



PROMISING PRACTICES IN YOUNG ADULT EMPLOYMENT

LESSONS LEARNED FROM EMT CAREER PATHWAY PROGRAMS

Supported by the National Fund for Workforce Solutions | By Loh-Sze Leung

As the number of youth disconnected from the workforce continues to rise, the National Fund for Workforce Solution's Young Adult Initiatives aim to test and implement new strategies for targeting America's young adults.

Starting in 2013 with the Youth/Industry Partnership Initiative (YIPI), the National Fund has funded the development and evaluation of innovative methods aimed at targeting and engaging America's young adults.

The Young Adult Initiatives include:

- › Identifying effective methods for connecting youth to industry partnerships
- › Describing the characteristics of effective partnerships between employers and education and training providers
- › Cultivating a network of top employers experienced in recruiting young adults and sharing with them the National Fund's best practices for young adult recruitment

The National Fund's Young Adult Initiatives ultimately seek to develop a deep understanding of how industry partnerships and employers most effectively engage youth and to share this information so that employers and workforce development collaboratives across the country can access the potential of, and invest in, the millions of youth across the nation.

CASE STUDY OVERVIEW

This case study will focus on challenges and opportunities for young adults in emergency medical services, a part of the health care sector that includes emergency medical technicians (EMTs) and paramedics.

Specifically, this case study will highlight EMT training partnerships implemented by [CareerWorks: Greater Newark Workforce Funders Collaborative](#) in New Jersey and the [Bay Area Workforce Funding Collaborative](#) (BAWFC) in California. It will also integrate lessons learned from a similar project implemented several years ago by [SkillWorks: Partners for a Productive Workforce](#) in Boston, MA. While only the BAWFC specifically limited recruitment for this program to young adults, all of the collaboratives recruited and enrolled a significant proportion of young adults in their EMT training programs.

Our goal is to share lessons learned and draw conclusions aimed at informing future efforts to train and prepare young adults for emergency medical services (EMS) or similar career pathways.

BRIEF OVERVIEW OF EMERGENCY MEDICAL SERVICES AND EMTs

Emergency medical technicians and paramedics are employed in the fast-growing emergency medical services part of the health care sector. Most paid EMTs and paramedics work full time, and about 1 in 3 work more than 40 hours per

week.¹ Nearly half of EMTs and paramedics are employed by ambulance companies, 30 percent are employed by government agencies, and 17 percent are employed by hospitals. All EMTs and paramedics must complete a postsecondary educational program and obtain licensure. The [National Registry of Emergency Medical Technicians](#) (NREMT) certifies EMTs and paramedics and administers the required written exam.

NATIONAL FUND IMPLEMENTATION OF EMT TRAINING PROGRAMS IN THREE SITES

Overview of Training Program Elements

This case study covers the implementation of and lessons learned from EMT training partnerships supported by three National Fund sites: CareerWorks in Newark, NJ; BAWFC in the San Francisco Bay Area; and SkillWorks in Boston, MA.

All three partnerships provided pre-employment EMT training for those who were unemployed, underemployed, or employed outside of the health care sector at the time of entrance to training. They also served a relatively large proportion of young adults, with the Bay Area site training exclusively young adults. In addition to training, all of the partnerships offered supportive services to participants such as tutoring, coaching, and assistance with job placement.

QUICK FACTS: EMTs AND PARAMEDICS

Median Pay, 2012	\$31,020 per year, \$14.91 per hour
Entry Level Education	Postsecondary non-degree award, usually less than one year
Educational Prerequisites	High school credential and cardiopulmonary resuscitation training
Certification Requirements	Completion of certified education program, plus practical and written exams
Licensure Requirements	Vary by state; include background check and certification
Work Experience in Related Occupation	None
On-the-Job Training	None
Number of Jobs, 2012	239,100
Job Growth, 2012–22	23% (much faster than average)
Employment Change, 2012–22	55,300

PROGRAM ELEMENT	BAWFC	SKILLWORKS	CAREERWORKS
Population Served	Young adults only	Adults/young adults	Adults/young adults
Participant Requirements	Between 18–24	Between 18–24	At least 18
	Low-income	Low-income	Low-income
	High school credential/GED	High school credential/GED	Tenth-grade reading/math level
Number of cohorts trained	1 – summer 2014	1 – spring 2010	2 – spring 2013 and spring 2014
Length/Format of Training	8-week condensed program, classroom-based	12-week hybrid program (half online, half classroom-based)	First cohort: 9-week classroom-based program
			Second cohort: 9-week hybrid program
Total Number of Participants	10	25	First cohort: 20
			Second cohort: 24
EMT Training Provider	Skyline College	Northeastern University College of Professional Studies (CPS)	First cohort: Less Stress Instructional Services Second cohort: MONOC Mobile Health Services
Basic Skills Training Provider	N/A	X-Cel Education; Dimock Community Health Center (CHC)	N/A
Supportive Services Offered	Skyline provided a Boot Camp orientation for interested students and optional tutoring during the summer session.	X-Cel Education and Dimock CHC provided contextualized basic skills before the EMT program and limited coaching and tutoring during the program.	First cohort: None. Second cohort: MONOC provided online academic support and CareerWorks staff provided additional wraparound services.
Employer Engagement and Job Placement Strategy	Led by Skyline College, leveraging faculty industry connections and career services.	Led by Northeastern CPS, leveraging faculty industry connections. Northeastern CPS reached out to three specific ambulance companies for this partnership.	First cohort: Led by Less Stress Instructional Service. Second cohort: Led by Newark's One-Stop Career Center.
EMT Certification Requirements	Pass skills/practical exam (given as part of course at Skyline); pass NREMT written exam; apply for licensure at local EMS office	Pass Skills/Practical Exam (given as part of course at Northeastern); pass NREMT written exam; apply for licensure from state Office of Emergency Medical Services (OEMS)	Pass skills/practical exam; pass NJ State written exam or NREMT written exam; apply for licensure from state OEMS

Despite common elements, however, the partners and implementation strategies employed in recruiting, training, and supporting participants in the program varied considerably. The table, on page 3, provides an overview of key program elements for each site’s EMT program.

Results

All three sites were successful in recruiting young adults and other individuals to participate in training. The sites did well in attracting both underrepresented minorities and young men to the training. In Newark, interest in the program was so great that CareerWorks asked the Newark One-Stop Career Center to sponsor another EMT cohort to expand training capacity. Unfortunately, they were unable to do so because of funding limitations.

Overview of Participant Demographics and Results

Despite successful recruitment efforts, sites were less successful in retaining, graduating, and placing participants in employment. Across the three programs, records indicate that training completion rates ranged from 48 percent to 80 percent, while only 10-20 percent of each cohort attained or were eligible to apply for EMT state certification.

The BAWFC retained 8 out of 10 participants in training. However, only three students successfully passed the EMT practical exam and completed the course with a grade of C or better; two of these students passed the NREMT written exam required for certification, a pass rate of 67 percent.

In Boston, 12 out of 25 SkillWorks participants successfully completed the EMT training course at Northeastern University. Five students successfully passed the practical exam; two of these passed the written exam and obtained their state certifications, a pass rate of 40 percent. One participant subsequently found employment as an EMT teaching assistant.

In Newark, 13 out of 20 participants from the first cohort completed training and 4 obtained state certification, a pass rate of 31 percent. All four gained employment as EMTs. In the second cohort of 24, 8 participants took the NREMT written exam and 2 obtained state certification, a pass rate of 25 percent. Six participants are planning to retake the exam. According to MONOC, two participants have started their own ambulance company in northern New Jersey.

Limited comparison data is available, but a scan of data obtained from the NREMT website (www.nremt.org) on first-time pass rates by state² and by training program (available for CA only) helps provide some context for the National Fund sites’ pass rates.

	BAWFC	SKILLWORKS	CAREERWORKS
Average Age	70% between 18-22 30% between 23-28	26	33
Race/Ethnicity	70% Hispanic 20% white 10% two or more races	20% Hispanic 64% African-American 4% white 12% other	18% Hispanic 82% African-American
Gender	60% female 40% male	36% female 64% male	66% female 34% male
Educational Attainment	100% some college but no degree	4% some college but no degree 96% high school credential/ GED	40% some college but no degree 60% high school credential/GED
Economically Disadvantaged	50% PELL or state fee waiver-eligible	64% below 200% of Federal Poverty Level	Not reported

Interestingly, in California, there is at least one explicitly youth-oriented program called the Bay Area Youth EMT Program (www.bayemt.org) primarily serving youth ages 18-24 in the Oakland area. This program's NREMT written exam pass rate in 2013 was 56 percent for all first-time test takers, closer to the rates attained by National Fund sites.

2013 FIRST TIME PASS RATES FOR NREMT EMT WRITTEN EXAM³

National Average	70%
California Pass Rate	70%
Massachusetts Pass Rate	52%
New Jersey Pass Rate	71%
Skyline College (California)	85%

Lessons Learned

While the overall employment outcomes of the National Fund's sites' EMT programs were disappointing, there were some bright spots and promising practices, and the lessons learned will be useful in informing future efforts in this sector.

The following lessons and reflections were gleaned from interviews with the National Fund site directors, reviews of grant and evaluation reports, and conversations with training providers and EMT program directors.

SHORT DOES NOT MEAN EASY

While EMT training is short-term compared with many health care and allied health credential programs, the content is at a relatively high level, is technical, and requires a strong grounding in basic science. Interviewees identified inadequate student preparation for EMT coursework as a key barrier to success.

Sites implemented promising practices such as integrating medical terminology and EMT course preparation into the last few weeks of the GED training program in Boston; offering a boot camp orientation for all prospective EMT students at Skyline College; and setting a relatively high bar for recruitment and enrollment (tenth-grade reading and math level) in Newark.

Despite these efforts, programs universally felt that more preparation was needed, which was reflected in low pass rates for the practical and written NREMT exam. In fact, the faculty at Skyline College felt that an emergency medical responder course would be more manageable as a first

or transitional step while just as engaging for students, especially if marketed and built as a bridge program to EMT since completion of the EMR course alone does not lead directly to state certification or employment.

PROGRAM DESIGN: CURRICULUM

Two of the three National Fund sites (SkillWorks and CareerWorks) experimented with hybrid online/in-classroom training models, while BAWFC implemented an intensive 8-week classroom-based summer model. All three sites cited challenges with their program design and would tweak their service delivery models in the future.

Specifically, SkillWorks and CareerWorks would shift more time toward in-classroom training and provide more support to students both before and during the online portions to increase their success. SkillWorks specifically cited the need to increase students' computer literacy and comfort level with online learning. BAWFC cited the difficulty of compressing a full semester of EMT coursework into an 8-week summer session, especially for a young adult population disconnected from work and school.

PROGRAM DESIGN: SUPPORTIVE SERVICES

All three sites provided tutoring and/or supportive services and felt that these services were critical to student retention and success. All sites agreed they would increase their investments in this area for future EMT cohorts.

Data submitted by Skyline College for all EMT cohorts from fall 2013 to fall 2014 showed a strong negative correlation between student receipt of financial aid and the overall success rate of the class.⁴ In fact, the greater the concentration of financial aid recipients in a class, the less likely those students were to succeed.⁵ While a number of factors likely contributed to this finding, including the quality of educational preparation low-income students receive before they attend college, it is clear that low-income students need additional support to increase success rates.

In addition to increased funding for supportive services, sites cited the need to more carefully integrate these services into program design by being clearer about which member(s) of the industry partnership would handle academic coaching, case management, tutoring, job placement, and student supports. All three sites discussed the need for greater support and preparation for test taking, especially because there can be a several-week lag between the end of the course and the NREMT written exam. This type of support would ideally include additional tutoring, review courses, and assistance with NREMT test and licensing fees.

ACHIEVING EMPLOYMENT: UNDERSTANDING AND ADAPTING TO SECTOR CONDITIONS

The three National Fund sites took intentional steps to include local EMS employers on advisory groups, in curriculum/program design, and in providing internships, and these employers did confirm a need for EMTs in their communities. Nonetheless, the sites all struggled to a certain extent to place successful participants in employment.

One bright spot was CareerWorks' first cohort, where 100% of the graduates who achieved state certification were hired as EMTs. CareerWorks staff cited the connections of the training provider, Less Stress Instructional Services, to private ambulance companies and Less Stress's commitment to connecting graduates with job opportunities as key factors in the partnership's success.

In following up with employers and program staff after the conclusion of these programs, there are a few key lessons for the future. First, it is important to clearly assign and define the responsibility for job placement within the partnership. In many traditional postsecondary education models, the responsibility for job search and placement rests primarily on students, while faculty who have industry connections offer assistance. However, a young adult population with less work experience and more limited professional networks is likely to require a more proactive and hands-on approach to job placement.

Second, while ambulance companies initially expressed interest in hiring young adult graduates, partnerships and collaboratives need to have a more granular understanding of employers' hiring criteria. For example, BAWFC found in later conversations that many employers hire only those age 21 and older for liability reasons. Employers in Boston similarly expressed concerns about hiring young adults because of the maturity level required to work in emergency, life-or-death situations. Future programs might not only choose to focus recruitment efforts on older youth (21 and older) but also work to address employer concerns about maturity and liability through training and program design.

Participants with criminal records faced additional challenges in obtaining EMT certification and employment. SkillWorks found that in Massachusetts, both the timing of the licensing authority's review of a participant's criminal history (after completion of coursework) and the latitude that the authority has in using this information made it impossible for the partnership to know in advance whether or not a particular past offense would result in disqualification from certification. In addition, some employers' hiring practices differed from the licensing authority's standards, so even a

participant's successful licensure could not guarantee that barriers related to criminal offenses had been resolved.⁶

POST-TRAINING FOLLOW-UP AND SUPPORT

Most participants in the National Fund site cohorts, even many who passed the practical exam, had trouble passing the NREMT written exam that would allow them to attain licensure and employment. Future partnerships might consider building test preparation into the training curriculum and into a post-training module. This approach has a potential dual benefit of increasing certification rates and allowing partnerships to keep better track of participants and provide post-training support.

IMPLICATIONS AND CONCLUSIONS

It is clear from the National Fund's experience to date that there are many challenges inherent in an EMT sector strategy for young adults. However, becoming an emergency medical technician can still be a great entry point to health care careers as it offers access to a number of promising occupational pathways in the sector. The occupation is experiencing robust growth, is attainable after relatively short-term, engaging, hands-on training, and offers industry-recognized credentialing. The EMS industry also has expressed interest in diversifying its workforce in order to better serve diverse communities.

Given these factors, we share the following implications and conclusions to inform and strengthen future training efforts in this sector.

- 1. Strong employer engagement, with public and private sector EMS employers, is needed to develop a granular understanding of the industry and to address specific barriers to employment for young adults, including but not limited to concerns about age, emotional maturity, and criminal background. Funders should look for a comprehensive strategy to overcome employment biases and barriers when selecting programs to support.**
 - » In the future, sites should be strategic about recruiting and working with employers open to hiring young adults and/or new EMT graduates. From experience, these are likely to be smaller, private ambulance companies rather than public sector EMS employers. Ideas for deepening employer engagement include building in more opportunities for young adult participants to interact with EMS employers, additional hands-on training hours to better prepare young adults, and post-placement support to ensure the new hire's success.

2. This sector is a better fit for young adults with strong science abilities and the capacity to handle the stressful nature of this job.

- » The training to become an EMT, while short, is highly technical, and it can be difficult to keep up with the coursework without some prior health care or science background, even if it is not strictly required. Many employers in the industry are reluctant to hire those under 21 due to liability and perceived lack of maturity to handle emergency situations. Workforce partners and funders need to carefully consider the attributes of the EMS sector and plan appropriately when making program and investment decisions. Partnerships need to recruit for and assess the emotional maturity of participants, and program design should likewise help students develop these attributes in order to be successful on the job.

3. Programs need to build in greater support and preparation to ensure greater success.

- » The experience of the three National Fund sites clearly demonstrates the need for comprehensive student support and coordination of services. Tutoring and academic support during the course were helpful, but sites also pointed to the need for careful recruitment

and screening to ensure academic readiness; the development of bridge programs between GED or high school programs and the EMT program; and even building in an Emergency Medical Responder course as a pre-requisite to the EMT training. Promising practices included providing medical terminology before the start of the EMT course and offering a boot camp orientation before the start of class, but these were insufficient by themselves to ensure student success. In addition, sites cautioned against using online or hybrid program delivery unless adequate support and preparation were built in.

4. Support needs to continue beyond the end of training to include test preparation and employment support.

- » Especially because employment depends on licensure, which in turn depends on the successful passage of the NREMT exam, partnerships need to build in exam preparation strategies and services to help participants be successful. Instead of being considered as a separate component, the exam (and services related to passing the exam) should be treated as an integral part of any EMT training program.

ENDNOTES

¹ Bureau of Labor Statistics, U.S. Department of Labor. 2014. Occupational Outlook Handbook, 2014-15 Edition, EMTs and Paramedics. Accessed on April 30, 2015. <http://www.bls.gov/ooh/healthcare/emts-and-paramedics.htm>. Unless otherwise noted, information in this section comes from this source.

² “2013 First Time Pass-Rate by State.” Accessed on May 11, 2015. https://www.nremt.org/nremt/downloads/2013_FirstTimePassRates.pdf

³ “National Registry of EMTs EMT Written Examination Results by Training Program.” Accessed on May 11, 2015. http://www.emsa.ca.gov/Media/Default/PDF/EMT_Pass%20Rates2013.pdf

⁴ $R^2=0.73$. From custom report prepared for the National Fund for Workforce Solutions by Skyline College, April 2015.

⁵ $R^2=0.41$. From custom report prepared for the National Fund for Workforce Solutions by Skyline College, April 2015.

⁶ Mt. Auburn Associates, Inc. Northeastern University Emergency Medical Careers Partnership—Final Report. 2014. Boston, MA: Author

This brief was generously sponsored by:  THE ANNIE E. CASEY FOUNDATION

This research was funded by the Annie E. Casey Foundation. We thank them for their support but acknowledge that the findings and conclusions presented in this report are those of the author alone, and do not necessarily reflect the opinions of the Foundation.



TEL 617.728.4446 FAX 617.728.4657 | C/O Jobs for the Future, 88 Broad Street, 8th Floor, Boston, MA 02110

WWW.NFWSOLUTIONS.ORG

Follow Us:  [Twitter @National_Fund](https://twitter.com/National_Fund)  [Facebook /nfwsolutions](https://facebook.com/nfwsolutions)  [Instagram @National_Fund](https://instagram.com/National_Fund)