

National Registry of Emergency Medical Technicians

2007 Annual Report



**National Registry of
Emergency Medical Technicians®**
THE NATION'S EMS CERTIFICATION™

Providing Safety for the American Public



Transitioning to Computer Based Testing — a True Partnership



“My sincere thanks and gratitude for the exemplary way in which the EMTs performed their duties when I recently lost consciousness. I’m afraid I didn’t follow the instructions I was given after donating blood. Instead of drinking lots of fluids and taking it easy, I gave my dog the water, and headed to the dog shelter for an event. While standing in line for about 20 minutes, I felt myself getting faint. I lost consciousness. I was alone and never before had such an experience. However, the EMTs who tended to me were wonderful, caring, sensitive, professional, and prompt. I had all the faith in the world that I was in excellent hands. They are definitely MY HEROES!”

—Caren Z.

2007 was a historical year for The National Registry of Emergency Medical Technicians. On January 2, the pencil and paper method of examination was changed to computer based testing in the pursuit of a more accurate evaluation of competency, increased exam security, and reduced wait time for results. This technological advance allowed the NREMT to continue to fulfill its most important goal: protecting the public.

This transition was not accomplished alone. The NREMT recognizes the countless hours of meetings, discussions, and work that took place with our partners throughout the EMS community—they made the successful transition possible. The NREMT is grateful for their commitment and wishes to say “thank you” for a job well done.

The focus of all NREMT staff was to ensure a smooth and seamless transition. Numerous materials were developed to help candidates, educators and state EMS officials understand

the testing changes and improvements that would enhance the certification process. Incoming calls were analyzed to determine where additional communication or adjustments were needed.

This historical move provides an increased level of professionalism and credibility to EMS—a profession with a short but proud history. This will now allow the NREMT to focus on new tasks including implementing the EMS Agenda for the Future, the National Scope of Practice Model, National EMS Education Standards, and recommendations in the 2006 Institute of Medicine Report titled “Emergency Medical Services At the Crossroads.”

The NREMT looks forward to carrying on this instrumental work and partnering with other organizations and professionals in the EMS community in continuing to develop the professionalism of EMS for the sake of the American public.

Excerpts are from an actual patient letter. Photos have been changed to protect the privacy of the patient.

For all of us involved in the emergency medical services system in America, these are truly exciting times to witness and be part of. For much of the relatively young history of EMS, professionals have held differing perspectives as to what EMS is and how it works, although there has long been an appreciation of why it is important. EMS has always been very fluid, dynamic and ever-changing since its inception back in the late 1960's, and the events of the past several years are no exception to the continued evolution and expansion of our profession.

Certainly the historic reports emanating from the prestigious Institute of Medicine (IOM) have helped shape and frame some of the issues surrounding the provision of emergency care. In June 2006 the Institute of Medicine of the National Academies released a report on the Future of Emergency Care in the United States Health System, and in this document it clearly pointed out that despite the lifesaving efforts performed daily the emergency medical system as a whole is yet overburdened, underfunded, and highly fragmented when looked at on a national level.

By any standard, this is a system in crisis. Therefore, any effort to develop an emergency medical system to meet the nation's needs in a disaster situation must address the fundamental infrastructure and capacity problems that already impede the everyday delivery of emergency medical services. There is little doubt that our system is being overwhelmed by the combination of expanding needs and a resource-limited environment. As our national EMS leaders continue to address the future there will be helpful resources that clearly distinguish between what is a public responsibility and what is a private responsibility and between what is the proper role of the federal government and what priorities should remain with the states.

The IOM Report focuses on several distinct areas including EMS as a part of the overall health care system, the funding and infrastructure needs of the system and EMS workforce trends and professional education. The American public naturally expects, and rightly deserves, the highest quality of emergency medical treatment and transportation in their greatest time of medical need. The public deserves this assurance from all providers of out-of-hospital emergency medical care through a uniform definition of competency.

Those of us associated with the National Registry are pleased the IOM Report supports content within the EMS Education Agenda for the Future by addressing the importance of national certification of EMS providers and the recommendation for national accreditation of paramedic education programs. Our belief is that certification enhances professionalism and creates consistency and uniform competency among EMS providers – important fundamentals for the assurance of the public protection that we strive for. The Education

Agenda document proposes an EMS education system that has five integrated components including:

- National EMS Core Content
- National EMS Scope of Practice Model
- National EMS Education Standards
- National EMS Education Program Accreditation
- National EMS Certification



The collective national EMS community is well on its way to addressing each of the system pieces. Completion and dissemination of the National EMS Scope of Practice Model is a recent milestone that further enhances the collective roll-out of the EMS Agenda for the Future. The Scope of Practice will create a national standard for emergency service providers, similar to the scope of practice for other medical professions. The National Scope of Practice model describes four levels of EMS licensure with each level representing a unique role, set of skills and knowledge base. Within the next year National EMS Education Standards will be developed for each level.

The goal of the Education Standards is to guarantee that highly trained EMS professionals provide consistent and competent emergency medical services across the nation. Adherence to the uniformity of the standards will also make it easier for EMS professionals to move from one state to another and for emergency medical service providers to adopt new technology. It should serve as a close guide for states to help develop their own versions of rules and regulations or to redefine the existing ones to better increase consistency across the nation for terms, nomenclature and skills.

While the National Registry stands ready to participate as a key stakeholder, the leadership for developing and fully implementing a voluntary national system lies with the leadership of the states and the EMS community itself. Together, it is our shared commitment to achieving significant health impacts on the public that will drive change. From our perspective, the potential of a fully developed EMS education agenda to bring consistency, accountability, and quality improvements to pre-hospital care appears well worth the investment.

All of us look for rigorous work to continue this coming year as we continue our way down a comprehensive road for moving forward to ensure state-of-the-art EMS systems that meet the needs of all the populations served in every zip code in America. Those of us who accept the responsibility of being involved in the education and certification of EMS providers must also accept the responsibility and duty imposed on us by those who entrust their lives to us – the American public.



NREMT Senior Leadership left to right: William E. Brown Jr., Executive Director; Gregg S. Margolis, Associate Director; Sherry A. Mason, IT Systems Manager; Robert L. Wagoner, Associate Director; Terry Markwood, Certification Coordinator.

Senior Leadership

William E. Brown Jr., MS, RN, NREMT-P
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Gregg S. Margolis, PhD, NREMT-P
Associate Director

Terry Markwood, MS Ed, NREMT-B
Certification Coordinator

Sherry A. Mason
IT Systems Manager

Robert L. Wagoner, BS, NREMT-P
Associate Director

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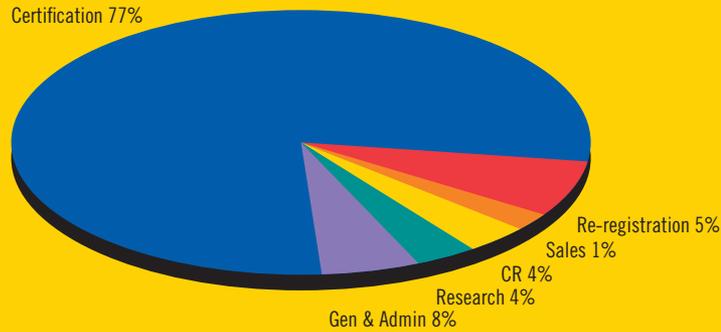
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Rocco V. Morando

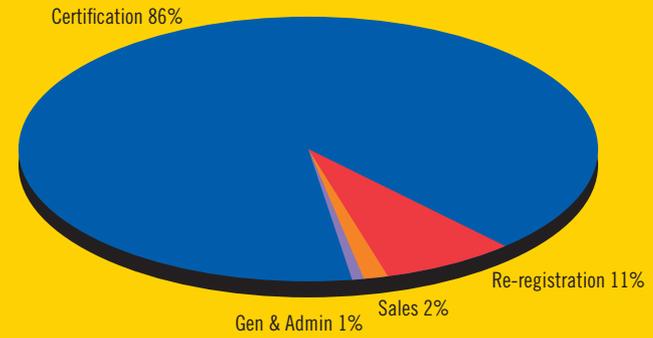
DIRECTORS EMERITI

Ray A. Bias
Marilyn Gifford, MD
Norman E. McSwain, Jr., MD
Roger White, MD

Operating Expenses - \$8,742,944



Operating Revenue - \$10,315,011



5 Year National Certification Trends

Number of Nationally Certified EMS Professionals



*Not available
EMT I/85 and EMT I/99 combined



Strategic Plan and Key Initiatives

William E. Brown Jr., MS, RN, NREMT-P
Executive Director



“My husband and I were involved in a serious automobile accident. My neck was really hurting. An off-duty paramedic called 911 and then stood in a very awkward position holding my neck until the emergency squad arrived. I feel he saved my life. As it turned out my neck was broken. I believe the only reason I can walk today is because of his help. We will be forever grateful to him.”

—Ann and Paul B.

Wow, what a successful year! 2007 will be a year not forgotten by the NREMT, states, stakeholders, or EMTs as they headed to Pearson VUE test centers to take a computer examination on the day they chose, finishing faster, and receiving their results the next business day on the NREMT website. Never before were we able to provide as much precision and efficiency in the measurement of entry-level competency. It could not have been done without your support. A special thanks goes to those State EMS officials who helped establish additional testing centers within their states, particularly in the rural areas.

We did more than launch computer based testing. Community Relations and Research continued to be a focus at the Registry. We produced recruitment brochures and display posters to help get people excited about entering and remaining in EMS. We visited states and talked with stakeholders regarding the first steps in CBT and the mission of the NREMT. Our research fellows continued advancement toward their doctoral degrees, had manuscripts accepted for publication and presented abstracts and posters at scientific assemblies. We are in the ninth year of the Longitudinal EMT Attribute and Demographic Study (LEADS) and awaiting the opportunity to provide a report to the nation after our tenth year!

The EMS Education Agenda for the Future: A Systems Approach continued to be a focus for the NREMT Board and staff. We have been working with EMS educators to help design and write the new National EMS Education Standards. We hosted a meeting with the State EMS officials regarding National EMS Certification timelines for implementation of the National EMS Scope of Practice Model.

In November, the Board of Directors passed a motion that will require all candidates for Paramedic registration, beginning January 1, 2013, to be graduates of programs accredited by the Committee on Accreditation for EMS Professions. Accreditation is required in the EMS Education Agenda and was recommended in the Institute of Medicine's Report, EMS at the Crossroads. We're working toward full implementation of the Education Agenda in 2013. The national EMS community support is present for the Agenda and we are moving forward.

Looking back on 2007, we'll fondly remember the work that was accomplished by the Board, states, staff and all those who help the NREMT maintain its important work of being the National EMS Certification.

Excerpts are from an actual patient letter.
Photos have been changed to protect the
privacy of the patient.

Examination Department

Robert L. Wagoner, BS, NREMT-P, Associate Director

It has been an exciting year as we closely and carefully monitored the transition from 36 years of paper/pencil testing to a very successful implementation of computer based testing. Many candidates, program directors, and state EMS officials provided very favorable feedback on the convenience of scheduling examinations and the rapid notification of results in most cases. In 2007 we also improved the turn-around time of NREMT Advanced Level practical examination results, most of which were processed and mailed on the same day they were received at the NREMT as compared to the seven-to-ten-day average turn-around time of years past. Four training sessions were also conducted in 2007 for new NREMT Advanced Level Representatives who oversee administration of the psychomotor examination.

NREMT candidates have been able to realize the improved efficiency of computer based testing. Since each candidate is measured to his/her maximum level of ability, those who perform significantly above or below the passing standard are able to finish the cognitive examination sooner than those who perform near the passing standard.

Item writing meetings were conducted at the First Responder, Basic and Paramedic levels to assure that all item pools remain robust. Operational item pools and pilot item pools were rotated based on utilization. NREMT psychometric consultants continued to review the performance of all items and prepared technical reports for the NREMT Standards and Examination Committee. Careful monitoring of performance and feedback on item quality and scheduling convenience for the cognitive examinations will continue and quality improvements made when warranted.

The NREMT began preparations for extensive review and revision of all item pools and psychomotor examinations to comply with the implementation of the new National EMS Education Standards. We anticipate Basic exam items will begin to reflect the new Educational Standards beginning in the Fall of 2010 with other levels reflecting those changes beginning in 2011.

Gabriel Romero, MBA, NREMT-P joined the NREMT team in November as the Examination Coordinator to assist the Examination Department with these extensive revisions as well as day-to-day operations. This will allow the NREMT to remain responsive to customer needs while continuing to offer state-of-the-art certification services for the nation's EMS community.

Certification Department

Terry Markwood, MS Ed, NREMT-B,
Certification Coordinator

The Certification Department spent the first half of the year ensuring the successful conversion from paper applications to the electronic system or online application process. The second half was mainly dedicated to making adjustments to improve the online process and making it more efficient. The Certification staff carefully listened to feedback from candidates about the online application process, and used these comments to make changes. In order to improve the system and the overall online experience, the Certification Department staff then worked very closely with the IT Department to make those improvements. Surveys indicate that 91% of applicants felt it was easy or extremely easy to complete their online application.

In the last quarter of the year, the Certification and Re-certification Departments were combined for increased efficiency of the online application and application review process. Meetings held with educators and state officials also produced valuable input. The IT Department must be recognized for working diligently to make these improvements as quickly as possible. In all, the NREMT is quick to acknowledge that the success of the conversion has been a team effort for which the NREMT is extremely grateful.

While the Certification and Re-certification Departments have more to accomplish, the staff feels good about the transition to the online application process.



“A driver of a pick-up truck lost control of his truck, crossed over into my southbound lane and hit me head-on. The doctor who performed my surgery told my husband that I could possibly die. Because the paramedics assessed my situation correctly and acted with speed, I am sitting here today writing about this. These paramedics gave me the chance to enjoy more years with my grandchildren and daughter—and for that I will be forever grateful.”

—*Elaine S.*

Excerpts are from an actual patient letter. Photos have been changed to protect the privacy of the patient.

Community Relations Department

Gregg S. Margolis, PhD, NREMT-P
Associate Director

Assuring that candidates, educators and state officials received the information they needed for the switch to computer based testing (CBT) was the most important task of the Community Relations Department in 2007. Thanks to the outstanding support of the EMS community, the challenges experienced were minor. Valuable feedback from the community allowed us to improve throughout the year. These enhancements were reported through monthly email communiqués, website postings and instructional handouts. The communiqués were expanded to include program directors. Surveys were conducted to measure candidates' experiences. Meetings with state officials and educators allowed the NREMT staff to gain additional feedback. Consistent and timely communication has helped to make the transition positive and rewarding.

In addition to a focus on CBT, the new on-line exam option for re-certification was communicated to registrants, as well as how EMS professionals with a lapsed certification could regain their NREMT certification. Materials for conference displays were prepared to assist registrants and answer questions for visitors to NREMT exhibits.

A series of posters to help retain EMS professionals was produced in the last quarter, and will be available early in 2008 at a cost recovery basis. The posters feature patient testimonials that let EMS professionals know their dedication and hard work is recognized and vital.

The Community Relations Department is dedicated to the service of keeping the EMS community updated on all NREMT policies and issues that affect the work they do.

Research Department

Gregg S. Margolis, PhD, NREMT-P
Associate Director

The NREMT is in a unique position to help improve the understanding of the complex issues facing EMS and EMS professionals. As an organization committed to evidence based decision making, we strive to conduct and facilitate research that increases the knowledge about EMS, ultimately to improve patient care.

The NREMT research priorities focus on patient safety and competency research, the future of EMS, and EMS workforce analysis. The NREMT Board of Directors has supported our endeavors and we are proud of our productivity—thirteen manuscripts published or accepted for publication in peer review journals and over thirty abstracts presented at professional meetings in just a few years. We value collaboration and encourage researchers to contact us if we can assist in their projects.

Finally, we are particularly excited about the growth of the EMS Research Fellowship program. This unique work-study program provides tuition support for promising researchers to pursue a terminal degree at The Ohio State University. We look forward to continued maturation of this new program and expanding the community's understanding of emergency medical services through research initiatives.

NREMT 2007 Research Productivity

Studnek JR, Ferketich A, Crawford JM (2007). On the Job Illness and Injury Resulting in Lost Work Time Among a National Cohort of Emergency Medical Services Professionals. *American Journal of Industrial Medicine* 00:1–11.

Studnek JR, Ferketich A (2007). Organizational Policy and Other Factors Associated with Emergency Medical Technician Seat Belt Use. *Journal of Safety Research* 2007;38(1):1-8.

Studnek JR, Crawford JM (2007). Factors Associated With Back Problems Among Emergency Medical Technicians. *American Journal of Industrial Medicine* 2007;50(6):464-469.

Fernandez AR, Studnek JR (2007). The Association between a Candidates Score on the National Certification Examination and the Elapsed Time from Course Completion to Completion of the Cognitive Examination. Oral presentation at the Prehospital Care Research Forum presented at the annual Meeting of the National Association of EMS Educators (awarded best oral presentation.)

Studnek JR, Fernandez AR, (2007). Factors Affecting the Probability of Passing the National Paramedic Certification Examination. Oral presentation at the Prehospital Care Research Forum and presented at the annual Meeting of the National Association of EMS Educators (awarded best research.)

Margolis GS, Fernandez AR, Studnek JR (2007). Intent to Leave the EMS Profession. Poster presentation at the Prehospital Care Research Forum and presented at EMS Today, the annual Meeting of the Journal of Emergency Medical Services.

Margolis GS, Studnek JR, Fernandez AR, (2007). A Categorical Schema of EMS Personnel. Poster presentation at the Prehospital Care Research Forum and presented at EMS Today, the annual Meeting of the Journal of Emergency Medical Services.

Studnek JR, Fernandez AR, Margolis GS (2007). Emergency Preparedness of Nationally Registered First Responders. Poster presentation at the Prehospital Care Research Forum and presented at EMS Today, the annual Meeting of the Journal of Emergency Medical Services.

Fernandez AR, Studnek JR (2007). Organizational Description & Community Size of Nationally Registered First Responders. Poster presentation at the Prehospital Care Research Forum and presented at EMS Today, the annual Meeting of the Journal of Emergency Medical Services.

Studnek JR, White L (2007). Effect of Sleep Disorders on Emergency Medical Technicians. Poster presentation at the Prehospital Care Research Forum and presented at EMS Today, the annual Meeting of the Journal of Emergency Medical Services.

Studnek JR, Ferketich A, Crawford JM (2007). Rates of on the Job Illness And Injury Among a National Cohort of EMS Providers. Oral presentation at the annual meeting of the National Association of EMS Physicians.

Studnek JR, Fernandez AR (2007). Utilization of Distributive Education to Fulfill National Registry Re-Registration Requirements. Poster presentation at the annual meeting of the National Association of EMS Physicians.

Studnek JR, Margolis GS, Mistovich JJ, Fernandez AR (2007). Identifying Educational Strategies of Successful EMT-Basic Programs. Poster presentation at the annual meeting of the National Association of EMS Physicians.

Fernandez AR, Studnek JR (2007). Quantifying and Describing Actively Practicing Nationally Registered EMT-Basics. Poster presentation at the annual meeting of the National Association of EMS Physicians.

Please contact the NREMT for reprints

“It is important to have an external validated testing process in place. Having national certification provides valid testing and assists in setting a standard that provides professional mobility for EMS providers.

The preparation and troubleshooting for the switch to CBT was remarkable. I admire the thought processes and progressive nature of the National Registry to tackle the task.”

Julie Coffman
Director of Certification and Curriculum
Alabama Fire College



“My wife had to call 911 for my 93-year-old mother who was in a non-responsive state. What impressed me was how gentle, concerned and kind the EMTs were in dealing with her. My town is fortunate to have EMS professionals like them.”

—Clarke P.

EXAMS PER YEAR

	2003	2004	2005	2006	2007
First Responder	6900	7774	6761	7307	4053
EMT Basic	81505	88222	92090	94616	83709
EMT-I 85	5383	6004	5231	5518	5341
EMT-I 99	1013	1521	1869	1704	1537
Paramedic	14054	15339	15815	17380	17001
Total	108855	118860	121766	126525	111641

FIRST TIME PASS RATE

	2003	2004	2005	2006	2007
First Responder	72%	73%	71%	65%	78%
EMT Basic	68%	64%	65%	71%	70%
EMT-I 85	63%	55%	61%	65%	70%
EMT-I 99	67%	65%	63%	59%	71%
Paramedic	63%	63%	64%	62%	63%

CANDIDATE SATISFACTION SURVEY RESULTS

Two major advantages of computer based testing are the ability of candidates to choose when they test and rapid reporting of results. In 2007, more than half of the candidates were able to test on the day they preferred and over 99% of NREMT exam results were available within two business days.

91% rated the on-line application as easy or very easy

89% were able to test within 2 weeks of their preferred day

94% were able to test at their preferred testing center

90% were able to test on their preferred day of the week

90% were able to test at their preferred time of day

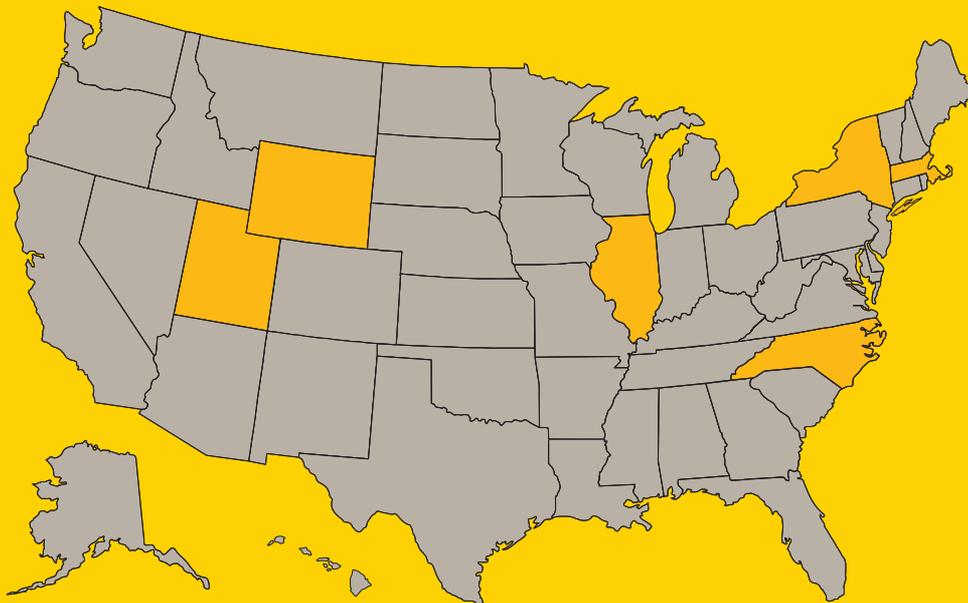
91% rated the test environment as good or excellent

48% drove 25 miles or less to test

5% drove more than 100 miles to test

Excerpts are from an actual patient letter. Photos have been changed to protect the privacy of the patient.

The map below illustrates the states that utilize National Registry certification to issue EMS licenses as of December 31, 2007.



KEY

- Utilize the Registry
- Non-Registry

Notes:

Florida uses the National Registry for Basic certification only.

Alaska, Indiana, Maryland, New Jersey, New Mexico, Pennsylvania, Virginia, Washington DC, and Washington use the National Registry for Paramedic certification only.

"The NREMT is the only standard that I, as a medical director, can reliably use that isn't subjected to political or other pressures to lower the standard of competency."

David Persse, MD
Public Health Authority
EMS Director
City of Houston
Houston, TX

"The leadership of the Registry has been some of the driving force towards a more unified and progressive profession. Many of the "street medics" are not probably aware of all of the national issues or the need to have an organization that is constantly pushing to improve the EMS profession, but thankfully the NREMT has continued that effort. We have all benefited."

Gregg Lander, BS, NREMT-P
EMT Program Chair
Chemeketa Community College
Salem, OR

National Registry of Emergency Medical Technicians

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“As an educator and a paramedic, I believe the National Registry provides both a premier service and a valuable resource to the EMS profession. By its support of the Institute of Medicine Report and EMS Agenda for the Future, it has committed to the highest standards of our field. Additionally, through its pursuit of excellence in providing validated examinations, quality research, consistent public relations, and superior customer service, the National Registry helps chart our profession on a course to a bright and necessary future. “

Gordon A. Kokx, MS, NREMT-P
Professor, EMS Program Director
The College of Southern Idaho
Twin Falls, ID

“Striving for National Registry Certification has become a quest for my Paramedic students and a goal I meet with relish. Can my students prove what they have learned? Can they show everyone around them that they have what it takes to be an EMS professional? These answers are found in their ability to meet and pass the milestone of National Registry Written and Skills exams. The National Registry has given Educators the tools to “standardize” and evaluate our students as compared to the entire Country. Thank you National Registry for this ability to impact future lives, both personally and professionally!”

Paul Honeywell
Manager of Field Training
Southwest Ambulance
Arizona



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Emergency Medical Technicians®**
THE NATION'S EMS CERTIFICATION™

