

# National Emergency Medical Services Advisory Council Committee Report April 2016

**Committee:** Provider and Community Education Committee

**Title:** Strategy for the transition of EMS providers into a more formalized educational and credentialing process.

**Definitions:** For the purposes of this document, the definition of credentialing and formalized education are as follows:

- Credentialing is the process of obtaining, verifying, and assessing the qualifications of a practitioner to provide care or services in or for a healthcare organization. Credentials are documented evidence of licensure, education, training, experience, or other qualifications (JCAHCO, 2016).
- Formal Education is “the hierarchically structured, chronologically graded ‘education system’, running from primary school through the university and including, in addition to general academic studies, a variety of specialised programmes and institutions for full-time technical and professional training” (Coombs, 1973).

**Description:** There exists a need for a national strategy to transition the process of training for certification as an emergency medical services (EMS) provider to a more formalized educational process for professional credentialing of paramedic providers, including guidelines for academic institutions to grant experiential learning credits for EMS providers who graduated from educational institutions accredited by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Profession (CoAEMSP).

## **Issue Synopsis:**

### **Problem Statement and Background**

**Problem Statement:** Because EMS providers are educated and certified outside of the formal education industry, they are often not perceived as health care providers, have limited ability to influence the overall health care system, and are reimbursed at a lower rate.

**Background:** The discipline of EMS established its foundation as a network of public service providers since its modern-day inception in the 1960s and its formal placement under the

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umbrella of the National Highway Traffic Safety Administration (NHTSA) in 1970 (NHTSA, 2016). The recognized roles of EMS evolved through standardized training using nationally recognized standards from the U.S. Department of Transportation (DOT) and recognition of competency through registration or certification from state agencies (DOT, 2016). These standards have included a method for maintaining continuous competency via continuing education. To establish parity with other allied health professions, a national strategy is necessary to transition the process of training for certification to a more formalized educational method for professional credentialing. This strategic process should include a method of retroactively awarding experiential credit for initial certification, as well as recognizing the requirements to maintain competency in paramedical practice. This essential evolution is particularly true for advanced life support providers (paramedics) who are increasingly becoming active participants in the overall healthcare team and performing in parallel with other allied health professions. To gain professional recognition, equitable compensation, comparable knowledge levels, and meaningful contribution toward the formulation of national healthcare policies similar to that of other allied health professionals, paramedicine must establish a more formalized credential of education.

Evidence shows that individuals with earned college degrees have a greater earning potential than those without (Psacharopoulos and Patrinos, 2004) and are likely to even improve labor market outcomes for workers without college degrees through a *spillover effect* (Winters, 2013). Higher education has also been shown to provide many incidental benefits, such as an improved overall quality of life and enhanced business outcomes (Winter, 2013; Doms et al., 2010).

Investigation into the differences of earning potential, performance, and career success between bachelor degree paramedics and non-degree paramedics has been exceptionally limited in the professional literature. This paucity of information may be due to the infancy of the profession of emergency medical services as well as the limited number of bachelor degree-awarding programs in EMS in the United States (CAPEMS, 2015). Most commentaries in trade journals offer a brief discussion on the merits of earning a bachelor degree with little empirical

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data to support such claims (Polk and Langford, 1993 and Hsieh, 2012). In order to gain insight into the benefits of a more formalized credentialing process for paramedics in the future and the benefits of a higher education, a survey of the literature on this topic for nursing was conducted as a surrogate, parallel profession.

As early as 1975, it was becoming more evident that students participating in nursing education would benefit from a baccalaureate degree in measures of attitude, personality, leadership, performance, and self-confidence (Stone and Green, 1975). “Both the National Advisory Council on Nurse Education and Practice and the American Organization of Nurse Executives encouraged baccalaureate education [for nurses] and suggested that nursing should strive for a workforce comprised of two-thirds baccalaureate prepared nurses by 2010.” (Altmann, 2011). A meta-analysis of studies investigating nurses seeking bachelor degrees revealed that the public expected nurses to have attained more education and that patient outcomes with bachelor-prepared nurses were improved (Altmann, 2011). As the EMS profession seeks increasing parity with the nursing profession, this parallel of expectation and performance becomes even more evident.

The transition from training for certification to formal education for credentialing in EMS will likely be progressive and incremental across the nation. A likely model would be articulation agreements between community colleges and four-year colleges and universities that would enable a bachelor degree in EMS-related curricula. In recent years, a similar approach was initiated to facilitate nursing programs to engender enhanced articulation for nurses earning an associate’s degree to progress toward a baccalaureate degree in New Mexico with notable results (Giddens et al., 2015)

As the profession of paramedicine continues to grow and evolve into areas such as critical care transport provider, tactical EMS provider, community paramedicine, and mobile integrated healthcare delivery, there must be a more formalized transition from technician to health professional. For many, the distinction between a practicing professional and an industry technician is not the scope of practice inasmuch as it is the depth and breadth of knowledge.

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Building an educational foundation with which the EMS profession can grow from will help to establish legitimacy as well as parity with other allied health professions.

**Conclusion Statement**

EMS providers are capable learners, capable test-takers, and capable educators. The role that EMS providers play in the overall healthcare of the citizenry is becoming increasingly realized and relevant. To achieve parity with other healthcare professions, EMS providers will benefit from a formalized association with the post-secondary institutions as envisioned in the EMS Agenda for the Future and the U.S. Fire Administration (e.g., Fire and Emergency Services Higher Education Recognition Program (FESHE)). It is time to make that transition and allow EMS providers to enjoy the benefit of a full voice at the health care table.

**Resources/references related to the issue**

- Adams, J., DeFleur, M.H., and Heald, G.R. (2007) The acceptability of credentials earned online for obtaining employment in the health care professions, *Communication Education*, 56:3, 292-307.
- Alexander, M., Weiss, S., Braude, D., Ernst, A.A., and Fullerton-Gleason, L. (2009) The relationship between paramedics' level of education and degree of commitment, *American Journal of Emergency Medicine*, 27, 830-837.
- Altmann, T. K. (2011) Registered nurses returning to school for a bachelor's degree in nursing: Issues emerging from a meta-analysis of the research, *Contemporary Nurse*, 39(2): 256-272.
- Consortium of Academic Programs in EMS (CAPEMS), website of organization representing EMS education programs that award bachelor degrees, <http://www.capems.org/get/> retrieved April 9, 2016.
- Coombs, P. H., Prosser, C. and Ahmed, M. (1973). *New Paths to Learning for Rural Children and Youth*, New York: International Council for Educational Development, <http://infed.org/mobi/what-is-non-formal-education/> retrieved October 31, 2016.
- Department of Transportation (DOT), National Highway Traffic Safety Administration, National EMS Standards for Paramedic (2009) National Emergency Medical Services

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- Education Standards – Paramedic Instructional Guidelines – DOT HS 811 077 E, <http://www.ems.gov/pdf/811077e.pdf>, Retrieved April 14, 2016.
- Doms, M., Lewis, E. Robb, A. (2010) Local labor force education, new business characteristics, and firm performance. *Journal of Urban Economics*, 67: 61-67.
- Giddens, J., Keller, T., and Liesveld, J. (2015) Answering the call for bachelor-prepared nursing workforce: An innovative model for academic progression. *Journal of Professional Nursing*, 31(6): 445-451.
- Hsieh, A. (2012) Why a degree is a must for today's paramedic. *EMS1 article*, <http://www.ems1.com/ems-products/education/articles/1269674-Why-a-degree-is-a-must-for-todays-paramedic/> retrieved October 31, 2016.
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO), *Ambulatory Care Program: The Who, What, When, and Wheres of Credentialing and Privileging*, [https://www.jointcommission.org/assets/1/18/AHC\\_who\\_what\\_credentialing\\_booklet.pdf](https://www.jointcommission.org/assets/1/18/AHC_who_what_credentialing_booklet.pdf), retrieved October 31, 2016.
- McMillan, S.C., (1985) A comparison of professional performance scores of graduating associate and baccalaureate degree nursing students. *Research in Nursing and Health*, 8, 167-172.
- Michau, R., Roberts, S., Williams, B., and Boyle, M. (2009) An investigation of theory-practice gap in undergraduate paramedic education. *BMC Medical Education*, 9:23.
- National Highway Traffic Safety Administration (NHTSA), Office of EMS, website, [http://www.ems.gov/pdf/2010/EMSAgendaWeb\\_7-06-10.pdf](http://www.ems.gov/pdf/2010/EMSAgendaWeb_7-06-10.pdf) Retrieved April 9, 2016.
- Nooney, J.G., Unruh, L., and Yore, M.M. (2010) Should I stay or should I go? Career change and labor force separation among registered nurses in the U.S. *Social Science and Medicine*, 70, 1874-1881.
- Psacharopoulos, G., Patrinos, H.A. (2004) Returns to investment in education: a further update. *Education Economics*, 64: 373-398.
- Polk, D. A. and Langford, S. J. (1993) EMS Degree Programs: Opening doors you didn't know existed. *JEMS*, S39-S44.
- Shin, K., Jung, D.Y., Shin, S., and Kim, M.S. (2006) Critical thinking dispositions and skills of senior nursing students in associate, baccalaureate and RN-to-BSN programs. *Journal of Nursing Education*, 45:6, 233-237.

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Stone, J. C. and Green, J. L. (1975) The impact of a professional baccalaureate degree program. *Nursing Research*, 24:4, 287-292.

Williams, B., Onsmann, A., and Brown, T. (2012) A Rasch and Factor Analysis of a paramedic graduate attribute scale. *Evaluation and the Health Professions*, 35:2, 148-168.

Winters, J. V. (2013) Human capital externalities and employment differences across metropolitan areas of the USA. *Journal of Economic Geography*, 13: 799-822.

**Crosswalk with other standards documents or past recommendations**

EMS Agenda for the Future

EMS Education Agenda for the Future: a Systems Approach

National EMS Core Content

National EMS Scope of Practice Model

National EMS Education Standards

Promoting Innovation in Emergency Medical Services

**Analysis**

The national guidelines and policies that direct EMS goals and vision have long promoted a culture of growth and development. Central to attainment of those promotional objectives is a firm educational foundation. Whereas most allied health professions render credentials for practice following formalized education through institutions of higher education, EMS has traditionally recognized providers of the discipline through structured, discrete training. The training, while germane to the practice of prehospital care, rarely includes general education or foundational content of higher education. This deficit in education creates a notable differential between paramedicine and other allied health professions.

**Committee conclusions**

The Provider and Community Education Committee of the National EMS Advisory Council recognizes the need to formalize paramedical education nationwide and to affirm this

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profession's role within the overall healthcare arena. While we in the industry recognize EMS as a practice of medicine, that is not a universal perception among all other allied health professions, largely due to the lack of a strong post-secondary educational requisite. This integration and recognition can best be accomplished with a more formalized process of education for credentialing, rather than training for certification of competency.

This recommendation for a strategic plan to formalize the educational process does not preclude the importance or opportunity for basic life support providers of EMS (e.g., emergency medical technicians (EMTs) and emergency medical responders (EMRs)) to achieve that level of certification through independent courses. This element of support for society should continue without impedance, but should also facilitate the opportunity for the academic progression into a more formalized degree of paramedicine. This initiative is consistent with contemporary interpretations of professional growth and development of the paramedic professions of the future.

**Recommended Actions/Strategies:**

**Recommendation #1:**

The U.S. Department of Transportation and the National Highway Traffic Safety Administration should convene a multidisciplinary task force comprised of EMS educators, practitioners, stakeholders, special interest groups, subject matter experts, and allied healthcare profession representatives to craft the essentials of the core curriculum for the supplemental content in the formal paramedicine degree. Educational content in the paramedicine degree should enable parity with similar allied health professions.

**Recommendation #2:**

The U.S. Department of Transportation and the National Highway Traffic Safety Administration should consider the development of a strategic plan for the creation of additional tiers of paramedic education to yield a formal degree that include the associate, baccalaureate, and various graduate degree levels. The development of the strategic plan

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should be completed within a reasonable time frame in a model that is applicable to emergency medical services, similar to that of other professions (e.g., Fire and Emergency Services Higher Education Recognition Program (FESHE)).

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