

Embracing the future for emergency nurse practitioners and specialty practice: Implications for research, clinical practice, education, and health policy

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ABSTRACT

The emergency nurse practitioner (ENP) specialty has grown rapidly, responding and adapting to changes within emergency care. Designation and advancement of nurse practitioner (NP) specialties follows a systematic process as defined by the profession. This includes establishment of scope and standards of practice, educational standards, and policy initiatives to ensure quality and safety within the profession. This article describes how the ENP specialty has used evidence to meet health system needs and chart a transformational future. Current recommendations for advancing health care transformation, as described by the American Association of Colleges of Nursing–Manatt Report, inform and frame the processes by which the ENP specialty has collaborated with diverse stakeholders to create a research and policy agenda to ensure that ENPs are appropriately prepared to lead and provide access to safe, affordable, quality health care. These processes provide a future-oriented model that promotes advancement of the NP profession through provision of new NP specialty designations as they emerge to meet changing health care system needs.

Keywords: Emergency department; emergency nurse practitioner; emergency nurse practitioner education; emergency nurse practitioner practice standards; health policy; NP specialty practice.

Journal of the American Association of Nurse Practitioners 30 (2018) 586–591, © 2018 American Association of Nurse Practitioners

DOI# 10.1097/JXX.0000000000000123

Background

Nurse practitioner (NP) specialties are increasing as the NP role adapts to meet changing health care delivery,

workforce needs, and the public's expectation for health care provider specialized expertise (Aleshire, Wheeler, & Prevost, 2012; Austin, 2016). Nurse practitioner specialties exemplify innovation within the professional role as acquisition of additional knowledge and skills in a focused area result in new role definitions and practice standards. As new health care specialties are recognized and integrated within the health care system, it is the responsibility of those professions and their members to uphold the highest level of vigilance to protect their role, ensure relevancy, and promote public well-being by ensuring safe, high-quality patient care standards (Porter-O'Grady & Malloch, 2018). Leading transformational change requires a specialty to envision and initiate adaptations to role definitions, scope and standards of practice and educational strategies as scientific evidence, technologies, quality improvement strategies, and theoretical models change within the health care industry. Transformational change, through specialization within the NP profession, meets the Institute of Medicine's (IOM)

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Received: 1 May 2018; **accepted** 30 July 2018

Future of Nursing recommendations (IOM, 2011) by improving patient access to specialty care by increasing the number of NPs having specialized competencies. Specialty practice is also consistent with the Triple Aim of improving patient-centered population health by increasing access to NPs competent in providing high-quality, cost-effective specialized care (Berwick, Nolan, & Whittington, 2008; Salmond & Echevarria, 2017).

The emergency nurse practitioner (ENP) specialty has rapidly grown over the past 50 years. Currently, of the 248,000 NPs within the United States, nearly 15,000 report practicing in emergency care settings (5.9%) (American Association of Nurse Practitioners [AANP], 2018a). As the science of emergency care has advanced, NPs have contributed to the unique body of knowledge through research that has helped to advance the ENP specialty. Collaborative research with stakeholders has provided a foundation for evaluating and modifying educational and practice standards to meet rapidly changing trends within emergency care. These efforts further inform quality improvement and policy development within the specialty. This article synthesizes the implications discussed within this themed issue to describe how ENPs have created a research agenda to envision and impact the future of their specialty and provides a future oriented model for development of other NP specialties in adherence with current regulatory guidelines.

Envisioning and supporting the growth of specialty practice

In acknowledging the growth of specialty practice within the NP profession, the American Association of Nurse Practitioners (AANP) created the first Specialty Practice Groups (SPGs) in 2015 to provide members with targeted forums to discuss, network, collaborate, and share information “to advance specialty knowledge” (AANP, 2018b). By 2018, the number of AANP SPGs increased from two to 12 in response to changing NP practice trends determined through requests and regularly conducted member surveys (AANP, 2018b). In response to increasing growth and interest within the ENP profession, an Emergency SPG was launched in 2018. This provided AANP members with a means to monitor and communicate changes in standards of care and practice barriers within the ENP specialty to inform educational preparation, practice standards, and policy development.

Similarly, the National Organization of Nurse Practitioner Faculties (NONPF) established Special Interest Groups (SIGs) to facilitate networking and sharing of educational resources in specialty education. In 2018, NONPF launched an Emergency SIG in response to educator requests as the number of ENP academic postgraduate programs were projected to double within the year. The NONPF SIG provides a forum for discussion and dissemination of curricular standards for ENP educators

(American Academy of Emergency Nurse Practitioners [AAENP], 2018). The ENP SIG is important for envisioning the future of ENP education and practice by providing educators networking opportunities to engage in collaborative research initiatives that examine educational standards and teaching strategies. These initiatives may serve to promote evaluation of program outcomes to ensure curricula are appropriate, scientifically derived, and cost-effective. Otherwise, left unexamined pedagogical approaches will become quickly outdated given the rapid changes and system needs within emergency care practice.

As described within the *Consensus Model for APRN Regulation* (Advanced Practice Registered Nurse [APRN] Consensus Work Group & National Council of State Boards of Nursing [NCSBN] APRN Advisory Committee, 2008), an NP specialty “evolves out of an APRN role/ population-focus and indicates that an APRN has additional knowledge and expertise in a more discrete area of practice” (APRN & NCSBN, 2008, pp.12). “New specialties emerge based on health needs of the population to provide added value to the role practice as well as providing flexibility within the profession to meet these emerging needs of patients” (APRN, & NCSBN, 2008, pp.12). Responsibility for oversight of educational programs and competency validation at the specialty level is charged to specialty organizations (APRN, & NCSBN, 2008, pp. 12). Research within the specialty ensures that ENPs have an appropriate education, valid measures to assess knowledge and skill proficiencies, and a scientific basis to inform policy that affects regulation of the profession.

The processes by which a nursing specialty is officially recognized within the nursing profession and sets forth its scope and standards were described within this issue in the article on the appraisal of the ENP role by Hoyt et al. Specialty scope and standards of practice must be tested and modified using the most current methodologies with rigorous analysis of practice trends. These data are then used to establish content validity for developing certification programs, for validating specialty knowledge, competencies, and proficiencies, and for establishing appropriate educational curricula.

The ENP scope and standards of practice were published by the American Academy of Emergency Nurse Practitioners (AAENP) in collaboration with the Emergency Nurses Association (ENA) in 2016 after an exhaustive review of the ENP role literature and national emergency care demographic data and practice trends (AAENP, 2016). These data along with practice analysis surveys (AANPCB, 2016) provided the basis for development of a psychometrically sound certification examination described by Tyler et al. in the ENP practice analysis article within this issue. Clarification of and establishment of ENP practice standards using improved strategies for measuring ENP practice/proficiency milestones were discussed in the

previous article in this series by Ramirez et al. This work established new industry congruent standards for evaluating ENP skills and knowledge applicable for educators and employers. Finally, in the proposed standardized educational ENP curricula article within this series, Wilbeck et al. describes how ENP educational curricula are structured, based on evidence of emergency practice trends and scope and practice standards. Using relevant research in development of educational and practice standards ensures that ENPs have the appropriate preparation for specialty practice acquired through academic programs, fellowships, or continuing professional education consistent with changes in emergency care.

As new NP specialties emerge, consultation between specialty organizations and state boards of nursing is critical to prevent unnecessary barriers to practice within the profession as questions arise regarding specialty scope of practice (Hain & Fleck, 2014). Specialty organizations are charged to develop, implement, and evaluate specialty education to ensure quality and relevancy (APRN & NCSBN, 2008). State boards are charged with monitoring/regulating licensure, which varies legislatively state to state. Meanwhile, interpretation of the regulation of specialty practice has become controversial as currently written within the *Consensus Model* (APRN & NCSBN, 2008). Reexamination of the role of professional specialty organizations as described within the *Consensus Model* is needed to clarify policies for regulation and oversight of specialty practice. This must include collaboration with emergency care stakeholders, employers, and nursing organizations to ensure appropriate regulation of the specialty consistent with improving access to care and meeting health system workforce needs.

Envisioning the future of specialty practice through research

Today's emergency departments (EDs) are complex settings providing a wide range of care from community public health services and management of minor health complaints, to acute stabilization and resuscitation of life-threatening conditions. In the past 20 years, EDs have become safety nets for access to care among the poor and uninsured and as settings for unscheduled, convenient, walk-in care among insured patients (Kellermann, Hsia, Yeh, & Morganti, 2013; Morganti, et al., 2013). Emergency care settings are diverse and include rural, critical access settings, correctional institutions, some occupational health centers, urgent care clinics, and other settings where patients present with a wide range of medical conditions.

Although the "core mission of EDs is stabilization of patients with potentially life-threatening illnesses and injuries" (Morganti, et al, 2013, pp. 49), between 28% and 50% of all visits nationwide for new-onset episodic or chronic health condition flares are now seen in the ED versus primary care settings (Pitts, Carrier, Rich, &

Kellermann, 2010). Today's EDs also serve as primary diagnostic centers for unscheduled patients requiring complex medical work-ups and as the entry point for more than half of all hospital admissions (Morganti, et al, 2013; Pitts, Pines, Handrigan, & Kellermann, 2012). This has resulted in critical workforce gaps in emergency care that NPs have rapidly filled.

However, as increasing numbers of NPs enter the ED workforce, emergency care knowledge and skill gaps have become apparent to employers when NPs are hired having only entry-level core and population-focused NP competencies. Specialty practice requires higher level, emergency-specific knowledge and skills that are appropriate and based on ED trends and practice data. Current evidence supports that ENPs must be prepared to care for pediatric and adult patients presenting with minor and urgent medical conditions and that they are also proficient in advanced level triage, care initiation, resuscitation and stabilization of emergent conditions, and in the care of obstetrical and gynecological conditions (AAENP, 2018). ENPs must also recognize when patients, once stabilized, require admission/transfer to higher levels of care in adherence with federal laws. The opinion that to safely practice in emergency settings requires education in "on-going management of and intervention of physiologically unstable, technologically dependent" patients—the role of an acute care pediatric or adult-gerontology NP (NONPF, 2016) needs to be tested, in comparison to current curricular recommendations that emergency-specific content builds on the family nurse practitioner (FNP) foundation to ensure that ENP training is appropriate, cost-effective, and sufficient. Analysis of national ED demographic and census data, when viewed in conjunction with national regulatory models and practice analyses, provides information and structure to design quality transformative changes within the ENP profession.

Practice-based research

Emergency nurse practitioner researchers are well positioned to assess quality outcomes, lead outcome-driven, transdisciplinary research to test new emergency care delivery models designed to reduce costs, improve emergency care outcomes, and improve patient and provider care satisfaction consistent with meeting the Quadruple Aim of Health Care Improvement (Bodenheimer & Sinsky, 2014). Innovative emergency care delivery models are currently being implemented to improve care access and reduce costs. These include free-standing EDs offering additional specialty and primary care services, home-based, on-demand urgent care delivered by NP/emergency medical service professional teams, and use of telehealth to increase access to ED services in rural settings and to reduce wait times and occupancy in busy EDs (Augustine, 2013; Choi, Blumberg &

Williams, 2016; Dispatch Health, 2016; McHugh, Krinsky, & Sharma, 2018; Morganti, et al., 2013). ENP-led research can test the outcomes of these new care delivery models to ensure they increase access, are cost-effective and safe, and that ENP educational preparation is consistent with emergency care system needs. Practice-based research will also inform modification of practice standards, competencies, and curricular development consistent with a rapidly evolving practice landscape and industry demands.

Educational research

Educational research is needed to test the effectiveness of teaching strategies as increasing numbers of ENP educational programs are established to meet the diverse ED workforce needs. As NP specialties evolve, especially those with overlapping population-focused competencies, curricular standards must be evaluated in relation to practice standards to ensure they are congruent, flexible, sufficient, and cost-effective. Pedagogical principles must be adapted to embrace new technologies, learner needs, and improved methods for assessment of clinical proficiencies and readiness to practice. Educational research must be on-going as practice environments inform organizational theories and as quality improvement and research methodologies evolve. Envisioning the future for ENP education requires a strong research foundation.

Research to inform policy

Nurse educators have recently been charged, based on anticipated health care delivery changes, to take a more active role in partnering with health care institutions and other professions to lead in transforming health care and health policy (AACN, 2016; Glazer & Sharp-McHenry, 2017). These partnerships will help to align ENP curricula with health system workforce needs and support trans-disciplinary translational research to shape policy affecting the specialty. This requires cooperation between stakeholders and nursing organizations and a willingness to adapt policy as new evidence emerges.

Despite strong evidence driving changes in ENP clinical education and requirements for certification, ENP specialty preparation and readiness for practice remains poorly understood (AAENP, 2018). Consequently, interpretation of ENP scope of practice has proven difficult for employers, physicians, NPs, professional organizations, and state boards of nursing in the context of the 2008 *Consensus Model*. This challenge has resulted in restrictive barriers to practice among state boards and facility credentialing bodies that is contributing to role confusion and increasing ED workforce gaps.

Nurse practitioners have rapidly entered emergency care. They have done so with varied experience and entry-level educational backgrounds. Although the majority of

ENPs report role preparation through clinical practice and continuing education (88%), as described by Tyler et al. in the ENP practice analysis article, there are increasing numbers of ENPs entering the workforce upon completion of graduate ENP academic and fellowship programs as the number of these specialty programs has grown. Current evidence supports the FNP educational foundation as most congruent for practice requirements in the majority of emergency care settings. However, there are also ENPs prepared in pediatric and adult-specific population-based educational programs who, like FNPs, add emergency-specific knowledge and competencies through on-the-job training and continuing education. These ENPs, limited by age-restricted scope of practice, must be supported as they transition to the role and prepare for certification eligibility through individualized educational programs designed to fill their population-focused competency gaps. Comparison studies of care outcomes of board-certified ENPs will further strengthen the specialty as it advances and will help to validate ENP curricula.

Although the *Consensus Model* (APRN & NCSBN, 2008) clearly states that an NP's scope of practice is not setting specific, the ED as a setting for care has been repeatedly used to explain role differences between primary and acute care NPs. Unfortunately, these examples have failed to consider the unique knowledge and skills required to care for unscheduled patients of all ages who present to ED settings with widely ranging psychosocial and medical conditions. Emergency nurse practitioner preparation requires a diverse set of skills and knowledge in caring for patients of all ages not currently met through age-limited population-focused academic NP programs. ENP specialty preparation builds on NP core and population-focused education, and, as described within the *Consensus Model*, specialty practice is established and monitored by the specialty profession. State licensing boards "will not regulate the APRN at the level of specialties" (APRN & NCSBN, 2008, p. 12). Research and clinical expertise within the profession must inform any changes in specialty practice regulation.

On-going research is needed to determine whether the ENP specialty has sufficiently evolved for designation as a new role or population as described within the *Consensus Model* (APRN & NCSBN, 2008, pg. 13). Designation of the ENP as a new role or population will affect ENP program development and accreditation, ENP certification, and subsequent regulation of the profession. As currently described within the *Consensus Model*, a new APRN role/population requires that the practice "is not entirely subsumed within one of the other roles" and that its educational standards and practice competencies exist, are consistent and nationally recognized by the profession" (APRN & NCSBN, 2008, pg. 13).

The ENP role is that of a NP. To cost-effectively meet ED staffing needs, ENPs must be prepared to care for patients of all ages consistent with the FNP population foci. However, emergency care requires specialized competencies that meet the definition of a specialty practice. ENP researchers, having practice expertise and research skills, are well-suited to evaluate the evidence to determine whether a new role or population criterion has been met and when practice regulation and policies require change. Any proposed change will also require stakeholder input from diverse organizations, ENP educators, and NP employers.

Embracing the future of nurse practitioner specialty practice

As transformative leaders, NP specialists must push boundaries to promote quality, safety, and innovation within health care. According to Porter-O'Grady and Malloch (2018), a cornerstone of effective innovation involves deconstruction of prior models to ensure relevancy and sustainability of the profession. This requires that ENP providers and educators remain open to diverse stakeholder views and new theories and models of care to best meet rapidly changing health care needs. Relevancy, a key to sustainability, requires that change be appropriate and timely and that the profession driving change has value (Porter-O'Grady & Malloch, 2018). The value of a specialty within the health care system is, in part, based on where it fits within a transforming model of care. Evaluation of a specialty's relevance and value is also based on the metrics used to demonstrate accountability and clinical and process outcomes and effectiveness in partnerships with stakeholders.

The ENP specialty has rapidly advanced with support from the AAENP in collaboration with its partner organizations, AANP, ENA, NONPF, the American Academy of Nurse Practitioner's Certification Board, the American College of Emergency Physicians, and the American College of Osteopathic Emergency Physicians. These partnerships have contributed to setting new standards for ENPs across research, clinical practice, education, and policy initiatives. These standards are consistent with the key elements of transformative health care delivery as described within the American Association of Colleges of Nursing-Manatt report (AACN) for *Advancing Healthcare Transformation* (AACN, 2016). These key elements adapted for the ENP specialty include embracing a new vision, strengthening ENP clinical practice, partnering in preparing ENPs of the future, partnering in implementation of accountable care, investing in ENP nursing research programs for better integration of research into clinical practice, and implementation of an advocacy agenda to support a new era for academic nursing.

As the ENP specialty has grown, the development of an advocacy agenda has emerged. ENP experts have been working with employers and state boards of nursing across the nation to spread awareness of ENP specialty education and certification opportunities. Emergency nurse practitioner scope and practice standards have been disseminated through publications, presentations, and through work with stakeholders and state boards to clarify the unique role and competencies of the ENP. This work has been accomplished by individuals at the local level and through the efforts of AAENP and their partners collectively at state and national levels. Advocacy work is critical to ensure that the future of the profession remains relevant and sustainable.

Figure 1 shows the AACN-adapted Transformational Model for Embracing the Future for ENP Practice (2016). This model can be applied to other specialties as they emerge in response to health care needs. The model provides a framework for promoting clinical opportunities for NP specialty-role development and evaluation of team skills critical to meeting health system employer needs. The development of the ENP specialty is consistent with the transformational approach recommended by AACN and with the recommendations for regulation of specialty practice as defined within the *Consensus Model*. Implementation of an ENP advocacy agenda is on-going as the specialty responds to changes within emergency care to ensure safe, accessible, and affordable care to patients of all ages and acuities. The processes followed in establishing the ENP specialty serve as an exemplar and roadmap as new transformational, relevant, and

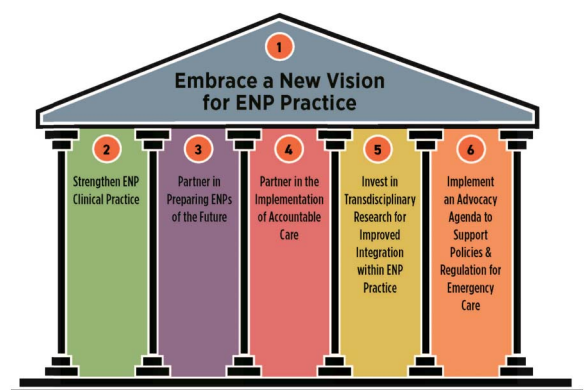


Figure 1. Transformational Model for Embracing the Future for ENP Practice. Adapted from American Association of Colleges of Nursing (AACN), Manatt Health (March, 2016, p.3). *Advancing health care transformation: A new era for academic nursing*. American Association of Colleges of Nursing. Copyright AACN 2016. Adaptations are themselves works protected by copyright. So in order to publish this adaptation, authorization must be obtained both from the owner of the copyright in the original work and from the owner of copyright in the translation or adaptation.

valued specialties emerge to meet changing health care system needs.

Authors' contributions: D. D. Evans led substantial contributions to the conception and design of the work, including drafting and revising the work for critically important intellectual content and assuming accountability for all content. K. S. Hoyt provided substantial contributions to the conception and design of the work, including revising the work for critically important intellectual content and assuming accountability for all content. J. Wilbeck led substantial contributions to the design of the work, including revising the work for critically important intellectual content and assuming accountability for all content. L. Schumann, E. Ramirez, D. Tyler, and D. Agan provided substantial contributions to the design of the work, including revising the work for critically important intellectual content and assuming accountability for all content.

Competing interests: The authors report no conflicts of interest.

References

- Advanced Practice Registered Nurse Consensus Work Group & National Council of State Boards of Nursing APRN Advisory Committee. (2008). *Consensus model for APRN regulation: Licensure, accreditation, certification and education*. (2008). Retrieved from https://www.ncsbn.org/Consensus_Model_for_APRN_Regulation_July_2008.pdf.
- Aleshire, M. E., Wheeler, K., & Prevost, S. S. (2012). The future of nurse practitioner practice: A world of opportunity. *Nursing Clinics of North America*, 47, 181–191. doi: 10.1016/j.cnur.2012.04.002.
- American Academy of Emergency Nurse Practitioners. (2016). *Scope and standards for ENP practice*. Retrieved from http://aaenp-natl.org/images/downloads/aaenp_scope_and_standards.pdf.
- American Academy of Emergency Nurse Practitioners. (2018). *Practice standards for the emergency nurse practitioner specialty*. Retrieved from http://aaenp-natl.starchapter.com/images/downloads/Practice/practice_standards_for_the_emergency_nurse_practitioner.pdf.
- American Academy of Nurse Practitioners Certification Board. (2016). *Executive Summary of the 2016 Practice Analysis of Emergency Nurse Practitioners*. Austin, TX. Retrieved from <http://www.aanp-cert.org/resource/documents/AANPCB%202016%20ENP%20Practice%20Analysis%20Executive%20Summary.pdf>.
- American Association of Colleges of Nursing, Manatt Health. (2016, March). *Advancing healthcare transformation: A new era for academic nursing*. American Association of Colleges of Nursing. Retrieved from <http://www.aacnursing.org/Portals/42/Publications/AACN-New-Era-Report.pdf>.
- American Association of Nurse Practitioners (AANP). (2018a). *Press Releases and Announcements: Number of nurse practitioners hits all record high*. Retrieved from <https://www.aanp.org/press-room/press-releases/173-press-room/2018-press-releases/2190-number-of-nurse-practitioners-hits-new-record-high>.
- American Association of Nurse Practitioners (AANP). (2018b). *Specialty practice groups*. Retrieved from <https://www.aanp.org/membership/specialty-practice-groups>.
- Augustine, J. (2013). The future of unscheduled Care. Unpublished report, Emergency Department Benchmarking Alliance.
- Austin, D. (2016). *New roles for nurse practitioners bring opportunities and challenges*. Science of Caring. Retrieved from <https://scienceofcaring.ucsf.edu/patient-care/new-roles-nurse-practitioners-bring-opportunities-and-challenges>.
- Berwick, D., Nolan, T., & Whittington, J. (2008). Quality and accountability: The triple aim: Care, health & cost. *Health Affairs*, 27, 759–769. doi: 10.1377/hlthaff.27.759.
- Bodenheimer, T. & Sinsky, C. (2014). From trip to quadruple aim: Care of the patient requires care of the provider. *Annals of Family Medicine*, 12. Retrieved from <http://www.annfamem.org/content/12/6/573.full.pdf+html>.
- Choi, B., Blumberg, C., & Williams, K. (2016). Mobile integrated health care and community paramedicine: An emerging emergency medical services concept. *Annals of Emergency Medicine*, 67(3), 361–366. <https://doi.org/10.1016/j.annemergmed.2015.06.005>.
- Dispatch Health. (2016). *Redefining on-demand care in senior living and home health*. Retrieved from <https://bonsecours.com/library/our-services/richmond/dispatchhealth/white-paper.pdf>.
- Glazer, G. & Sharp-McHenry, L. (2017, March 29). "Legislative: Advancing health care transformation a new era for academic nursing". *The Online Journal of Issues in Nursing*, 22, No. 2. doi: 10.3912/OJIN.Vol22No02LegCol01. Retrieved from <http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/Columns/Legislative/Legislative-Advancing-Healthcare-Transformation-A-New-Era-for-Academic-Nursing.html>.
- Hain, D. & Fleck, L. (2014). "Barriers to nurse practitioner practice that impact healthcare redesign". *OJIN: The Online Journal of Issues in Nursing*, 19, Manuscript 2. doi: 10.3912/OJIN.Vol19No02Man02.
- Hoyt, K., Evans, D., Ramirez, E., & Wilbeck, J. (2017). The specialty of emergency nurse practitioner practice. *Advanced Emergency Nursing Journal*, 39, 231–235. doi: 10.1097/TME.000000000000166.
- Institute of Medicine (IOM). (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: The National Academies Press.
- Kellermann, A., Hsai, R., Yeh, D., & Morganti, K. (2013). Emergency care: Then, now and next. *Health Affairs*, 32, 2069–2074. doi: 10.1377/hlthaff.2013.0683.
- McHugh, C., Krinsky, R., & Sharma, R. (2018). Innovations in emergency nursing: Transforming emergency care through a novel nurse-driven emergency department telehealth express care service. *Journal of Emergency Nursing*. doi: 10.1016/j.jen.2018.03.001.
- Morganti, K. G., Bauhoff, S., Blanchard, J. C., Abir, M., Iyer, N., Smith, A., ... Kellermann, A. L. (2013). The evolving role of emergency departments in the United States. *Rand Health Quarterly*, 3, 3. Retrieved from <https://www.rand.org/pubs/periodicals/health-quarterly/issues/v3/n2/03.html>.
- National Organization of Nurse Practitioner Faculties (NONPF). (2016). *Adult gerontology acute care and primary care competencies*. Retrieved from http://c.ymcdn.com/sites/www.nonpf.org/resource/resmgr/competencies/NP_Adult_Geri_competencies_4.pdf.
- Pitts, S., Carrier, E., Rich, E., & Kellermann, A. (2010). Where Americans get acute care: It's increasingly not at their doctor's office. *Health Affairs*, 29, 1620–1629. doi: 10.1377/hlthaff.2009.1026.
- Pitts, S., Pines, J., Handrigan, M., & Kellermann, A. (2012). National trends in emergency department occupancy: Effect of inpatient admissions versus emergency department practice intensity. *Annals of Emergency Medicine*, 60, 679–686. doi: <https://doi.org/10.1016/j.annemergmed.2012.05.014>.
- Porter-O'Grady, T. & Malloch, K. (2018). *Quantum leadership: Creating sustainable value in health care* (5th ed.) Burlington, VT: Jones & Bartlett Learning.
- Salmond, S. & Echevarria, M. (2017). Healthcare transformation and changing roles for nursing. *Orthopedic Nursing*, 36, 12–25. doi: 10.1097/NOR.0000000000000308.
- Tang, N., Stein, J., Hsia, R., Mazelli, J., & Gonzales, R. (2010). Trends and characteristics of US emergency department visits: 1997–2007. *Journal of the American Medical Association*, 304, 664–670. doi: 10.1001/jama.2010.1112.