

Strategies to Move Entry-Level Nurse Practitioner Education to the Doctor of Nursing Practice Degree by 2025

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ABSTRACT

Background: The National Organization of Nurse Practitioner Faculties (NONPF) has made the commitment to move all entry-level nurse practitioner (NP) education to the Doctor of Nursing Practice (DNP) degree by 2025.

Problem: Although there are more than 250 DNP NP programs throughout the United States, many other NP programs have yet to transition to the doctoral level.

Approach: Leaders representing licensure, accreditation, certification, education, and practice organizations attended a NONPF 2017 Summit to discuss the DNP degree as entry into NP practice. Summit participants strategized on building collective strengths and addressed barriers to implementation. A solution-oriented discussion with action items has been operationalized for the last 4 years.

Outcomes: Four workgroups were created to address education, outcomes, capacity, and messaging related to moving all entry-level NP education to the DNP degree.

Conclusion: Ongoing collaborative efforts are critical to facilitate advancing all NP education programs to the DNP degree by 2025.

Keywords: Doctor of Nursing Practice, entry to practice, graduate nursing education, National Organization of Nurse Practitioner Faculties (NONPF), nurse practitioner

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For the past 20 years, numerous organizations have endorsed the Doctor of Nursing Practice (DNP) degree as entry into advanced nursing practice. Most recently, the American Association of Colleges of Nursing (AACN) published their *Vision for Academic Nursing*, reaffirming that advanced nursing study should be at the doctoral level.¹ Specific to nurse practitioner (NP) preparation, the National Organization of Nurse Practitioner Faculties (NONPF) committed to move all entry-level NP education to the DNP degree by 2025. Since the early 2000s, NONPF has led and embraced the vision of DNP-prepared NPs.

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The role of the NP has expanded beyond managing individual patients. Today, our students enter health care systems caring for vulnerable and often underserved populations with multiple coexisting conditions and numerous unmet needs. As a result, today's NPs monitor care for populations of patients, identify gaps in care processes and outcomes, use data and information technology, and critically appraise and apply evidence to improve practice and population health outcomes. Doctor of Nursing Practice programs address these complexities. However, challenges continue to exist in transitioning NP education to the DNP. As a leader in quality NP education, NONPF continues to progress toward the goal of moving NP education to the DNP by 2025 and is working with national leaders to develop next steps to achieve this goal. We provide an update on progress toward the goal of moving entry-level NP education to the DNP degree by 2025 and propose next steps to achieve this goal.

Progress Toward Adopting DNP Entry-Level NP Education

A Sustained Commitment to DNP NP Education

In the early part of the 21st century, the practice doctorate further evolved and NONPF embraced this evolution,

beginning with stakeholder focus groups at the NONPF annual meetings. In 2001, NONPF launched a practice doctorate task force to guide policy development, maintain dialogue between NONPF and other nursing organizations, and provide NP faculty with resources to support the creation of new practice doctorate programs.^{2,3} In 2004, the AACN recommended phasing out the ND title and adopting the DNP degree.⁴ The AACN also recommended that all master's programs transition to the DNP degree for entry into advanced nursing practice by 2015.⁵ In 2005, the NONPF Board approved recommendations provided by the practice doctorate task force, which outlined critical components for NP education at the doctoral level.⁶

The National Organization of Nurse Practitioner Faculties has also led NP curricular development during the progression of the DNP degree, beginning with "Curriculum Models for the Practice Doctorate in Nursing."⁷ Concurrently with the release of the AACN's *Essentials of Doctoral Education for Advanced Nursing Practice*,⁸ NONPF led the development of the *Practice Doctorate Nurse Practitioner Entry-Level Competencies*.⁶ These competencies served as the foundational document for the *NONPF Nurse Practitioner Core Competencies*⁹; these competencies have established the doctoral-level requirement for NP education since 2006.⁶ In 2015, NONPF formally reaffirmed the commitment to advance the DNP degree as entry into the NP role and pledged to support faculty members through curriculum change.¹⁰ In support of this initiative, NONPF published a white paper in 2016 entitled "Transitioning to a Seamless Integrated DNP NP Curriculum."¹¹

In addition to curricular offerings, NONPF has developed and disseminated other resources to assist NP faculty with transitioning to the DNP degree.¹² In 2016, NONPF developed a business plan template to support the transition of NP programs.¹³ This template includes the components of a comprehensive business strategy that can be used to obtain financial support for a new DNP program or for transitioning existing master's NP programs.

The DNP Summit

On April 20, 2018, NONPF made the commitment to move all entry-level NP education to the DNP degree by 2025. Before setting the date, NONPF hosted a DNP Summit in Washington, DC.¹⁴ Thirty-eight stakeholders from across the United States gathered to have a dialogue on moving all entry-level NP education to the DNP degree. These leaders represented nearly 20 licensure, accreditation, certification, education, and practice organizations. The DNP Summit participants recognized the challenges in moving all entry-level NP education to the DNP degree and discussed creating a blueprint for a successful transition. Leaders also strategized on how to build on their collective strengths that would aid in the process and addressed barriers to implementation. A solution-oriented discussion resulted in action items and a transition timeline. Although not all summit participants agreed that the DNP should be

the entry-level degree required for NP practice by 2025, representatives agreed to stay actively engaged in this work.

Four workgroups with representation across summit participants were created to address issues in education, outcomes, capacity, and messaging related to moving all entry-level NP education to the DNP degree. The Education Workgroup focused on curricular models for seamless DNP programs without exiting at the master's degree. The Outcomes Workgroup collaborated with key NP stakeholders to obtain data on DNP-prepared NPs. The Capacity Workgroup identified and explored capacity issues and solutions related to creating a DNP NP workforce. The Messaging Workgroup focused on how the DNP degree as entry to NP practice should be communicated, with a specific emphasis on how the DNP degree benefits health care systems and communities.

DNP Summit Workgroup Updates

Education Workgroup

The Education Workgroup first gathered information on existing resources from faculty who had already implemented postbaccalaureate-to-DNP programs. During the 2019 AACN Doctoral Conference, the workgroup hosted a listening session with 11 postbaccalaureate-to-DNP program directors. The dialogue focused on lessons learned during the process of transitioning their NP programs to the DNP degree without a master's degree exit. Key points revolved around integrating systems thinking throughout the entire NP program, educating faculty and preceptors on quality improvement and change projects, and collaborating with practice partners to leverage the value of NPs as systems change experts.

As the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) has successfully promoted and transitioned to the DNP as entry to practice for nurse anesthesia, NONPF saw them as an exemplar in promoting DNP education. Therefore, data gathering included consulting with leaders from the American Association of Nurse Anesthetists on processes and lessons learned as they moved forward with transforming Certified Registered Nurse Anesthetist (CRNA) programs to the DNP degree. A NONPF representative also attended a workshop that focused on transitioning existing CRNA programs to the DNP degree.

Furthermore, the workgroup obtained curriculum plans from schools that had developed seamless DNP programs without master's exits. This review of course sequencing and credit structures laid the groundwork for the NONPF seamless DNP curriculum model.¹⁵

Outcomes Workgroup

The Rand report on the "DNP by 2015" recommended conducting outcome studies of DNP practice to better understand the impact of DNP graduates on patient care.¹⁶ To this end, the outcomes workgroup embodies a coordinated effort by key NP stakeholders that represent the interests of DNP-prepared NPs to review existing DNP

outcomes data and identify gaps regarding licensure, accreditation, certification, education, and practice. The workgroup has engaged in a 2-phase process, with the first phase consisting of identifying existing literature and data regarding outcomes for DNP-prepared NPs. The second phase of the work has centered on developing a national DNP NP minimum dataset (DNP NP MDS) that can be used to measure outcome data for DNP-prepared NPs.

In the first phase of the work, the group identified studies in the published and gray literature that measured DNP-prepared NP outcomes, as well as state, national, educational institution, and health system databases that are tracking NP outcomes. An environmental scan of the literature resulted in only a small number of studies measuring DNP-prepared NP outcomes.^{17,18} The workgroup concluded that, although important work had been done, there were not enough published data available for a literature synthesis on DNP studies that are specifically related to DNP-prepared NP outcomes.

In addition, the workgroup collected data on DNP graduates, including graduation rates of NP students by degree and certification pass rates. Using information prepared by the AACN, the workgroup explored data from 2013 to 2020.^{19,20} Master's student NP graduates have continued to grow at a steady rate during that period (14 216-29 587). Postbaccalaureate DNP NP student graduates (377-3139) and postmaster's DNP NP student graduates (530-1269) have steadily increased. The workgroup is in the process of reviewing certification pass rates of DNP candidates in comparison with all candidates from 5 certifying organizations.

In the second phase of the work, the workgroup identified the need to develop a minimum dataset (MDS) related to DNP-prepared NPs. Development of the DNP NP MDS included reviewing and synthesizing multiple existing surveys used to collect data on NPs. This review resulted in an MDS of core and additional variables that can be used to collect standardized data about DNP-prepared NPs.²¹

Capacity Workgroup

The Capacity Workgroup began with a fishbone analysis to identify factors contributing to insufficient capacity to create a DNP-prepared NP workforce. The main branches of the fishbone included the following categories: human resources, practice and regulatory policies, academic administration restrictions, and student and financial issues. The fishbone analysis was refined to specifically identify contributing factors, leading to the cataloguing of nearly 40 causes that contribute to decreased capacity for a DNP-prepared NP workforce. Through consensus, the group identified priorities; the top 4 included funding for students, funding to increase clinical placement capacity, recruitment and retention of practice-focused faculty, and increased clarity of financial models for DNP programs.

Health Resources and Services Administration (HRSA) funding represents a significant source of health care professional education grants. The group analyzed trends in

HRSA advanced practice nursing traineeship funding and found that funding had significantly decreased from 2014 to 2017. On the basis of the review, there was more than a \$7 million reduction of funding for prelicensure traineeship grants since 2014 and a corresponding reduction in the number of grantees from 89 to 63. In addition, it was found that, despite an increase in the number of students who received funding, the percentage of students from rural backgrounds decreased from 42% in 2014 to 24% in 2017. The National Organization of Nurse Practitioner Faculties reviewed the data with stakeholders and sent a letter to the US Office of Management and Budget to advocate for increased funding for NP education programs.

Workgroup members expressed concern about increasing clinical placement requirements as a capacity-limiting issue for movement to the DNP degree. Decreasing preceptor burden and providing incentives for preceptors are 2 strategies to increase capacity. Working with the NP roundtable, NONPF and other nursing organizations wrote letters to the Centers for Medicare & Medicaid Services to revise language regarding teaching documentation, which resulted in successful changes to regulatory language allowing NPs to use student documentation for billing. In addition, several states have successfully passed tax credit legislation for providers who precept NP students. A workgroup member drafted a recommendation for model tax credit legislation.

Clinical faculty recruitment and retention can be challenging for a variety of reasons, including practice-academia salary differentials, perceived inequity in workload between clinical and tenure-track faculty, and lack of tenure eligibility for clinical faculty at many institutions. Although universities retain the right to set criteria for appointment, promotion, and tenure, the workgroup drafted language for clinical-track tenure that could be used by schools. The workgroup presented on "Using the Boyer Model of Scholarship for the DNP Tenure Process" at the NONPF 2020 Annual Conference.²²

Moreover, concerns regarding financial losses can be a barrier to implementing DNP NP programs. Using the NONPF Business Plan Template, a financial model was added to the materials and presented at the NONPF 2020 Fall Conference.²³ The template can be used by schools to guide a financially sustainable model for new DNP NP programs.

Messaging Workgroup

The Messaging Workgroup focused on communicating the value and importance of DNP education as entry into NP practice. Objectives included reviewing previous messaging campaigns regarding changes in nursing education, identifying audiences, and crafting unique key messages for each audience while including representatives from licensure, accreditation, certification, education, and practice. For the past several decades, there has been inconsistent formal messaging around degree transitions in NP education. As a result, the workgroup recommended developing a

comprehensive messaging plan, and NONPF added a communication specialist to the NONPF staff.

The workgroup also reviewed the experiences of other professions, such as pharmacists and physical therapists, who converted their educational programs to clinical doctorates.^{24,25} The need to enhance their students' educational content resulted from an increase in the complexity of care required for individuals and populations. A common thread was the need to develop critical thinking and system-focused competencies in students. These competencies could be fully supported in their doctoral program.

Current Status of the Workgroups

Regarding the current status of the 4 workgroups, 3 of the workgroups (Education, Capacity, Messaging) have completed their action items.¹⁴ The fourth workgroup (Outcomes) continues to further refine and test the DNP NP MDS survey. The National Organization of Nurse Practitioner Faculties remains committed to moving forward the DNP degree by 2025 and is aligned with the AACN's *Vision for Academic Nursing*.¹ Using the recommendations from the workgroups, NONPF developed strategies to assist faculty in transitioning to the DNP degree.

Development of NONPF Resources for the Transition to the DNP Degree

At the organizational level, NONPF recognized a need to disseminate information on transitioning NP education to the DNP degree. Early in this process, NONPF published an infographic highlighting the growing number of DNP programs across the United States.²⁶ After the release of this information, a podcast for NP faculty was developed in which NONPF leaders discussed the importance of transitioning NP education to the DNP degree. The podcast was released in October 2019.²⁷ In 2020 at the NONPF conference, a panel of representatives from licensing, accreditation, certification, education, and practice was asked to discuss the impact of the DNP degree on their organization.

Building on the work of the Summit education workgroup, NONPF developed and disseminated a postbaccalaureate-to-DNP curriculum template. First presented at the Fall 2020 NONPF Conference, this template outlines a postbaccalaureate-to-DNP curriculum, which includes 1000 direct patient care clinical hours.¹⁵ The curriculum, which was based on a thorough review of successful postbaccalaureate-to-DNP programs, incorporates core didactic and clinical management courses with a series of system-level seminars in which the DNP competencies are actualized. The DNP NP curriculum includes a complementary document to map the courses and content to the "Common Advanced Practice Registered Nurse Doctoral-Level Competencies."²⁸

To assist NP faculty in the curriculum revisions, NONPF has also developed a series of DNP workshops. First presented at the NONPF Fall Conference in 2019, these programs have been transformed to a virtual format

and are being offered several times per year. The workshops offer hands-on support and consultation for faculty involved in transitioning their current master's-level NP programs to DNP-level programs.

Next Steps Toward Moving Entry-Level NP Education to the DNP Degree by 2025

The movement of all entry-level NP education to the DNP degree will require the ongoing collaboration of stakeholders representing licensure, accreditation, certification, education, and practice. The National Organization of Nurse Practitioner Faculties is committed to continue working with these stakeholders to advance the work of the DNP-prepared NP.

Sustained collaboration with the National Council of State Boards of Nursing is essential to examine and address regulatory and legislative barriers for DNP-prepared NPs. During the transition to master's-level education for NPs in the 1990s, NPs with a baccalaureate or other non-master's-level degree were allowed to continue to practice. A parallel recommendation should be developed for current master's-prepared NPs who do not have a DNP degree. In the event that a master's degree is required for NP licensure, modifications will need to be made to regulations or statutes to ensure that nurses who have a DNP degree (but no master's degree) can also obtain licensure to practice. In addition, collaboration is critical among NP stakeholder organizations to address legislative and regulatory efforts aimed at limiting use of earned academic credentials, specifically using the title "Dr" for NPs with doctoral degrees.

Nurse anesthesia education's transition to the doctoral degree was successful due to the joint work of education, accreditation, and certification. The COA, the singular accreditation arm in nurse anesthesia, was able to create a seamless movement to the doctoral level.²⁹ However, there is more than 1 accreditation agency that exists for NP accreditation. As a result, continued conversations with NP accreditors need to occur to develop accreditation standards that are consistent with the current NP competencies written at the doctoral level since 2006. As the National Task Force Criteria for Evaluation of Nurse Practitioner Programs undergoes revision, consideration should be given to standardize the criteria to be consistent with the doctoral-level NONPF *Nurse Practitioner Core Competencies*,⁹ the AACN *Common Advanced Practice Registered Nurse Doctoral-Level Competencies*,²⁸ and the level 2 competencies of the AACN *Essentials Core Competencies for Professional Nursing Education*.³⁰

A similar scenario exists with certification. With only 1 certification agency for nurse anesthesia, the decision to move to a doctoral requirement for certification was less challenging because they supported the accreditation standard that was set by COA. In NP practice, however, there are 5 certification agencies. As doctoral preparation becomes the standard, role delineation studies would provide clarification on certification level assessment of the DNP-prepared NP graduate. Discussion needs to continue with

certifiers, with the end goal of a certification examination that requires the DNP degree and reflects doctoral-level educational outcomes, knowledge, skills, and experience.

In academia, there also may be barriers, both regulatory and institutional. Overcoming challenges in moving NP education to the DNP degree will require a robust effort among NP faculty to assess barriers. Conversations with higher education commissions and other regulatory agencies about removing obstacles to requiring the DNP degree should occur. The National Organization of Nurse Practitioner Faculties will continue to assist NP faculty in the development of curricula and essential information and tools needed to transition to and maintain doctoral-level NP programs. As the 2021 AACN Essentials are implemented, NONPF continues to collaborate with the AACN to address the intersection between the new level 2 competencies of the AACN *Essentials Core Competencies for Professional Nursing Education*,³⁰ NONPF *Nurse Practitioner Core Competencies*,⁹ and the AACN *Common Advanced Practice Registered Nurse Doctoral-Level Competencies*.²⁸

It will be critical to collaborate with practice partners who are employing DNP-prepared NPs to disseminate the outcomes of their practice. Models that optimize the knowledge, skills, and experience of DNP-prepared NPs will move the profession forward. In addition, innovative preceptor models for collaboration between practice and academia will contribute to the success of DNP-prepared NPs. Support for academic student health centers and school of nursing owned faculty practices represent areas for additional clinical sites, particularly in states with full-practice authority.^{31,32}

Conclusion

The movement toward DNP NP education has continued to evolve for the past 20 years. The National Organization of Nurse Practitioner Faculties has played a crucial role in providing direction for quality NP education and resources for NP faculty. It continues to advocate and provide leadership for transitioning NP programs to the DNP degree. Through the DNP Summit, NONPF gathered 38 organizational representatives to discuss and identify key focus areas needed to move DNP education forward, resulting in 4 workgroups: Capacity, Outcomes, Messaging, and Education. The National Organization of Nurse Practitioner Faculties continues to develop resources specific to DNP education and for faculty guiding the development of those programs. Collaborative efforts among organizations are paramount because there is still work that needs to be completed to maintain quality in NP programs in addition to consistently moving all NP education programs to the DNP degree level by 2025.

It is essential that NPs have the skills and competencies to care for populations of patients. Nurse practitioners are providing preventive care as well as addressing multiple comorbidities while navigating the inherent challenges of an increasingly complex health care system. Doctor of Nursing Practice educational preparation emphasizes a systems ap-

proach to health care delivery designed to meet those challenges. The National Organization of Nurse Practitioner Faculties is prepared to advocate for NP faculty and provide faculty resources necessary to produce DNP-prepared NPs who are ready to optimally address the health care needs of individuals, families, and communities and provide present and future health care leadership.

References

1. American Association of Colleges of Nursing. AACN'S vision for academic nursing. 2019. Accessed July 7, 2021. Available at <https://www.aacnnursing.org/Portals/42/News/White-Papers/Vision-Academic-Nursing.pdf>
2. National Organization of Nurse Practitioner Faculties. NONPF board statement, NONPF Washington, DC. 2002. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/Archives>
3. National Organization of Nurse Practitioner Faculties. Practice doctorate in nursing: models, competencies, and the NONPF perspective. 2004. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/Archives>
4. American Association of Colleges of Nursing. AACN position statement on the practice doctorate in nursing. 2004. Accessed July 7, 2021. Available at <https://www.aacnnursing.org/Portals/42/News/Position-Statements/DNP.pdf>
5. American Association of Colleges of Nursing. The doctor of nursing practice: current issues and clarifying recommendations. 2015. Accessed July 7, 2021. Available at <https://www.aacnnursing.org/Portals/42/DNP/DNP-Implementation.pdf>
6. National Organization of Nurse Practitioner Faculties. Practice doctorate nurse practitioner entry level competencies. 2006. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/Archives>
7. Marion LN, O'Sullivan AL, Crabtree MK, Price M, Fontana SA. Curriculum models for the practice doctorate in nursing. *Top Adv Pract Nurs*. 2005;5(1).
8. American Association of Colleges of Nursing. The essentials of doctoral education for advanced practice nursing. 2006. Accessed July 7, 2021. Available at <https://www.aacnnursing.org/Portals/42/Publications/DNPEssentials.pdf>
9. National Organization of Nurse Practitioner Faculties. Nurse practitioner core competencies with curriculum content. 2017. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/14>
10. National Organization of Nurse Practitioner Faculties. The doctorate of nursing practice NP preparation: NONPF perspective. 2015. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/Archives>
11. National Organization of Nurse Practitioner Faculties. Background paper: transitioning to a seamless, integrated DNP NP curriculum 2016. 2016. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/DNPResources>
12. National Organization of Nurse Practitioner Faculties. DNP Resources. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/DNPResources>
13. National Organization of Nurse Practitioner Faculties. NONPF business plan template to support transition to the DNP and word document with appendices. 2016. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/DNPResources>
14. National Organization of Nurse Practitioner Faculties. The doctor of nursing practice summit—proceedings, December 18, 2017. 2018. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/DNPResources>
15. National Organization of Nurse Practitioner Faculties. Post-baccalaureate DNP program curriculum and competency mapping template. 2020. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/DNPResources>
16. Auerbach DI, Martsolf GR, Pearson ML, et al. The DNP by 2015: a study of the institutional, political, and professional issues that facilitate or impede establishing a post-baccalaureate doctor of nursing practice program. *Rand Health Q*. 2015;5(1):1-81.

17. Minnick AF, Kleinpell R, Allison TL. DNP's labor participation, activities, and reports of degree contributions. *Nurs Outlook*. 2019; 67(1):89-100. doi:10.1016/j.outlook.2018.10.00
18. Beeber AS, Palmer C, Waldrop J, Lynn MR, Jones CB. The role of doctor of nursing practice-prepared nurses in practice settings. *Nurs Outlook*. 2019;67(4):354-364. doi:10.1016/j.outlook.2019.02.006
19. American Association of Colleges of Nursing. *2013–2014 Enrollment and Graduation in Baccalaureate and Graduate Programs in Nursing*. Washington, DC: American Association of Colleges of Nursing; 2014.
20. American Association of Colleges of Nursing. *2020–2021 Enrollment and Graduation in Baccalaureate and Graduate Programs in Nursing*. Washington, DC: American Association of Colleges of Nursing; 2021.
21. Covelli A, Fowler L, Bigley M. Development of the Doctor of Nursing Practice nurse practitioner minimum data set (DNP NP MDS). Paper presented at: Nurses Reshaping the Workforce: From Crisis to Innovation 2021 Virtual Conference; June 10, 2021; Virtual.
22. Smith G, Danford CA, Schultz C. A new era for NP education using the Boyer model of scholarship for the DNP tenure process. Paper presented at: NONPF Annual Conference; April 24, 2020; Virtual.
23. Jakubisin-Konicki A, Southard E, Idzik S, Ellis K, Hodges A, Swartwout K. *DNP Workshop Part 2-Panel*. Paper presented at: NONPF Fall Conference; November 5, 2020; Virtual.
24. Plack M, Wong C. The evolution of the doctorate of physical therapy: moving beyond the controversy. *J Phys Ther Educ*. 2002; 16(1):48-59. doi:10.1097/00001416-200201000-00008
25. Supapaan T, Low BY, Wongpoowarak P, Moolasarn S, Anderson C. A transition from the BPharm to the PharmD degree in five selected countries. *Pharm Pract*. 2019;17(3):1611-1619. doi:10.18549/PharmPract.2019.3.1611
26. National Organization of Nurse Practitioner Faculties. DNP 2025 infographic. 2019. Accessed July 13, 2021. Available at <https://www.nonpf.org/page/Archives>
27. National Organization of Nurse Practitioner Faculties. A degree of difference: DNP for education, why it matters to faculty podcast. 2019. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/DNPResources>
28. American Association of Colleges of Nursing. Common advanced practice registered nurse doctoral-level competencies. 2017. Accessed July 7, 2021. Available at <https://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/Common-APRN-Doctoral-Competencies.pdf>
29. Council on Accreditation of Nurse Anesthesia Education Programs. Standards for accreditation of nurse anesthesia programs-practice doctorate. 2021. Accessed July 7, 2021. Available at <https://www.coacrna.org/wp-content/uploads/2021/03/Standards-for-Accreditation-of-Nurse-Anesthesia-Programs-Practice-Doctorate-revised-January-2021.pdf>
30. American Association of Colleges of Nursing. The essentials: core competencies for professional nursing education. 2021. Accessed July 7, 2021. Available at <https://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/Essentials-2021.pdf>
31. National Organization of Nurse Practitioner Faculties. Commitment to nurse practitioner faculty practice. 2017. Accessed July 7, 2021. Available at <https://www.nonpf.org/page/83>
32. American Association of Nurse Practitioners. State practice environment. 2021. Accessed July 7, 2021. Available at <https://www.aanp.org/advocacy/state/state-practice-environment>