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NURSE EDUCATION REPORT

Approach to advanced practice nursing student clinical during COVID-19

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The COVID-19 pandemic has presented challenges to the advanced practice (AP) nursing clinical education environment largely due to unique challenges training programmes have of ensuring students earn required direct patient clinical care hours (Heyer et al., 2021). Many healthcare settings have restricted visitors, including students, to promote safety, while others temporarily closed their offices to in-person visits due to local mandates, which continue to vary as a result of emerging variants and case surges. While many states adopted policies that allow for simulation or other experiences to replace direct clinical hours in pre-licensure nursing programmes during COVID-19 (National Council of State Boards of Nursing, 2020), AP nursing education regulations continue to reguire a minimum of 500 supervised direct patient clinical care hours for nurse practitioner (NP) students to meet graduation and certification requirements (National Organization of Nurse Practitioner Faculties [NONPF], 2020). Thus, NP programmes must seek novel ways to maximize the use of available resources for students to earn supervised direct patient clinical care hours during this ongoing global health crisis.

The American Association of Colleges of Nursing (AACN) published considerations in July 2020 for reopening the United States (US) Schools of Nursing (SONs) that included guidance on clinical education during the pandemic. However, evidence about the use and application of these considerations in the US AP nursing programmes is limited. In this article, we aim to describe our approach to and experiences with ensuring quality clinical care experiences for Doctor of Nursing Practice (DNP) AP students during the onset

of the COVID-19 pandemic in the spring 2020 semester and our continued efforts, in accordance with the AACN guidelines (2020).

1 | AIM

We aim to demonstrate our translation of these guidelines into practice in the hopes that our experiences and approach provide other SONs and faculty with some practical solutions to the challenges of AP clinical education during this time.

2 BACKGROUND

Our SON is part of a large urban university, located in the northeastern region of the United States. In this manuscript, "SON" refers to our organization. The SON offers a variety of doctoral AP programmes, including family nurse practitioner (FNP), paediatric nurse practitioner (PNP), clinical nurse specialist (CNS), acute care adultgerontological (ACAGNP) and primary care adult-gerontological (PCAGNP). In addition to the minimum of 500 supervised direct patient clinical care hours required for NP students (NONPF, 2020), the SON requires AP students to obtain an additional 284 clinical hours which can be applied to direct or indirect patient care. At the onset of the pandemic in spring 2020 when initial restrictions were implemented, 79 total DNP AP students across the FNP, CNS, PNP, ACAGNP and PCAGNP tracks at our institution were enrolled in

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clinical. Nineteen students were in their final semester and scheduled to graduate in spring 2020, with 17 of these residing locally and two residing out of state. The remaining 60 students (60% (n = 36) local and 4% (n = 24) distant) were in their second and third years of the programme in the spring 2020 semester.

If students could safely remain in their previously established clinical settings, they were encouraged to do so. A few preceptors and sites accommodated displaced students for additional days, which allowed them to complete their clinical requirement. However, many AP clinical sites (66 of the 79) restricted student access for a variety of reasons, including a lack of personal protective equipment (PPE), increased workload of preceptors, staffing shortages and concerns about social distancing required for staff and student safety. Many practices converted from in-person visits to telemedicine wherever possible to minimize virus exposure. Across the United States, many clinical sites continue to offer telehealth in addition to in-person visits as the pandemic persists. (Callender et al., 2021).

3 | DISCUSSION

3.1 | Approach

Our faculty and clinical placement team were proactive in reaching out to clinical partners at the onset of the pandemic to provide information about student needs and disaster management support and have continued to remain in close contact with our partners and check in with each surge. The continual nurturing of these clinical practice partnerships allowed for a variety of innovative student experiences and a better understanding of the struggles of clinicians during a global pandemic (Spector et al., 2021) Faculty also contacted colleagues and leaders of COVID-19 initiatives about opportunities for students to obtain clinical hours and recommended distant students seek volunteer COVID-19 response opportunities in their areas of the country. These faculty relationships and actions at the pandemic onset have helped provide high-quality clinical experiences for our students during this challenging time (Roberts et al., 2020).

3.2 | Clinical opportunities

3.2.1 | COVID-19 response

Screening, triage and testing for COVID-19 are a priority for healthcare institutions, and newly established response centres have provided opportunities for new AP clinical sites. At the onset of the pandemic, 32 students from our institution functioned under direct supervision of NP and physician preceptors in COVID-19 response centres and followed evidence-based, institutional algorithms. Students improved history-taking, documentation skills, ability to follow guidelines and communication with patients, in addition to advanced leadership and disaster management skills. Debriefing sessions, led by faculty and required of all students, provided a platform to discuss issues concerning infection complications and effects on the workforce and community.

Indirect clinical opportunities, including the need for volunteers to teach hospital staff about PPE, have added to overall student learning. AP students have been trained to correctly don and doff PPE, and once expert, teach proper technique and function as institutional PPE safety officers.

AP students are encouraged to explore volunteer opportunities to earn clinical hours during this time. If an opportunity is identified, students are required to check with programme directors prior to engaging in clinical activities to ensure the opportunity is appropriate and that the institution has a contract with the SON. If no contract exists, the site is vetted and a clinical partnership contract is established as appropriate. In the Spring 2020 semester, 22 students at our institution earned a total of 589 h over 3 months through this method. One distant AP student established a clinical opportunity at their institution with a nurse case management programme to follow COVID-19 patients after discharge and earned clinical hours. The student reported to the director of this nurse case management programme and to a SON faculty member for weekly debrief checkins. Four students participated in a community outreach programme screening residents and staff at local long-term care facilities. Another opportunity allowed students to assist with a phone line at a local health centre where they spoke with low income, mostly uninsured patients about symptoms, emotional distress about community infections, and how to remain healthy during the pandemic.

3.2.2 | Telemedicine

As telemedicine restrictions concerning location and reimbursement were lessened across the nation as a result of the pandemic, this became a prime clinical opportunity for students (Health Resources and Services Administration, 2022). SON administration met with university hospital system leaders to develop and disseminate algorithms to all departments with instructions on how to incorporate students in telemedicine visits. In addition, AP nurse alumni around the country continue to be contacted about telemedicine clinical opportunities for students. Faculty worked to establish contracts for students to participate with these colleagues in telemedicine appointments outside our university system (Johnson et al., 2022). Students require organization-specific training and instruction on the use of telemedicine platforms, associated technologies and new ways of approaching patients, and this has been added into the programme.

Without the ability to physically assess many body systems, students gain new appreciation for the history, review of systems and patient-reported changes. Documentation is completed by the preceptor, and all portions of the visit are reviewed with the patient and student. Student learning extended beyond the participation in the telemedicine patient care encounter. For many practices and providers, the area of virtual visits was new and prior to the pandemic had only a narrow application. As the pandemic continued, Centers for Medicare and Medicaid Services (2020) issued waivers allowing

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broader coverage for more providers and across state lines. Students are required to learn policy change and are able to observe first-hand how the use of telemedicine increased access to care for a wide variety of patients. Other considerations for student learning include maintenance of privacy and standard of care in virtual visits, awareness of acceptable HIPAA-compliant platforms, how to educate patients on the use of technology and to join with preceptors as they also expand their learning of telehealth. Navigating the ever-changing and varying state regulations on the use of telehealth during this pandemic remains a challenge for schools of nursing and students alike.

3.2.3 | In-person

If in-person clinic visits continue and students remain in their original clinical locations, the students are required to wear PPE per institutional policy. Some sites require students to provide their own PPE, and our SON arranges to purchase PPE for these students, in accordance with the AACN considerations (2020). As most institutions did not allow visitors during in-person clinic visits at the onset and now again with increased positivity rates, students are exposed to alternative forms of communication with family, including phone and video conversations. NP faculty members who maintain clinical practices and other established preceptors are asked to precept additional AP students, either on different clinical days or by taking additional students each day, to ensure that students could have direct face-to-face clinical opportunities.

3.3 | Clinical competency

Clinical competency evaluation methods have not changed from those used pre-pandemic, but the format was adjusted to be virtual at the onset of the pandemic, and we have continued in a hybrid form throughout. Students and preceptors complete evaluations for every site and experience where clinical hours are earned. Students undergo formative and summative evaluation through Objective Structured Clinical Examinations (OSCE), a form of simulation wherein students interact with patient actors and are evaluated in a standardized manner (Aronowitz et al., 2017; Luke et al., 2021; Matlala, 2021). OSCEs are completed virtually intermittently during the pandemic surges, which allows for evaluation of clinical competence in addition to student knowledge of alternative methods for evaluating patients in the virtual environment (Bradford et al., 2021; Kobeissi et al., 2021).

Debriefing, a discussion intended to foster reflection and learning after an event or experience, is thought to contribute to improved clinical outcomes (Stafford et al., 2021). During the Spring 2020 semester at the pandemic onset, faculty held weekly clinical conferences via Zoom online to discuss patient presentations, differential diagnoses and management strategies. These weekly meetings supported the curriculum and provided much-needed emotional support for students who were dealing with the stress of the pandemic. These optional sessions were well-attended, and students actively engaged in the learning process. These sessions also served to build trust and a sense of community with their peers and faculty. SON administration and faculty remain in close and frequent contact with the students during courses.

3.4 | Curriculum considerations

During the pandemic, the DNP AP curriculum has been reviewed to determine if actions could be taken to support and enhance student learning with regard to clinical education and timely progression through their plan of study, and several curriculum modifications have been made.

In the DNP AP programmes, didactic and clinical courses are separated, and this structure allows for some flexibility where students can progress in their theory learning without falling behind due to the clinical challenges brought on by the pandemic. Students attended clinical one to two times per week prior to the pandemic but were encouraged to seek as many hours as possible per week after the pandemic onset before additional restrictions were implemented at their sites. Our institution has continued to provide flexibility with students during COVID surges where students complete clinical hours and remain in close contact with faculty during intersessions. Additionally, modifications have been made to the delivery of course content, including adapting to online and asynchronous modalities which allows students to focus on earning clinical hours, working and other obligations (Taylor et al., 2022). A flipped classroom structure has also been used and allows for any synchronous sessions to be devoted to debriefing, sharing clinical experiences and evaluating clinical competencies (Murphy et al., 2022).

Decisions were also made to incorporate telemedicine into the curriculum, beginning in the first clinical course. With the additional allotted clinical hours in the curriculum, simulation was and will continue to play a key role in uniform instruction of all students to develop proficiency in patient care delivery (Roberts et al., 2020). Our institution has also worked to develop micro-credentials for our students as rapid response practice preparation (Ryerse, 2017). One of these micro-credentials provides students the opportunity to participate in a structured study of contact tracing and COVID science, including synthesis and application activities and a group debrief. Other micro-credentials for our students include food as medicine and nutrition, medications for addictions (MAT) training and psychological first aid. Additional training in other areas, including disaster preparation and management, is under review and construction.

4 | ANALYSIS

4.1 | Sustainability

As the COVID-19 pandemic has continued for many months, sustainability of high-quality clinical experiences for AP nursing students congruent with curriculum during this time is paramount. See Figure 1 for student alternative placements.





AP faculty are asked to continue to precept multiple students if possible. The programme is also allowing flexibility for obtaining clinical hours anytime during the semester, occasionally during intersession and several clinical sites are doubling up student groups (Diegel-Vacek et al., 2021). In addition, a working document of clinical hours earned and location of students and sites was established on a virtual platform so if a student is unable to attend clinical, another student in need of hours can be called to fill that site. Students who are ill or unable to attend clinical for another reason will be required to make up clinical hours in subsequent semesters but will not be penalized.

Weekly clinical debriefs with faculty will continue to assess student learning, goal achievement, health and well-being. Clinical and theory components in our programme will continue to be separated. Sustainability plans also include continuing to integrate telemedicine throughout the curriculum, and additional micro-credentials for students, including training in areas such as disaster preparation and management. More guidance from accrediting bodies is needed to determine the amount of telemedicine hours that can count as direct clinical care. Our SON will continue to monitor for guidelines and supportive evidence about direct clinical hours and opportunities for AP nursing students and will update our approach as appropriate.

4.2 | Implications

Nursing institutions should continue to work to establish and sustain mutually supportive relationships with faculty, students and clinical partners, while creating opportunities for open dialogue, communication and exchange of innovative ideas, particularly during these unprecedented times. We recommend that clinical and theory components be offered separately in the curriculum. This will allow for flexibility in obtaining clinical hours across multiple semesters if needed, while ensuring that learning is congruent with theory. Programmes should also develop plans for students who are ill or who cannot attend clinical for other reasons during this time. Additionally, AP nurse faculty should identify opportunities to precept students and creative solutions for clinical sites during this challenging time. Our institution has strong relationships with preceptors and practices, which have been of great benefit as clinical site access is intermittently limited. It is essential that SON faculty be attuned to the needs of preceptors who are an integral part of clinical education and work to strengthen these relationships. Nurse faculty must promote and ensure that students bring a beneficial role to the practice and that preceptors are supported, particularly during these challenging times of COVID-19 and staffing shortages.

5 | CONCLUSION

The support and communication of all faculty, students and organizational partners will help ensure that AP students meet clinical requirements for practice entry competencies and graduation. Faculty should review curriculum and consider modifications to meet the needs of this time. NP programmes and faculty must also understand the challenges COVID-19 brings to AP clinical education, and creatively adapt and develop approaches, such as those described here, to provide students with the full amount of necessary clinical hours and adequate preparation for practice through high-quality experiences.

AUTHOR CONTRIBUTIONS

KM, NR, SR and MF made substantial contributions to the conception and design, acquisition of data, or analysis and interpretation of data; involved in drafting the manuscript or revising it critically for important intellectual content; gave final approval of the version to be published; should have participated sufficiently in the work to take public responsibility for appropriate portions of the content; and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

ETHICAL APPROVAL

The article was a descriptive article without experimental intervention, interaction with or identification of subjects, and reviewed program generalities without divulging any protected or copywritten material.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Data sharing not applicable

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