ABSTRACT: During the COVID-19 pandemic, many health care facilities closed their doors to nursing students, depriving them of the experience of caring for patients, a foundation of nursing education. The purpose of this article is to report on how the National Council of State Boards of Nursing convened nurse leaders from around the country to explore this problem and develop possible solutions.

Coming together virtually, these leaders recommended a national model, the practice–academic partnership, to provide nursing students with in-person clinical experiences during the pandemic. This model is unique in its recognition of the important role of nursing regulatory bodies in these partnerships. The practice–academic partnership model creates clinical education opportunities for students during a public health crisis, such as the COVID-19 pandemic. Further, the model could be applied to meet the chronic challenges nursing education programs have often faced in securing clinical sites, even in the absence of a global or national public health emergency. We provide the context in which the practice–academic partnership model was developed, along with keys to its successful implementation and suggestions for its evaluation. We also discuss the implications of using this model once the pandemic ends.

Keywords: COVID-19, nursing education, nursing students, practice–academic partnership
developed by the American Association of Colleges of Nursing (AACN) in 2012 as well as apprenticeship models that are used in some states. However, it differs from both types of models in its acknowledgment and inclusion of nursing regulation. This is a model that can be used in the future to support nursing education programs in providing high-quality direct patient care experiences that are necessary for graduating safe and competent nurses.

**CONTEXT OF NURSING STUDENTS IN CLINICAL SETTINGS**

As in other health care professions, clinical experience with patients has always been the foundation of education in nursing. A recent large, mixed-methods study of nursing education found that clinical experiences with actual patients are critical to prelicensure nursing education. We don’t have data on the minimum number of hours of clinical experience that RN or LPN programs should have, though we do know that the United States lags behind other countries in the number of clinical hours required of prelicensure students.

When the pandemic caused practice settings to close their doors to nursing students, many nursing programs, after consultation with their BONs, began to use simulation with social distancing or virtual simulation or both, simply because there were no other options. A groundbreaking randomized controlled study of RN education programs found that they could substitute up to 50% simulation for clinical experiences without adversely affecting outcomes. All 10 sites included in the longitudinal study already provided students at least 600 hours of clinical experience, and they adhered to NCSBN's simulation guidelines. However, there have been no studies of programs in which educators substituted simulation for more than 50% of required clinical hours.

Because of social distancing requirements, educators in many nursing programs decided against holding in-person simulation sessions and had to resort to virtual simulation, which is a recreation of reality depicted on a computer screen. The evidence for substituting clinical experiences with virtual simulation is not as strong as for in-person simulation, and there are no studies of outcomes using virtual simulation to replace either in-person or simulated clinical experiences. While there are many studies of the use of virtual simulation in health care education, they often use small samples and aren’t conducted with sufficient scientific rigor. In a systematic review of virtual simulation in nursing education studies from 1996 to 2018, the authors found it a promising teaching strategy in nursing. However, they cited the high number of exploratory and other descriptive designs, as well as the variability of objectives, conditions, equipment, and samples in the studies included. They recommended randomized controlled trials to elevate the science of virtual simulation. BON policy decisions must be based on robust science.

Designating nursing students as visitors at the beginning of the pandemic was a sweeping response to the evolving information available to the health care community at the time, and it had a profoundly negative impact on nursing programs and students. Nursing programs faced significant challenges in returning students to clinical settings, complicated by inconsistent policies in defining the role of nursing students across different facilities. On NCSBN networking calls, BON representatives identified another repercussion of restricting students from clinical settings, which is that it limits a potential source of patient care providers. All of this prompted Washington State’s BON to request that the governor designate nursing students as essential workers, a request that the governor honored.

In our professional opinion, it isn’t reasonable to designate nursing students as visitors in the clinical setting. Students care for patients under the direction of their clinical instructors. They’re responsible for patients while they care for them—assessing, medicating, teaching, and vigilantly monitoring and documenting patients’ progress. Moreover, under the supervision of faculty, nursing students collaborate with patients’ families and interprofessional teams while they care for their patients.

**THE PRACTICE–ACADEMIC PARTNERSHIP MODEL**

In this collaboratively developed practice–academic model, educators, practice leaders, and nurse regulators are encouraged to collaborate proactively to ensure that in-person clinical experiences continue. While these partnerships are not new to nursing practice and education, the pandemic created an urgent need for nurse leaders to promote and disseminate a new model that would help both nursing education programs and health care facilities respond to challenges, while at the same time continuing to meet the regulations of BONs. This collaborative model may also have future implications for addressing chronic issues of preceptor and clinical site shortages, which presented significant challenges for nursing programs well before the pandemic.

In this model, health care facilities and nursing programs are encouraged to partner to provide educational opportunities for students and to assist with workforce challenges in clinical settings. The practice–academic partnership model includes all prelicensure nursing students—LPN/LVN, associate degree, diploma, and BSN students—who are enrolled in BON-approved nursing programs. As with the apprenticeship model, the students may be employed by the health care setting and, in conjunction with the academic institution, would receive academic credit to meet their clinical experience requirements. However, in many of these practice–academic partnerships the students are not employed, but instead are participating in their required
clinical experiences. In either case, faculty members work closely with the practice setting leaders to identify experiences that meet the students’ course objectives, and faculty have oversight of the students’ course evaluations. Additionally, faculty members are responsible for informing students of the risks and responsibilities of working in a health facility during a public health crisis.

Ten key nursing organizations, along with representatives of BONs, developed and have formally endorsed this model (see Organizations That Developed and Endorsed the Practice–Academic Partnership). The endorsing organizations have also widely disseminated information about the practice–academic partnership model to their members and beyond using different media strategies, including social media, a video, a national webinar, and newsletters. Additionally, the NCSBN developed free online COVID-19 courses students may take before participating in the practice–academic partnership.16

A key component of the partnership model is that students are considered essential workers, not visitors, in the health care setting. This designation not only allows students back into clinical facilities but also offers an unprecedented opportunity for students to assist in a time of crisis and learn the principles of population health and emergency management. This model serves as a framework for permanent national recognition that nursing students are essential workers and shouldn’t ever be classified as visitors, especially in times of crisis.

**Keys to a successful model.** Below are some fundamentals to consider when establishing successful practice–academic partnerships, based on the experiences of those who have implemented them. Additionally, the AACN has provided some resources for the implementation of their academic–practice partnership, which might also be helpful (see www.aacnnursing.org/Academic-Practice-Partnerships).

**Communication.** Consistent and clear communication is essential for the success of any partnership, though it’s particularly important during a public health crisis.17 The nursing leaders who developed the practice–academic partnership model emphasized the importance of each practice partner and nursing education program meeting to develop shared goals and expectations of the program. A facilitator designated in the partnership agreement may assist in maximizing the outcomes in any new partnership.

An official agreement between a practice site and a nursing education program is often required, though it may be an extension of an established relationship. Established partnerships have the benefit of incorporating the requirements of the clinical setting, the school of nursing, and, if they exist, the BON’s clinical agreement requirements. Zerwic and colleagues have developed general principles based on their experience in implementing such partner-

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**Organizations That Developed and Endorsed the Practice–Academic Partnership**

- National Council of State Boards of Nursing
- National League for Nursing (NLN)
- American Organization for Nursing Leadership
- Accreditation Commission for Education in Nursing
- Organization for Associate Degree Nursing
- NLN Commission for Nursing Education Accreditation
- American Association of Colleges of Nursing
- Commission on Collegiate Nursing Education
- National Student Nurses’ Association
- American Nurses Association

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the pandemic, alleviating critical shortages of nurses, particularly in rural areas.\textsuperscript{18}

Before the pandemic, most practice partners provided nursing students with an orientation that included organizational guidelines and expectations. Continuing this practice in times of crisis is especially important. Shortages in personal protective equipment (PPE) were cited as a reason to limit student access to clinical experiences, though nursing programs have responded by providing students with PPE. The responsibility for the provision of PPE should be determined as part of the practice–academic partnership agreement. Initial and ongoing collaboration with a nursing education program facilitates communication and flexibility, especially when workforce needs, such as the need for additional nurses in surge situations, increase nursing staff exposure or infection rates, thus requiring rapid staffing solutions.

Practice–academic partnerships shouldn’t be limited to program structures that may not be sustainable. The decision to offer paid or unpaid positions to students is solely that of the health care facility and is based on the resources available. Many unpaid partnerships have been very successful and provide more opportunities for students to participate.\textsuperscript{17}

Practice–academic partnerships also shouldn’t be limited to large medical centers or medical–surgical units. For example, such partnerships are valuable in community health and public health courses.\textsuperscript{19} Students working in partnerships with community health organizations may participate in contact tracing, COVID-19 testing, screening, and influenza or COVID-19 vaccine administration. In Idaho, health care facilities in rural communities enthusiastically embraced this model, and it provided students a variety of health care experiences in rural settings.\textsuperscript{20}

\textbf{Faculty involvement.} Faculty members are actively involved in practice–academic partnerships and serve as a liaison between the practice partner and the nursing education program. Faculty members develop student objectives, supervise students, and are responsible for clinical evaluation based on the school’s clinical evaluation format. In some cases, faculty members provide guidance to preceptors hired by the practice setting to work directly with the students. Initial and ongoing collaboration with the practice partner, including their preceptors, is necessary to ensure mutual understanding of students’ clinical requirements and course objectives. Depending on the structure of the partnership, faculty or preceptors or both may have a joint academic appointment.

COVID-19 created a new dynamic in which the Centers for Disease Control and Prevention (CDC) provided evolving guidance for health care workers in practice settings.\textsuperscript{21} Faculty members had to be prepared for unique situations related to the pandemic that affected students directly. Following mutually agreed upon protocols for testing and exposure was essential to reduce the risk of disease transmission among students as well as patients and staff members in health care facilities. The CDC guidelines mandated periods of quarantine and isolation for known exposures and infection, which may have affected both staffing and students’ clinical time.\textsuperscript{21} Therefore, faculty members had to be flexible regarding student absences.

\textbf{Regulatory involvement.} It’s essential for BONs to be involved with the planning and implementation of practice–academic partnerships because nursing education programs must meet state regulations, such as faculty oversight of students, qualifications of the clinical instructor, and student evaluation, among others. For example, the Idaho Board of Nursing, which had implemented practice–academic partnerships before the COVID-19 crisis, actively worked with nurse leaders across the state to promote such partnerships during the pandemic.\textsuperscript{22} Likewise, nurse leaders in Iowa implemented a practice–academic partnership during the pandemic, working closely with their state BON.\textsuperscript{17} Additionally, those implementing a practice–academic partnership must collaborate with national nursing accreditors to ensure that they’re meeting accreditation standards. (The accrediting bodies are the Accreditation Commission for Education in Nursing, the Commission on Collegiate Nursing Education, and the National League for Nursing’s Commission for Nursing Education Accreditation.)

\textbf{Student involvement.} Students must review the standard health care setting guidelines required by the health care facility where they work, including those related to COVID-19, and should attest that they understand and will adhere to all guidelines. Additionally, it’s highly recommended that they complete mandatory education on COVID-19 in preparation for their role, which includes information on the appropriate process for donning and doffing PPE, with proficiency evaluated and documented by faculty.

Many students live in congregate settings in areas with varying levels of COVID-19 community transmission, testing frequency, and vaccination requirements. They may participate in activities that would increase the risk of exposure and transmission of the virus. Therefore, students should be encouraged to be transparent about their ability to safely engage in direct patient care. Nursing programs are obligated to provide students with the most current evidence-based information regarding the risks and responsibilities of working in a health care setting.

\textbf{Student assignments.} As long as the students’ course objectives are met, they may supplement the workforce by caring for patients. Under supervision, within the framework of the partnership, and based on the students’ competency level, they may provide care to patients with COVID-19 at all acuity levels. These direct patient care experiences may range from
CONSIDERATIONS FOR IMPLEMENTATION
Financial implications are always a consideration in health care. When developing a practice–academic partnership, both the nursing education program and the health care facility must consider the available resources. Resources that most directly affect the sustainability of the partnership include funds for training and orientation, as well as personnel if the health care facility uses preceptors. Depending on the expectations specified in the partnership agreement, either the nursing school or the practice setting will provide PPE for each student and faculty participant. The allocation of resources should be outlined in the agreement to ensure a transparent and successful partnership.

A practice–academic partnership may offer improved staffing continuity to reduce dependence on traveling nurses and therefore may result in decreased costs. In some health care facilities, traveling nurses were being used to support overburdened systems. Travel nurses have always been used to address staff shortages, but the pandemic increased the demand for them, especially in areas of high COVID-19 numbers. In April 2020, increases in base salary for travel ICU nurses ranged from 3% in Texas, which had fewer cases at that time, to 74% in New York, which was then a COVID-19 hot spot. This dynamic creates inequity in staffing alternatives: wealthier health care facilities can more easily recruit expensive traveling nurses compared with facilities that can’t afford the higher rates.

EVALUATION OF THE PRACTICE–ACADEMIC PARTNERSHIP
Practice–academic partnerships require initial and ongoing evaluation with input from all participants. The AACN’s academic–practice outcome matrix can provide a structure for establishing a program’s outcomes. In Norton Healthcare’s Student Nurse Apprenticeship Program, they use the Health Professional Education in Patient Safety Survey to measure the new graduates’ patient safety competence at entry to practice. This tool measures self-reported new graduate competence in six domains, as follows:

- contribute to a culture of patient safety
- work in interprofessional teams to ensure patient safety
- communicate effectively to promote patient safety
- manage safety risks
- optimize human and environmental factors
- recognize, respond to, and disclose adverse events

These are all important issues to regulators, educators, and practice partners, so this tool may be considered when planning a practice–academic partnership.

Currently no tool exists to measure the outcomes of practice–academic partnerships. Program evaluation should include input from students; faculty; nursing education program administrators; and health care facility representatives, including staff nurses, unit-level leadership, and administration. Evaluation of these partnerships provides the opportunity for program validation, improvement, and sustainability. The evaluation process must be transparent, with contributions from all key stakeholders to ensure that each participants’ perspectives and suggested improvements are considered. The timely review of feedback is important to allow for discussion, clarification, and possible implementation of changes prior to the next academic term.

PARTICIPATION IN THE PRACTICE–ACADEMIC MODEL
During the early months of the pandemic, these partnerships provided students with valuable clinical experiences. As of December 2020, more than 700 students participated in one of these novel practice–academic partnership models in Georgia, Iowa, and Idaho. While other programs were forced to urgently identify strategies to replace clinical experiences with actual patients, these partnerships allowed students to continue to gain clinical experience during the pandemic.

Although there have been no national surveys of outcomes of practice–academic partnerships to date, anecdotal data have been very positive. For example, some of the comments offered in interviews have been:

- Student: “It’s actually been a pretty challenging but very rewarding experience.”
- Faculty: “Our students embraced this opportunity to help meet the needs of the community during this unprecedented time.”
- Practice partner: “It is a great program. We hired 92% of the spring graduates and 100% of the graduates passed NCLEX.”

IMPLICATIONS FOR THE FUTURE
Supervised clinical practice, with students providing direct care for patients, is evidence based and the bedrock of nursing education. When practice settings designated students as visitors and closed their doors to them in March 2020, most nurse educators struggled to come up with virtual strategies to...
replace in-person clinical experiences. However, others implemented practice–academic partnerships, finding them to be a successful strategy for allowing students to complete their clinical experience requirements during the pandemic and providing much needed patient care support for health care facilities. With many educators reporting the scarcity of clinical sites even before the pandemic,\(^1\) this model certainly holds promise for the future. The success of this innovative practice–academic partnership demonstrated the important role nursing students play as essential workers.

Yet, we need more data on the practice–academic model. Researchers should conduct a national, multisite study on student outcomes where the practice–academic model is in use and compare them with outcomes in nursing programs where formal partnerships don’t exist and faculty members find clinical placements for their students. It would be particularly important, once new graduates have started their first job, to survey them and their managers regarding their confidence, competence, and safety in practice. Likewise, a valid and reliable measurement tool, which could be used across settings and institutions, is needed for evaluating partnerships and developing best practices.

Imagining a future in which we learned from this pandemic, Maryann Alexander, in an editorial in the *Journal of Nursing Regulation*, asked, “What if education and practice became true academic partners? And healthcare facilities made a true commitment to participate in the education and mentoring of the next generation of nurses? Instead of shutting their doors to students during an emergency, students and faculty would be integrated into the workforce.”\(^1\) The practice–academic partnership model is a true reflection of that vision. ▼

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