

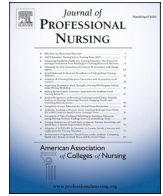


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## Journal of Professional Nursing

journal homepage: [www.elsevier.com/locate/jpnu](http://www.elsevier.com/locate/jpnu)

## Planning and implementing a practice/academic partnership during COVID-19

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### ARTICLE INFO

#### Keywords:

Clinical education  
COVID-19  
New graduate nurse  
Temporary licensure

### ABSTRACT

Due to the COVID-19 pandemic, nursing programs were challenged to continue educating students at practice sites, and educational institutions limited or eliminated face-to-face education. The purpose of this article is to report on a university and community college nursing program and an academic medical center that implemented an academic-practice partnership with the goal of creating opportunities to continue clinical experiences for nursing students during the pandemic. Principles and implementation of this successful partnership provide direction for other nursing programs and practice settings that may continue to have challenges in returning students to clinical and keeping them in clinical as the pandemic continues.

### Introduction

The disruption to the health of the world's population from COVID-19 has had far-reaching consequences. Nursing education programs have been significantly impacted as they work to continue the pipeline of students through their programs. As COVID-19 illnesses in the United States increased in March 2020, many educational institutions responded by dismissing in-person classes and moving to virtual learning environments. Nursing programs had to make tough decisions about how to complete student clinical experiences in healthcare institutions and laboratory settings. That challenge increased as many long-term care facilities, public health agencies, and hospitals decided that students could not continue with their direct patient care experiences due to uncertainties on how the virus was spread and shortages in personal protective equipment (PPE) supplies. Removing nursing students from their "hands-on" learning experiences created a situation that could potentially worsen the current nursing shortages for practice settings by disrupting the pipeline of new graduates into the workforce and graduating a workforce that is less prepared to work in this complex health care environment.

To decrease the impact of COVID-19 on nursing education, the University of Iowa College of Nursing (UI-CON), Kirkwood Community College (KCC), and University of Iowa Hospital and Clinics (UIHC)

Department of Nursing Services and Patient Care sought innovative strategies to protect both student and patient safety and provide in-person educational experiences for students during the crisis. The academic and practice leaders from the UI-CON, KCC, and UIHC worked together to ensure that undergraduate pre-licensure nursing students in their final semester could continue to complete clinicals, graduate on time, and progress toward licensure. Subsequently, the group focused their efforts on strategies to continue clinical education for undergraduate nursing students in other clinical courses. The purpose of this manuscript is to describe this partnership, the challenges experienced, and the solutions that were implemented in our setting, in hopes that readers might be able to apply these in their settings to maintain nursing education in clinicals.

#### Formation of practice/academic partnership

Prior to the pandemic, nursing leaders in the UI-CON and UIHC met every one-to-two months to discuss issues related to the shared Nursing Clinical Education Center (NCEC, a simulation and laboratory space). Governance of the NCEC before the pandemic was largely limited to administrative issues (allocation of resources, etc.). Early in March as the pandemic began to unfold, each entity began formulating plans independently, occasionally connecting but through meetings of

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<https://doi.org/10.1016/j.profnurs.2020.11.007>

Received 5 August 2020;

Available online 26 November 2020

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scattered individuals and/or between isolated units. After the [National Council of State Boards of Nursing \(2020\)](#) posted the policy brief about using practice/academic partnerships during the COVID-19 crisis, UIHC nursing leaders mobilized their two largest educational partners, the UI-CON and KCC, to form a practice/academic partnership. The focus of the partnership was on pre-licensure education and maintaining a pipeline of nursing students completing their educational requirements and then transitioning into the workforce.

The practice/academic partner task force was composed of the deans and associate deans of the nursing programs (UI-CON, KCC), and UIHC representatives, including the chief nursing officer, the director of nursing education, and representatives from nursing education and nursing recruitment at the medical center. The group initially met two to three times a week, transitioning to weekly meetings and then every two to three weeks as conditions stabilized.

### Challenges and solutions

#### *Academic institutions required that all students be removed from in-person learning and be taught virtually*

In March 2020 as the COVID-19 crisis was escalating, universities and colleges issued proclamations that eliminated in-person courses. Although this blanket policy provided consistency across the university for the continuation of courses, there was no consideration given for the impact of this approach on students enrolled in nursing courses. Nursing cannot be taught exclusively online and achieve satisfactory educational outcomes.

UI-CON and KCC worked with their individual campus leaders early in the crisis to educate them as to why in-person clinical experiences and laboratory work were essential to academic progress and achieving prescribed program standards. Our institutional leaders committed to an exemption for the health science colleges to the “all-online” education rule in March and have reaffirmed that exemption as the pandemic continues to impact our institutions.

#### *Practice sites removed students from clinical*

An immediate response to the pandemic from many clinical agencies was to remove undergraduate pre-licensure students from clinical experiences. However, leaders in the UIHC Department of Nursing realized that they needed these nursing students to complete their final semester senior clinical to maintain the pipeline of new graduates into the workforce from which they would be able to hire during the medical crisis. In response to a request from the UIHC director of nursing education for assistance to advocate to higher levels of UIHC leadership, the Chief Nurse Executive (CNE) approached other UIHC leaders to obtain support for allowing nursing students to remain in clinical and for securing for them adequate PPE (face masks and face shields).

She also successfully made the argument that students should be viewed as “essential” in meeting direct patient care needs. Essential workers are individuals who are employed to provide a service or operation that is critical for infrastructure operations ([National Council of State Legislatures, 2020](#)). The public have become familiar with the concept of essential employees from frontline food service workers to health care professionals across the continuum of care. Some institutions have not considered health profession *students* as essential because the students are still learning. In our opinion, that is short-sighted. Students were viewed as helpful to the unit as the staff responded to shifting responsibilities. Also, it is imperative to maintain the pipeline of health care professionals, and this requires “hands-on” opportunities for learning. The concept of nursing students as essential individuals has remained an important foundation throughout our response to the pandemic locally and throughout the state.

#### *Safety concerns for students and faculty in the pandemic*

When the COVID-19 pandemic began, one of the first questions for our nursing programs was whether we could keep students and faculty safely in clinical practice. The availability of sufficient PPE for faculty and students was in question. In addition, faculty and students were worried about their personal health when little was known about risks of the virus.

As soon as UIHC could verify that enough basic PPE (face masks and face shields) was available for use with non-COVID-19 patients, we began to determine whether we could keep all students or selected groups of students in clinicals. Academic leaders from UI-CON and KCC met with their respective nursing faculty to discuss students’ abilities, course objectives, and alternative strategies to meeting course objectives. The practice/academic partnership agreed that students in their final semester had the knowledge and skill to safely use PPE, could contribute to the workload of the hospital units, and could manage the anxiety associated with working in a stressful environment.

Students were not allowed in units caring for COVID-19 patients or units with highly immunosuppressed patients. This was primarily due to concerns about the availability of PPE and the need to limit the number of personnel in the unit. UIHC did not allow students to participate in aerosol-generating procedures (e.g., intubation, nebulizer treatments, or a code) if the patient had not been tested for COVID-19 or results had not returned. If a student was exposed during an aerosol-generating procedure and did not have on full PPE, including N95 masks, and the patient later tested positive for COVID-19, the student was required to self-quarantine.

#### *Reduced hospital census as UIHC pivoted to care for COVID-19 patients*

The patient census at UIHC was rapidly reduced by the elimination of elective surgeries and procedures as an approach to open more beds to treat COVID-19 patients. This resulted in limited clinical opportunities for students. The furloughing of nurses due to decreasing patient census and the need to re-train staff to meet the needs of the critically ill COVID-19 patients placed an additional strain on staffing needed to continue clinical education.

The practice-academic partners agreed that the primary focus for potentially limited clinical placements was for students in their final internship clinical. Senior students work 1:1 with a clinical preceptor on an assigned unit. Most students had completed at least half of their clinical hours and were viewed as helpful to the unit as the staff responded to shifting responsibilities. This also justified the Chief Nurse Executive’s argument that students were essential staff during the pandemic.

When patient beds were converted to care for COVID-19 patients, disrupting the assignments of nursing students, students’ assignments were changed to non-COVID units. Senior students who were completing internships in other hospitals or clinical environments that closed to students were moved to UIHC so that they could continue their clinical education. These students were cycled into rotations as other students completed their required hours. Students were encouraged to complete hours as quickly as possible to make room for their peers.

UIHC committed to keeping as many internship experiences as possible active for the nursing programs in the geographic area, especially for students who were current UIHC employees or for students who were applying for employment at UIHC. This was seen as an important recruitment tool for new graduates and was also a strategy that other clinical sites began to use to bring students back into their agencies.

#### *Barriers to transition to practice*

It quickly became apparent in spring 2020 that the process of students graduating, applying for licensure, taking the NCLEX, and

beginning new positions was disrupted, and UIHC was concerned about maintaining their new nurse pipeline. The Iowa Board of Nursing initiated weekly conversations with all academic institutions throughout the state to discuss the challenges that academic programs were experiencing and potential strategies to manage the issues from clinical placements through licensure. The Governor, through declaration of a public health emergency, was able to issue proclamations that allowed new graduates to apply for temporary licenses.

The Board of Nursing was able to accept applications for licensure without fingerprints and background checks because fingerprint sites were closed. With Board approval, applicants were able to schedule future NCLEX test dates and obtain a temporary license to practice as a new graduate nurse. These temporary licenses allowed new graduates to work under the direct supervision of another nurse until they successfully passed the NCLEX-RN exam.

During the first few months of COVID-19, testing centers that provided the NCLEX examination closed. Although many testing centers have reopened, they have reduced capacity because of social distancing. The National Council of States Board of Nursing responded by reducing the number of items on the exam, eliminating practice questions, and decreasing the time allotted for testing. Both KCC and UI-CON began preparing students for the newly-changed NCLEX exam.

The UI-CON and KCC worked to reduce or eliminate obstacles that delayed timely graduation. For example, UI-CON worked with the Registrar's office to expedite issuing of final transcripts so they could be sent to designated Boards of Nursing. The Nursing Recruitment office at UIHC worked with their Nursing Education and Human Resources departments to develop a classification for new graduate nurses and to draft job descriptions for those with temporary licensure, allowing for an earlier start to the on-boarding process. The UIHC Nursing Education and Nursing Recruitment offices worked with the Health Care Information Services department to determine electronic health record (EHR) documentation templates that aligned with the new job description of graduate nurse. New graduate nurses with temporary licenses were provided with student EHR access rather than the usual RN access. Once the license was obtained, the new graduate nurse's job code changed in the system, which triggered the change in EHR access to that of an RN. Leaders of the Nurse Residency Program and nurse managers were notified of the change in on-boarding to allow time for planning.

The policy brief from the National Council of States Boards of Nursing (2020) encouraged practice/academic partners to explore employment of students on a full-time/part-time basis to work as student nurses for pay and academic credit. Our practice/academic partners immediately explored if this option could benefit the medical center. In spring 2020, we decided to focus our efforts on completing as many internships as possible. However, in fall 2020, we began piloting a new transition program that begins prior to graduation. The hospital identified students who had completed internship hours early in the semester and had accepted staff nurse positions at the hospital. The hospital offered to a small number of nursing students the opportunity to work as nursing externs on the units where they would be employed after graduation. The students registered for an independent study, were assigned a preceptor, and a faculty member was identified to oversee the externship until they officially graduate. The advantage to the hospital is the opportunity to have these future nurses more quickly transition to the nursing role at a time when the hospital is experiencing a staff shortage due to the pandemic. Student externs can function at a higher level than if they worked as patient care technicians (nursing assistants). Salary levels have been established slightly below entry level for RNs. The students in the pilot see this as an opportunity to maintain the skills they gained during their internship, speed up their transition when they assume their RN position, and begin earning a salary.

#### *Obstacles in implementing alternative learning experiences*

Meeting outcomes of practicum courses for students enrolled in the

early semesters of their nursing programs was a concern since they were removed from the clinical agencies. The Governor issued proclamations that allowed nursing programs to substitute simulation for clinical. There was considerable debate among nursing programs and faculty on whether simulation should be used as a complete substitute for clinical. A landmark study by Hayden, Smiley, Alexander, Kardong-Edgren, and Jeffries (2014) and the National Council of State Boards of Nursing examined simulation substituted for up to 50% of in-person clinical hours. The investigators concluded that high-quality simulation experiences could be substituted for clinical and produces no differences in end-of-program outcomes for students. Hayden et al. indicated that high-quality simulation should include the following: faculty members who are trained in simulation pedagogy, adequate numbers of faculty to support the learners, subject matter experts who conduct theory-based de-briefing, and equipment and supplies to create a realistic environment. However, there is no evidence to support that online learning can substitute for either the high-quality simulation experiences described by Hayden et al. or for clinical experiences. This created a dilemma for educational institutions that were unable to access clinical sites: move students through the program using untested online resources as a substitute for clinical or delay students' progress until clinical sites reopened.

KCC and UI-CON chose different approaches to manage clinical for students who were not in their final semester. At UI-CON, some virtual experiences were substituted for clinical hours, but substitution did not exceed 50%. Where possible, telehealth opportunities were used for actual clinical hours. For example, in a gerontology practicum, students were assigned to work with an older adult and met virtually to perform a health history and functional/independent daily living assessment. Faculty felt strongly that students in some clinical groups (medical-surgical, mental health and maternal-child) would need to complete make-up hours in the summer or fall before starting their next clinical rotation to ensure that they met course outcomes and were prepared for the practicum courses in the fall. This altered semester calendar was communicated with students early and often. KCC chose not to substitute for any clinical experiences and instead reduced clinical to 75% of required hours.

Didactic courses were moved completely online for the remainder of the spring 2020 semester. Both KCC and UI-CON used web-based course management software for all courses, which was critical for the shift to online learning. Faculty, in collaboration with administrative team leaders, determined whether courses were offered synchronous or asynchronous. That structure continued into the fall because UI-CON and KCC committed to keeping didactic courses virtual while focusing on the use of face-to-face strategies for clinical and laboratory courses.

#### *Managing groups of students in clinical*

In mid-May 2020, it became apparent that COVID-19 restrictions would need to remain in effect going forward into the summer and fall. The hospital nursing leaders advocated with the UIHC epidemiologist and hospital leadership to continue to deem nursing students as essential workers, allowing them to continue their clinical education. By the end of May, the nursing department had permission to proceed with clinical placements through the fall, as long as students followed all PPE requirements, COVID-19 guidelines, and academic programs reduced faculty-to-student rotations to 1:4 instead of the usual 1:8.

Students highly value observational experiences in units like the pediatric or neonatal intensive care units. In prior semesters, they have had single-day rotations to specialty care units. Most observational (no hands-on care) experiences in the hospital have been eliminated to reduce density on these specialized units and focus the efforts of hospital staff on maintaining the foundational experiences in a time of high stress.

### Limited resources

Initially, all PPE was provided by UIHC; subsequently, all students' academic institutions have provided them with face shields and cloth face masks. Medical-grade face masks continue to be provided by UIHC for direct patient care. Students must wear face masks into the clinical and laboratory settings and add face shields during all patient interactions and settings where social distancing cannot be enacted (including laboratory settings). The expense of the PPE for KCC and UI-CON has been supported in part by the CARES Act funding from the federal government and in part by the nursing programs. Going forward, the institutions are exploring whether this becomes part of the equipment each nursing student is expected to provide.

Faculty resources were an issue with the change in faculty-to-student ratios in clinical. The UI-CON was able to accommodate the change without hiring additional faculty. Teaching assignments were scrutinized to ensure that all faculty had a full load for the semester. Faculty incorporated off-unit learning opportunities that enabled them to rotate students off the clinical units throughout the semester to comply with the reduced ratio. KCC added additional adjunct faculty to support their clinical rotations. Clinical groups are now using additional shifts such as evenings and weekends to limit the density of students during the busiest time periods.

The practice-academic partners explored using alternative start and stop times for the semester to reduce the density of students on units. Students were given the option to start internship hours in the summer prior to their scheduled time in the fall. Faculty volunteered to change their fall assignment to the summer to oversee the students that negotiated the early start. Courses were re-listed with the registrar with a variable start time to accommodate the date change. Both UI-CON and KCC worked to ensure that clinicals were completed by the middle of November 2020. The expectation was that there would likely be a resurgence of COVID-19 in the fall and that completing clinicals before Thanksgiving would help to ensure course objectives could be met. In addition, courses that had clinical in a block schedule (first 8 weeks and last 8 weeks) were adjusted to every other week clinicals. This prevented one group from being significantly disadvantaged if clinical hours had to be truncated in the fall.

### Leveraging the impact beyond one practice-academic partnership

The practice-academic partners worked with nursing leaders across the state to share our practice-academic model and encourage other institutions to allow a return of students to clinical. We suggested to practice partners that viewing nursing students as essential individuals may help facilitate a return to clinical. This may require advocating beyond hospital leadership. We have learned that some hospitals' boards of directors have been involved in the decision making about student and visitor access to the hospital. Members of boards, particularly community members without health care experience, may not understand the importance of continuing the pipeline of students in clinical rotations and may advocate for a strict policy that removes students from the institution.

We communicated with the State Board of Nursing and health care leadership groups such as the Iowa Organization for Nursing Leaders, Iowa Association of Colleges of Nursing, and Iowa Community College Nursing Educator Directors Association to support maintaining students in clinical practice and to develop a process for temporary licensure. Joint letters were written to the organizations, and follow-up phone conversations helped to identify barriers and strategies that others could tailor to their specific situations. Members of our group have participated in national webinars, written articles for newsletters, and individually consulted with organizations across the country as many academic institutions and hospitals struggle with the education of nursing students during this challenging pandemic.

### Conclusion

Clinical experiences in hospitals, community health, and long-term care provide the foundational learning opportunities for health care profession students. Never in our time have academic and practice partners had to navigate such a widespread, long-term crisis that limited students from using health care practice sites and simulated learning environments. This successful partnership shows that practice-academic partnerships are able to be continued during a time of crisis if institutions work together. This is important because the pipeline of nurses into the workforce needs to continue, especially during medical crises.

The principles identified below emerged for the practice-academic partnership.

1. Communicate frequently. In a fluid situation like the COVID-19 pandemic, a regular and established plan for communication was critical.
2. Establish priority for clinical resources. When clinical resources were limited, the academic and practice partners needed to prioritize student placements.
3. Consider the needs of both academic and clinical partners. The goals of both partners were articulated and plans prioritized that met common needs first and then each institution's individual goals.
4. Consider students as "essential workers"—meaning, those actively contributing to and critical to the delivery of direct patient care.
5. Ensure flexibility. The academic and practice partners, as well as the students, had to be willing to adjust as the situation changed. Partners collaborated frequently to continue/restart or pause/stop students.
6. Re-negotiate. As the situation changed, both partners needed to consider alternative approaches.

As nursing programs navigate the uncertainty of the COVID-19 pandemic, challenges continue. Many educational programs are not going to be able to provide clinical placements, and this is likely to vary because the pandemic affects areas of the country differently and each state promulgates different guidance and rules for nursing education. The reasons include inadequate supplies of PPE necessary for safe patient contact, low patient census, furloughed nursing staff, high patient census with COVID-19 patients, staff feeling overwhelmed because of resumed surgery/procedural admissions in addition to COVID-19 risk, or regulations that prohibit students from a facility (e.g., long-term care). The principles and strategies outlined in this article highlight approaches that can be used to enhance academic-practice partnerships to continue the education of nursing students during the COVID-19 pandemic.

### Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

### Declaration of competing interest

The authors have no conflicts to report.

### Acknowledgment

The authors thank Kevin Grandfield for his editorial assistance.

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