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The impact of covid-19 on the regulation of nursing practice and education

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ABSTRACT

To adapt to the environment resulting from a worldwide pandemic, states across the country enacted regulation changes impacting nursing education, entry into practice, and licensure. In this manuscript, the authors collected state board of nursing data from sources including websites and letters from the State Boards to deans, directors, and chairs. Information obtained reflected changes to regulation of practice and regulation of education. As the pandemic continues, associate degree educators will need to continue to stay abreast of nursing regulation changes made to meet healthcare workforce needs while also ensuring public safety.

The COVID 19 pandemic began in the United States (U.S.) in early 2020 resulting in widespread social disruption. No workforce area has been impacted more by this disruption than healthcare environments. Shortages of medical personnel, supplies, equipment, and physical space have greatly affected the response to the overwhelming number of Americans diagnosed with the COVID-19 disease since the disease appeared. In order to meet healthcare workforce needs, states have responded with emergency declarations and changes to regulation of healthcare personnel. This paper outlines a review of the regulatory response to this pandemic related to licensure of registered nurses and to the education provided by associate degree and baccalaureate degree nursing programs.

Background

The regulation of nursing to protect the American public coincided with changes in American society such as industrialization and urbanization (Alexander, 2017). Regulation of nursing has evolved over time to address both education and licensure of nurses. Stievano et al. (2019) conducted a systematic review of factors that have impacted nursing regulation across the globe from papers published between 2000 and 2016. Their analysis identified themes affecting nursing regulation, including those related to societal challenges.

While nursing regulation has evolved based on challenges and nursing practice changes in the past, no external factor has had such a significant impact on nursing regulation as the unprecedented pandemic that has affected health globally for more than a year. In terms of practice, the current pandemic has created a need for healthcare providers across disciplines to meet the exponential increase in patients needing care. In the report by the National Academies of Sciences, Engineering, and Medicine (2020) *Rapid Expert Consultation on Staffing Considerations for Crisis Standards of Care for the COVID-19 Pandemic,* "the availability of trained staff, more than any other element, will likely continue to be the biggest challenge of COVID-19 hospital care" (p.13). The need to increase all types of providers is identified in this report with emphasis on the need for nurses and respiratory therapists. The panel suggests numerous strategies to optimize staffing including "stepping up staff" and position specific training. Early in the pandemic, recommendations also included instituting changes in regulation of nursing such as reactivating expired licenses and allowing for practice across states (Spetz, 2020).

The pandemic has also impacted education of healthcare professionals, including new nurses. As the pandemic took hold across the U.S., campuses across the country closed their doors, requiring nurse educators in baccalaureate and associate degree programs to cancel on campus classes and laboratory experiences. In addition, nurse educators also found they were not able to provide clinical experiences as agencies closed their doors to students in order to deal with the increase in patient numbers with a limited supply of PPE. Nursing education organizations responded to changes in the healthcare environment with recommendations. Nursing program accreditation bodies, such as the Accreditation Commission for Education in Nursing (ACEN, 2020) and the Commission on Collegiate Nursing Education (CCNE, 2020), both issued guidance to support their accredited nursing programs allowing for flexibility in offering of didactic

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coursework and clinical experiences. The Society for Simulation in Healthcare and the International Nursing Association for Clinical Simulation and Learning (2020) also issued a joint position statement encouraging the use of virtual simulations to replace required clinical hours. All these bodies offering guidance cautioned nursing education programs to refer to local state boards of nursing regulations prior to making decisions to ensure regulatory compliance.

As the pandemic has spread across states in various waves of severity, states have responded to the needs of the public in various ways based on their unique situation. This paper summarizes the response in nursing regulation from a practice and education perspective, with implications provided for baccalaureate and associate degree nurse educators.

Method

A review of COVID related licensure and education changes was conducted using a variety of sources. The authors began with using materials published on websites, including the NCSBN documents outlining changes in both practice (NCSBN, 2021b) and education (NCSBN, 2020b). In addition, documents linked in these tables of changes were also reviewed, such as state/governor proclamations, Board of Nursing regulatory changes, and/or Letters to Program Directors, in the case of educational changes. The materials from each state board of nursing website were accessed as well as letters to directors from the State Boards, if posted. Some states had no information posted and in these cases the state board or directors within the state were emailed for further information or a search of additional news items posted on websites were also used to identify changes made. The information from the boards was reviewed in two broad categories as they related to changes based on COVID 19: 1) changes made related to the regulation of practice and licensure, including entry to practice, and 2) changes made to regulations related to delivery of curriculum.

Findings

Changes to practice entry within the state

Regulatory practice changes offering emergency licensing waivers in response to the pandemic were made available in almost all states (NCSBN, 2021b). These changes were most commonly made based on proclamations or executive orders made by governors. However, a small number of states implemented changes based on legislative orders, state regulatory bodies (such as the Board of Nursing), or state Board of Health orders. One state made changes based on Department of State guidance. The most common change was opportunities for nurses with active licenses in other states to practice in the state (including the District of Columbia and Guam) even if the state was not part of the Nurse Licensure Compact (NLC). Only two states did not offer a waiver option—Arkansas (a compact state) and Illinois (non-compact). Many states (n = 24) also provided changes to licensure renewal criteria for both currently and formerly licensed nurses in the state, such as allowing renewal without required continuing education, extending deadlines for renewal for 90 days or more, and/or allowing formerly licensed nurses (retired or lapsed licenses) to be licensed to practice, generally if the license had lapsed less than five years prior. These waivers were offered in states that were both rural and urban throughout the U.S. Many states (n = 25) also offered new opportunities or expanded opportunities for graduate nurses who had not yet taken the National Council Licensure Exam (NCLEX) to practice, with supervision by a licensed nurse offered as a requirement for those states listing this graduate nursing practice, although it was not clear how many states had this option prior to the pandemic. Student nurse practice was also allowed in six states (i.e., senior nursing students or students with certain levels of practice) with restrictions, such as limited scope of practice and oversight by a licensed practitioner. At least 14 states and Guam had at least one program in the state in which nursing students were allowed to graduate early to take the NCLEX and enter the workforce.

Changes to curriculum delivery

Changes in regulatory oversight of the education of new nurses was also common, with 42 states reporting changes in nursing education regulations representing both rural and urban communities across the country (NCSBN, 2020b). These changes were most commonly communicated directly to nursing program directors through letters from state boards of nursing. However, some state boards of nursing issued official regulatory guidance while in some states, regulatory guidance was provided through executive orders. The most common regulatory response was in the form of guidance related to providing clinical hours and use of simulation to substitute for clinical hours (25 states). An additional nine states, generally those without any state required number of student clinical hours, provided general recommendations urging flexibility in promoting student program completion. Only four states (Arizona, Florida, Maryland, and Maine) specifically identified options for meeting didactic course requirements. Less frequently, revisions were made to site visit schedules and rules governing faculty. Most states also listed time limits for these waivers, most of which have now since expired.

In terms of waivers related to clinical hours, a majority of the state boards of nursing authorized changes related to clinical experiences, preceptorships, and instructional options including simulation. It was made clear by many Boards that no two programs were alike and individual plans responsive to the individual program circumstances needed to be developed. Common themes affecting nursing education included the substitution of simulation for clinical practice, revision of required clinical hours and/or graduation requirements and an emphasis on flexibility and creativity in meeting clinical objectives. Solutions were offered to meet needed clinical hours including giving credit for student's working, volunteering, and taking part in apprenticeships in clinical agencies. Many Boards suggested that changes could be made to current education plans without prior approval, but with the requirement that a report be submitted to the board outlining any changes. Simulation as a substitute for clinical practice was often suggested. In those states with standards limiting the percent of simulation that can be substituted for clinical, often those standards were relaxed. In addition, it was suggested that a substitution of 1:1 clinical for simulation ratio could be changed to a 1:2 substitution, with one hour of simulation counting as two hours of clinical, by some boards. Program guidance included considering students as meeting clinical learning objectives through effective use of simulation to promote progression and graduation, although some boards only authorized this for senior nursing students.

In addition, new academic-practice partnerships were developed, such as letting student workers 'count' work hours towards clinical hour requirements. This included states, such as California, allowing students to practice in clinical settings at increasing levels depending on the coursework completed in the nursing program (California Board of Registered Nursing, 2020).

Discussion

As the pandemic continues to surge across the country, the need for healthcare personnel, including nurses, continues to be a significant workforce issue. In this review of regulatory changes made because of the pandemic, changes to both regulation of practice and education were instituted to help address workforce needs. The most common regulatory changes made by boards were related to practice

of nursing within the state, including expanding opportunities for student nurse practice. Another common response to the pandemic has been the movement of new graduates into the workforce prior to passing the NCLEX. The changes in both practice and regulation have direct impact on educators in associate degree and baccalaureate programs.

The direct impact of regulatory and curricular changes since the pandemic are yet to be seen. However, outcomes to consider are NCLEX pass rates and readiness for practice. While the use of graduate nurses in practice is not new, what is different is the circumstances and complexity of the healthcare environment graduates are entering. As new practicing professionals, the impact on changes to new graduates with altered teaching modalities creates a potential concern given the obligation schools of nursing have in preparing future practicing nurses. With many programs moving to simulated experiences to replace clinical, including virtual simulation options, the preparation of graduates has not been standard across programs. While not clearly a causal relationship, national NCLEX-RN first time pass rates have been declining since the pandemic with first time pass rate in 2019 at 88.18% but those since the pandemic have been lower with a pass rate of 86.57% in 2020 and 83.75% for the first three quarters of 2021 (NCSBN, 2021a). In addition, a study of 2020 graduates nationally indicated that confidence of graduates with limited direct clinical opportunities negatively impacted their self-confidence (Feeg et al., 2021). Associate degree nurse educators must be cognizant of how current changes in preparation are impacting NCLEX outcomes and implement evidence-based teaching strategies to support NCLEX success and readiness for practice.

The direct impact of regulatory changes on practice is less clear. Regulatory changes to practice have been modified throughout the pandemic and continue to be modified with the NCSBN latest updates dated October 31, 2021 which included 2 states that have since rescinded waivers (NCSBN, 2021). Evidence indicates that healthcare agencies have been able to accommodate the increase in patients with changes such as use of travel nurses, expanded sites for care (Hick et al., 2021) and postponing elective procedures (Goodman, 2021). However, as the pandemic continues to surge across the country, states are indicating the lack of resources, including nursing staff, is reaching never seen shortage levels. An exhausted nursing workforce facing vaccine mandates has taken its toll causing nurses to resign from the profession in large numbers (Goodman, 2021). The resulting shortage has led the American Nurses Association (ANA, 2021) to request the federal government declare the shortage of nurses a national crisis. In addition, we are now seeing authorization of Crisis Standards of Care forcing healthcare providers to make difficult decisions about who may receive care because of a shortage of healthcare professionals (Soucheray, 2021).

In more promising news, the pandemic has also led to creative solutions to promote education and workforce needs with new academic-practice partnerships. Given the continuing pandemic, models for partnerships, such as those advocating use of students as part-time or full-time employees, can help address both the preparation needs of students and workforce needs of health care agencies (NCSBN, 2020a). Additional models include internship opportunities or expanding clinical beyond the standard educational term (Beu, 2020). Finding safe and effective ways for practice and education partners to work together will continue to be key in providing nursing students with experiences that will facilitate students in passing the NCLEX and support workforce needs. These partnerships are best created at the local level to meet the specific needs and resources of the agencies involved. Such partnerships must also ensure compliance with regulatory standards related to unlicensed students practicing in healthcare environments. State or federal funding to support nursing workforce could enhance the ability to develop these needed partnerships.

This review is limited in that it provides information available on websites and only limited first-hand information from schools or boards of nursing. It is also limited to regulation changes, based on information reported to the NCSBN, which has been updated regularly but not clearly identified when those updates were made. It also only represents one country despite the fact the current pandemic has impact globally. Further research is needed to understand the effects of all regulation changes made across states and globally.

Conclusion

The current pandemic has continued to lead to unprecedented changes in healthcare, including regulation of nursing practice and education. In an effort to continue to protect the safety and welfare of the republic, nursing regulatory bodies will continue to address the challenges created by the ongoing pandemic to support the healthcare workforce needs. Nurse educators across all levels will to need to address regulatory modifications as they develop and work collaboratively with clinical partners to continue to support student learning needs and preparation of graduates. In doing so, educators will be preparing our workforce to meet healthcare outcomes during the current pandemic and assist in their preparation for future catastrophic events.

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The authors confirm that this manuscript is not currently under review by another publication, will not be sent to any other publishers while still under review. This paper has not been presented at any meeting or conference.

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References

Accreditation Commission for Education in Nursing (2020). Temporary flexibility related to virtual site visits and use of distance education. Retrieved November 25, 2020, from https://www.acenursing.org/temporary-flexibility-related-to-virtual-site-visits-and-use-of-distance-education/

Alexander, M. (2017). The evolution of professional regulation. *Journal of Nursing Regulation*, *8*(2), 3. doi:10.1016/S2155-8256(17)30091-1.

American Nurses Association. (2021). ANA urges US Department of Health and Human Services to declare nurse staffing shortage a national crisis. Retrieved from https://www.nursingworld.org/news/news-releases/2021/ana-urges-us-department-of-health-and-human-services-to-declare-nurse-staffing-shortage-a-national-crisis/. Accessed November 1, 2021.

Beu, E. (2020). Nursing students ready to fill gap amid COVID-19 surge. Retrieved December 4, 2020 from https://www.koco.com/article/nursing-students-ready-to-fill-gap-amid-covid-19-surge/34879084

California Board of Registered Nursing. (2020). *Nursing students may supplement healthcare staff during recent spike in COVID-19 cases*. . Retrieved December 4, 2020, from https://thedcapage.blog/wp-content/uploads/2020/08/FINAL-COVID-BRN_News_Release_8.11.2020.pdf.

Commission on Collegiate Nursing Education. (2020). *Information regarding coronavirus impact on CCNE accredited baccalaureate and graduate nursing programs*. . Retrieved November 24, 2020, from https://www.aacnnursing.org/Portals/42/CCNE/News/CCNE-Statement-on-Coronavirus-Bacc-and-Grad.pdf.

Feeg, V., Mancino, D. J., & Gobderhan, C. R. (2021). Employment trends and the impact of the pandemic on 2020 new graduates' pre-graduation learning experiences and job search in the first 6 months. *Dean's* Notes, *43*(1), 1–5.

Goodman, D. M. (2021). Will vaccine mandates affect the existing nursing shortage? [Blog]. *Medscape Nurses*. Retrieved November 1, 2021, from https://www.medscape.com/viewarticle/960377.

Hick, J. L., Hanfling, D., Wynia, M., & Toner, E. (2021). Crisis standards of care and COVID-19: What did we learn? How do we ensure equity? What should we do? Retrieved November 3, 2021, from https://nam.edu/crisis-standards-of-care-and-covid-19-what-did-we-learn-how-do-we-ensure-equity-what-should-we-do/

National Academies of Sciences, Engineering, and Medicine. (2020). *Rapid expert consultation on staffing considerations for crisis standards of care for the COVID-19 pandemic*. Washington, DC: The National Academies Press. doi:10.17226/25890.

National Council of State Boards of Nursing. (2020a). *Policy brief: U.S. nursing leadership supports Practice/Academic Partnerships to assist the nursing workforce during the COVID-19 crisis*. . Retrieved January 8, 2021, from https://www.ncsbn.org/Policy_Brief_US_Nursing_Leadership_COVID19.pdf.

National Council of State boards of Nursing. (2020b). *Changes in education requirements for nursing programs during COVID-19*. . Retrieved December 18, 2020 from https://www.ncsbn.org/Education-Requirement-Changes_COVID-19.pdf.

National Council of State Boards of Nursing. (2021a). *NCLEX pass rates*. . Retrieved November 3, 2021, from https://www.ncsbn.org/1237.htm.

National Council of State Boards of Nursing. (2021b). *State response to COVID-19*. . Retrieved December 18, 2020, from https://www.ncsbn.org/State_COVID-19_Response.pdf.

Society for Simulation in Healthcare/International Nursing Association of Clinical Simulation and Learning. (2020). COVID-19 SSH/INACSL position statement on use of virtual simulation during the pandemic. Retrieved November 24, 2020 from https://www.ssih.org/COVID-19-Updates/ID/2237/COVID-19-SSHINACSL-Position-Statement-on-Use-of-Virtual-Simulation-during-the-Pandemic

Soucheray, S. (2021). Alaska, Idaho using crisis standards of care over COVID-19. Retrieved November 3, 2021, from https://www.cidrap.umn.edu/news-perspective/2021/09/alaska-idaho-using-crisis-standards-care-over-covid-19

Spetz, J. (2020). There are not nearly enough nurses to handle the surge of cornonavirus patients: Here's how to close the gap quickly. *Health Affairs Blog*. Retrieved December 10, 2020, from https://www.healthaffairs.org/do/10.1377/hblog20200327.714037/full/.

Stievano, A., Caruso, R., Pittella, F., Shaffer, F., Rocco, G., & Fairman, J. (2019). Shaping nursing profession regulation through history - A systematic review. *International Nursing Review*, *66*(1), 17–29. doi:10.1111/inr.12449.