Views of regulatory authorities on standards to assure quality in online nursing education

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ABSTRACT

Background: With the rapid growth in online education programs in nursing, quality of education through this modality is becoming of greater importance.

Purpose: This paper aims to explore current recommendations and standards for quality in online nursing education offered by nursing regulatory, accrediting, and licensing organizations.

Method: Individual interviews were conducted with the leaders from four accrediting, licensing and certifying organizations in nursing about their perspectives on quality standards for online education.

Findings: The following themes emerged from the qualitative interviews: *Theme 1-* Standards are not specific to online education; *Theme 2-* This is not up to us - Professional organizations can offer recommendations but not responsible for regulations; and *Theme 3-* Each institution has responsibility to provide support and evaluate the quality of online education.

Discussion: Schools of nursing should continue to incorporate current standards for quality in online education as the methods of delivery continue to evolve in this highly technologically-oriented world.

Cite this article: Delva, S., Nkimbeng, M., Chow, S., Renda, S., Han, H.-R., & D'Aoust, R. (2019, November/December). Views of regulatory authorities on standards to assure quality in online nursing education. Nurs Outlook, 67(6), 747–759. https://doi.org/10.1016/j.outlook.2019.06.011

Background

Advances in information technology have resulted in the uptake of online education across different disciplines and fields of studies. Conventionally called "online learning," this modality is available for students at all education levels as evidenced by early media literacy training (Ferdig & Kennedy, 2014; Schmidt, 2013), particularly in postsecondary health professional programs (George et al., 2014). The percentage of students enrolled in various distance undergraduate classes grew from 8% in 2000 to 20% in 2008 and almost a fourth of college graduates report taking an online class (Parker, Moore, & Lenhart, 2011; Radford, 2011). A 2011 Pew Research report showed that 77% of institutions offer online courses and 58% of those surveyed offer full degree programs online (Parker et al., 2011). Data

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indicates that this increasing trend in implementation of online education is also true for nursing. Four hundred of the 679 RN-to-Baccalaureate programs have an online component (American Association of Colleges of Nursing, 2014). Since many nursing programs have embraced online learning, the U.S. News World Report now has a "Best Online Nursing Program Rankings" (Brooks & Morse, 2014).

Online learning is defined as a program or a class in which 80% of the content is offered online (Allen & Seaman, 2016). With enhanced flexibility in terms of time and place, as well as learning methods, older students, those with dependents, significant others or students who are employed fulltime or have disabilities are more likely to enroll in online programs (Radford, 2011; Sovajassatakul & Chaisanit, 2016). Additionally, students in traditional on campus programs are increasingly enrolling in online classes. This is due to the convenience of an online course, where time would normally conflict with other in-person courses or activities (Parker et al., 2011).

Unlike disciplines such as business and computer science, where demonstration of knowledge and skill could easily be assessed with available technologies, nursing and other clinical practice disciplines may require more specific evaluation of competency. Therefore, traditional methods of ensuring quality for online education may not be sufficient for online education in nursing. Currently, accreditation, licensing, and regulation of nursing education occur at three levels. First, there are state-level licensing boards that approve schools of nursing and ensure that graduating students are ready for safe practice (National Council of State Boards of Nursing [NCSBN], 2018a). Schools are responsible for ensuring that they meet all the requirements necessary to obtain approval from the licensing board. Second, accreditation processes and agencies assess the quality of nursing programs from a national perspective (NCSBN, 2018b). Requirements for accreditation vary by organization. For example, the Commission on Collegiate Nursing Education (CCNE) has standards for accreditation that are responsible for keeping schools in compliance. These guidelines are used to assess the schools' performance by the committee during the accreditation visit (American Association of Colleges of Nursing [AACN], 2018). There are multiple accrediting and certifying organizations for the different specialties in nursing and at various levels of training and degrees (LPN, RN, BSN, MSN, Master's/Post-Master's certificates and DNP). Finally, there are federal policies, such as the Americans with Disability Act that schools have to follow in order to help students with disabilities navigate the online environment (U.S. Department of Education, 2018).

To the best of the authors' knowledge, there is currently no known entity responsible for oversight and continuous monitoring of the quality of online nursing education programs long-term. Therefore, this paper seeks to explore current recommendations and standards for quality in online nursing education offered by regulatory, accrediting and licensing organizations in nursing. In particular, the objectives of this project were to: (a) Explore whether the selected organizations currently have quality standards for online education in nursing; and (b) Understand the views of regulatory and licensing organizations in nursing on potentially setting quality standards in online education. This information can facilitate an understanding of current regulatory guidelines in nursing and inform further development of standards for monitoring quality in online learning.

Quality in Online Education

In 2009, the Council of Regional Accrediting Commissions (C-RAC), which is a group of seven regional organizations that accredit about 3,000 colleges and universities in the United States (C-RAC, 2018), developed nine guidelines for evaluating online education. The guidelines describe ways in which online education is incorporated into institutional practices. For example, one of the guidelines stresses that institutions must assess how online learning aligns with their mission and has plans for how budget and technological capabilities will support the online platform (Higher Learning Commission, 2009). Regional accrediting through member organizations uses a peer review process to evaluate quality in education at different levels, junior colleges, colleges, and institutions of higher education. Each of the seven regional agencies has select criteria used to evaluate the programs within that purview and these criteria account for different methods of education delivery (Council of Regional Accrediting Commissions [C-RAC], 2018). For example, the Higher Learning Commission (HLC) also has criteria on its checklist for accreditation which states: "The institution's program quality and learning goals are consistent across all modes of delivery and all locations (on the main campus, at additional locations, by distance delivery, as dual credit, through contractual or consortial arrangements, or any other modality)" (Higher Learning Commission, 2019). The Accrediting Commission for Community and Junior Colleges Western Association of Schools and Colleges also assesses aspects of online learning including whether there is accurate application of procedures for determining if a course offered by distance education will provide substantive interaction between the instructor and student (The Accrediting Commission for Community and Junior Colleges, WASC, 2015).

Other organizations that focus on quality in online education include Distance Education Accrediting Commission (DEAC) and Online Learning Consortium. DEAC is a nonprofit organization that accredits distance programs (51% or more content offered by distance learning) from the secondary school through professional and doctoral degrees. Its accreditation handbook identifies the criteria relevant to online learning, including adequate design and delivery of materials using readily available and reliable

technology (Distance Education Accrediting Commission, [DEAC], 2019). The Online Learning consortium on the other hand is a membership resource organization created to advance quality in online teaching and learning through worships, consulting and research (Online Learning Consortium [OLC], 2019). These agencies focus on all distance education and faculty including clinical and nonclinical degrees and programs. Clinical programs such as nursing that require students to learn and demonstrate skills and competencies may require more specific criteria for ensuring quality in online nursing education.

Many accrediting agencies utilize evidence-based approaches in setting standards and evaluation criteria for accreditation of schools. Therefore, evaluation criteria, checklist and commissions may utilize well-known quality frameworks and guidelines such as the Quality Matters (QM) framework. For example, under its Quality Initiative page HLC makes reference to QM' online/mobile learning (Higher Learning Commission, 2019). Currently, many institutions implement the QM standards in the process of developing and creating content for nursing education in an online setting. QM sets national quality benchmarks for organizations to use through rubrics that meet the needs of different sectors in online education (Butecher & Wilson-Strydom, 2012). The instrument serves as the guiding framework for this project because it is considered the gold standard when discussing quality in online education in nursing.

Quality Matters: A Guiding Framework

QM, is a nonprofit organization that advocates for establishing standards for online and blended learning courses. Online course evaluation is usually performed via a faculty-oriented peer review process using an evidence-based tool or rubric. QM standards are based on eight categories — course overview, learner objectives, assessment and measurement, resources and materials, learner engagement, course technology, learner support, and accessibility (Quality Matters, 2018a). In addition, the standards include and highlight the concept of course alignment, which means objectives should drive the development of learning and assessment activities, as well as the selection of course materials and course technology. Course alignment occurs when essential course components — Learning Objectives, Course Activities Assessment and Measurement, Instructional Materials, and Student Interaction, and Course Technology—connect to ensure students achieve the intended learning outcomes.

The QM standards serve as a framework to assure such an alignment occurs for online and blended courses through a predetermined mapping process (Quality Matters, 2018b; Roehrs, Wang, & Kendrick, 2013). Courses can be evaluated against the QM framework through the use of a standard based scoring guide and a set of online tools to facilitate the peer-review process. QM has generated widespread interest and has been supported by several studies in the literature that examine the impact on student learning outcomes, student retention, student satisfaction, relationship between design and learning, and accreditation standards (Martin, Ndoye, & Wilkins, 2016).

Methods

Design and Sample

The purpose of this project was to determine regulatory bodies' current standards for assuring quality in online education. Therefore, the initial protocol included examination of the organization's website for standards or guidelines that were specific to quality in online education using the QM rubric. A nursing education expert was consulted to ensure adequate representation from different organizations. Eight diverse accrediting and licensing organizations were identified to explore project objectives. From a review of the literature, a template was developed to extract information from the organizations identified. A list of eight questions (see Table 1) was used to determine if these national organizations currently offer standards related to any aspects of the QM rubric.

The preliminary web search revealed that none of the organizations offered quality standards for online education in nursing. Two organizations, however, discussed the need for online education within their websites. For example, one licensing organization identified pre-licensure education requirements for online education by state and another organization identified comprehensive standards for accrediting online programs. The information alone did not provide enough detail and data to address this project's purpose. Consequently, the protocol was updated to include key stakeholder interviews. All of the eight organizations were contacted for interviews and four responded to the team's correspondence.

Data Collection

The institutional IRB reviewed the protocol and exempted the need to consent as it was considered a quality improvement project. Two leaders from each of the eight organizations were contacted via both electronic communication and telephone. The emails followed a similar script as the phone call, where information about the project purpose, interview process, and anonymity was provided to potential participants. If no response was received within two weeks, another email was sent that a telephone conversation or an in-person meeting would subsequently be arranged. Four leaders from three accrediting organizations and one licensing organization agreed to discuss their views and participate in the interviews.

Criteria	***Organization #1	†Organization #2	*Organization #3	****Organization #4	**Organization #5	†Organization #6	†Organization #7	†Organization #8
Q1. Is goal of the organization clearly stated?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Q2. Are the standards focused on online education? If so, list them.	No. But, website offers pre-licensure education requirements for distance education by state.	No	No, but they discuss quality standards for distance education in accreditation standards for nursing education programs. It is addressed in four of the five quality indicators.	No	No	No	No	No
Q3. Do they differentiate standards between online theory courses vs. online clinical/simulation?	N/A	No	No, but they make a statement about standards for Clinical, simulation and laboratory courses.	N/A	No	No	No	No
Q4. What levels of online nursing education do the competencies focus on?	Pre-licensure only	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Q5. Do they incorporate QM standards? Y/N. If so, how?	No	No	Yes. In the curriculum framework, they list recommendations for assessment, learning objectives, and learning activities as they are mentioned in the QM Standards.	No	No	No	No	No

Table 1 – List of Organizations Contacted and Their Association of Organizations' Standards to Quality Matters Rubric Criteria

*   I1, Accreditation.
**   I2, Accreditation.
*** I3, Licensing.
**** I4, Certification.
† No response.

Table 2 – Interview Guide Used for One-on-One Interviews
Exploring perspectives on standards for online education from the views of regulatory, accrediting, licensing and professional organizations
Q1.   Goal of the organization? What do you consider main role of your organization?
Q2.   Are your standards focused on online education? If so, list them.
Q3.   Do you think your nursing organization should be responsible to give recommendations for online education?
Q4.   Do you differentiate standards between online theory courses vs. online clinical/simulation?
Q5.   What levels of online nursing education do the competencies focus on?
Q6.   Do you incorporate Quality Matters standards? Y/N. If so, how?
Q7.   Do you know about the Universal Principles of Learning? (Interviewer will define Universal Principles of Learning if participant does not correctly define)
Q8.   If you were to implement online standards, how would you recommend that nursing schools:
a) Engage students in online education?
b) Present information and content in different ways?
c) Differentiate the ways that students express what they know?

Semi-structured interviews were conducted with these experts to understand their opinions on setting standards for online nursing education and took place from June 2018 to late August 2018. Interviews lasted between 25 and 40 min. Questions from the interview guide (Table 2) included: (a) Are your quality standards focused on online education? (b) Do you think your nursing organization should be responsible to give recommendations for online education? (c) What levels of online nursing education do the competencies focus on? With the permission of the leaders, the interviews were audio recorded and transcribed verbatim.

Analysis

Two authors (MN, SD) utilized NVivo v.10 qualitative software for content analysis and independently coded these interviews for relevant themes (NVivo, 2012). Themes were discussed with a co-coder and revised in an iterative process of data reduction to obtain final larger and sub themes. Degree of agreement was achieved with a calculated interrater reliability of 80%. This was the team's way of "testing good fit" to ensure that the data were inherently supporting the larger themes and vice versa (Vaismoradi, Jones, Turunen, & Snelgrove, 2016). The team met with three experts in the field of nursing education who evaluated the interview

guide for validity. They assessed for clarity and appropriateness of questions and minor refinements were made. Content experts had extensive experience in academia, nursing education and online course development. The themes were finalized after several discussions and consensus was achieved among the experts after two rounds of face-to-face meetings. The common issues addressed were relevancy of themes to aims and a change in semantics, such as constituent order of a clause that pertained to key phrases used in adult education and online learning.

Findings

Four interviews were conducted via telephone ($n = 3$) and in person ($n = 1$) with experts from nursing organizations and accrediting agencies. The face-to-face interview was held in a private area at the leader's workplace. Table 3 summarizes the participants' background and characteristics including their roles and the type of organizations they represented. Two leaders were directors of different accrediting institutions (denoted as "I1, Accreditation" and "I2, Accreditation" respectively). Another leader was President of a licensing body (I3, Licensing) and the remaining interviewee

Table 3 – Interviewee Background and Characteristics				
Organization	Interviewee	Interview Method	Role	Experience*
Accrediting institution	I1, Accreditation	In person	Executive Director for accreditation	35 years in teaching and accreditation
	I2, Accreditation	Telephone	Associate Director for accreditation	26 years in teaching and 1.5 years in accreditation
Licensing body	I3, Licensing	Telephone	President of the board of directors of a regulatory agency	20 years as Executive director of the regulatory body
Certification agency	I4, Certification	Telephone	Senior Vice President of accreditation and certification	8 years in certification organization
* All variables were self-reported measurements by participants.				

Table 4 – Themes and Subthemes of Factors Considered When Determining How to Set Standards for Various Methods of Education

Themes	Subthemes	Supporting Quotes
Standards are not specific to online education		
	No written standards for online nursing programs	"…we consider online education one of the methods of delivery for nursing education, but our standards are broadly written and don't really focusing specifically on online education.… They [nursing schools] tell us how they carry out their programs and through our on-site review process, we ask questions about how they meet our standards and criteria." (I2, Accreditation) "It's all levels that we accredit. Certainly, we have very few online programs at the practical levels. The higher the level of education, the more online programs we see. We see more Baccaleurate, Masters, DNP programs online than at the technical level [LPN]." (I2, Accreditation)
	Quality Matters principles used	"we just use adult learning principles…we know that people learn better when there's engagement, when they have an opportunity to work out a problem and not just I'm going to stand and tell you what to do but I give you a problem if [inaudible 5:07] I'll give you a problem and you work through that. " (I4, Certification)
This is not up to us - Professional organizations can offer recommendations but not responsible for regulations		
	No evidence that standards for online education are needed	"However, when we do a classroom observation of an online course, we do look for QM indicators in terms of how the course is organized and the level of communication and interaction between students and teachers." (I2, Accreditation) "QM and what they have indicated as appropriate you will see we identified our standards in those standards." (I1, Accreditation)
	Following national standards is important for successful program outcomes	"regardless of the method of delivery (face-to face, hybrid, distance education), students need to meet the learning outcomes for the program of study then the program outcomes which includes NCLEx or certification rate success." (I2, Accreditation) "One of the things we look at is do we have multiple forms of evaluation…both summative or formative evaluation. What is the process faculty use to evaluate learning. What we look for is to make sure they're not just doing only one method such as a standardized exam." (I2, Accreditation)
Each institution has responsibility to provide support and evaluate the quality of online education		
	Faculty should have access to good resources	"And of course, all of these years later, there are all of these resources like Blackboard…is that what you use at [your institution]? I think it can be a powerful tool and can support student learning. Not only support but it can lead to student learning. At the end of the day it's about best practices." (I1, Accreditation) "I think online education needs to be active learning and so that requires a teacher with those skills that can facilitate active learning sometimes it requires investing in technology that helps um that active engagement." (I1, Accreditation)
	Online students should have same resources and user protection as in person	"Accommodations in ADA is a huge deal in online learning… This is where you take into consideration that regardless of what you develop it had to be developed in a way that all should have access to it. Regardless of what your disability may be." (I1, Accreditation) "what is says about distance education is the delivery of instruction by distance education method must be consistent with the program curriculum plans enables students to meet the goals, competencies and outcomes of the program and standards of the board of nursing." (I3, Licensing) "For example, there was a program where technical support was not available on the weekends. There were some students who worked during the week so that would mean that if they were having technical issues, they would not be able to get much done over the weekend. So we provided feedback about that and the program had to ensure there was support available

(continued)

Table 4 – (Continued)		
Themes	Subthemes	Supporting Quotes
	Schools are responsible for making sure that students meet expected outcome regardless of delivery mode	24/7 even if it was over the phone so that they would be in compliance." (I2, Accreditation) "We need to follow federal regulations such as Title IV so that we are consistent with what the federal government, well the Department of Education requires. For example, we ask is it password protected or do students enrolled in online programs have to pay extra. Or we also ask how does the school know the person that they testing is actually the person?" (I2, Accreditation) "If students aren't meeting the outcomes [the schools] have to make changes programmatically" (I2, Accreditation) "in some ways there's value face to face, right? You can go more in depth in some areas than you can in others so there might be content that's more appropriate for an online environment than it would be an in-person environment." (I4, Certification). "I think it needs to be a safe space for learning, um, which is actually a principle of education in general so people feel safe making mistakes…if the teacher makes it an uncomfortable environment or the other students make it an uncomfortable environment then people won't learn" (I4, Certification). "I don't care whether it's online or in person, the same principles apply … So we very much want the same standards for education whether it's online or in person, or, or a mixed or both" (I4, Certification). "We have the programs report to us the number of credit hours that they are using some of distance education. For clinical, everyone has to have some of sort of clinical piece even online students. So for clinical, they have to have preceptors so we make sure they actually have preceptor manuals in place" (I2, Accreditation)

was Senior Vice President of a certification agency (I4, Certification). On average, the leaders had 16 years of experience ranging from 1.5 years to 35 years in teaching and accreditation.

The following superordinate themes and subthemes reflect the opinions of the nursing leaders identified from these conversations (Table 4):

1 Standards are not specific to online education-subthemes: (a) No written standards for online nursing programs, (b) QM principles used,
2 This is not up to us – professional organizations can offer recommendations but not responsible for regulations-subthemes: (a) No evidence that standards for online education are needed, (b) Following national standards is important for successful program outcomes,
3 Each institution has responsibility to provide support and evaluate the quality of online education-subthemes: (a) Faculty should have access to good resources, (b) Online students should have resources and user protection as in person, (c) Schools are responsible for making sure that students meet expected outcome regardless of delivery mode.

Theme 1: Standards are not specific to online education

The interviewees expressed that their standards were not specific to online education, but rather are to ensure that institutions of higher education are compliant with federal guidelines. One participant stated that the majority of their standards are based on what the US Department of Education recommends: *"We ask those questions to make sure they are consistent with the department of education but we don't dictate how the online programs should be run. It is up to the schools to decide" (I2, Accreditation).* They also voiced that their organizations would never mandate standards for online education because their stance is that this should be an institutional decision. Ultimately, the participants stated that institutions should have the freedom to choose how they facilitate learning because each school has a different mission.

Subtheme 1a: No written standards for online nursing programs

The participants noted that accreditors are there to ensure that content and performance are up to par with national standards. However, the schools can internally develop their own plan of action on how to assess and measure learning, how to deliver different learning activities and how to provide support for students in an online environment. *"We look at a course or a syllabus. We look at evaluation strategies, then ask to see examples of assignments and discussion boards and talk to faculty. We ask for policy they have written for distance students. So you pretty much look for potential disadvantages to online students that would impair their learning process…then we just document what we find" (I1, Accreditation).*

Interviewees mentioned that as long as the deliverables are being met, whether online or in person, then educators are doing what they need to help students prepare for big milestones in their career such as passing the national council licensure examination for nursing. They also echoed that as long as distance learning students were not being shortchanged on different learning opportunities then there was no need to have supplemental standards for online education. For example, if a student was not able to accrue the required clinical hours because of their remote status and the institution had no plan in place to help the student get the remaining hours of training, then the accreditors would be concerned. They emphasized that nursing students need hands on clinical experience to prepare them for real world scenarios. If they are not given the chance to practice like other students, then the institution would not be doing their job to ensure that students have enough practice to excel in the clinical world. *"We have the programs report to us the number of credit hours that they are using for distance education. For clinical, everyone has to have some sort of clinical piece even online students. So, for clinical, they have to have preceptors so we make sure they actually have preceptor manuals in place. We then interact with students to make sure they are getting the skills they need from their clinical experience. We also sample preceptors who are involved in distance education. If they have instances where they replace simulation in place of clinical time...we make sure they have to be consistent with state board of nursing"* (I2, Accreditation). Overall, their concern was more related to upholding equity in regulation for online learners rather than sanctioning unnecessary standards across the board. Any evidence of online students placed in an unfair disadvantage is usually appraised at the site visit. As a result, regulators do not grant accreditation status unless the schools are able to prove equal access to educational opportunities for all students enrolled.

Subtheme 1b: QM principles used

Participants were asked if they incorporated QM standards when creating their standards for nursing education. Most participants were well aware of QM standards and one replied: *"I am very familiar with Quality Matters. We were introducing Quality Matters throughout faculty so they could follow approved standards and metrics. To me it's the leading standards for courses and programs...I think I'm dating myself... the Sloan consortium is another but it has really morphed over the years"* (I1, Accreditation). Only one participant (I3, Licensing) was not familiar with QM to which the interviewer briefly reviewed the principles. All participants indicated that QM principles were not incorporated in their standards and criteria; one participant went on to add the following: *"No they are not incorporated... however, when we do a classroom observation of an online course, we look for QM indicators in terms of how the course is organized and the level of communication and interaction between students and teachers"* (I2, Accreditation). The consensus was that QM was important in online learning;

however, the leaders felt that the schools should decide if they want to adopt such principles because it has to align with their institutions' missions and values. The same participant stressed the importance of doing away with blanket regulations because it limits the schools' freedom. *"It's important to understand what happens when you promote checklists because there are already a lot of standards written out there that can be adopted. When we go into an institution, we check to see whether they've actually done that. I actually prefer to reverse that a little bit and if they don't have any then that's a red flag. A checklist may not capture the uniqueness of an institution or a program. They've already been done by QM"* (I2, Accreditation). Participants articulated the importance of QM principles but felt that the institution's decision to not adopt the principles does not necessarily suggest poor quality. They believed that setting such an expectation for all schools would undermine their ability to execute their own mission and vision whether in the classroom, simulation, or clinical setting.

Theme 2: This is not up to us − professional organizations can offer recommendations but not responsible for regulations

Aside from allowing the schools to choose what specific standards they wanted to incorporate, leaders of regulatory bodies felt that it was not their responsibility to take on such a role. They expressed that individual schools were perfectly capable of deciding which rubric was right for their educators and students. *"It just feels like if we prescribed a programmatic mandate, that would be an overreaching of our role as an accrediting body"* (I2, Accreditation). Participants espoused the idea that institutions should have the ability to carry out their missions and goals that are central to their pedagogical identity.

Subtheme 2a: No evidence that standards for online education are needed

Specifically, participants echoed a similar theme that no evidence confirms that standards for online education are necessary. *"So, um we treat online education the way we would in the other methodology of education. Most of what we see are hybrid programs so they might have some online content but they also have face to face content with their students at the pre-licensure level. There are a few that are just online, but of course they have their clinicals face to face with a faculty member and then we have the traditional programs that are always face to face and there are still quite a few of them around"* (I3, Licensing). They expressed that so long as the school can demonstrate students' success regardless of program modality, then there is no need to add more criteria. Since schools offer different types of programs (traditional, blended and online), their main objective should be to employ creative solutions to provide equal access to resources for all students.

Subtheme 2b: Following national standards is important for successful program outcomes

When asked about setting regulations specifically for online programs, respondents expressed that

standardization had no bearing on program success. They also asserted that their organization "*would never mandate quality standards for online education*" *(I1, Accreditation)*. Most underscored the importance of helping students develop the competencies they need to demonstrate certain skillsets and professional dispositions when caring for different patient populations.

Theme 3: Each institution has responsibility to provide support and evaluate the quality of online education

Subtheme 3a: Faculty should have access to good resources

Frequent references were made to the utility of technical and academic resources. In order to be efficient instructors, faculty needs to be well equipped with the right tools to lead an online classroom. One participant stated: "*Many institutions have a center for teaching and learning and those resources are there to help. We just need to make sure faculty have access to that information or that they have the right resources like instructional designers*" *(I1, Accreditation)*. Managing different learning management systems such as (Blackboard) (www.blackboard.com) or (Desire2Learn) (www.d2l.com), can be burdensome for faculty. To overcome this barrier, participants felt that educators should have access to instructional designers to help with navigating the different course platforms. With the extra support, educators can focus on teaching the content and supporting their students. "*There has to be faculty support such as instructional support…and, um, the learning activities need to be congruent with online format method of delivery and also line up with the evaluation methods*" *(I2, Accreditation)*. Participants added that some educators are intimidated by the unfamiliar territory of an online platform. They highlighted that technology should not be a barrier for faculty. Instructional support can help faculty who are digitally naive develop the self-efficacy to teach courses online.

Subtheme 3b: Online students should have resources and user protection as in person

Due to the lack of human interaction, online learners are deprived of virtual assistance. Participants stressed the importance of making sure that support is adapted to the online environment. "*We ask students, then we ask faculty and then administrators how do they have access to resources that students on campus have access to. Are student support services the same as if they were doing in person degree programs. [Site visitors] ask questions like: 'How do you ensure that students in online programs have access to student support services such as financial aid, registrar, counseling…any accommodations'*" *(I1, Accreditation)*. Interviewees expressed that they frequently encountered differences in curriculum between online and traditional learners in the clinical component. "*You can't say to me we have a distance learning program and our students can't do clinical…students should be able to fulfill all program requirements no matter the delivery of the program*" *(I1, Accreditation)*. Since nurses provide direct patient care, experiential learning is critical in nursing education. Participants posited that institutions needed to have strategies in place to enhance the

quality of learning in clinical settings for distance learners so that they are not at a disadvantage. "*We try to course correct at the end of the site visit to ensure that students have the tools to meet program outcomes*" *(I2, Accreditation)*. In this case, accreditors also highlight that even in the case where schools fail to meet such expectations, they provide feedback to the institutions so that they can make improvements instead of just placing them on sanction.

Besides assessing the quality of education delivery, the leaders also stressed the importance of protection for user-defined data. Participants stressed the importance of safeguarding student privacy and confidentiality to avoid the risk of data being breached by a third party: "*You have to have a way with people to express their opinions through online education, um, but the conversation should be respectful um, you also need to protect people's confidentiality*" *(I2, Accreditation)*. This poses a huge risk to big data privacy since multiple students are accessing these online platforms over a long period of time (usually a semester or term). Any third party, whether it is a fellow student or an outside offender, can access a substantial amount of data. This could mean access to previously used exams or access to financial aid information. Participants raised concerns about those potential issues and usually look for institutional practices on how they handle or manage this type of data responsibly.

Subtheme 3c: Schools are responsible for making sure that students meet expected outcome regardless of delivery mode

There was consensus in the view that institutions needed to ensure that students were meeting expected outcomes regardless of delivery mode. One participant stated, "*[Nursing] programs need to be implemented with same degree of rigor regardless of whether it's a face to face program*" *(I2, Accreditation)*. They highlighted that some faculty opt to teach online assuming that it would be easier to manage than a traditional classroom. The decision to teach online should be based on teaching style and should not be a way of creating convenience. Usually, if an educator does not have the competencies for teaching online, then they will be doing a disservice to the learner who may not necessarily acquire the knowledge and skills they need to successfully pass important exams such as the NCLEX. "*Sometimes faculty may struggle in the traditional classroom…and for those that choose to teach online thinking it'll be easier-they're wrong. Sometimes, they transfer some of those weaknesses over to the online classes… It's a lot easier for me to organize a class face to face in the classroom than it is to develop an online course because it's much more time consuming. If all you do is make lectures and put it online then you've missed the mark*" *(I1, Accreditation)*. According to the leaders, schools are expected to help faculty gain the skills they need to improve instructional practices. By focusing on faculty development, instructors can become more confident in their technical capability to facilitate an online classroom, which in turn promotes student success.

Discussion

This is the first project to assess the current landscape of quality in online education in nursing and to explore barriers to setting standards for online education from the views of leaders of regulatory, accrediting, licensing and professional nursing organizations. Although these organizations detailed criteria for quality in nursing education at each academic level, there were no criteria or standards that were specific to online nursing education. Rather, we learned that nursing accreditation, licensing and certification organizations currently do not distinguish between in person and online education for quality standards. However, we also learned that accreditors frequently encounter issues of incongruence between face-to-face and online classes (Rovai & Grooms, 2004). Findings suggest that more attention should be paid to how each school sets benchmarks for monitoring quality (Rovai, 2003). The adoption of QM standards in every school of nursing might potentially be a first step to ensure quality in online education for nursing as a whole.

In discussing quality of online eudcation, studies have shown that QM can be a great tool to monitor and adequately sustain quality (Adair & Shattuck, 2015; Hollowell, Brooks, & Anderson, 2017) as it offers a clear blue print in course design, delivery and alignment by which desired learning outcomes can be achieved. Specific guidelines for online teaching operations may be necessary, especially when it comes to simulation or clinical rotations. In prehealth education, effective apprenticeship is an important step to integrate theory into practice. Recently, schools have started to use augmented/virtual reality, robot technology and computerized simulation, such as Shadow Health, for distance online simulation (de Oliveria, do Prado, & Kempfer, 2014; Aebersold, 2018; Brown et al., 2018). As technology advances in this area, we have to be prepared to incorporate innovations, but also do the research needed to determine how clinical competency is measured, what means should be used, and how often students need these experiences (Sittner et al., 2015). A randomized controlled trial comparing blended vs. online clinical supervision for undergraduate nursing students found that students in blended courses were more satisfied with their learning experience compared to those in the online courses (McCutcheon, O'Halloran, & Lohan, 2018). Evidence shows that there is a need for high fidelity clinical simulations in nursing education (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014; La Cerra et al., 2019; Brown et al., 2018) and the International Nursing Association for Clinical Simulation and Learning recommends setting standards for best practice for simulation in online nursing programs to ensure clinical competency (Sittner et al., 2015). In the meantime, simple strategies such as having online students come for onsite immersions where faculty can assess, teach,

and evaluate clinical competency through simulation with mannequins can validate effectiveness of delivery methods. Mitchell and Delgado (2014) have recommended that standards need to be in place to ensure quality in clinical experiences for distance learners.

Dissonance was noted with the leaders, because while they felt that following national standards was important, they also believed no standards for online education are needed. There were strong objections to setting stringent national standards for online programs that pervaded for all the narratives. The concerns were based around the thought that this would decrease flexibility, creativity, and lead to a "cookie cutter" form of instruction. These leaders stated that there is currently no evidence to support national guidelines for online education in nursing. Accreditation and certifying bodies expressed that their role was not to set strict standards for different types of programs, but rather to ensure quality was illustrated in the delivery of online classes. At the same time, participants felt that distance learners are susceptible to being short changed on clinical hours or on certain resources such as mentoring or embedded tutoring due to the nature of their program. Bearing this in mind, the leaders expressed that it was important to look for cases where the playing field was not leveled for distance learners during site visits.

Accreditors often criticize online education because students do not have access to campus resources such as libraries nor do they have opportunities to network and collaborate with peers and faculty (Kristoffersen, D., 2019; CHEA, 2002). One way to tackle this inequity, is if institutions offer resources to both educators and students. Wong (2013) reports that there was a positive relationship between student performance and availability of online resources. Support for students can vary for different institutions. For example, schools that may not have the funds to hire instructional designers can perhaps provide self-help documents, tutorial videos for those teachers or add technology training in their faculty orientation. The literature indicates that a well-designed online course leads to high student achievement and satisfaction (Bowers & Kumar, 2015). This support would be followed by ongoing continuing education to maintain and improve quality in the delivery of online courses. In fact, the rate of academic success for both types of program are the same regardless of whether RN-BSN students are enrolled in online or on-campus program as long as the support is the same for both (Mancini, Ashwill & Cipher, 2015). Despite what the literature shows, employers still have a negative perception of graduates from online programs. A national survey conducted with health care recruiters show that they are reluctant to hire students who graduated from online degree programs vs. traditional programs due to their distrust in the credentials of online programs, particularly the RN-BSN pathway (Kinneer, 2014). A potential approach to tackle this bias against online degrees is to have consistency in

defining and regulating quality online education with guidance (ideally evidence-based) from our accrediting bodies. Mitchell and Delgado (2014) has recommended that standards need to be in place to ensure quality in clinical experiences for distance learners. That way, we are barring the risk of graduating students who are not yet prepared to practice safely while increasing their chances of employment.

Routinely, adult learners in tertiary education are expected to navigate the educational landscape alone. According to Slater and Cusick (2017), self-directed learning is challenging in higher education, especially for pre-health students. Online learners are expected to have more self-efficacy skills in an asynchronous learning environment. Another way schools can prepare faculty is by assessing educators' readiness and/or areas of weaknesses before they migrate to online teaching. Ultimately, it is the students who suffer the consequences of poorly delivered content. There should be no substitute for rigorous teaching and execution. Faculty who struggle to deliver content in online classes can display counterproductive behaviors, which negatively impacts student achievement (Gay, 2016; Ragan & Schroeder, 2014; Driscoll, Jicha, Hunt, Tichavsky, & Thompson, 2012; Wingo, Ivankova, & Moss, 2017). A study showed that poor student performance was associated with inadequate faculty training for online classes (Wingo, Ivankova, & Moss, 2017). Administrators should continue to evaluate student performance and find instructional gaps if outcomes are poor. The literature speaks for the need to have "social presence" in an online environment. Increased satisfaction and engagement are seen in online learning when the student feels engaged, that they know and are known by their faculty, and the faculty demonstrate compassion. Faculty may need education in how to set up the virtual classroom to optimally engage students by improving online practices that achieve these goals (Brown & Wilson, 2016; Plante & Asselin, 2014). Faculty can benefit from resources and support by consulting with instructional designers, which can greatly improve course design and delivery (Brooks, 2010; Ocean, Allen, Thompson, & Lyman, 2017).

Limitations and Strengths

This project had some limitations. To be noted upfront is that the interviewee list was limited to four participants; however, these interviewees are leaders of large bodies that set priorities for the nursing profession and practice. Participants were recruited from different types of organizations (accreditation, certification, and licensing) involved in setting decisions on standards for nursing leaders. Most of our participants were experienced in nursing education and in the accreditation process and were able to provide valuable insights about assuring quality in online learning. Our sampling strategy allowed us to learn more on this topic in a group of experts with varied experiences and perspectives. We are prudent about arguing that our findings are transferable to and valid for all accreditors in

nursing education. Secondly, the use of a specific framework (QM) in this project may limit our specific findings, but the broader purpose was to understand the current climate on regulatory organizations current practice and perceptions about setting specific quality standards for online education in nursing. Third, while our team did our best to search the websites of these organizations, it is possible that some content and resources may not be uploaded unto the website or the content might only be accessible to members and affiliates. Despite these drawbacks, the project has several strengths. We targeted a diverse group of individuals, which can ensure that these results could be transferrable to all types of nursing programs. Data from these interviews serve as a contribution to an understanding of the role of certifying and licensing organizations on setting standards for online education in nursing. While the leaders believe it is not within their role to set specific standards for online education in nursing, they will do whatever is necessary (e.g., offering recommendations after a certification visit) to ensure that all nursing students acquire the competencies and skills needed to provide quality patient care regardless of the modality.

Conclusions and Implications

This paper has substantial implications for discussions around setting standards for quality in online education for nursing students and nursing education. While this new paradigm of online learning is embraced in nursing education, efforts are still needed to ensure that student learning is not being compromised. We have to ensure there is equity for every student enrolled without differential access to learning materials such as technologies or resources. Of course, there is a high learning curve for teaching as well as learning in an online platform for both nursing faculty and students. Considering these issues of readiness, institutions need to have support systems in place to overcome such challenges. This paper provides perspectives from respondents who are believed to be experts and key stakeholders in the nursing education community. Regulatory organizations report that their current role is to ensure that schools are compliant with federal policies. While there are no national guidelines specific to quality in online education, schools of nursing could employ evidenced-based teaching resources such as QM in order to assure quality in online education.

Acknowledgment

Supplementary materials

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.outlook.2019.06.011.

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