



NCSBN

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FY 2015-16 Nursing Education Trends Committee

At NCSBN's 2015 Delegate Assembly, BONs voiced the challenges they face with the regulation of nursing education programs. Therefore, in September 2015 the NCSBN Board of Directors convened the Nursing Education Trends Committee.

The Nursing Education Trends Committee was charged with exploring and identifying the trends and issues in the regulatory oversight of nursing education programs.

Background:

The following systematic process was followed for reviewing the evidence and developing a prioritized list of trends and issues:

1. **Review of literature:** A literature review was conducted to identify the issues and trends cited in the literature as well as research in nursing education (Attachment A). The themes identified in the literature include growth of nursing education programs; challenges with the quality of prelicensure programs and RN to BSN programs; clinical site shortages; distance education issues; and fraudulent programs. Upon review, the committee members acknowledged that the literature, and particularly the research, is limited in identifying pertinent regulatory trends and issues. To further explore these issues and trends, the education consultants at the Boards of Nursing were surveyed.
2. **Survey of those who regulate nursing education programs:** BON education consultants are in the front lines of the regulation of nursing education programs. Their unique perspectives were elicited via a survey to learn more about the emerging trends/issues they face. The following issues/trends in the regulation of nursing education programs were identified by them:
 - Faculty shortage/lack of qualifications;
 - Clinical site shortages;
 - Low NCLEX pass rates related to nursing program quality issues;

- Difficulties with proprietary nursing programs, such as questionable program quality and low NCLEX pass rates;
 - Distance education program concerns; for example, programs not complying with out-of-state approval requirements;
 - Issues with accreditors, such as programs meeting accreditation standards, but not BON approval requirements;
 - Challenges with programs increasing simulation percentages, but not securing the needed resources, such as faculty development.
3. **Expert opinion:** The Nursing Education Committee members collected and collated the issues and trends from the literature and education consultant survey. They then discussed their own experiences and knowledge as subject matter experts and identified additional issues/trends related to nursing education.

All the issues/trends from these sources (literature, education consultants and the committee) were aggregated to develop an evidenced-based survey of trends and issues in the regulatory oversight of nursing programs. This survey was then disseminated to the EOs of the BONs since they see the broader picture of their BONs' needs.

4. **Survey of BON executive officers (EOs):** The EOs were asked to identify and rank order the top five trends/issues on the survey. The responses were weighted based on averages. Below are the results of this survey presented in a prioritized list of trends/issues in the oversight of nursing education programs:

Findings

Following a systematic process, the following are trends and issues identified in the regulatory oversight of nursing education programs:

- #1 – Faculty shortage/lack of qualified faculty
- #2 – Clinical site shortages
- #3 – Concerns about quality of prelicensure education programs, signaled by low NCLEX pass rates, student attrition, etc.
- #4 – Lack of robust outcome measures for nursing education programs (besides first-time NCLEX pass rates)
- #5 – Rapidly changing expectations for nursing practice and education (e.g., evolving scopes of practice for LPNs/VNs and RNs and obtaining the education to meet these changes).

Selected Literature Review: Emerging Regulatory Trends in Nursing Education

Introduction

A review of the literature was conducted in CINAHL, MEDLINE and the *Journal of Nursing Regulation* to search for current articles published on the trends in the regulatory oversight of nursing education from 2010 to June 2016. Additionally, seminal work on nursing education from 2010 to June 2016 that is not in the databases (such as books, white papers, etc.) has been included. This search yielded the following themes: growth in the number of graduates and nursing education programs, quality of existing nursing education programs, limited numbers of clinical sites, increase in distance education programs, increase in use of simulation and concerns with fraudulent credentials and fraudulent programs. See Appendix I for an evidence table summarizing the literature that was identified.

Growth in Nursing Graduates and Nursing Education Programs

The Institute of Medicine's report (2011) recommended that 80% of registered nurses (RNs) be educated at the baccalaureate level by the year 2020, which in turn helped to stimulate the number of BSN nursing education program enrollments, nursing graduates, and nursing education programs (Hewitt, 2016).

Buerhaus, Auerbach, & Staiger (2014) reviewed data from the Integrated Postsecondary Education Data System (IPEDs), which is a longitudinal database of trends in postsecondary education consisting of annual surveys conducted by the National Center for Education Statistics. The researchers reported a rapid increase in the number of graduates from 2002-2012. At the beginning of this 10-year period, the number of BSN graduates was 34,808. By the end of this period, the number of BSN graduates grew to 97,629, which reflects an absolute growth of 180% or 62,821 BSN graduate nurses. Additionally, there has been a growth in RN programs. The National Council of State Boards of Nursing (2015a) reported a 46% (from 1,610 in 2004 to 2,347 in 2014) increase in approved RN programs.

Similarly, RN to BSN program enrollments have increased increased, and again this may result from the Institute of Medicine's (2011) recommendation to increase the proportion of BSN nurses in the

workforce. The American Association of Colleges of Nursing reports that enrollment in RN to BSN programs has increased every year for the last 9 years, with a 288% increase from 2003 (31,215 RN to BSN programs) to 2011 (89,975 RN to BSN programs) (American Colleges of Nursing, 2012).

The growth of RN programs leads to the simple question of whether the supply of adequately prepared faculty are able to meet these growing demands (Buerhaus et al., 2014; National Council of State Boards of Nursing, 2015a). The 2015-2016 AACN Special Survey on Vacant Faculty Positions (Li, Stauffer & Fang, 2015), which shows the nursing faculty vacancy trends in baccalaureate or higher nursing education, reported that 17.5% (N=130) of responding schools had a need for additional faculty but did not have any full-time vacancies in order to hire. Additionally, for the schools that reported full-time vacancies and could hire faculty, the vacancy rate was 7.1% (Li, Stauffer & Fang, 2015), which means that some nursing education programs are operating without full faculty capacity.

Quality of RN to BSN and Prelicensure Nursing Education Programs

In addition to the shortage of faculty, another concern related to the growth of nursing education programs is the quality of the programs (Buerhaus et al., 2014; Hooper, McEwen, & Mancini, 2013). Hooper et al. (2013) report variability in prerequisite requirements of RN-to-BSN programs, highlighting that some programs have flexible requirements; yet, others eliminate the need for prerequisites (content in the sciences and humanities) entirely. Also, the researchers state that variability exists across programs in the time period required between completing the prerequisite and initiating the nursing education program. Researchers have called for the use of standardized competencies in efforts to promote consistency across RN-BSN programs (Hooper et al., 2013; McEwen, 2015).

While there are concerns about the consistency of some RN to BSN programs, those that are accredited by the national nursing accreditation agencies [Commission on Collegiate Nursing Education (CCNE) or Accreditation Commission for Education in Nursing (ACEN)] must meet certain standards. For example, programs accredited by CCNE must meet 109 outcomes of the *AACN Essentials of Baccalaureate Education for Professional Nursing Practice*, which can be categorized as professional

identity/communication (25%), nursing across the lifespan (25%), leadership (25%), population health (13%) and evidence-based practice/quality improvement (12%) (Kumm & Fletcher, 2012; Martin, Godfrey & Walker, 2015). Additionally, acknowledging that the dramatic increase of RN to BSN programs could challenge the quality of these programs, AACN (2012) published a white paper calling for quality clinical practice experiences to transition the student's competencies to the baccalaureate level, such as enhancing their understanding of organizations/systems, leadership, evidence-based practice and community and population-based care. It is not known, however, how many RN to BSN programs are not nationally nursing accredited, and only 13 boards of nursing have regulatory authority over RN to BSN programs. Therefore, it is plausible that some RN to BSN programs have no nursing oversight, which could adversely affect the quality of these programs and nursing practice.

There are challenges in prelicensure education as well. In their regulatory oversight of prelicensure nursing education programs, BONs have reported quality issues with nursing education programs. While these challenges are not widespread, in some programs (particularly for-profit programs) BONs are seeing decreased first-time NCLEX pass rates, as well as programs struggling to meet approval standards (National Council of State Boards of Nursing, 2016).

Similarly, the literature reports challenges in prelicensure nursing education. In the seminal Carnegie Study of Nursing Education (Benner, Sutphen, Leonard & Day, 2010), researchers found weaknesses in the highly abstract way nurse educators teach in the classroom, where students are expected to memorize taxonomies, such as the signs, symptoms, interventions and outcomes of conditions, rather than integrating actual patient situations. Likewise, the study found that the prerequisite social science and technology courses lack rigor. They found the strengths of prelicensure nursing education to be: (a) developing ethical comportment in students; and (b) providing powerful clinical experiences where students can integrate both classroom and clinical teaching.

Nursing programs, however, are beginning to step up to the challenges. In a follow-up guest editorial, Benner (2012) reported encouraging news on how programs are making changes, based on the Carnegie Study's recommendations. Likewise, Djukic et al. (2013) revealed good news about modest improvements being made in the preparedness of new graduates in the areas of quality and safety, perhaps related to the Quality and Safety Education for Nurses (QSEN) initiative that has been integrated throughout prelicensure programs. While these reports are encouraging to regulators, there is still room for improvement.

Limited Numbers of Clinical Sites

Another issue affecting the quality of nursing education programs is the lack of appropriate clinical sites (McNelis, Fonacier, McDonald, & Ironside, 2011; McNelis, et al., 2014; National Council of State Boards of Nursing, 2015a). The National League for Nursing commissioned a survey (N=2,386) to explore clinical education in prelicensure programs (Ironside & McNelis, 2010; McNelis et al., 2011). The survey was completed by faculty from associate, diploma, and baccalaureate programs across 50 states and it was found that lack of quality clinical sites was ranked as the most important barrier to clinical learning followed by lack of qualified faculty. Additionally, the results of the survey showed that conventional strategies (e.g., providing clinical rotations on evenings, nights, weekends, and/or holidays) to manage barriers and challenges were not very effective. Recommendations from this study included further research of more effective approaches to improving the current status of clinical education.

Use of Simulation

Nursing education programs have been increasingly integrating simulation into their curricula in order to optimize clinical experiences primarily due to continued decreases in access to traditional clinical experiences (Jeffries, Dreifuerst, Kardong-Edgren, & Hayden, 2015). Until recently, the question of how much clinical experience can be substituted with the use of simulation has concerned nurse educators and regulators. In 2014, the National Council of State Boards of Nursing (NCSBN) published results of a multisite study evaluating the use of simulation as a substitute for traditional clinical hours (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). The findings revealed that up to 50 percent simulation can be substituted for traditional clinical experience in nursing education programs.

Subsequently, NCSBN convened an expert panel consisting of representatives from the International Nursing Association for Clinical Simulation and Learning, American Association for Colleges of Nursing, National League for Nursing, Society for Simulation in Healthcare, BONs, and NCSBN to develop national guidelines to assist undergraduate nursing education programs in the use of simulation. These guidelines recommend a strong commitment from the faculty/school, adequate facilities to accommodate simulation, appropriate educational and technological resources and equipment, qualified and trained faculty and simulation lab personnel, and established policies and procedures for simulation (Alexander et al., 2015).

Before the results of NCSBN's multi-site simulation study were disseminated, Hayden, Smiley & Gross (2014) surveyed the boards of nursing as to their requirements related to the use of simulation in prelicensure nursing programs to replace clinical experiences. These results would serve as a benchmark for future regulatory comparisons. At that time, 8 states did not allow simulation to replace clinical experiences, and 4 states required a specific percentage of simulation that could replace clinical experiences (generally 25%). For the remaining 38 states, either the regulations were silent or the BONs made decisions on a case-by-case situation. Since the release of the NCSBN national simulation study results, states have begun to develop policies or rules addressing the use of simulation, though there have been no further surveys to document the changes being made.

A recent national survey (Breymer et al., 2015) found that there was considerable variability in, and confusion around, the ratio of simulation hours to clinical experience hours used. These ratios are determined by the nursing program. Some programs use a 1:1 ratio, others use 1:2, and still others use 2:1. For example, in the NCSBN National Simulation study (Hayden et al., 2014), the ratio used was 1:1. Currently there is no evidence clarifying which ratio is most effective. Additionally, the researchers found that faculty-to-student ratios, in the same schools, were greater in the clinical instruction setting than in simulation. The researchers asked many important questions, but this one is particularly pertinent for nurse regulators: How can faculty in clinical settings monitor students effectively when they have

double the students that simulation faculty have, particularly when students must be stopped or corrected before a mistake is made? As the use of simulation in nursing education increases, we will need more evidence to answer some of these questions.

Distance Education Programs

Distance education in nursing has the advantage of providing increased access and flexibility to nursing students (Lowery & Spector, 2014; Murray, 2013). In addition, distance education increases faculty capacity (Murray, 2013). The literature on distance education emphasizes its use as an innovative educational strategy (Du, et al., 2013; Murray, 2013); although, there is a dearth of published literature on regulatory oversight of distance education nursing programs (Lowery & Spector, 2014).

Similar to the variability of BON approval processes for nursing education programs, variability is also evident in the nursing regulation of distance education programs and in licensure requirements of faculty (Lowery & Spector, 2014). The National Council of State Boards of Nursing conducted a survey of its member boards and identified that 48% of BONs required didactic faculty to be licensed where the program was located, 17% required didactic faculty to be licensed in states where the program and students are located, and the remaining BONs responded with “other” (e.g., “we don’t have distance education programs” (Lowery & Spector, 2014). Additionally, the survey found that BONs typically require clinical faculty to be licensed in the state where they are supervising students in clinical, with 29% of BONs requiring clinical faculty to be licensed in both the home and host state.

This variability across distance education programs in nursing motivated action to address these matters.

In 2014, the NCSBN Distance Learning Education Committee developed Regulatory Guidelines for Prelicensure Programs. These guidelines were developed to promote consistency for the regulation of prelicensure distance education nursing programs (Lowery & Spector, 2014).

Fraudulent Credentials and Fraudulent Nursing Education Programs

Many boards of nursing (BONs) have been experiencing increased fraudulent activity related to credentials verification for licensure and nursing education programs (Spector & Woods, 2013; Tse,

2015). The issue of fraudulent credentials, though not new, has increased likely due to the advances and reliance on technology and the Internet (Tse, 2015). This has allowed for the proliferation of fabricated education-related documents such as diplomas, degrees, transcripts, etc. In order to assist in preventing fraud, BONs should try to identify patterns of increased numbers of applicants from certain countries or regions; recognize irregularities across documents from a certain country or region; check with other BONs to determine similar experiences; and share discovery of fraudulent information with other BONs (National Council of State Boards of Nursing, 2015b).

Boards of nursing have also been challenged with fraudulent nursing education programs. These nursing programs claim to have obtained BON approval when in fact they are not approved by the BON (Spector & Woods, 2013). Many of these programs build a rapport with students and gain their trust so they seemingly have the students' best interest in mind (Ayars & Thomas, 2015). Early identification is necessary in stopping the spread of fraudulent nursing education programs and fraudulent practices. This can be accomplished by the BONs educating the public about these fraudulent programs and sharing information about these programs with other BONs so that the programs is unable to easily relocate to another jurisdiction.

Additionally, there have been concerns about fraudulent practices arising from for-profit nursing education programs (Morgan, 2012). The primary concern about for-profit nursing education programs is the lack of transparency about the quality of these types of programs. For-profit programs tend to offer baccalaureate programs to those students who already have completed education as a licensed practical nurse (LPN) or an associate-degree registered nurse. Morgan (2012) suggests that stricter regulatory oversight of LPN-BSN and RN-BSN programs is necessary for these for-profit nursing education programs.

Summary

The published literature reveals significant trends and issues in nursing education. These include: the growth in the number of graduates and nursing education programs and the ability to meet these increased demands; the concerns about the quality of prelicensure and RN to BSN nursing education programs; the clinical site shortages; variability in the regulation and quality of distance education nursing programs; the variation in the percentages of simulation within nursing curricula; and concerns with fraudulent credentials and fraudulent programs.

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Appendix I - Nursing Education Trends - Evidence Table

Citation	Type of Publication	Purpose	Findings/Main Points	Committee Implications
Alexander et al. (2015)	Guidelines – Peer-reviewed journal	Provides guidelines on simulation for BONs and nursing education programs.	BONs can utilize the guidelines to evaluate the use of simulation as a substitute for clinical experiences in nursing programs. Additionally, nursing programs can use the guidelines to implement simulation programs.	Increased percentage of simulation replacing clinical is a challenge for BONs right now.
AACN (2012)	White Paper	Provides recommendations for practice experiences in RN to BSN programs.	RN to BSN programs should include practice experiences that reflect baccalaureate-level decision making and critical thinking.	Given the dramatic increase in the number of RN to BSN programs, the need to maintain academic rigor is essential to regulators.
Ayars & Thomas (2015)	Peer-reviewed journal	Describes the challenges of identifying fraudulent programs for BONs.	Illustrates the importance of the collaboration that is necessary when identifying and processing fraudulent programs.	BONs need guidance for identifying increasing numbers of fraudulent programs.
Benner (2012)	Guest editorial – Peer-reviewed journal	Provides update on the Carnegie Study of Nursing Education recommendations.	Three years later, programs are making changes based on the Carnegie Study of Nursing Education.	Educators should continually review and revise curricula based on the evidence.
Benner, Sutphen, Leonard, & Day (2010)	Research - Book	Determines signature pedagogies of nursing education.	This seminal study found the strengths of nursing education to be in clinical instruction and ethics; and the weaknesses to be lack of rigor in the prerequisites and classroom teaching.	BONs should be aware of these strengths and weaknesses when revising their rules and regulations.
Breymier et al. (2015)	Research – Peer-reviewed journal	Provides data from a survey of prelicensure schools of nursing to identify substitution ratios for simulation hours to supervised clinical hours.	<ul style="list-style-type: none"> • Schools of nursing reported various substitution ratios of simulation hours to clinical experience hours; some using a 1:1, 1:2, or 2:1 ratio • No current evidence clarifying the most effective ratio • Faculty-to-student ratios were greater in the clinical instruction setting than in simulation 	Increased use of simulation presents challenges to the BONs.
Buerhaus, Auerbach, & Staiger (2014)	Research - Peer-reviewed journal	Reviews data from Integrated Postsecondary Education Data System (IPEDS) from 1984-2012.	Rapid increase in numbers of graduates from 2002-2012 as well as increase in the number of nursing education programs.	Concern over the quality of nursing education and whether nurses are being prepared adequately.

Citation	Type of Publication	Purpose	Findings/Main Points	Committee Implications
Djukic et al. (2013)	Research – Peer-reviewed journal	Examines the differences in reported quality and safety preparedness between two cohorts of entry-level licensed registered nurses.	Over three years, there have been modest improvements in preparedness of new graduates in the areas of quality and safety.	While there have been modest improvements in quality and safety education, there is room for growth.
Du et al. (2013)	Research – Peer-reviewed journal	Evaluates the efficacy of web-based distance education for nursing students and practicing nurses.	Web-based distance education has produced equivalent or better outcomes in knowledge acquisition based on the review of 9 randomized, controlled trials.	Increases in distance education programs have challenged BONs. This presents evidence that web-based distance nursing education outcomes are similar to traditional programs.
Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries (2014)	Research – Peer-reviewed journal	Evaluates the use of simulation as a substitute for traditional clinical hours.	Up to 50% simulation can be substituted for traditional clinical experience in nursing education programs.	Increased percentage of simulation replacing clinical is a challenge for BONs.
Hayden, Smiley, & Gross (2014)	Research – Peer-reviewed journal	Provides data from a survey of BONs identifying their requirements related to the use of simulation in prelicensure nursing programs to replace clinical experiences.	The rules and regulations related to the use of simulation as a substitute for clinical experiences varies across BONs before the National Simulation Study results were released.	This study lays the groundwork for future comparisons of simulation percentages.
Hewitt (2016)	Peer-reviewed journal	Provides update of the current state of the IOM that 80% of registered nurses be prepared at the baccalaureate level by 2020.	<ul style="list-style-type: none"> • There is continued growth of RN to BSN programs. • RN to BSN curricula should employ higher-level, critical thinking skills in didactic learning and clinical experiences. 	Variation in the quality and regulation of RN to BSN programs pose a challenge to BONs.
Hooper, McEwen, & Mancini (2013)	Peer-reviewed journal	Describes and recommends a national metric of quality indicators for RN to BSN programs.	<ul style="list-style-type: none"> • There is variability in characteristics of RN to BSN programs. • The use of standardized competencies could promote consistency and quality across RN to BSN programs. 	Variation in the quality and regulation of RN to BSN programs pose a challenge to BONs.
Institute of Medicine (2011)	Report, disseminated in a book	Provides recommendations to positively transform the future of nursing.	The following four key messages are highlighted: 1) nurses should practice to the full extent of their education and training, 2) nurses should achieve higher levels of education and training, 3) nurses should be full partners with other health care professionals, and 4) develop better data collection through improved information infrastructure.	This report led to an increase in BSN completion programs, which have been a challenge for some BONs.

Citation	Type of Publication	Purpose	Findings/Main Points	Committee Implications
Jeffries, Dreifuerst, Kardong-Edgren, & Hayden (2015)	Peer-reviewed journal	Describes the faculty development needs for maintaining fidelity in simulation.	<ul style="list-style-type: none"> • Adequate faculty development and education were crucial to the development and implementation of a simulation curriculum as evidenced in the National Simulation Study. • Debriefing is necessary for successful student outcomes. • BON policies need to provide guidance for simulation pedagogy. 	Increased use of simulation leads to a crucial need for faculty development, which affects the faculty shortage.
Kumm & Fletcher (2012)	Research – Peer-reviewed journal	Describes the process of undergraduate curriculum revision.	Using a systematic approach, developed the five themes from the Baccalaureate Essentials Outcomes.	All CCNE accredited programs including RN to BSN should include these themes.
Li, Stauffer, & Fang (2015)	Research - unpublished	Shows the nursing faculty vacancy trends in baccalaureate or higher nursing education.	<ul style="list-style-type: none"> • 17.5% (N=130) of responding schools had a need for additional faculty but did not have any full-time vacancies. • Full-time faculty vacancy rate was 7.1% during that same reporting period. 	Nursing education programs are experiencing faculty shortages; BONs and nurse educators need to collaborate to ensure that an appropriate number of faculty with adequate qualifications will meet the demands of nursing education.
Lowery & Spector (2014)	Research – Peer-reviewed journal	Describes implications related to regulating prelicensure distance education programs.	Recommendations and guidelines for nursing education prelicensure distance education programs are presented for providing consistency across BONs.	Increased use of distance education in nursing provides challenges to BONs.
Martin, Godfrey, & Walker (2015)	Peer-reviewed journal	Describes what Magnet hospitals should expect from baccalaureate nurses.	Illustrates how Magnet organizations can embrace the Baccalaureate Big 5 as an expectation of BSN preparedness.	All CCNE accredited programs including RN to BSN should include these themes.
McEwen (2015)	Peer-reviewed journal	Reviews the Differentiated Essential Competencies (DECs) of Graduates of Texas Nursing Programs in order to identify BSN-level specific concepts, content, and competencies to apply towards RN to BSN programs.	<ul style="list-style-type: none"> • Application of DECS provides quality content for RN to BSN programs. • Nurse educators of RN to BSN programs can utilize the DECs to enrich their program curricula. 	Variation in the quality and regulation of RN to BSN programs pose a challenge to BONs.
McNelis, Fonacier, McDonald, & Ironside (2011); Ironside & McNelis (2010)	Research – Peer-reviewed journal	Explores characteristics of clinical education in prelicensure programs.	<ul style="list-style-type: none"> • Lack of quality clinical sites was ranked as the most important barrier to clinical learning followed by lack of qualified faculty. 	Nursing education programs are experiencing a shortage of clinical sites and lack of qualified faculty.

Citation	Type of Publication	Purpose	Findings/Main Points	Committee Implications
			<ul style="list-style-type: none"> • Conventional strategies (e.g., providing clinical rotations on evenings, nights, weekends, and/or holidays) to manage barriers and challenges were not very effective. • Further research is necessary to explore alternative clinical sites. 	
McNelis et al. (2014)	Research – Peer-reviewed journal	Examines the clinical experiences between students and faculty at 3 nursing programs.	<ul style="list-style-type: none"> • The following issues contribute to inadequate clinical education: missed learning opportunities, inadequate metrics for clinical learning and progression, and lack of interprofessional collaboration. • Employing new clinical pedagogies that increase clinical reasoning and decision making and steer away from completion of tasks will assist in optimizing the knowledge, skills, and abilities of new nurses entering practice. 	Providing quality clinical experiences can be an issue for educators and can present challenges to BONs in regulating prelicensure programs.
Morgan (2012)	Peer-reviewed journal	Describes changes implemented by the federal and state governments and accreditation agencies in regulating proprietary nursing education programs.	The nurse regulators' role could be to better educate consumers about the quality of nursing programs, encourage innovative teaching strategies while ensuring program quality, and strengthen oversight of LPN to BSN and RN to BSN programs.	Increases in proprietary nursing education programs lead to challenges for BONs.
Murray (2013)	Peer-reviewed journal	Discusses innovative pedagogic practices in nursing published between 2009 and 2012.	<ul style="list-style-type: none"> • The following four primary themes emerged: calls for reform or educational redesign, increasing use of technology, need for partnerships between academia and practice, and new classroom and clinical pedagogies. • BONs can work collaboratively with nurse educators to promote new and creative teaching strategies. 	BONs have a role in promoting quality education in nurse.
NCSBN (2015a)	Peer-reviewed journal	Provides information about the 2014 nursing regulatory environment.	Part of this article presented data on the increasing numbers of RN nursing programs in the U.S.	BONs are experiencing increasing numbers of RN prelicensure programs.

Citation	Type of Publication	Purpose	Findings/Main Points	Committee Implications
National Council of State Boards of Nursing (2015b)	Resource Manual	Provides guidance on uniform licensure requirements for internationally educated nurses.	Part of the manual contains specific information for nurse regulators on identifying fraudulent applicants and programs.	BONs are challenged with increasing fraudulent applicants and fraudulent programs.
National Council of State Boards of Nursing (2016)	Peer-reviewed journal	Provides information about 2015 nursing regulatory environment.	Part of this article present challenges BONs experience when regulating nursing education programs.	Some BONs are experiencing programs that have difficulty meeting approval standards.
Spector & Woods (2013)	Peer-reviewed journal	Discusses recommendations for evaluating prelicensure nursing program approval by requiring national nursing accreditation by 2020.	As part of this article, the increase of fraudulent programs was discussed as a challenge for BONs. In some cases, programs claim to have obtained BON approval when in fact they have not.	Boards of nursing have been challenged with fraudulent nursing education programs.
Tse (2015)	Peer-reviewed journal	Identifies areas of concern when examining internationally educated nurse (IEN) credentials.	<ul style="list-style-type: none"> • The credentials evaluation process should include an evaluation of the physical features as well as content of the submitted documents; additionally, the current status of the school should be confirmed. • When fraud is determined, communication among BONs is crucial to prevent mobilization of fraudulent applicant to other states/jurisdictions. 	BON staff should be thoroughly educated about the credentials evaluation process and how to identify fraudulent documents and credentials.