HISTORY AND CONTEXT OF SPECIALTY NURSING IN BRITISH COLUMBIA:
MANDATORY OR VOLUNTARY CERTIFICATION?

by

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Key Messages

Background

The authors reviewed evidence and examined the historical development and context of certification for specialty nursing falling within the general scope of practice for Registered Nurses (RNs) in British Columbia (BC). An analysis of 30 documents was completed, as well as an environmental scan to determine the current state of mandatory certification. The inquiry addressed the following three questions: 1) What is the historical development of specialty nursing and certification in BC and Canada? 2) What factors have influenced the move towards mandatory certification in BC? 3) What are the implications of mandatory certification for nurses and the profession of nursing?

Key Findings

Specialty practice has developed within the context of general nursing in BC and has been influenced by mainstream trends and health care policy. Globalization has incorporated the influence of US healthcare policy and recommendations from US Magnet Hospitals. Specialty nursing has not been regulated in BC and mandatory certification is enforced by the employer. There is a dearth of quantitative research linking certification in specialty nursing practice to positive patient outcomes; however, emerging evidence suggests a positive correlation between BSN prepared nurses and patient outcomes in specialty practice. There are unintentional consequences for employer and nurse associated with mandatory certification: additional costs associated with education, extension of preparation time of an RN, restrictions on employment for experienced RNs and the creation of barriers in the recruitment of inter-provincial expertise.

Recommendations

- Enhance support for diploma registered nurses to obtain a bachelor's degree
Support further education in specialty nursing once nurses have obtained a permanent position in a specialty area.

Conduct further research examining the purpose and efficacy of mandatory certification and investigate challenges associated with mandatory certification.
Executive Summary

Background

The trend towards mandatory certification for specialty practice has become evident through the qualifications required for employment among British Columbia’s (BC’s) health authorities. Moving from voluntary certification to mandatory certification for employment may have unintended consequences for nurses and the profession of nursing. The authors reviewed evidence for certification and examined the historical development and context of mandatory certification for specialty nursing that falls within the general scope of practice for Registered Nurses (RNs) in British Columbia (BC). The inquiry addresses the following three questions:

1. What is the historical development of specialty nursing and certification in BC and Canada?
2. What factors have influenced the move towards mandatory certification in BC?
3. What are the implications of mandatory certification for nurses and the profession of nursing?

Methods

Data were collected by two different means: a search of the empirical and grey literature, and an environmental scan. CINAHL®, Medline, Google Scholar and Advanced Google were searched for relevant articles, editorials, and policy documents. The environmental scan consisted of a general search for relevant documents on public websites and a generic email sent to various agencies through the contact us feature. A scan of the external career websites of the Health Authorities in BC provided information and statistics on the current state of mandatory certification for specialty practice in BC.
Findings

Historically, specialty nursing practice has evolved within the context of general nursing in BC. Mandatory certification has not been regulated in BC and is enforced by the employer. The movement towards mandatory certification is complex and has been influenced by a variety of social, political, and technological trends. Evidence-informed practice and policies have contributed to the inclusion of research from the United States (US) in policy decision-making. Globalization has further disseminated organizational philosophies associated with US Magnet Hospitals, such as certification, into the context of BC health care.

The evidence supporting mandatory certification is scant, as well as the research demonstrating a positive correlation between certification and patient outcomes. However, there is a body of evidence available on the self-reported perceptions of nurses and regulators on the value of specialty certification. Emerging evidence correlates BSN prepared nurses to positive patient outcomes in specialty practice.

A scan of employer career websites revealed of 840 job postings; 253 (33.2%) had mandatory requirements for the completion of post-graduate programs or certificates in specialty practice. The requirement for mandatory certification is inconsistent across the province, revealing that it is imposed by the individual health authorities. Furthermore, the requirement for certification on job postings identified internal inconsistencies within health authorities as requirements varied among facilities in the same region.

Discussion

In addition to certification, many factors are associated with Magnet hospitals that impact positive working environments. In the review of evidence for decision-making, multiple variables should be considered and implemented instead of solely implementing certification.
Enforcing mandatory certification may have unintended consequences for both the nurse and the employer, including: increasing the length of education to between five and seven years for RNs, creating a barrier for potential applicants entering nursing by restricting applicants to work in areas that do not require a certificate, creating a barrier for inter-provincial nurses who are experienced in specialty practices and do not hold a certificate, and impacting the nurse and the employer financially due to costs associated with certification and recertification.

**Recommendations**

- Enhance support for diploma registered nurses to obtain a bachelor’s degree
- Support further education in specialty nursing once nurses have obtained a permanent position in a specialty area
- Conduct further research examining the purpose and efficacy of mandatory certification and investigate challenges associated with mandatory certification
History and Context of Specialty Nursing in BC: Mandatory or Voluntary Certification?

Certification in specialty nursing has been developed and implemented as nursing has evolved in Canada over the last few decades. The trend towards mandatory certification for specialty practice has become evident through the qualifications required for employment among British Columbia’s (BC’s) health authorities. Moving from voluntary certification to mandatory certification for employment may have unintended consequences for nurses and the profession of nursing in our dynamic, complex healthcare environment. In this paper, specialty nursing falling within the general scope of practice for Registered Nurses (RNs) will be discussed, followed by an examination of the history, context, and implications of mandatory certification for nurses and for the profession of nursing.

Background

To become certified, nurses must complete post graduate coursework in an educational institution. In BC, on-the-job training or short organizational programs are not included. Therefore, certification for employment has extended the education of post-graduate nurses. Once a certificate or diploma has been obtained, registration with the Canadian Nurses Association (CNA) for credentialing within the specialty is voluntary. The CNA has identified 20 specialty areas of nursing that remain in scope for RNs. Examples include, but are not limited to: Emergency Nursing, Intensive Care, Perinatal, Pediatrics, Nephrology, Public Health, and Mental Health (CNA, 2014).

A growing body of evidence on the value of certification in specialty nursing has been presented in the literature. The need for specialty nurses was first described more than two decades ago, due to the increasingly complex and highly technical care being provided to an aging population with multiple comorbidities (Weinstein, 1989). Mandatory certification by
specialty was arguably the next logical step in professional self-regulation, identifying nurses’ professionalism and commitment while providing nurses with a natural evolution to their careers (Brady et al., 2001; Miracle, 2002). However, conflicting evidence exists in relation to the implementation and outcomes associated with certification leaving critics divided on the subject (Kaplow, 2011). It has been argued that trends towards mandatory certification are based on anecdotal evidence, such as the assumption that skill and knowledge held by the certified nurse translates into better care for the patient (Boltz et al., 2013; Shirley, 2005). Recruitment and retention practices demand further exploration due to increasing numbers of difficult to fill (DTF) positions, suggesting current specialty requirements may inhibit applicants (Vioral, 2011).

In addition to conflicting evidence, the majority of research on certification has been completed in the United States (US) and may not apply to the context of certification in Canadian nursing, or more specifically in BC. Continued examination of this topic would help policy makers, employers, regulators, and governments in decision-making as it pertains to mandatory certification in nursing practice.

The aim of this paper is to explore the development of mandatory certification for specialty nursing in Canada, with a particular focus on the BC context. Three questions will be examined: 1) What is the historical development of specialty nursing and certification in BC and Canada? 2) What factors have influenced the move towards mandatory certification in BC? 3) What are the implications of mandatory certification for nurses and the profession of nursing?

**Methods**

Data were collected by two different means: a search of the empirical and grey literature, and an environmental scan. CINAHL© and Medline databases were searched using a combination of two or more of the following terms; British Columbia, Canada, certification,
credentialing, history, implications, licensing, nursing, specialization, specialty, and trends. A total of 412 article titles were reviewed for relevancy resulting in the examination of 62 abstracts. Twenty-five articles were selected for full review and nine relevant articles were included in this paper. References from the 25 articles were examined for applicable research and 58 articles were selected for review. Of these, 35 articles were fully reviewed; 11 articles were relevant to the topic. Therefore, a total of 20 articles were included from the literature, 16 of which were peer-reviewed, the remaining four were commentaries and editorials.

The grey literature search for reports and policy documents consisted of website searches and a generic email sent through the contact us feature for the Association of Registered Nurses of British Columbia (ARNBC), British Columbia Ministry of Health, CNA and the College and Association of Registered Nurses of British Columbia (CRNBC). Advanced Google, Google Scholar, and Proquest were searched with the same terms as above and generated 348 titles. Twelve documents were selected for review and provided another four articles for inclusion to the data. In addition, websites for several other nursing associations and specialty nursing organizations were scanned to ensure inclusion of public documents or white papers as they pertained to specialty nursing policy.

Finally, an environmental scan of career websites for the Health Authorities in BC was completed to gather data on available job postings and qualifications for positions. The literature reviews and the environmental scan resulted in a total of 30 sources for inclusion, as described in Table 1. The data extraction table examining the articles is available in Appendix B.
Table 1

*Number of Research Articles by Type*

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commentaries</td>
<td>6</td>
</tr>
<tr>
<td>Discussion Papers</td>
<td>4</td>
</tr>
<tr>
<td>Literature Reviews</td>
<td>2</td>
</tr>
<tr>
<td>Proposals</td>
<td>1</td>
</tr>
<tr>
<td>Policy/Reports</td>
<td>8</td>
</tr>
<tr>
<td>Quantitative Studies</td>
<td>7</td>
</tr>
<tr>
<td>Websites</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**History and Context**

**History**

The evolution of specialty nursing in Canada and BC is very complex, developing within general nursing practice and impacted by the trends associated with technology, healthcare reform and policy, and societal influence. Due to the multi-factorial nature of specialty nursing, the history is difficult to distinguish from the influencing trends. Therefore, the historical foundation for this paper focused specifically on describing the efforts to create specialty practices within the profession of nursing as opposed to the general development of nursing in BC. Data were used from the discussion papers, literature reviews, commentaries and websites reviewed.

**Canada.**

Historically, the nursing voice has been represented by the CNA at the national level. The objectives of the CNA are to advance the profession of nursing, promote professional-led regulation, and advocate in the public’s interest on healthcare ([http://cna-aiic.ca/en/about-cna](http://cna-aiic.ca/en/about-cna)).
The CNA provides credentialing associated with specialty nursing if candidates meet the criteria outlined in the competencies associated with each specialty. However, the CNA does not provide educational programs or curricula to meet these competencies. Therefore, nurses who feel they meet the competencies may challenge the exam to obtain credentials within a specialty. In the past, the CNA became involved in credentialing because Canadian nurses favored a pattern of generalization instead of specialization in a healthcare environment with a widening scope. Nurses travelled to the US as specialty programs were not available to Canadian nurses until 1984 when the Canadian Council of Occupational Health nurses offered the first Canadian certification program. Since 1984, the CNA has worked on certification programs to include the major areas of nursing. There are currently 20 different specialty areas recognized by the CNA, as indicated in Table 2 (CNA, 2011).

Although the CNA has provided credentialing for nursing specialties, the regulation for the scope of practice of RNs varies across the country and is not uniformly legislated across Canada because health services are a provincial/territorial responsibility with limited federal involvement. The provinces/territories have delegated the authority for self-regulation to the respective licensing authorities for nursing (International Nursing Review, 1996).

British Columbia.

In 2005, BC enacted the Health Professions Act, the Registered Nurses Association of British Columbia (RNABC) was dissolved and the College of Registered Nurses of British Columbia (CRNBC) was created. This resulted in the creation of four college certified practices: remote nursing, contraceptive management, sexually transmitted infections, and RN First Call (CRNBC, 2012). Once obtained, these certified practices extend the scope of practice of the
Table 2

*CNA Certification Program Development*

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroscience Nursing</td>
<td>1991</td>
</tr>
<tr>
<td>Nephrology Nursing</td>
<td>1993</td>
</tr>
<tr>
<td>Occupational Health Nursing</td>
<td>1993</td>
</tr>
<tr>
<td>Emergency Nursing</td>
<td>1994</td>
</tr>
<tr>
<td>Critical Care Nursing</td>
<td>1995</td>
</tr>
<tr>
<td>Perioperative Nursing,</td>
<td>1995</td>
</tr>
<tr>
<td>Psychiatric and Mental Health Nursing</td>
<td>1995</td>
</tr>
<tr>
<td>Oncology Nursing</td>
<td>1997</td>
</tr>
<tr>
<td>Gerontological Nursing</td>
<td>1999</td>
</tr>
<tr>
<td>Perinatal Nursing</td>
<td>2000</td>
</tr>
<tr>
<td>Cardiovascular Nursing</td>
<td>2001</td>
</tr>
<tr>
<td>Critical Care Pediatrics Nursing</td>
<td>2003</td>
</tr>
<tr>
<td>Gastroenterology Nursing</td>
<td>2004</td>
</tr>
<tr>
<td>Hospice Palliative Care Nursing</td>
<td>2004</td>
</tr>
<tr>
<td>Community Health Nursing</td>
<td>2006</td>
</tr>
<tr>
<td>Orthopaedics Nursing</td>
<td>2006</td>
</tr>
<tr>
<td>Rehabilitation Nursing</td>
<td>2006</td>
</tr>
<tr>
<td>Enterostomal Therapy Nursing</td>
<td>2009</td>
</tr>
<tr>
<td>Medical-Surgical Nursing</td>
<td>2010</td>
</tr>
<tr>
<td>Peri-Anesthesia Nursing</td>
<td>2012</td>
</tr>
</tbody>
</table>

*Note:* Retrieved from:  
http://nurseone.ca/en/certification/what-is-certification/certification-program-history

The need for nurses to upgrade their skills was recognized in the 1940s, driven by changes in patient care, the use of antibiotics and the growing complexity of new medical and surgical techniques and procedures. Even so, continuing education was not instituted until the 1970s when hospital programs were replaced by diploma programs at publicly funded colleges.
and universities. In 1982, RNABC promoted the BSN as the minimum requirement for entry into practice although it was not mandatory until 2003 and then only with a phased implementation. The last non-BSN program ended in 2007 (CRNBC, 2012).

The ideology of continuing competence appears to have developed through public opinion and pressure asserted through policy. For example, in 2000, the Ministry of Health declared:

Today, the Health Professions Act requires regulatory colleges to establish not only standards, but also limits and conditions for registrant’s practice as well as standards for academic achievement and registration. In other words, the legislation gives CRNBC the authority to establish standards that are not subject to government approval. (BC Ministry of Health, 2000, p.15)

The Ministry also recommended maintaining diploma prepared RNs as the minimum requirement for entry into practice and suggested continuing with the specialty programs offered at provincially recognized colleges and universities. The Ministry further described the need for inter-provincial migration of approximately half the nursing workforce in order to meet staffing needs within the province (BC Ministry of Health, 2000).

**Trends**

Trends (technological, social, political, and economic) have played an important role in the history of nursing policy in Canada and BC. They have impacted decision-makers and stakeholders including, but not limited to governments, regulators, health authorities, employers, and providers. Six key trends relevant to specialty nursing were identified: the influence of technology, evidence-informed practice, social trends, healthcare reform, healthcare policy and globalization.
Technology.

Although multiple authors discussed advances in technology as contributing factors to the need for specialty nursing practice, the reason why technology was a contributing factor had not been well established within the literature (CNA 2011; CRNBC 2012; CRNBC, 2012, February; Joachim et al., 2003; Keeling, 2004; Ministry of Health, 2000; Turris, Binns, Kennedy, Finamore & Gillrie, 2007). Some authors alluded to increasingly complex patient presentations combined with increasingly sophisticated working environments (CRNBC 2012; Turris, Binns, Kennedy, Finamore & Gillrie, 2007).

Evidence-informed practice.

The application of evidence as an essential requirement to inform healthcare policy, decision-making for programs and services, and clinical/practice has evolved. The concept of evidence has been embraced by the nursing profession in the form of evidence-informed practice and continuing competence. Continuing competence has evolved into a shared responsibility among nurses, employers, education institutions, regulators and governments (CNA, 2007, February). While demonstration of competence is required for entry into practice, competence is fundamentally different from the nurse’s clinical performance. To ensure quality and safety in relation to nursing competence, patient outcomes must be associated with the nurse’s daily practice (CRNBC, 2012, February).

Linked to the concept of continuing competence and evidence-informed practice is the principle-based approach. This approach is based on the achievement of an outcome through compliance with a detailed set of instructions, protocols and rules. Tenants of the principle-based approach are to deliver services and to ensure quality without harm to the patient. Therefore, employers provide nurses with the opportunity to get feedback on their performance so they can
make changes to their practice before rules and regulations are brought into force. Employers seeking to mitigate risk question if the nurse has demonstrated prudent judgment for the situation and make recommendations for improvement (CRNBC, 2012, February). The CNA (2007, February) has been an advocate for the self-directed, continuing education of nurses as a way for employers to create quality practice environments and mitigate risk of harm to patients. Certification in nursing specialty is also considered a part of quality practice (CNA, 2007, February).

**Social Trends.**

There are three societal trends associated with certification in specialty nursing: paper credentials, increase in patients, and reduction of harm through rules and regulations. Individuals in society have become more attentive to how government funds are disbursed and are concerned with “value for money” (CRNBC, 2012 February, p. 5). The social movement of empowerment with a consumer driven focus for healthcare required the participation of the public in decision-making. In BC, this has led to the addition of consumer representatives on professional regulatory boards resulting in a focus on paper credentials rather than demonstrated competence (CRNBC, 2012; Cutshall, 1996; International Nursing Review, 1996). In 1999, BC’s Royal Commission on Health Care and Costs, referred to as the Seaton Commission, concluded that exclusive scopes of practice should be narrowed to focus on the prevention of harm, as well as providing cost-effective and timely health care to more patients (CRNBC, 2012). Since 1999, the institutional concept of *just culture* has gained momentum. The concept holds organizations accountable for the systems they have designed and for the way in which people have worked and acted within the system. Just culture is based on three duties: the duty to follow procedural rule, to produce an outcome, and to avoid causing unjustifiable risk of harm. Organizations have
acknowledged and anticipated human fallibility and have aimed to reduce or halt human errors before they become critical (CRNBC, 2012, February).

**Healthcare Reform.**

Quality healthcare and safety of the public has become paramount for administrative, program, and clinical practice reform. The US Institute of Medicine (IOM) has defined six system aims for quality healthcare in their 1999 document “To Err is Human.” These include: safe, effective, patient-centered, timely, efficient, and equitable care (CRNBC, 2012, February). The Canadian Adverse Events study has shown that Canada’s experience is similar to that of the US and has provided similar recommendations to the IOM’s recommendations. In addition, the Canadian study identified that adverse events were most often the result of systems failures and not that of individuals (Hospital News, 2004).

In 1993, the BC government made a concerted effort to downsize acute care, reducing the number of nursing positions with the belief that fewer nurses were needed due to decreased patients per days in hospital. The reduction of nurses increased workload and decreased patients per days equated to higher acuity levels for those patients admitted to hospital (BC Ministry of Health, 2000). At the same time, technological, organizational and demographic changes created the need for ongoing training and upgrading of nursing skills, particularly in specialized areas. Therefore, institutional decisions on specialty training were made based on existing budgets, available human resources, availability of clinical experts, and access to healthcare resources. British Columbia’s Institute of Technology (BCIT) has provided the educational means for nurses to obtain certificates in specialty practice. In 2000, employers began asking the government for alternative means to educate staff as organizational financing for nurses in BCIT programs was challenging to maintain (BC Ministry of Health, 2000).
Policy

Healthcare and societal trends have informed policy but on the other hand policy has also impacted trends in specialty nursing practice. Policy has guided the legislation and regulation of the professions and the scope for nurses’ practice. Policy feeds back into the existing trends that have then affected employers, organizations, governments and regulatory bodies completing the feedback loop.

**British Columbia policy.**

In addition to the inclusion of public representatives on professional regulatory boards and the boards of healthcare organizations, the MOH mandated health authorities to identify population needs and gaps in services, and then implement cost-effective service delivery strategies (BC Ministry of Health, 2000). The Ministry of Advanced Education, Training and Technology recommended that educational institutions continue to assess and promote the delivery of specialty education programs in communities around the province, either on site or by distance in anticipation of nursing shortages in specialty areas due to the increased acuity and decreased patients per days in hospital (BC Ministry of Health, 2000). Thereafter, the publication of *Safe Choices* by the MOH advanced the creation of certified practices to address public concern in respect to assurance of safety within the RNs scope of practice (Griffiths, 2007). According to Griffiths (2007), the MOH was concerned that BC did not have provincial consistency for the education of RNs in the performance of high risk activities and recommended CRNBC become more involved in regulating practice.

**Canadian policy.**

The BC Ministry of Health (2000) reported that one half of the nursing workforce in BC has moved from other provinces. Federally and provincially, regulatory bodies spent years
facilitating the movement of nurses across provincial borders. In 2000, provincial regulators approved the Mutual Recognition Agreement, allowing nurses to move more freely between the provinces and territories. The nursing workforce had already become increasingly mobile due to the implementation of the North American Free Trade Agreement (NAFTA) in 1995 (CNA, 2007, February). NAFTA allowed nurses to move across international borders without undergoing job-validation processes to qualify for employment, giving rise to the globalization of Canadian and BC nursing practice (Foreign Affairs, Trade and Development Canada, 2013).

**Globalization.**

Globalization increased pressure to create a competitive marketplace and the ability to recognize professional credentials. Due to NAFTA, it became necessary to align nursing qualifications and licensing with other national regulatory bodies (Cutshall, 1996). Cutshall (1996) argued that uniform legislation, when viewed positively, ensured consistency of public policy for the governance of the professions. However, uniformity was also viewed negatively. It promoted a cookie cutter approach ignoring the differences in clinical practice, the culture of professions, and the context of the health system (Cutshall, 1996). The influence of US policy and healthcare reform on specialty nursing must be considered with the increasing globalization of nursing practice.

**US policy and healthcare reform.**

In 1995, the Pew Health Professions Commission, charged with assisting health care professionals, policy-makers and education institutions made recommendations after a thorough review of the existing US healthcare situation. The Commission influenced the authorization of nursing specialties they deemed necessary for balance between the scope of practice of medicine and nursing, protection of the public, availability of provider options, and the maintenance of
professionalism for nurses (International Nursing Review, 1996). Furthermore, the commission recommended formal recognition of the different levels of preparation in nursing, including specialty practice, promoting the creation of a career ladder for nurses. Failure to implement the recommendations by practitioners, policy-makers and institutions was touted by the Commission as an abdication of responsibility to patients, nursing students and the public (Center for Health Professions, 2009). US healthcare shifted away from professional self-regulation towards government and consumer participation in, and authority over health care services. (International Nursing Review, 1996). In the Institute of Medicine’s report “To ERR is Human”, cost pressures increased in the US forcing institutions to invest in programs, such as credentialing, that were believed to have an effect on outcomes (Hickey et al., 2014). In response, some settings implemented mandatory certification for specialty practice (Frank-Stromborg et al., 2002).

**US Magnet Hospitals.**

Nurse leaders noticed that some hospitals had better retention of nurses during the high turnover rates of the 1980’s. The American Academy of Nursing identified 41 hospitals as *magnets* for nurses due to their supportive working environments. The American Nurses Association developed a recognition program in 1990 for the credentialing of Magnet organizations, with the first hospital credentialed in 1994. In 2011, seven percent of US Hospitals (400) had achieved Magnet recognition. Magnet hospitals have employed higher rates of specialty certified and BSN prepared nurses than non-Magnet hospitals. Furthermore, Magnet hospitals have promoted education and supported the advancement of nurses within their organizations (Kelly, McHugh & Aiken, 2012). Although a growing body of evidence suggests that Magnet designated hospitals have better outcomes, much remains to be known about which
standards have influenced which outcomes (Hickey et al., 2014). Leadership concepts and best practices taken from Magnet Hospitals in the US were used as a foundation in the recommendations provided by the Assess and Intervene policy report released by the MOH (BC Ministry of Health, 2000).

Current State

An environmental scan of publicly available external career websites of the health authorities in BC was completed August 29th, 2014. Career websites scanned included: Fraser Health, Interior Health, Northern Health, Vancouver Coastal Health, and Vancouver Island Health. The scan revealed job postings for RNs that the health authorities could likely not fill through their internal websites. Table 3 outlines the findings from the environmental scan, classifying the available job postings as either specialty qualified or general practice. Specialty qualified pertains to the requirement under the job qualifications for either post-graduate coursework or completion of an approved specialty program or certificate, indicating that if this was not completed the candidate would not meet the required qualifications for the position. Postings that allowed for an equivalent combination of education, training or experience were included with the general practice job postings. In Fraser Health two categories for specialty nursing existed within different job postings. Both Emergency (ER) and Intensive Care (ICU) had postings for mandatory completion of a certificate for employment and postings for a commitment to obtain a certificate in the specialty area once employed. The postings with the requirement to obtain a certificate after employment were included under general practice as the certificate was not mandatory to enter the practice area. Of 840 job postings, 253 (33.2%) had mandatory requirements for the completion of post-graduate programs or certificates in specialty areas. The requirement for mandatory certification was inconsistent across the province,
Table 3

Number of Job Postings by Specialty and Health Authority

<table>
<thead>
<tr>
<th>Health Authority</th>
<th>ICU</th>
<th>ER</th>
<th>MH</th>
<th>OR</th>
<th>Other</th>
<th>Peds/Perinatal</th>
<th>General Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraser Health</td>
<td>42</td>
<td>67</td>
<td>0</td>
<td>27</td>
<td>6</td>
<td>30</td>
<td>267</td>
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<td>Interior Health</td>
<td>4</td>
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<td>0</td>
<td>4</td>
<td>2</td>
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<td>106</td>
</tr>
<tr>
<td>Northern Health</td>
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<td>15</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>Vancouver Coastal</td>
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<td>5</td>
<td>21</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>91</td>
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<tr>
<td>Vancouver Island</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>83</td>
<td>36</td>
<td>33</td>
<td>11</td>
<td>34</td>
<td>587</td>
</tr>
</tbody>
</table>

Total

Overall 253 587

Note: HA=Health Authority, ER=emergency Room, ICU=Intensive Care Unit, OR=Perioperative, MH=Mental Health, ET=Enterostomy. General Practice includes job postings with statement “or equivalent education, training or experience.” revealing that it was imposed by individual health authorities. Interior Health required mandatory certification for two postings in a larger tertiary care centre ICU, but this was not a requirement at other institutions within Interior Health, revealing internal inconsistency for
nursing qualifications in specialty practice. The type of nursing specialty requiring a certificate was also not consistent among health authorities. In Northern Health mandatory certification was required for Mental Health, Perinatal and the ER only. Vancouver Coastal required certification for ER, ICU, Perinatal, Mental Health and Public Health. The most recent statistics for 2014 indicate that within the specialty areas identified among postings, 1030 nurses held credentials in BC (CNA, 2014). However, RNs have the ability to obtain a certificate without applying for credentialing through CNA. This number represents all nurses in BC with CNA specialty credentials including those already employed in specialty areas and those not.

A summary of the institutions in BC currently offering programs in specialty nursing are outlined in Table 4. Length of certificate programs among institutions varies from one to three years part-time depending on the specialty with the exception of perioperative, offered as a full-time four-month optional program. The majority of the programs fall into the two-year time frame for completion. The cost for the programs range from $700-$6,000 with the majority falling in the $3,000 - $6,000 range. The number of weeks in clinical practice vary from six to 36 weeks either part-time or fulltime, depending on the program. Clinical days are unpaid time, unless the nurse is sponsored by their employer.

Certification and Patient/Provider Outcomes: What does the Research say?

Quality of the Research

Seven quantitative studies aimed at examining the relationship between nurse and patient outcomes were appraised using a cross-sectional appraisal tool adapted from Guyatt, Sackett & Cook (1996) available in Appendix A (Milton Kanes Primary Care Trust, 2002). All seven studies were descriptive and cross-sectional in design. Cross-sectional designs only measure one point in time, allowing perceptions to change as they are based on opinion (Wade, 2009).
Table 4
Post Graduate Specialty Certificate Programs in BC

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Name of program</th>
<th>Duration in Years</th>
<th>Clinical time in weeks</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia Institute of Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>Critical Care Nursing Specialty</td>
<td>2.5</td>
<td>36</td>
<td>3,000-6,000</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>Emergency Nursing Specialty</td>
<td>2.5</td>
<td>24</td>
<td>3,000-6,000</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>High Acuity Nursing Specialty</td>
<td>2.0</td>
<td>12</td>
<td>3,000-6,000</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>Neonatal Nursing Specialty</td>
<td>2.0</td>
<td>36</td>
<td>3,000-6,000</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>Nephrology Nursing Specialty</td>
<td>2.0</td>
<td>36</td>
<td>3,000-6,000</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>Occupational Health Nursing Specialty</td>
<td>3.0</td>
<td>12</td>
<td>3,000-6,000</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>Pediatric Nursing Specialty</td>
<td>2.5</td>
<td>6</td>
<td>3,000-6,000</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>Perinatal Nursing Specialty</td>
<td>2.0</td>
<td>20</td>
<td>3,000-6,000</td>
</tr>
<tr>
<td>Advanced Certificate</td>
<td>Perioperative Nursing Specialty</td>
<td>2.0</td>
<td>36</td>
<td>3,000-6,000</td>
</tr>
</tbody>
</table>

Camosun College

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Name of program</th>
<th>Duration in Years</th>
<th>Clinical time in weeks</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Degree Diploma</td>
<td>Inter-professional Mental Health and Addictions</td>
<td>1.0</td>
<td>21</td>
<td>~5300.00</td>
</tr>
</tbody>
</table>

Selkirk College

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Name of program</th>
<th>Duration in Years</th>
<th>Clinical time in weeks</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>Mental Health and Addictions</td>
<td>1.5</td>
<td>n/a</td>
<td>~700.00</td>
</tr>
</tbody>
</table>

Douglas College

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Name of program</th>
<th>Duration in Years</th>
<th>Clinical time in weeks</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>Post Graduate Mental Health</td>
<td>1.5-2.0</td>
<td>6-12</td>
<td>4,000-5,500</td>
</tr>
</tbody>
</table>
Therefore, in all seven studies, authors relied mainly on subjective data. Among these studies, only one was evaluated to be of strong quality, five were moderate in quality, and one was weak in quality. The only study (Cary, 2000) that examined certification in Canada received a weak rating because it lacked data for the evaluation of methods, the reduction of bias, the collection of data, and representation of the study findings. Failure to report one or more of: bias reduction, collection of samples, or justification of methods resulted in moderate ratings for five of the studies. In one study, the authors compared the outcomes of certified nurses to the outcomes of non-certified nurses in their knowledge of pain, recognition of chemotherapy induced nausea, documentation of nursing assessments and patient satisfaction; however, the researchers were unable to meet the required sample size from their power calculation resulting in a lack of validity for the results (Coleman et al., 2009). Kendall-Gallagher, Aiken, Sloane and Cimiotti (2011) who reviewed the impact of certification on patient mortality and nurses’ failures to rescue received the strongest rating. A table identifying the strength of the individual studies is available in Appendix A.

**Certified Nurses and Patient Outcomes**

Five of the seven studies specifically focused on the relationship between certification and patient outcomes. In two of those studies, the authors found no statistically significant differences in the documentation of symptoms, assessments, or in the interventions between the certified and non-certified nurses (Coleman et al., 2009; Frank-Stromberg et al., 2002). Frank-Stromberg et al. (2002) found that the patients of certified nurses had higher rates of infection and certified nurses documented fewer instances of patient teaching at a small mid-west Home Care Agency. Kendall-Gallagher, Aiken, Sloane and Cimiotti (2011) attempted to determine if certification was associated with risk for inpatient mortality or nurses’ failure to rescue.
Specialty certification was associated with decreases in patient mortality and failure to rescue, but only if the nurse was BSN prepared. In a prior study, Kendall-Gallagher and Blegen (2009) explored the relationship between the proportion of certified nurses on a unit and the risk of harm to patients. Certification was only associated with a decrease in total falls on the unit. Variables not related to nursing specialty certification also had a positive effect: years of experience and total hours of nursing care per patient.

All of the authors in all five studies recommended that further research be completed (Coleman et al., 2009; Frank-Stromber et al., 2002; Niebuhr & Biel, 2007; Kendall-Gallagher, Aiken, Sloane & Cimiotti, 2011; Kendall-Gallagher & Blegen, 2009).

**Relationship between Certification and Nurse Outcomes**

In four of the seven studies, the authors reported on nurse’s perceptions of specialty certification as a secondary measure (Cary, 2000; Coleman et al., 2009; Kelly, McHugh & Aiken, 2012; Niebuhr & Biel, 2007). Overall, certified nurses perceived their practice was enhanced by certification and led to greater job satisfaction. The authors reported nurses perceived an improved sense of satisfaction as a professional, validation of knowledge and clinical ability, greater collaboration with healthcare professionals, increased confidence and recognition as an expert within the specialty area as benefits of certification (Cary, 2000; Coleman et al., 2009; Kelly, McHugh & Aiken, 2012; Niebuhr & Biel, 2007). Coleman et al. (2009) found certified nurses were more likely to be employed at a teaching hospital, consistent with higher rates of certified nurses and BSN prepared nurses working in Magnet hospitals (Kelly, McHugh & Aiken, 2012). Certified nurses were also more likely to participate in continuing education than non-certified nurses, attributed to the education opportunities provided.
through certified nurses’ memberships with specialty organizations (Coleman et.al, 2009; Kelly, McHugh & Aiken, 2012).

Although there is a dearth of information about the link between specialty certification and clinical competency, benefits were reported by nurses (Hickey et.al, 2014). In addition to the benefits of enhanced nursing practice and job satisfaction, other benefits have been reported, such as reimbursement of examination fees, ability to display credentials, and reimbursement for continuing education (Niebuhr & Biel, 2007). Furthermore, global benefits of mandatory certification in nursing specialty were identified: standardized education, public accountability, professional achievement, and the development of a community of experts (Turris, Binns, Kennedy, Finamore & Gillrie, 2007).

The process of certification was reported as time consuming and more costly than employer or scholarship reimbursements. The costs associated with certification included unpaid time off to attend courses, the cost of writing certification exams, and recertification. There were also challenges in meeting the different requirements for specialty nursing practice across provincial and territorial jurisdictions (Certification comes of age, 2011; Niebuhr & Biel, 2007; Simpson, 1990; Turris, Binns, Kennedy, Finamore & Gillrie, 2007). Mandatory overtime, long workdays, increased on-call during scheduled days off, and resentment from colleagues for time off to complete coursework were factors that prevented nurses from obtaining certification in specialty areas (Wade, 2009). In 1997, a lack of recognition after obtaining certification was identified as a challenge (CNA, 2011) and continued to be a challenge in 2007 (Niebuhr & Biel, 2007).
Challenges for Employers

Prior to 2000, shortages in specialty areas resulted in DTF positions impacting the employer’s ability to provide service (BC Ministry of Health, 2000). Financial incentives have been provided by employers in an attempt to relieve some of the challenges facing nurses for obtaining certification (Coleman et al., 2009). In 2000, BC employers reported difficulty in arranging nurses’ participation in education due to challenges in staffing and arranging financial subsidies for BCIT specialty education programs, petitioning the government for another means to credential nurses (BC Ministry of Health, 2000). Kendall-Gallagher et al. (2011) recommended instead that employers invest in the improvement of nurses’ education levels to that of a BSN rather than specialty certification since there is little evidence to suggest that certification has a positive impact on patient outcomes in the absence of BSN preparation.

Discussion

The evidence supporting mandatory certification for specialty nursing is scant. However, there is a body of evidence available on the self-reported perceptions of nurses and regulators on the value of specialty certification. Two gaps remain within the literature: the majority of research on certification in specialty nursing is US based and there is a lack of outcome measurements with high quality research.

The majority of research links certification in specialty nursing to US Magnet hospitals. Magnet hospitals are recognized providers of supportive environments for nurses; however, many factors influence the environment outside of certification. Hickey et al. (2014) described physical environment, recognition for achievement, organizational culture, and hospital standards and policies as additional factors contributing to a supportive nursing workplace. Although certification in specialty nursing is identified as one factor associated with Magnet
hospitals, certification remains voluntary and researchers have not been able to identify a relationship between certification and positive patient outcomes. Therefore, due to a lack of evidence within the literature, mandatory certification for specialty practice seems premature. US Magnet hospitals continue to be used as an example for policy development and recommendations for the profession of nursing in Canada. Governments, regulators, employers and stakeholders should consider the many factors associated with Magnet hospitals that impact positive working environments as opposed to focusing on certification for specialty practice when the evidence is inconclusive. Emerging evidence from high quality research identifies an association among BSN prepared nurses and positive patient outcomes. Given that 50.8% of RNs in BC remain diploma prepared, it would appear that work could be done to increase the number of BSN prepared nurses in BC (CIHI, 2014).

CRNBC, the licensing body tasked to protect the public and regulate nursing acts, has not deemed specialty practice as a high risk activity requiring regulation. High risk activities are defined as nursing acts considered to carry a risk of harm to the patient (CRNBC, 2012). The recognition of certified practices within regulation identifies the need for continuing education for acts that are considered high risk. CRNBC may have set a trend towards further specialization due to certified practices; however, nursing in specialty areas is not defined in nursing regulations. The CNA advocates for and determines the competencies for specialty practice without contributing to the development of education. The CNA is somewhat limited by the varied regulation and enactment of nursing standards across the country limiting its ability to make credentialing mandatory. Therefore, no specific entity is responsible for monitoring and recommending standards for specialty nursing practice in BC or Canada in the context of regulation. Hence, mandatory certification has fallen to the employer. When stakeholders
enforce agendas that influence the requirements for practice, the profession’s ability to self-regulate is challenged.

Provision of nursing care is through a specific lens, with a set of professional values and ethics that create a nursing identity. Several different provincial, national and international stakeholders have been involved in the development of nursing practice policies and the progression towards mandatory certification in BC. Policy documents drafted by commissions are used to inform decision-makers. In the US, the American Medical Association and the Pew Commission consisted of one nurse among physicians and academics to report and provide recommendations on professional nursing decisions. The influence of the biomedical perspective on nursing practice is the medicalization of nursing through certification of medical tasks as outlined by stakeholders who are not nurses. In BC, the Seaton Commission (which does not consist of any health care professionals) provides guidance for policy and legislation. The values of governments, and subsequently employers, may conflict with that of nursing. Specifically, the concept of evidence to support decision-making comes into question. Evidence-informed practice fosters continuing competency for nurses; however, evidence has not been implemented in the decision tree leading to mandatory certification. Concepts of quality and risk management align with the concept of just culture and the principle-based approach implemented by some employers, thus representing corporate values. Quality and risk management implies protection of the public. However, CRNBC does not deem specialty nursing as the performance of high risk activities requiring regulation. Employer enforced nursing specialty may have unintended consequences on the profession of nursing and for nurses.

Mandatory certification in specialty nursing increases the length of education for RN preparation to between five and seven years depending on the specialty. Extending education for
in scope nursing practice may act as a barrier for potential candidates due to the decrease of younger applicants and increase of mature applicants to nursing programs (Buerhaus, Staiger & Auerbach, 2000). Furthermore, newly graduated nurses can only work in areas that do not require certification. Evidence suggests up to two of every five nurses’ leave the profession within five years, indicating that ongoing limitations and challenges exist for newly graduated nurses (Health Canada, 2007). Considering half of the nursing workforce comes to BC through inter-provincial transfer, experienced nurses may be restricted in their employment regardless of previous experience in a specialty area and may be required to pursue a different area of nursing when they transfer to BC. Employers may be missing the opportunity to take advantage of the out-of-province expertise available for specialty nursing due to the qualifications listed in specialty nursing job postings.

Extending education comes with a financial cost to both the nurse and the employer. The average cost for an advanced practice certificate in BC is $3,000 - $6,000 with anywhere from six to 36 weeks of unpaid clinical time. Clinical time prevents the nurse from obtaining remuneration in his or her regular position, as well as providing a challenge to the employer for replacing the nurse. The employer is responsible for replacing the staff member, sometimes with high overtime costs. Employers may also provide incentive programs reimbursing employees for the tuition costs of certification and in some cases pay for clinical time as well. However, if nurses do not have permanent positions and require certification for employment, attrition from funded programs may be high as nurses find permanent employment in other areas. Furthermore, nurses are not officially recognized or financially rewarded with any significance upon completion of a certificate. Incentives for obtaining a certificate are poorly investigated
within the literature. Further examination into overcoming the barriers associated with certification would benefit decision-makers.

**Conclusion**

This paper has examined the development of mandatory certification in BC through its history, context and the implications for nurses and for the profession of nursing. Mandatory certification has a complex history, ultimately guided by employers in BC. Although evidence exists to support nurses’ perceptions of the value and efficacy associated with certification, evidence is lacking to demonstrate impact on patient outcomes. Emergent evidence shows improved patient outcomes with degree prepared nurses. Enhanced support from employers for diploma prepared nurses to obtain a bachelor's degree would be beneficial. Furthermore, support for education in specialty nursing would be more beneficial once nurses have obtained a permanent position in a specialty area. Finally, given the dearth of evidence on mandatory certification, further research examining the purpose, efficacy, and challenges of mandatory certification would help to clarify the role of certification in nursing practice.
References


doi:10.1188/09.CJON.165-172
Critical challenges: revitalizing the health professions for the twenty-first century. Centre for Health Profession at the University of California, 2009. Retrieved from:

http://www.futurehealth.ucsf.edu/summaries/challenges.html


Hall, L. M. (2003). Responding to the problem of recognizing and valuing nurses' work. Nursing Leadership (Toronto, Ont.), 16(2), 61-62


### Appendix A

#### Appraisal Ratings

<table>
<thead>
<tr>
<th>Author</th>
<th>Quality of Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niebuhr &amp; Biel (2007).</td>
<td>Moderate</td>
</tr>
<tr>
<td>Kendall-Gallagher &amp; Blegen (2009).</td>
<td>Moderate</td>
</tr>
<tr>
<td>Kelly, McHugh &amp; Aiken (2011).</td>
<td>Moderate</td>
</tr>
<tr>
<td>Frank-Stromberg et al (2002).</td>
<td>Moderate</td>
</tr>
<tr>
<td>Coleman et al (2009).</td>
<td>Moderate</td>
</tr>
<tr>
<td>Cary (2000).</td>
<td>Weak</td>
</tr>
</tbody>
</table>
11 questions to help you make sense of descriptive/cross-sectional studies

How to use this appraisal tool

Three broad issues need to be considered when appraising the report of a descriptive/cross-sectional study (e.g., a study that collects data on individuals at one time point using a survey or review of medical charts):

- Are the results of the study valid?
- What are the results?
- Will the results help locally?

The 11 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. You are asked to record a “yes”, “no” or “can’t tell” to most of the questions.

Screening Questions

1. Did the study address a clearly focused issue?
   
   HINT: A question can be focused in terms of:
   - the population(s) studied
   - the health measure(s) studied (e.g., risk factor, preventive behavior, outcome)

   Yes  Can’t tell  No

2. Did the authors use an appropriate method to answer their question?
   
   HINT: Consider
   - Is a descriptive/cross-sectional study an appropriate way of answering the question?
   - Did it address the study question?

   Yes  Can’t tell  No
Detailed Questions

3. Were the subjects recruited in an acceptable way?
   
   *HINT: We are looking for selection bias which might compromise the generalizability of the findings:*
   - Was the sample representative of a defined population?
   - Was everybody included who should have been included?
   
   Yes  Can’t tell  No

4. Were the measures accurately measured to reduce bias?
   
   *HINT: We are looking for measurement or classification bias:*
   - Did they use subjective or objective measurements?
   - Do the measures truly reflect what you want them to (have they been validated)?
   
   Yes  Can’t tell  No

5. Were the data collected in a way that addressed the research issue?
   
   Consider:
   – if the setting for data collection was justified
   – if it is clear how data were collected (e.g., interview, questionnaire, chart review)
   – if the researcher has justified the methods chosen
   – if the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted?)
   
   Yes  Can’t tell  No

6. Did the study have enough participants to minimize the play of chance?
   
   Consider:
   – if the result is precise enough to make a decision
   – if there is a power calculation. This will estimate how many subjects are needed to produce a reliable estimate of the measure(s) of interest.
   
   Yes  Can’t tell  No
7. How are the results presented and what is the main result? 
   Consider:
   – if, for example, the results are presented as a proportion of people experiencing an outcome, such as risks, or as a measurement, such as mean or median differences, or as survival curves and hazards
   – how large this size of result is and how meaningful it is
   – how you would sum up the bottom-line result of the trial in one sentence

8. Was the data analysis sufficiently rigorous? 
   Consider:
   – if there is an in-depth description of the analysis process
   – if sufficient data are presented to support the findings

9. Is there a clear statement of findings? 
   Consider:
   – if the findings are explicit
   – if there is adequate discussion of the evidence both for and against the researchers’ arguments
   – if the researcher have discussed the credibility of their findings
   – if the findings are discussed in relation to the original research questions

10. Can the results be applied to the local population? 
    HINT: Consider whether
    - The subjects covered in the study could be sufficiently different from your population to cause concern.
    - Your local setting is likely to differ much from that of the study
11. How valuable is the research? write comments here

Consider:
- if the researcher discusses the contribution the study makes to existing knowledge (e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature?)
- if the researchers have discussed whether or how the findings can be transferred to other populations
## Appendix B

**Data Extraction Table**

<table>
<thead>
<tr>
<th>Author</th>
<th>Goal</th>
<th>Type</th>
<th>History</th>
<th>Context</th>
<th>Impacts on Nursing</th>
<th>Findings/Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Board of Nursing Specialties, 2005.</td>
<td>First specialty nursing certification program in US – 1945</td>
<td>Website</td>
<td>US</td>
<td>Founded in 1991 with a mission to promote the value of specialty nursing certification to all stakeholders and to achieve the vision of nursing certification as THE standard that the public recognizes quality nursing care.</td>
<td>Provides a testament to the public on the quality of the individual nurse’s credentials</td>
<td></td>
</tr>
<tr>
<td>BC Ministry of Health, 2000.</td>
<td>To examine the general problem of the nursing shortage with a review of specific settings that</td>
<td>Policy Report</td>
<td>“BC has relied on the immigration and inter-provincial migration of about half the nursing workforce.” (p.4)</td>
<td>Mandate of health authorities are to identify population needs, targeting those who required additional services, identifying inappropriate BSN for entry to practice: Supporter argue that changes in the healthcare system, increasing complexity of technology and Shortages in specialty areas of nursing and DTF positions can impact the employer’s ability to provide service.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
include rural and remote communities and specialty areas.

Included: BCNU, NBA and MOH representatives

Environment

"Technological, organizational and demographic change are giving rise to the need for ongoing training and upgrading of nursing skills, particularly in specialized areas." (p.7)

Healthcare reform promoted a shift from institutionally based care to a more diverse system that incorporated a wider range of settings (community, residential). Starting in 1993 concerted effort to downsize acute care = reduction in nursing positions with the belief of fewer nurses due to decreased patients days in hospital.

The system was under increasing costs, increasing demands and expectations from services, and implementing cost-effective service delivery methods.

Reduction of nurses and patient days in hospital equated to a much higher acuity level for those patients admitted to and staying in hospital.

In 1994-1995 NAFTA agreement enabled nurses to move to US and from US to Canada. Canadian nurses began taking advantage of this in large numbers during this time, more so than their American counterpart.

Decisions on specialty training are made based on existing budgets, available human resources, the availability of clinical experts and access to resources.

Opponents argue this is inconsistent with the principle of requiring employees to have a higher level of education and training than required to perform the required tasks. Further, the time it takes to educate a nurse would be extended and it would be more costly to the healthcare system influencing the overall supply of potential nurses. Increasing credentials for nurses may influence the demand for nurses, ensuring some level of shortage always exists.

Recommendation:

While the commission is not opposed to BSN education for nurses, it is not supported as a requirement for entry into practice.

Advanced education of any kind is costly. Cost in conjunction with extended length of study are barriers to attracting potential nurses to the profession. Suggestions for offsetting costs:

- Provide provincial training grants
- Implement loan forgiveness
- Establish co-op programs + income during training
- Maintain diploma exit programs
- Provide on-going education in the workforce
- Offer year round education to reduce education time
- Offer education in as many satellite
consumers and professionals, advance technology, and the ethical issues associated with advance technology.

Leadership and best practices taken from concept of “Magnet Hospitals” in the US as foundation for recommendations.

Nurses are the largest single group of professionals in the healthcare workforce.

In 2000 difficult to fill position from regular positions were found mainly in OR, ICU, ER, and Labor and delivery. Casual positions include PAR as well as those previously noted.

Employers are finding difficulty in arranging participation or financing for BCIT programs in specialty education and are asking for another means of credentialing nurses

Recommendation: Ministry of Advance Education, Training and Technology to continue to assess and promote the delivery of general and specialty education programs in communities around the province on site or by distance education.

<table>
<thead>
<tr>
<th>Author</th>
<th>Goal</th>
<th>Type</th>
<th>History</th>
<th>Context</th>
<th>Impacts on Nursing</th>
<th>Findings/Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cary, 2000.</td>
<td>Description of the program of research underway to investigate the Nursing</td>
<td>Quantitative - Descriptive</td>
<td>“Both the Pew Health Professions Commission and Consumer Advocacy centre have”</td>
<td><strong>Canada and US</strong> Pew Health Professions Commission and Consumer</td>
<td>More likely to be employed as NP, educator, manager, clinical nurse specialist,</td>
<td><strong>Findings:</strong> Mean years of experience 22 years, mean age 47.2 years old, held certification</td>
</tr>
<tr>
<td>outcomes of certification in the US and Canadian nursing workforce to inform policymakers.</td>
<td>Credentialing Research Coalition with CNA as a member for international representation.</td>
<td>identified the promise and peril of credentialing in protecting the public’s health.” (p.166) Promise - a vision of the world where what gets measured gets better, presumably allowing purchasers, employers and consumers the ability to make informed decisions regarding the care provider based on certification status. Perils – “self-interests of credentialing boards, economic incentives of credentialing enterprises, inconstant standards of performance among credentialing organizations, administrative management, and inadequate consumer membership on boards.” (p.166).</td>
<td>Advocacy</td>
<td>Researcher, quality assurance/improvement personal and school nursing personal. 50% of overall time reported as direct patient care activities.</td>
<td>coordinator/case manager, staff development personal, researcher, quality assurance/improvement personal and school nursing personal. 50% of overall time reported as direct patient care activities.</td>
<td>for mean of 7.8 years.</td>
</tr>
</tbody>
</table>
outcomes prior to 2000. Research has focused on demographics, personal and professional attributes of certified nurses. Conclusions from research remain at the descriptive or loose association level.

Policy initiatives that view body-count as opposed to composition will be challenged in light of the demand for high-quality care delivery and outcomes.

Policy initiatives that view body-count as opposed to composition will be challenged in light of the demand for high-quality care delivery and outcomes.

control over practice, initiate early interventions for patient complications, higher patient satisfaction ratings and fewer adverse incidents in patient care.”(p.169)

Findings suggest workforce distribution between rural, underserved areas and well-saturated provider areas and distribution of certified nurse population take the same form.

**Discussion:**
Institutional financial policies that base performance awards on quality practice outcomes could enhance incentives for nursing staff to obtain certification.

<table>
<thead>
<tr>
<th>Author</th>
<th>Goal</th>
<th>Type</th>
<th>History</th>
<th>Context</th>
<th>Impacts on Nursing</th>
<th>Findings/Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre for the Health Professions, 2009.</td>
<td>Policy Report</td>
<td>Intended as a guide to transformation in the emerging healthcare culture of the US. Failure to</td>
<td>US Pew commissions report from 1995</td>
<td>Recommendations for all healthcare professionals:</td>
<td>Professional schools</td>
<td></td>
</tr>
</tbody>
</table>
implement recommendations by practitioners, policy makers and institutions is an abdication of responsibility to patients, students and the public.

must enlarge the scientific bases of their curriculum of programs to include psycho-social and behavioural sciences, and population and health management into clinical work.

Next generation must be prepared to manage technology. Clinicians will be required to use technology to manage and prevent diseases and to be more customer focused

Recommendations for nursing:

Recognize the different levels of nursing preparation, Diploma, BSN, MSN and the different contributions they make to health services.

Consolidate titles for each level of nursing preparation.

Distinguish between
the practice responsibilities for each different level of nursing focusing on associate preparation for entry level hospital or nursing home practice, BSN on hospital care management and community practice, and MSN for specialty practice in hospital and independent practice as a primary caregiver. Strengthen career ladder programs to facilitate movement through the levels.

Reduce size and number of nursing programs.

Recover the clinical management role of nursing and recognize as important in training and practice at all levels.

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<tr>
<td>CNA, 2011.</td>
<td>Report on and celebrate the history of the CNA</td>
<td>Commentary</td>
<td>19 Specialty certification programs internationally</td>
<td>1984 – Canadian Council of Occupational Health Nurses</td>
<td>Barriers identified for specialty education in 1977: resentment towards nurses who</td>
<td>Groundwork for certification has been laid and it is important to</td>
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Certification program.

Back from 1977 report – Nursing has been favoring a pattern of generalization as opposed to specialization in a healthcare environment with widening scope due to technology and the exponential growth of scientific knowledge. Specialization has emerged with little planning. Specialty programs in 1977 were not available to Canadian nurses. Many travelled to the US for training and certification.

In 1977 Hospitals assumed responsibility for nurses clinical graduate training in specialties but rarely included background knowledge and theory.

Evolution of certification offers first certification exam in Canada. 1998 reciprocal agreement between CNA and the American Board for Occupational Health Nurses Incorporated to allow for American and Canadian OHN to hold certification in both Canada and the US.

1996 - First Employer recognition award developed and presented by CNA to the Mount Sinai Hospital to acknowledge employer support for their nursing staff through the certification in specialty areas.

took time off to become certified, no reimbursement for clinical coursework to the nurse, no paid leave to take training, few bursaries and scholarships. Certification may go unrecognized. Ensuring continuing competence.

courage and recognize specialization and start working towards it now (from 1977).
certification:
1980-86 Initial development of working groups and structure for certifications programs.
1984 – Canadian Council of Occupational Health Nurses offers first certification exam in Canada.
1986 Launch of first certification program. 1986-present ongoing development of specialty certification in major nursing areas
2011 – 20th anniversary of CNA certification program.

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<tr>
<td>Coleman et.al,</td>
<td>To compare the nursing outcomes of symptom management for nausea,</td>
<td>Quantitative -</td>
<td>Trends for mandatory certification continue to exist with little</td>
<td>US</td>
<td>Results suggested</td>
<td>Certified nurses</td>
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<td>2009.</td>
<td>vomiting, pain, patient satisfaction, and nurse</td>
<td>Descriptive</td>
<td>research supporting its implementation.</td>
<td>Study</td>
<td>ongoing continuing</td>
<td>participated in</td>
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<td>Studies included data from two inpatient oncology units, two</td>
<td>education on pain management is required for all nurses as well as</td>
<td>continuing education</td>
<td>more often than non-</td>
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<td>outpatient oncology clinics, and two infusion centers in the</td>
<td>continuous education for nurse and doctor on the guidelines to treat</td>
<td>certified nurses.</td>
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<td>Southern United States.</td>
<td>the symptoms of pain,</td>
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Findings:
Certified nurses participated in continuing education more often than non-certified nurses.

Certified nurses had more years in oncology and tended
satisfaction among certified and non-certified nurses in oncology specific environments.

obtain an OCN credential for personal achievement and professional growth are more likely to work in an environment that supports certification.

Nursing sensitive outcomes are affected by nursing interventions. Pain management is an important aspect of patient’s satisfaction with nursing care as well as the management of other symptoms such as, nausea and vomiting.

Several organizations have created guidelines for the management of these symptoms; however, rates of nursing compliance remain low. Certification status may be a factor in the knowledge based and influence overall nursing interventions

Goal for study participants was 51 certified and 51 non-certified nurses and four patients per nurse within the study. Actual participants included a total of 93 nurses – 35 certified 58 non-certified and 270 patients.

“Patients completed the Patient Pain Questionnaire; the Rhodes Index of Nausea, Vomiting and Retching; and the Press Gancy Inpatient Survey.” (p.167).

“Nurses completed a demographic form, the Nurse’s Knowledge and Attitudes Survey Regarding Pain, the Nausea Management: Nurses Knowledge and Attitude Survey, and a

Non-certified nurses may need incentives to attend continuing education opportunities.

The positive effects of certification and continuing education may be due to the opportunities available to nurses through credentialing organizations.

The impact of certification on patient outcomes requires further exploration.

Study should be considered exploratory as sample size inadequate due to not meeting participant numbers to show p=0.05.

to score higher on knowledge of pain and chemotherapy induced nausea and vomiting.

When chart audits were compared to the nurse and patient, certified and non-certified nurses showed no statistical differences in documentation of nausea.

Patient satisfaction was high for both groups of nurses and both groups of nurses reported high job satisfaction.
in the treatment of symptoms associated with chemotherapy. A questionnaire on satisfaction with their work. Charts audits developed by the investigations provided data on documented survey assessment and management” (p.167).

“The audit tool developed was designed to differentiate between individual nurses and treatment areas” (p.167). Nurses’ names were linked to their patient for the evaluation.

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<tr>
<td>Foreign Affairs, Trade and Development Canada, 2013.</td>
<td>Policy Report</td>
<td>Profession: Registered Nurse Required Credentials: 1 or 2</td>
<td>Certification requirements for Health-Care Workers: Certain health-care workers must meet specific</td>
<td>Canada</td>
<td>Under the NAFTA, certain Canadian Professionals may enter the United States and Mexico to carry out professional activities for an employer or on contract to an</td>
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certification requirements to enter and work in the United States. On July 25, 2003, the United States Citizenship and Immigration Service (USCIS) issued a final rule amending the interim regulations affecting certification requirements for certain health-care workers entering the U.S. to provide health-care services.

The regulations cover workers in seven health-care occupations: Registered nurses; physical therapists; occupational therapists; speech language pathologists; medical technologists; medical technicians; and physician assistants.

enterprise located in a member country. This includes performing training functions or conducting seminars related to your profession. Professionals are exempt from the job-validation process normally required of individuals seeking to work in another country.

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<tr>
<td>Citation</td>
<td>Review and comment on megatrends currently affecting nursing regulations.</td>
<td>Commentary</td>
<td>BC</td>
<td>Professional licensing will be expected to provide ongoing competency of practitioner’s, not just at time of licensing.</td>
<td>“Uniform legislation is a natural outcome of these trends”(p.111)</td>
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<td>Cutshall, 1996.</td>
<td>Author is ex-executive director of the Registered Nurses Association of British Columbia.</td>
<td>BC Society is rapidly imposing solutions to the rigid limitations on practice, turf-guarding of professionals, a focus on paper credentials as opposed to competence and the concept of the consumer whose voice is not heard. Governments are pressed by the public to provide protection of the public for healthcare services. Emphasis will be on competency not credentials. Credentials will continue to be important, but may be only one of many ways to recognize qualifications to practice under a protected title. Globalization has</td>
<td></td>
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<td>Uniform legislation viewed positively, ensures consistency of public policy as it affects the governance of the professions. “Viewed negatively, the cookie cutter approach panders to bureaucratic compulsiveness and ignores differences in the clinical practice and culture of the various professions.” (p.111)</td>
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<td>Trends bring up some issues:</td>
<td>Overemphasis on public protection – you can only do so much policing before you flatten out where you resources are used to minimal effect. Quality improvement and investigation of poor practice better define</td>
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increased pressure to create a competitive marketplace and the ability to recognize professional credentials – North American Free Trade Agreement (NAFTA) and the General Agreement on Trade and Tariffs (GATT) for Canada.

European Union developed agreements to recognize credentials across borders in the 1990’s.

Social movement of empowerment and the customer driven focus of profit requires the participation of the public in healthcare decision-making. In BC this has led to the addition of consumer representatives on professional public protection once away from the minimum requirement to practice.

There is a poor understanding of the significance of ownership of the professions for their professional standards – If you remove responsibility of a profession for itself, leaving it to bear only the “grunt work” you will have disempowerment of workers. The profession should be held responsible without others trying to do the work.

There is an assumption the professional should bear the cost of increasing public demands – megatrends have not reviewed the public willingness to pay for trends. At some point a protected title may not be worth the
Further, governance appointed people who are not a part of the professional structure will advise the government on professional regulatory matters. In other provinces, this has led to their authority to monitor the activity of self-governing professions.

How are representatives selected and appointed to participate as a vested member of the public? Will they represent the needs and desires of the public at large?

Mid 10990’s is in the middle of a paradigm shift for the professions.

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<tr>
<td>International Nursing Review, 1996.</td>
<td>Explore the historical foundation of licensing in Canada and the US and discuss the emerging issues faced by governments and licensing boards.</td>
<td>Discussion Paper</td>
<td>Canada</td>
<td>Canada</td>
<td>The inclusion of public participation has the potential loss in the ability of the profession to be truly self-regulating. The greater the participation, the greater the risk. “Specialty licensing for the sake of title protection will be expensive to maintain and might be costly.”</td>
<td>“With flexible scopes of practice, the evolution of professional groups is promoted and the cost of service delivery is decreased. In addition, employer assignment of practitioners is more flexible” (p.114). “Disadvantages of overlapping practice include the problem</td>
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Public participation creates a better understanding of issues for both the public and the profession while providing greater accountability.

Scope of practice for nursing is not uniformly legislated across Canada.

Specific acts considered potentially harmful to the public are restricted to certain professions. In 1996 Ontario was the first province to license individuals to perform regulated acts under the Regulated Health Professions Act.

NAFTA – North American Free Trade Agreement intended to allow more nurses to practice across borders.

Advanced nursing practice or increasing responsibility of nurses within their role raises the issues of licensing for specialist.

Review of licensing in 1996 occurred to enhance public protection and increase the public’s confidence in the self-regulation of nursing.

Concept of continuing competence – healthcare reform equated to underemployment for nurses, who moved into unconventional roles and non-traditional settings challenging licensing authorities to measure competency. Trends that
interpreted as professional interest rather than protection of the public.” (p.114)

“An overriding concern for nursing is the reduction of professional practice into a series of ‘tasks’”. (p.120)

Reducing nursing to a set of tasks and identifying who can perform tasks for nurses who are educated, prepared to assess, evaluate and provide care for the whole person is then moved away from the role of caregiver. Reinforced by the PEW recommendations.

Differences in approach between PEW and the nursing profession exist in two areas; the basis of nursing practice and the role of regulation in healthcare delivery.
US
Governments and healthcare payers focused more on economic value, while private agencies and professional organizations stressed quality assurance and mechanism for accountability.

PEW created to restructure and make recommendation on healthcare’s workforce as it pertained to supply, distribution, mix and competencies. Influenced the authorization of 4 nursing specialties as seen to be a necessary balance between scope of practice for medicine and nursing, protection of the public, availability of provider options, choices for consumers and reinforced this was the lack of regular employment for new graduates, employing RN’s as auxiliary healthcare workers, RN working alone and rising privatization of nursing services.

US
US healthcare shifted away from professional self-regulation towards government and consumer participation in, and authority over health services.
payers and maintenance of professionalism for nurses. Allowed nurses to meet the perceived deficiencies in the state.

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<tr>
<td>Frank-Stromborg et al., 2002.</td>
<td>Test of several hypotheses that patients cared for by certified oncology nurses have superior outcomes compared to non-certified oncology nurses. Describe the differences in nursing care provided by certified and non-certified nurses to home care patients In 4 areas: symptom management, adverse events, planned and</td>
<td>Quantitative - Descriptive, Retrospective Chart Review</td>
<td>Specialty practice presumed indicator of clinical competence. Related literature focused on identifying characteristics that differentiate cert vs non-cert providers.</td>
<td>US – Pew Health Professions Commission influence on regulating healthcare workforce. Recommend greater need for public accountability in governance of professions, scope of practice and demo of continuing competence.</td>
<td>“…environmental context for the delivery of nursing care may be an important variable moderating the relationship between nurse certification and patient outcomes.” P.667) Nursing is challenged to demonstrate that certification makes a difference to patient outcome, even when nurses believe that certification makes a difference to their practice, little evidence justifies mandatory certification.</td>
<td>Groups did not differ in respect to pain assessment at admission, number of pain assessments, assessment of fatigue at admission, number of unplanned visits to care facilities, admissions to acute or the number of unscheduled home visits. Certified nurses performed a greater number of fatigue assessments post admission. Certified nurses had higher rates of infection and fewer documented instances of patient teaching regarding</td>
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unplanned hospital admissions.

cared delivered by 20 nurses, 7 certified and 13 non-certified.

Nurses from a Medicare funded Home Care Agency in mid-west US.

infection.

Conclude little support to show superior patient outcomes by certified nurses.

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<tr>
<td>Griffiths, 2007.</td>
<td>Examine and explain new certified practices in British Columbia</td>
<td>Discussion Paper</td>
<td>Nursing regulation introduced and passed in legislation in 2005 in regard to registered nurses scope of practice.</td>
<td>“Certified practice arose from concern identified when the Health Professions Council provided its final report, Safe Choices, on the scope of practice of registered nurses in 2001.” (p.18)</td>
<td>Regulation provides RN’s in BC the authority to independently practice activities that are considered beyond the scope of practice for RN’s in other jurisdictions.</td>
<td>These activities are not contained in the general scope of practice for RN in BC.</td>
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CRNBC worked with government and stakeholders to review the regulation.

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<tr>
<td>Hall, 2003.</td>
<td>Commentary</td>
<td>Commentary</td>
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<td>Implications to nursing if specialist nurses cannot take on the generalist role.</td>
<td>Attaching relative value solely to specialist nursing work implies that the work is of greater importance/value than the generalist. Relative value model may devalue other types of nursing and/or nurses. Placing value on specialty nursing work may lead to a hierarchical view of some types of nursing care.</td>
</tr>
<tr>
<td>Hickey et.al, 2014.</td>
<td>Propose a conceptual model for research to examine the relationship</td>
<td>Discussion Paper</td>
<td>“Credentialing individuals or Organizations is a means for providers seek to assure the public that high</td>
<td>US based Increasing concern regarding quality and safety of health care since the Institute of</td>
<td>Credentials and credentialing have evolved faster than the research that underpins them. May hypothesized that credentialing has a positive effect on patient outcomes for three reasons: 1. Credentialing</td>
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between credentialing and patient outcomes, as well as discuss possible research questions associated with credentialing and quality of care.

Medicine published landmark report “To ERR is Human” in 2000. Efforts to improve care focus on insurance reform, increasing access and improving quality. As cost pressure increases in US healthcare reform, institutions will invest in programs, including credentialing that show an effect on outcomes. Because they require resources, the value will come under increased scrutiny.

“Few studies examine the link between specialty certification and clinical competence or nursing practice and evidence on the effect of certification on patient care outcomes is scant.”(p.121)

Growing body of evidence suggesting Magnet designated hospitals have better outcomes, but much remains to be known about which standards influence which outcomes and how.

“Relationships between standards, credentials and outcomes are mediated and modified by a variety of contextual and environmental variables” (p.122) – credentialing may only account for a small amount of the variance.

Many questions still remain (review p.123 for specific questions).

“Health care providers - both individuals and organizations - are under ever-increasing pressure to place greater focus on quality of patient care, including safety, effectiveness,
Changes will be needed in health care delivery roles, responsibilities, structures and processes to accomplish projected improvements.” (p.125)

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<tr>
<td>Joachim et.al, 2003.</td>
<td>Proposal of relative value for nursing work to quantify specialty nursing and explore implications in respect to the nursing shortage in specialty areas.</td>
<td>Proposal for Exploratory Study</td>
<td>In 2003 shortages in nursing specialty remain and are predicted to increase as time goes on due to the number of retiring nurses.</td>
<td>BC and Canada Nursing is viewed through two lenses: “…professional nurses are designated in general terms and seen as a single unit.” (p.52) “…second lens shows knowledge-based professionals whose knowledge is differentiated according to primary area of responsibility. The type of work, its difficulty, complexity of the job and experience are some factors to consider when the staffing shortages in specialty areas can only be filled by nurses who have the knowledge and experience required to work in those specialties – nurses with specialized knowledge in a narrow field of nursing” (p.52).</td>
<td>Difficult to recruit nurses for work in specialty areas due to a lack of recognition. To retain existing nurses in specialty areas, a method of valuing them must be devised – will provide an objective way to demonstrate their value. Staffing shortages in specialty areas can only be filled by nurses who have the knowledge and experience required to work in those specialties – nurses with specialized knowledge in a narrow field of nursing.</td>
<td>“Specialty nurses are not interchangeable with specialists in other areas or with generalists” p.52 “Nurses who work in specialized areas need specialized knowledge in a narrow field of nursing” (p.52). Relative value of nursing work may provide outcomes to assist in developing policies related to retention and recruitment and finding long-term solutions to the shortage in specialty areas.”</td>
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<td>Knowledge base is the primary method used to view nursing work and the nurse.” (p.52).</td>
<td>Some employers require a specialty course as evidence of the qualifications necessary to work in a particular area.” (p.54).</td>
<td>Knowledge are able to perform work that nurses without cannot safely and correctly perform.</td>
<td>Impossible for every nurse to know about all aspects of nursing.</td>
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| A nurse with specialized knowledge has a value in relation to other nurses who do not possess that knowledge. | If specialty nurses are not recognized for their knowledge and contributions, even sending nurse for specialty education may be ineffective. | Solution to fill the shortage is to have nurses choose specialty career paths early with a system that recognizes their knowledge base, achievements and contribution to the profession of nursing.
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<tr>
<td>Keeling, 2004</td>
<td>To describe the inception and development of coronary care units in the US in the 60’s and analyze the role of nurse from a historical perspective.</td>
<td>Literature Review</td>
<td>Postwar US - Heart disease accounted for 1 out of 2 deaths after the age of forty in mainly middle-class Caucasian men in the prime of their lives. This population played an important role in the US economy in the postwar years, as well as including many of the prominent political leaders that warranted national press coverage.</td>
<td>US Specialty equipment implemented needed nurse specially trained in reading the machines and implementing rapid interventions.</td>
<td>Nursing specialty was physician driven, Mentoring was completed by physicians, Expanded nurses’ role to even more of the medical responsibilities, such as working off standing orders which required nurses taking on more medical tasks – BO, venipuncture etc…</td>
<td>Nurses were taught in the clinical settings as opposed to the laboratory. Nurses stepped over the domain of nursing practice and into the domain of scientific medicine, curing patient arrhythmias which set the stage for continuing expansion of nurses’ scope of practice.</td>
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<td>Space Age Technology – significant influence of scientific knowledge in the media providing popular opinion that scientific research should be supported.</td>
<td>Specialized care required a team approach with specially trained RN’s providing round the clock care and take on responsibility previously taken by cardiologists and anesthetists in heart rhythm interpretation.</td>
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<td>New Technology – Wide spread acceptance of external cardiac massage and defibrillation.</td>
<td>Nursing role – 50’s role relatively unchanged in the care of the MI patient, boundaries between medicine and nursing were clear. By 60’s clear boundaries not necessarily in</td>
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1961 - first coronary care unit in US at Bethany Hospital, Kansas

Arrhythmias presented life threatening emergencies which needed prompt diagnosis. The nurse was always at the bedside while the physician would come and go.

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<tr>
<td>Kelly, McHugh, &amp; Aiken, 2012.</td>
<td>Revisit and confirm previous findings supporting better work environments and nursing outcomes of Magnet designated hospitals compared to non-magnet hospitals.</td>
<td>Quantitative Survey</td>
<td>The 1980’s experienced nursing shortages and high turnover rates. Nurse leaders noticed that some hospitals had better retention rates. The American Academy of Nursing identified 41 hospitals as “magnets” for nurses due to their supportive working environments. In 1990 the American Nurses Associate developed a recognition program to</td>
<td>US - California, Florida, Pennsylvania, and New Jersey adult acute care hospitals</td>
<td>In 2011 – 7% US Hospitals (400) had achieved Magnet Recognition. Magnet hospitals have been recognized globally in five countries – England, Australia, New Zealand, Singapore, and Lebanon.</td>
<td>Magnet hospitals had higher rates of certified nurses and higher percentage of baccalaureate prepared nurses than non-magnet hospitals. Nurses in Magnet hospitals 18% less</td>
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credential Magnet organizations, with the first hospital credentialed in 1994.

Goal of Magnet hospitals are to create supportive nursing care environments and are associated with lower levels of job dissatisfaction and burnout.

hospitals have a higher emphasis on patient care, greater opportunity for advancement and a greater ability to influence decision-making.

Survey mailed to random sample of RN’s using four state licensure bodies (California, Florida, Pennsylvania, and New Jersey).

Hospitals were identified through nurse response to where they worked.

Final samples – 567 hospitals total with 46 being Magnet recognized (covered 86% of hospitals for these states). 21,714 nurses from non-magnet and 4,562 nurses from magnet hospitals.

Surveyed environmental factors, hospital characteristics, likely to be dissatisfied and 13% less likely to report high levels of burnout. Nurses were also less likely to report intent to leave their current position.

Magnet hospitals show organizational innovation as “best practice” which demonstrates an example to hospital leaders, nurses and the public.
HISTORY AND CONTEXT OF SPECIALTY NURSING IN BC

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<tr>
<td>Kendall-Gallagher, Aiken, Sloane &amp; Cimiotti, 2011.</td>
<td>To determine if specialty nursing certification is associated with inpatient risk of mortality or nurses failure to rescue for surgical patients following complications.</td>
<td>Quantitative - Descriptive Nurses survey, retrospective chart review.</td>
<td>A greater proportion of BSN educated nurses are hired into staff nurse positions within the hospital setting and have been shown to be associated with lower mortality rates. More nurses are obtaining specialty certification; however little evidence exists to provide an association between certification and patient outcomes.</td>
<td>US – 48 intensive care units across 29 US hospitals. Data collected from four state adult acute care hospitals – California, Florida, New Jersey and Pennsylvania. Final sample included 652 hospitals representing 80% of adult acute care facilities from each state. Hospital discharge</td>
<td>“Since there is no evidence to suggest that specialty certification has a positive impact on patient outcomes in the absence of BSN education, hospital managers and patients might derive more benefits from investments in improving nurse education levels than in specialty certification for nurses without BSN qualifications.” (p.193)</td>
<td>Logistics regression used to determine probability of an event occurring in relation to mortality and failure to rescue from the percentages of patients who died and those who experienced complications. Results: Descriptive – Mean years of nursing experience =16 years, but range from 2.9-27 years. BSN certified nurses 38%, diploma certified</td>
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abstracts were examined specifically in relation to inpatient 30-day mortality and failure to rescue rates.

Sample:

Surveys sent to a random sample of nurses holding active license using a double-sampling strategy. Initial response rate 36% (98,000 nurses). Second survey response rate was 91% from survey mailed to 650 non-responders.

1,283,241 patients were included in the sample with a diagnosis classification of general, orthopedic or vascular surgery over a 24-month period from the four states.

Nursing variables: Only included nurses 35%.

Decreased risk of 30-day patient mortality and failure to rescue were associated with BSN prepared nurses. Specialty certification was associated with decreased patient mortality and failure to rescue, but only if the nurse was BSN prepared.

Years of nursing experience was not found to be a predictor of patient mortality – experience did not find it as a substitute for BSN education or specialty certification.
certification with a specialty organization and excluded CPR, ACLS, PALS etc…

Classified nursing education into two categories – diploma or associate degree and baccalaureate degree or higher and then applied certification to those two categories.

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<tr>
<td>Kendall-Gallagher &amp; Blegen, 2009.</td>
<td>“To explore the relationship between the proportions of certified staff nurses on a unit and risk of harm to patients.” (p.106.).</td>
<td>Quantitative - cross-sectional and correlation.</td>
<td>Link between specialty certification and competence has not yet been examined.</td>
<td>US</td>
<td>Three limitations:</td>
<td>Findings: Nurse education negatively related to skin breakdown.</td>
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<td>Previous research indicates that self-reported data on adverse events show human related factors such as, knowledge, training and use of protocols as categories that contribute to patient harm.</td>
<td>Two primary research questions. First was to examine the relationship between certified staff nurses on a unit and the unit rates of six adverse events – Med admin errors, total falls, skin-breakdown, and three types of nosocomial infections.</td>
<td>- four of the outcomes measures had missing data</td>
<td>Nurse experience positively affected medication administration errors.</td>
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<td></td>
<td>- The sample size was small</td>
<td>- The type of certification was not identified</td>
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<td>- Other variables showed positive effects on the outcome measure such as years of experience and total patient nursing care hours per patient positively affected the rate of catheter and bloodstream infections.</td>
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As of 2000, 400,000 nurses had been certified in Canada and the US among 67 certifying organizations offering 95 different credentials that included 137 specialty organizations.

The second question examined the organizational and nursing characteristics and their association with the rate of adverse events on the unit.

Primary data: Correlational, cross-sectional, unit level design used for data collected from a retrospective, cross-sectional study on the relationship between nurse staffing patterns and quality of care in 279 inpatient units across 47 community hospitals.

Primary data used the hierarchical linear modeling was used to test proportion of certified nurses and patient safety.

Secondary data:

| Hours of nursing care per patient as opposed to just certification of nursing staff. | Years worked by nurse positively affected rates of UTI’s. | Certification was only associated with a decrease in total falls on the unit. |
“…consisted of 48 adult ICUs (31 med/surg and 17 cardiac) in 29 hospitals.” (p.110.)

Descriptive statistics used for unit level variables and correlational matrices used to assess variables in linear relationships.

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<tr>
<td>Niebuhr &amp; Biel, 2007.</td>
<td>To validate nurses perceptions on the value of certification and examine the barriers and challenges for nurses to seek certification.</td>
<td>Quantitative Survey.</td>
<td>“The benefits of certification have been summarized as personal achievement, job satisfaction, validation of knowledge, challenge, greater earning potential, commitment to professionalism, and access to a broad range of job opportunities.: (p.176).”</td>
<td>Challenges and Barriers: “For nurses who had never been certified, the highest barriers to obtaining certification were: the cost of the examinations, lack of institutional rewards, and lack of institutional support.” (179).</td>
<td>“For those who let their certification lapse, the most cited reasons were: they no longer practiced in the specialty, there was inadequate or no compensation for</td>
<td>Findings: Total sample size of respondents to the ABNS Value of certification Survey was 97,768 nurses, both certified and non-certified. From this sample 11,427 response were obtained from 8615 (75%) certified nurses and 2812 (25%) non-certified nurses. Of these 1608 (14%) held the position of a nurse manager. Of the respondent 77.3% were certified.</td>
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Nurses who feel empowered may stay in their position with their employer for longer periods if recognized for their expertise.

Certification is one of many criteria for Magnet certification; however the benefits of becoming a Magnet designated facility have increased interest in recruiting and retaining nurses with certifications.

Authors wanted to validate these statements with the use of the Perceived Value of Certification Tool PVCT. PVCT incorporated 18 statements on the intrinsic and extrinsic rewards of certification on a 5 point Likert scale.

certification, and there was inadequate recognition.” (p.179).

Impact on lost workdays: Range of 0 – 35 days absent.

Impact on nurse retention: No differences seen between certified and noncertified nurses in response to intent to leave specialty.

Benefits and rewards of certification: reimbursement of examination fees, ability to display credential, and reimbursement for continuing education.

Respondents from 20 different organizations and 36 specialties.

Respondents: 31.8% staff nurses 14.4% managers 7.4% advanced practice nurses 7.0% educators

Education: 43.4% Baccalaureate degree 21.5% Master’s degree 20.4% Associate degree 13.4% Diploma 1.3% Doctorate

Average length of employment in specialty prior to obtaining certification was 8.5 years and was voluntary for 72.5% of the nurses who were certified.

Perceptions: …certified respondents had a higher percentage of agreement with the
Only statement that did not receive overall agreement was the one that incorporate an increase in salary associated with certification.

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<tr>
<td>CRNBC, 2012.</td>
<td>Describe the regulation changes in BC over the last 100 years affecting the nurses association with a description of the association’s advocacy for the nursing profession.</td>
<td>Report</td>
<td>1912 to 1934 – Graduate Nurses Association fought to regulate nursing and saw the development of the Registered Nurses Act. 1935 – legislation changes saw the development of RNABC which lead nursing in BC for the next 45 years. Focus of RNABC included education and labor relations. 1970’s – hospital based programs started being replaced by diploma programs at publicly</td>
<td>Regulation in BC has always focused on the interests of the public and public protection. “The movement for the registration of nurses began in Great Britain and quickly spread to Canada.” (p.6) The need for nurses to upgrade skills was recognized in the 1940’s, driven by changes in patient care, the use of antibiotics and the growing complexity of new medical and</td>
<td>“Restricted activities have been introduced for clinical activities that may present significant risk of harm and therefore reserved for specific professionals only, such as diagnosing and managing labor. In addition, there are now College-certified practices, which are restricted activities that can only be carried out by registered nurses certified by CRNBC. Categories of certified practice include remote nursing, contraceptive management, sexually</td>
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funded colleges and universities.

1980’s - labor relations became the responsibility of the BC nurses union, RNABC focused on entry to practice requirements, standards of nursing practice and advocating for mandatory registration of RN’s.

1982 – RNABC advocated for the BSN as minimum requirement for entry to practice. Would not be realized until 2003 phased over several years with the last non-BSN program ending in 2007.

1988 to 2005 – significant changes in health professions, ending with mandatory registration for BC RN’s, in 1988 with the association and continued with the surgical techniques and procedures. However, continuing education did not come of age until the 1970’s.

1992 – the Royal Commission on Health Care and Costs (Seaton Commission) was winding down and the BC government was anticipated to release new strategic directions for healthcare in 1993. BC adopted a plan for health care reform that included greater public participation in regulatory boards. Public representatives were appointed by the minister of health and joined the RNABC Board of Directors.

1999 – Seaton Commission concluded that exclusive scopes of transmitted infections and RN First Call.” P.23)
development of continuing competence for registration renewal.

1993 – changes to Registered Nurses Act required RNABC to establish continuing competency requirements of its members.

August 19, 2005 – RNABC dissolved and the College of Registered Nurses of BC was created to regulate the practice of BC nurses.

“Today, the Health Professions Act requires regulatory colleges to establish not only standards, but also limits and conditions for registrant’s practice as well as standards for academic achievement and registration. In other words, the legislation gives CRNBC the
authority to establish standards that are not subject to government approval. (p.15)

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<tr>
<td>Pratt, 1994.</td>
<td>To explore the current state of nursing specialization in Australia in relation to the context of specialty organizations. Recommendations are made to inform policy and planning on a national level.</td>
<td>Policy Paper</td>
<td>Clinical specialty organizations began developing in Australia in the 1950’s, increasing over the 70’s and 80’s. The trend has been towards national organizations; however, state and private organization such as, hospitals have also been starting specialty organizations. Education offered at universities, Australian College of Nurses, and employers and hospitals in the form of certificates. Some specialties have been funded by nurses – in 1967 gerontology nurses created membership.</td>
<td>Australia</td>
<td>Specialty nursing created a career ladder for clinical work for nurses within the specialty. When a narrow concern with the interests of a “special” group may lead to a disregard of other nursing groups, especially if they are not as large a group or are not as “high profile”. This can lead to broader issues that affect individual nurses and the profession by reducing overall influence of the profession as a whole. “...other health sector groups are continuing to work to fragment nursing and thus maintain control and dominance. One of</td>
<td>Discussion: Due to varied programs offered among several specialties, specialty expertise is not always obtained through advance education programs, but through varying lengths of experience in the specialty area.</td>
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for Geriaction Inc., to recognize specialty in this population.

By 1994 all state, national, employer based organizations had to meet 10 standards. Among these 14 programs have been provided in specialties; however, not all programs necessarily lead to a universally recognized qualification.

In 1994 – Australia had no accrediting or credentialing process for specialty nursing – unregulated.

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<tr>
<td>RNAO. (2014, August 25)</td>
<td>Website</td>
<td>Website</td>
<td>Types of Nursing: In Ontario there are three types of nursing positions, which reflect different levels of education and responsibility. To find out how to pursue a career in the Ontario government recognizes the need for new, innovative health care roles in areas of need. In that vein, here are two exciting New Nursing Roles in Ontario:</td>
<td>The Ontario government fosters the establishment of a related nursing group under its umbrella, to the exclusion of links with the profession at large.” (p.10).</td>
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one of these directions, check out the Becoming a Nurse section on our Careers in Nursing Website.

Registered Nurses (RNs):

Since 2005, all Ontario RNs must have a baccalaureate degree. RNs either take a collaborative college-university nursing program or a four-year university nursing program — both leading to a Bachelor of Science in Nursing degree (BScN) or Bachelor of Nursing degree (BN). Because an RN’s education is more comprehensive, they have a deeper knowledge base to draw on in areas such as clinical practice, critical thinking and research utilization. RNs can care for emerging nursing roles.

Registered Nurse-Performed Flexible Sigmoidoscopy (RNFS):

The RNFS pilot project in Ontario involves educating Registered Nurses (RNs) to perform flexible sigmoidoscopies — a diagnostic procedure used to screen for abnormalities in the lower third of the colon — increasing patient access to colorectal cancer screening. RNs who are implementing this role have attained specialized education and participated in training procedures prior to becoming independent practitioners.
patients with more complex needs in unpredictable situations.

**Nurse Practitioners:**

An NP is a RN with advanced university education who provides personalized, quality health care to patients. Primary Health Care Nurse Practitioner Education in Ontario is delivered by a consortium of nine universities under COUPN (Council of Ontario University Programs in Nursing). For more information check out the [Ontario Primary Health Care Nurse Practitioner Program](#). NPs work in four specialties: primary health care, adult and pediatric care and anesthesia. To learn more, check out the [Nurse](#)

**Registered Nurse - Surgical First Assist (RN-SFA):**

RN-SFAs function collaboratively with the surgical team to achieve optimal patient outcomes. Creation of these positions supports reducing wait times for surgical services. To become a RN-SFA, a RN with previous operating room experience attains additional education in surgical first assistance.
Practitioner
Association of
Ontario.

Registered
Practical Nurses
(RPNs):

Since 2005, all RPNs in Ontario must earn a diploma in Practical Nursing by taking a program consisting of four semesters over two years in a college program leading to a diploma in Practical Nursing. Because an RPN’s education is less comprehensive and more focused, RPNs’ careers are most appropriately suited to patients with less complex needs, and patients with stable and predictable conditions. Learn more about the Registered Practical Nurses Association of Ontario.
future credentialing, registration and licensing of specialties. specialties is inconsistent and disorganized with no standards associated to the specialty. Purpose of credentialing: Primary- public protection and give profession the ability to provide specialized services competently. Secondary: -Designates when practitioner can enter practice -Recognize excellence -Select for employment and salary -Distinguish fields not recognized by basic credentials -Obtain governments funding for programs recognized as providing higher quality -Facilitate public participation association that can set and determine standards across the country to ensure qualifications are consistent in specialties. Special interest groups. Technology and increasing knowledge base requires nurses to work in specialty areas and will require specialization of nursing as well as a need for baccalaureate programs. Specialties will need to be classified in a way that is sustainable as technology changes.

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results of an incentive program to have nurses certified in obstetrics at a US medical center to assist staff developers in analyzing the cost-benefit of implementing similar program at their institutions.

Concerned with ability to write an exam and were not willing to take the risk of losing their status as an experienced and knowledgeable senior member of the unit. Younger nurses were concerned with writing an exam feeling their levels of experience and knowledge was inadequate.

Incentive program developed to help address these concerns for 44 nurses. Staff reimbursed for all costs of courses and exams even if they failed and time was paid to staff.

Three full days in course and a full-day written exam. Certification can be costly and time consuming.

Motivator for nurses to participate was the support and cost reimbursement of the medical center.

Costs involve absenteeism for attendance at courses and for writing certification exam to both employee and employer.

Additional costs to nurse to re-certify over the long-term and may require continuing education.

If nurses do not pass the exams, cost to self-esteem.

Decreased rate of staffing vacancies decreasing center costs for recruitment and training of new staff.

Increased certified nurses may contribute to fewer liability issues and lawsuits.
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<tr>
<td>Turris, Binns, Kennedy, Finamore &amp; Gillrie, 2007.</td>
<td>Provide a historic description of the roots of specialization within nursing and offer an example of an innovative specialty education program.</td>
<td>Discussion Paper</td>
<td>In late 70’s and 80’s increasingly complex patient presentations and technologically sophisticated working environments lead to the profession of nursing directing attention to specialization.</td>
<td>Recruitment of new grads who lack “customary” two year med-surg backgrounds is becoming common due to shortages in the ED.</td>
<td>Specialization may lead to the fragmentation of nursing care and disunity of the nursing profession.</td>
<td>Propose fourth route for nursing specialization – substantial experience in the clinical specialty area.</td>
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<td>Three recognized routes for specialization – post-nurse certification, incorporation into basic nursing programs or in the completion of a master’s degree with a clinical specialty.</td>
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<td>Candidate with no experience for the fourth route must be highly motivated, enthusiastic, interested in emergency nursing, have a positive attitude, show an ability to handle pressure and stay calm, and have a sense of humor.</td>
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<td>Majority of specialty nursing programs exist in North America, Great Britain and Australia – programs focus on post-RN or graduate level with program commonalities that include; theory and clinical courses,</td>
<td></td>
<td>Regulation of nursing specialty is in the form of a national certification, but does not have standardized education and has missed the opportunity for the advancement of the professional knowledge and research.</td>
<td>Keys to successful integration: appropriate education programs that incorporate well-planned orientations, dedicated preceptors and mentors, organizational support and acceptance by ED staff.</td>
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promotion of critical thinking, translation into practice and a focus on the development of advanced clinical skills.

of the workforce between specialties.

Benefits of mandatory certification – standardized education preparation, public accountability, professional achievement and the development of a community of experts.

Drawbacks – “expense and time required for those attempting to credential, costs associated with development and maintenance of the testing process, and challenges in the different regulations in nursing practice among the provinces and territories.” (p.503.)

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<tr>
<td>CRNBC (2012, February)</td>
<td>Provide overview of healthcare trends influencing regulation in BC through a</td>
<td>Policy Report</td>
<td>BC</td>
<td>Social and Economic Trends:</td>
<td>Narrowing of professional credentialing has been seen to ensure quality and safety in the use of technology; however, it has led to</td>
<td>Findings: Just Culture Concept that holds organizations accountable for the systems they design and the way in which</td>
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downturn, the US reliance on using regulation to shape the conduct of financial institutions has left international stakeholders questioning this philosophy to oversight and governance. The US experience demonstrates that more rules and regulations do not answer economic pressures.

Individuals have become more attentive to how personal resources are being disbursed and are concerned with “value for money” spent. In the US has led to increased attention on regulatory body profiles and their justification in healthcare. In Canada has led regulatory bodies to provide clear articulations of narrow definitions of professional roles. Hyper-credentialing is perceived to erode confidence, independence and critical thinking that is required among all healthcare professionals.

An organization with a just culture accepts mistakes will occur, but does not wait for them to happen in order to make changes. The organization acknowledges and anticipates human fallibility and aims to reduce or halt human errors before they become critical.

Just culture encourages different interventions for different mistakes depending on whether it is a simple mistake, recklessness, or intentionally harmful behavior. Education...
their role and the benefits of their association with a focus on budgets and accounting practices.

Technology:
Complex and ever-changing technology requires professionals maintain and enhance their competencies in order to keep pace with current practice, giving rise to increasingly narrow credentialing of specific practices.

Self-regulation and Self-interest:
The destructive role of individual acting in their own self-interest within the confines of regulatory controls has eroded public trust. Media reports on the misconduct of healthcare professionals have and counselling for behavior and poor decision-making is promoted while changes in policy and procedures, structures and design are promoted for more serious mistakes.

Right-touch Regulation:
The amount of regulatory force required for the desired result. Over regulation is seen as interference in personal conduct, under-regulation is seen as a disregard of public responsibility. When harm occurs, blame is directed towards regulations; however, when it stands as a barrier to providing something that carries risk, it is termed as excessive. The public, media and politicians face both ways either wanting more or less regulation depending
provided the public with a distrust of professional self-regulation. Further, public stakeholders have general unease with the ability of professional self-regulation to protect their interests. Some have viewed hyper-credentialing of nurses advocating for “qualifications to practice” in the protection of the public as further proof of “self-serving” protectionism.

Trends in Healthcare:

Quality and Safety: Concerns for quality and safety of the public have been a driving force of administrative, program, and clinical practice reform in recent years. Bolstered by

on the moment.

Principle-based Approach:

Linked closely to evidence informed practice, right-touch regulation and just culture, this concept favors the achievement of an outcome or “value” by whatever means that does not inflict harm. Promote compliance with a set of detailed instructions, protocols and rules.

Operates with moral imperative – if harm occurs, people have the ability to get feedback on their performance and make changes to their practice before rules and regulations are brought into force. Standards do not conform to policies and rules, but to principles that guide the use of evidence which reflect societal
To Err is Human published by the US Institute of Medicine (IOM) in 1999. Two years later the IOM defined six system aims for care: safe, effective, patient-centered, timely, efficient, and equitable. Canada’s study Canadian Adverse Events (2004) showed that Canada’s experience was similar to that of the US. Important from the Canadian study was the conclusion that reports conducted on adverse events were most often the result of systems failures and not those of individuals.

Evidence Based/Evidence Informed Practice:

Drive for evidence-based practice has values and do not feed professional practitioners, institutions or the constraints of settings. There is no way to mitigate all risk, but need to question if the individual demonstrate prudent judgment for the circumstance.

Continuing Professional Development:

Consistent with the other concepts, continuing competence is getting more attention. While demonstration of competence is required for entry into practice, competence is fundamentally different from performance. (p.15)

Assuring quality and safety requires assessment of outcomes which demand those of the
been growing for decades. The need to apply the best available evidence has become a requirement of healthcare decisions making, including policy decisions on programs and services, and clinical/practice decisions. Many institutions are implementing “plan-do-study-act” models for continuous assessment and practice improvement.

practitioner in daily practice. The implication of ongoing assessment of practitioners to ensure quality and safety suggests regulatory bodies may have a more extensive role than historically seen.

Key informants recommend:

Being evidence informed in all that regulation does, be collaborative with other stakeholders, help to ensure that good things happen, be assessable to registrants, and collaborate with other provincial nursing organizations.

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<tr>
<td>CNA (2007, February).</td>
<td>Commentary</td>
<td>Healthcare delivery is the responsibility of the provincial and territorial governments, as is the regulation of all health professions.</td>
<td>Collaborative work with stakeholders is an important part of regulating nursing and should include; nurses, the nursing profession,</td>
<td>Regulatory bodies have work over the years to facilitate the movement of nurses across provincial borders. In 2000, regulatory bodies</td>
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Provinces and territories grant responsibility for regulation to professional colleges and/or nursing associations. (p.1)

Self-regulation regulates nursing for the interests of the public. Nurses are bound by standards of practice, ethical values in order to maintain the public's trust.

CNA works with regulatory bodies to enhance accountability and promote the mobility of nurses within Canada.

Nursing regulation describes the way in which nurses and educated and legislated to perform this duties. Only activities that present significant risk of harm are reserved for a particular group under regulations.

Continuing competence is integral to the nursing regulations across Canada and is the shared responsibility of nurses, employers, education institutions, regulator and governments.

Certification is important for nurses to show self-directed life-long learning.

Approved the Mutual Recognition Agreement as the nursing workforce has become increasingly mobile.
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| Wade, 2009.  | Use of an integrative literature review to address the question of whether or not specialty certification provides the benefit of quality for patients, the healthcare team and the nurse. | Literature review            | Growing concern of quality since the Institute of Medicine (US) released “To Err is Human” and “Crossing the Quality Chasm”.           | 12 studies – One including Canada                                                                  | There is growing concern over nurses leaving the profession with a looming shortage. If certification increase nurses sense of empowerment and job satisfaction, it may have the potential to increase the retention of nurses through its validation of knowledge and skill. | Findings:
Intrinsic value was the most reported finding which included an enhance feeling of personal accomplishment, personal satisfaction, validation of knowledge, indication of professional growth, and indication of attaining professional standards.
Empower second most reported finding which included; perceptions of power (informal or formal), participation in decision-making, Control over practice, leadership and recognition of expertise.
May be linked to nurse retention, |
extrinsic value associated with certification, the extrinsic rewards are what help nurses determine whether or not they should certify their practice.

Most hospitals do not offer rewards for specialty certification.

The expense of certification is on the individual nurse in an environment of nursing shortages in specialty areas with mandatory overtime, longer workdays and increased on-call on days off which are all stressors for obtaining certification.

increase job satisfaction, job recognition and collaboration with health team.

Enhanced Collaboration – Nurses perceived they had more collaboration with physicians and other team members.

Patient satisfaction rates among all the studies reviewed were solely based on nurse reports.

Clinical competence and Expertise – all but one study showed significant relationships between nurses perception of their skills and knowledge being enhanced.

Managers reported they preferred to hire certified nursing staff, but had limited resources to recognize and reward nurses.
Discussion:
The value of certification has limitations as there is a heavy reliance on nurses self-reports and the use of descriptive study designs. Most studies cross-sectional and descriptive making it impossible to objectively assess associations between certification and patient outcome.

Research is required to strengthen the claim of certification increasing patient outcome due to the nurse’s perception of autonomy and expertise in their specialty area.

Healthcare systems need to find a better way to support specialty certification through rewards, recognition and incentives.
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<tr>
<td>Weaver &amp; Sorrells-Jones, (1999).</td>
<td>To explore the necessary design changes and roles of leadership, teams and their members in a knowledge based environment.</td>
<td>Policy Paper</td>
<td>Knowledge based organizations are emerging from the previously traditional framework. The focus of a knowledge based organization is the productivity of its people, as the needs and wishes of its customer are paramount for healthcare. Team members are viewed as assets with the goal of maximizing their efficiency by reducing non-value work and overhead.</td>
<td>US Healthcare customers, employers and insurer are pushing for service, quality and budgetary improvement and accountability. “Healthcare institutions are under enormous pressure to respond with initiatives and integrated approaches to patient care delivery.” (p.19)</td>
<td>Nursing is an active member of a knowledge based team. As a team member, accountability and quality service is paramount.</td>
<td>New cost questions develop when healthcare professionals are seen as intellectual capital. Costing turnover takes on a new dimension, recruitment efforts should focus on expertise or competencies that are essential to a program or service. Financial rewards must be available to the staff of knowledge base organizations that are congruent to their expertise. Organizations should design incentive and compensation programs to motivate staff as knowledge based teams development continues.</td>
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<td>Wilson-Barnett, (1995).</td>
<td>To discuss the development of specialty nursing in the UK has seen the</td>
<td>Commentary</td>
<td>Since the 70’s “Functions” care is seen to be equally efficacious, but less costly, when Government funding has been provided</td>
<td>“Functions”</td>
<td>If care is seen to be equally efficacious, but less costly, when Government funding has been provided</td>
<td>Government funding has been provided</td>
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nursing roles and their effectiveness.

Development of a large number of nursing specialties.

“...nursing roles have been justified on the grounds of patient need, as frequently these conditions are under-recognized and under-treated, generalists confessing inadequate knowledge or skills helpful.” (p.1)

Specialty nursing has been supported by other professionals, especially physicians who have increasing workloads and psycho-social demands from patients and their families.

“Training ‘on the job’ generally characterizes the British scene. However, the central dimension of the role consistently pertains

undertaken by nurses, then tasks and functions may be reassigned to nursing.

Specialists work in focused ways with a defined population. A great deal of expertise is required in this practice and may take 2 or 3 years in order to provide the most effective care.

Specialist nurses need to decide if they will stay in their narrow clinical role. Some nurses have reported they feel trapped in a narrow field and would take less pay in order to move to a more general role to expand future opportunities.

Practice can become restrictive, repetitive and unchallenging after a period of time within a specialty.

When specialty nurses are first introduced to the team, they may be

when effectiveness can be demonstrated. Research has demonstrated positive results for nurse lead care where general nursing has fragmented results.
to direct clinical care.” (p.1) – unlike in North America where additional education is required. welcomed as someone to take over the unwanted medical tasks and provide continuity of care to patients. However, as their expertise increases some colleagues may find the role threatening or invasive. “Dependent on medical generosity, this either leads to further autonomy and partnership or an artificial barrier to independent nursing practice.” (p.2).