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A Licence for Life? Not so Fast. Understanding the Public's Perception of the Mechanisms to Promote the Continuing Competence of Registered Nurses in Nova Scotia.

Final Report

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Abstract

In the last 20 years, health regulators have focused on developing programs to promote the continuing competence of their members to respond to increasing public expectations for safe, competent and ethical health care. The literature shows regulators have failed to adequately engage the public in formulating these policy decisions. This project focused on understanding the gap between nursing regulatory policy decisions related to continuing competence and public expectation. The project examined how the public of Nova Scotia defined competent nursing practice, what influenced this practice and how can continuing competence be effectively measured. A telephone survey of 400 randomly selected adult Nova Scotians who received healthcare in Nova Scotia from a registered nurse was conducted. The results demonstrated that the public perception on the mechanisms to promote continuing competence is generally consistent with regulators policy decisions as well as provided new ideas for these mechanisms such as patient feedback. The project also demonstrated there is a misconception of the work of nursing and continuing competence. Noteworthy is the perception that older nurses are less competent. The results of this project could be used by regulators to guide the preparation of the general public for participation in nursing regulatory policy decisions.

Keywords: continuing competence, public engagement, regulation, policy

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Introduction

The mandate of many professional healthcare regulators is to ensure the public is safe.

Regulation of health care professionals exists because of the public; yet have we asked the public what

they think will keep them safe? What are the public's perceptions of what is continuing competence and

what are their expectations of health professionals in regards to ongoing maintenance of competence?

What is the role of the regulator and the registered nurse? The following project explored these

questions for Nova Scotian with a random sample of 400 members of the public.

Research Question

In the last 20 years, health regulators have focused on developing programs to promote the

continuing competence of their members to respond to increasing public expectations for safe,

competent and ethical health care. Since the early 1990s, a wide variety of reports and studies have

focused on the link between patient safety and continuing competence. As a results of landmark reports

such as *to Err is Human: Building a Safer Health System (1999)* and *Crossing the Quality Chasm: A New*

Health System for the 21st Century (2001), the public has taken a greater interest in patient safety and

are demanding a greater transparency by regulators in measuring and promoting continuing

competence.

The public, many of whom are consumers who pay for health care, are demanding that

regulators ensure public protection through rigorous regulatory processes, including effective

continuing competence programs. The question is: have we really listened to the public? The literature

shows we have not consistently asked the public key questions regarding continuing competence to

inform regulatory processes and requirements. This project answered some of these questions, such as

what defines as competent nursing practice, what influences this practice and how best to measure

continuing competence for the public of Nova Scotia. This project's aim was to increase this limited

body of information related to continuing competence as well explore how the public perspective may

be considered in regulatory policy decisions.

As mentioned, the literature on this topic is limited but one key study informed the work of this

project. Lazarus & Genell Lee (2006) examined the concepts of public perceptions of continuing

competence. This study was conducted by the Alabama State Board of Nursing This study's aim was to

determine the public perspectives of continuing competence. The investigators (ASBN) engaged both

the general public and members of the profession and measured their perceptions on continuing

competence. This project replicated portions of the Lazarus & Genell Lee (2006) study, using a modified

questionnaire to survey the public to answer the research question: "What are the public perceptions of

mechanisms to promote continuing competence of registered nurses (RNs) in Nova Scotia?" The

outcomes of the project will be used to help guide policy decisions related to continuing competence of

RNs in Nova Scotia.

Relationship to Regulation

The majority of professional health care regulators are mandated through government to

regulate the practice of their members in the public interest. This regulation occurs through setting

standards for practice, approval of entry to practice programs, addressing complaints received about

practice and approval of a continuing competence program. All these activities work to achieve the end

of safe care for the public. Regulators exist for the public, yet the literature has shown that we have

failed to adequately engage them in setting standards and programs. Alternatively, regulators have

engaged their members in these policy decisions. The primary purpose of nursing regulators is public

protection; however, the systems for measurement and maintenance for continuing competence has

traditionally been decided upon by members of the profession. There is a historical disconnect between working for the public interest and engaging them in the mechanisms used to promote safe care. This project has narrowed that disconnect by producing a body of knowledge related to the public's opinions on continuing competence.

This study extended the work of the Lazarus & Genell Lee (2006) study and has provided professional health care regulators with more information on how the public perceives competence and adequate mechanisms to promote continuing competence. Regulators could use these findings inform regulatory policy decisions related to continuing competence programs. The results of these two studies can also be used as a model for regulators to replicate their own study or project.

Definitions

When exploring the literature, the first questions to answer included: what is continuing competence is and how do regulators measure it? The literature includes varying definitions of continuing competence. Burns (2009) states "continuing competence seeks to determine whether an individual health care professional has continued to provide safe, competent care by maintaining current knowledge and skills since the time of initial licensure" (p. 281). The Australian Nursing and Midwifery Council(ANMC) (2009) defined continuing competence as "the ability of nurses and midwives to demonstrate that they have maintained their competence to practise in relation to their context of practice, and the relevant ANMC competency standards under which they gain and retain their license to practice" (as cited by Veron, Chiarella, & Papps, 2011). The College of Registered Nurses of Nova Scotia defines continuing competence as, "the ongoing ability of a registered nurse or a nurse practitioner to integrate and apply the knowledge, skills and judgment required to practise safely and

ethically in a designated role and setting" (RN Act, 2006). Although the definitions of continuing competence do differ somewhat, it is interpreted by the author that the underlying and consistent theme is that continuing competence includes health professionals who must update their competencies relevant to their context of practice regularly to ensure they remain safe and competent to practise in the best interest of the public.

Literature Review

An extensive search of the literature was conducted in 2014 in relation to continuing competence and public perceptions among health professions regulators (Best, 2014). A subsequent search was conducted in the fall of 2015 and in the spring of 2017 to determine if additional research had been generated since. The search was conducted worldwide and limited to 2006 to present day among health professions regulators. Search terms used were "continuing competence", "public safety", "effect on public", "measurement", "public perspective" and "regulatory bodies". Databases searched included CINAHL, PubMed, EMBASE, Google Scholar, ABI Inform Global, CBCA, Canadian Public Policy Collection and Academic Search Premier. A total of 20 articles - 15 in 2014, an additional two in 2015, and an additional three in 2017 were analyzed for the quality of the study or report and relevance to the topic. Upon this review, five were screened out due to lack of relevance of the refined topic. Based on this review, a total of 15 articles were reviewed for this paper.

Current Methods of Measuring Continuing Competence

An environmental scan of continuing competence programs in North America as well as Europe has clearly indicated that regulatory bodies are using a variety of methods to measure continuing competence (CRNNS, 2012). The consensus of the majority of regulators is having an entry-to-practice exam that effectively measures a professional's competence to enter the profession. Regulators have

also appeared to reach a consensus that a self-assessment is fundamental to any continuing

competence program (Burns, 2009). However, there is a lack of consensus among regulators on how

professionals should best address self-identified learning needs based on the self-assessment. The

literature points to a variety of methods, such as mandated continuing education, professional

portfolios, certification and certification maintenance re-examination, and practice experience (Burns,

2009, CRNNS, 2012). To date, there has been limited research on the effectiveness of any of these

methods to assure continuing competence. As a result, a key question for regulators becomes in

understanding how much regulation is too much and how much should be the accountability of the

health professional in maintaining competence.

The most studied method found in the literature is mandated continuing education (CE). A

variety of articles were reviewed related to mandated continuing education. The literature attempted to

establish a link between mandated continuing education and continuing competence, quality patient

care and changes in the practice environment (Smith, 2004, Vaughn, Rogers & Freeman, 2006 and

Tarnow, Gambino & Ford, 2013). Although the most common method used to promote continuing

competence is CE, there is very little substantive evidence in any of the studies to support that CE

actually leads to more positive patient outcomes. It appears that regulators must require a more robust

system of CE, which includes strong leadership, support from managers and other professionals in order

for CE to actually improve patient care outcomes. The major challenge for regulators is their lack of

control over organizational practice and systems. If the regulator could require these organizational

supports, it is predicted based on the literature reviewed that CE could result in a translation of new

knowledge to clinical practice, leading to safe quality care.

If we reflect on the opening question of what is the publics' perceptions of continuing

competence, would the public consider more robust CE which includes strong leadership and support

from managers as an adequate measure of continuing competence? The reviewed literature examined

what *regulators* and *health professionals* view as effective methods of continuing competence. The

literature doesn't mention the view of the public, who are the consumers of health care. This finding

furthers the case that very little evidence exists related to public perceptions of competence and

continuing competence, including mandated continuing education and this is an area of study worth

exploring.

Public Expectation and Perceptions of Continuing Competence

The literature searches of research conducted on public expectations of continuing competence

of health professionals yielded very limited results. One key research article by (Madison, 2010) was

reviewed along with reports from citizen advocacy groups, regulatory bodies and patient safety groups.

The reviewed literature indicates a need for regulators to adopt an integrated and rigorous method of

maintaining continuing competence   to ensure members are safe to practice. The literature also

discusses the concept of the informed public, which could possibility provide the answers regulators are

seeking to create these rigorous systems. In contrast, obtaining feedback from uninformed members of

the public may result in policy decisions that are ill advised and potentially place the public at risk. A

significant difficulty for regulators is developing an appropriate and valid definition of the "informed"

public.

Madison (2010) reviewed the evolving concept of patients as regulators in their influence over

healthcare delivery. Madison argues that over the last decade, patients are becoming increasingly

involved in the delivery of care and as such, could be considered regulators. Informed consent has

shifted the system of one in which the physician made decisions about what was best for the patient to

one in which the patient makes the decision about their care based on Information given by health care

providers. This may or may not be the same decision the healthcare provider would make about future

care. Madison (2010) argues that even if the patient received a full disclosure of their health

information, they may not fully understand the information or be capable of fully evaluating the

implications for their health. She concluded that despite the challenges with informed consent, it

"represents an important first step in ensuring a broader patient role in health care delivery" (Madison,

pg. 13, 2010).

Madison (2010) also discusses the trend in the last decade towards patient-centered care.

Landmark patient safety reports such as *to Err is Human: Building a Safer Health System (1999)* and

Crossing the Quality Chasm: A New Health System for the 21st Century (2001) express support for

patient-centeredness as key goals in healthcare delivery. In comparison, a commitment to informed

consent, like a commitment to patient-centeredness involves informed patient participation in decision

making and care tailored to the patient's needs. Madison (2010) suggests that implementation of

patient centeredness has the potential to shift decision making power from the authority traditionally

held by providers to patients. The same challenges exist with the patient who does not fully understand

the outcomes of their decisions about their care and treatment.

The third trend discussed is consumerism. The advent of the internet and the ability for a

patient to make a self-diagnosis and treatment plan prior to even a visit to their care provider has

changed the patients' influence over their care plan. Patients also now have internet access to health

care report cards which rate providers. These report cards vary in reliability and the patient needs to

again be informed of how the rating is being carried out.

Based on these three trends of informed consult, patient-centered care and consumerism,

Madison (2010) states that although patients may lack the authority of licensure boards and the rule

setting procedures of self-regulatory organizations, they do ultimately alter provider behavior just as

much as traditional regulators do and so they can be a type of regulator. The patient voice in healthcare

is powerful, especially in a user pay system and their decisions and demands affect the process of

providing care. One has to ask: if the public is so powerful and if these trends are in fact the future of

health care, why as regulators have we failed to adequately consult them in making policy decisions

related to continuing competence of healthcare professionals? Many Boards have consumer or public

representatives, yet have we adequately used them as resources when making policy decisions about

continuing competence methods? What are the risks or drawback to the patient as a regulator?

As previously discussed, Madison (2010) makes the argument that patients generally lack the

knowledge and experience necessary to make decisions about their medical care *on their own.* As a

result, the independent decisions they make may result in unexpected or unwanted results. Madison

(2010) states, "Consumers lack of full information, expertise and experience limits their ability to

successfully intervene, and the infrastructure that surrounds their involvement in care is insufficient to

fully overcome these limitations" (pg. 24). A fundamental belief in a self-regulating profession is that the

members of the profession are best positioned to regulate their own practice. This theory of patients as

regulators could be a threat to this privilege. Madison (2010) equates this to a threat to autonomy of

healthcare professionals.

How should the profession respond, supporting informed consent, patient centeredness and to

a degree, consumerism, while at the same time protecting the privilege of self-regulation? Madison

(2010) discourages provider resistance, but instead recommends an active engagement approach. This

would include ensuring that the information provided to patients accurately reflects the patient

situation and preference. This approach would retain the patient's influence of their treatment plans,

while maintaining trust at the center of the provider-patient relationship. The same is true in thinking

about the continuing competence and patient preferences and influence in policy decisions. As

regulators rather than failing to seek input, or ignoring patient perspectives we should adopt an active

engagement strategy. This would both meet the regulatory mandate and engage the public in the

process of regulation of health professionals.

Over the last 15 years, the College of Registered Nurses of Nova Scotia (CRNNS) has

implemented public surveys in an attempt to gain public input to influence policy decisions. Initially, the

impetus was to gain a sense of public awareness/perception of various issues pertaining to regulation

and the practice of RNs and NPs. These surveys have been conducted on an annual basis until 2008.

From 2009-2015 these survey were conducted bi-annually. In 2015, based on a review of governance of

practice and a focus on relational regulation, the frequency was changed back to annual.

An external company was contracted to administer a telephone survey, with the staff at CRNNS

designing the questions. The questions have been designed to measure CRNNS' effectiveness in meeting

the ends (outcome) that are set by its Board Council every three years to help CRNNS meet its mandate

of public protection.

The first section of the survey was designed to ensure that the public who is answering this

survey is the informed public, as defined by CRNNS. The participants were asked if they or a family

member has received care from and RN or NP in the last 12 months. If they answered yes, they were

considered the informed public and if they answered no, they were excluded from the survey.

The questions in the early 2000s focused more on the public's awareness of CRNNS and their

views on the role of the RN/NP. In the last two years, in the 2012 survey and in the 2014 survey

respectively, questions were added that focused more on the public's expectations of a competent

nurses. These questions were added to measure the organization's first of four outcome developed by

Council: *End A is: the public received safe competent, ethical and compassionate care from RNs and NPs*.

In the both the 2012 and 2014 surveys, a different random sample of 400 individuals over the age of 18 living in Nova Scotia were surveyed. The sample matched the geographical distribution of the population within the province and regional quotas in proportion to the population distribution within Nova Scotia were developed. In both 2012 and 2014, the participants were asked to rate the level of competence of the NP or RN using a scale of 1 to 10 where 1 is 'not at all competent' and 10 is 'extremely competent'. In 2012, the results of this question showed that 95% of respondents rated the care received as competent to extremely competent (providing a rating of 7 or more). In 2014, the results of this question showed that 96% of respondents treated the care received as competent to extremely competent (providing a rating of 7 or more).

In both surveys the participants were also asked to describe what some of the behaviors are or actions a NP or RN could take to show competent care toward their patients? They listed things such as:

- *"Know what they're talking about, don't fumble or mumble explaining things and come right out with the proper answers."*

- *"Take their time when listening. The touch they use, when a nurse places her hand on your shoulder, you feel reassured. It is a personal contact that says at that moment you are the person that is important."*

- *"Their attentiveness. That they watch over you carefully and closely monitor things. Also their ability to explain to the patient as well as the family what's going on. Not being afraid to ask for help if they need it."*

- *"When asked a question, they should know the answer."*

- *"To let their patient know that they are going to be cared for. In that respect, at least you know they are thinking about you."*

- *"To be respectful of the patient and family members. Friendliness is a big thing and it doesn't take much to smile and make people feel good."*

These verbatim answers gave an interesting insight into what the public defines as competent. From the comments, it would appear the surveyed public equates competence with caring and compassion, which are very different concepts. The questions in this survey could have been clearer; for example, a definition could have been given of competent prior to asking the question. An alternative explanation for the comments is that the public is not informed and therefore do not have the ability to recommend critical decisions in the future direction of continuing competence.

Lazarus & Genell Lee (2006) further examined the concepts of public perceptions in a two phase study of 1,127 individuals. The first phase involved only the public while the second phase involved members' educators and organizational leaders. A focus group of 12 men and women was first held to gain insight into the participants' perceptions of nursing competence and ways to ensure competence. The results of these focus groups were qualitatively analyzed and used to develop the questionnaire for phases one and two. The questionnaire was validated by the Alabama Board of Nursing, outside reviewers and pre-tested on a group of adult nursing care consumers.

The questionnaire was then used in a statewide survey sample of 600 men and women heads of households with no nurse in the household. These telephone interviews were recorded and the data was qualitatively and quantitatively analyzed. Findings were then used in the development of three separate questionnaires that were administered to a random sample of nurse licensees, educators and organizational leaders. The findings from both the consumer group as well as the licensees, educators and organizational leaders were analyzed and compared. In relation to continuing competence, the results revealed that significant differences of perceptions existed among consumers and RNs, consumers and organizational leaders and consumers and educators. The widest gap in perceptions was

with revalidation exams which are periodic testing using a re-licensing exam. Consumers were also asked if licensure for nurses should be good for life and 89% said no. In contrast, nurse licensees, educators and organizational leaders by majority supported licensure for life. The majority of nurses simply rejected the idea of periodically written a re-licensing exams as an acceptable mechanism to demonstrate continuing competence. While the idea of periodic examinations would be quite daunting for nurses and may in fact be regulatory overkill, the immediate rejection of the concept does seem somewhat self-serving.

Nurse licensees, educators and organizational leaders agreed with consumers on five of the listed mechanisms to ensure continuing competence: entry-to-practice exam, continuing education, criminal background checks, drug screens and employer evaluations. There was less agreement among the nurse licensees, educators and organizational leaders and the consumers on six of the mechanisms, including: revalidation exams, self-evaluation, peer evaluation, additional degree, portfolio and certification.

When these findings are compared to the current continuing competence models that were reviewed, they are for the most part consistent with the current approaches of the regulators with the exception of a few (CRNNS, 2012). The most significant and interesting finding is the discrepancy in the public's and the profession's view of revalidation exams. These findings add strength to the hypothesis that as regulators, we may not be designing programs and policy decisions that meet the needs of the public, but rather are viewed as self-serving to members of the profession

The limitations of the Lazarus & Genell Lee study are similar to the CRNNS public survey in that they failed to address the notion of surveying the "informed public". The consumers, who are members of the public in this survey, were the head of the household and the only screened out question was if they had a nurse or nurse aid in the residence they were excluded. There were no screening questions

related to education levels, income levels or other indicators that may measure the degree to which

they are informed.

The Citizen Advocacy Center, a United Stated based group, considers that they as an advocacy

group represent the informed public. In 1987, the Citizen Advocacy Center (CAC) was created for the

thousands of members of the public serving on health professional boards as representatives of the

consumer interest. As a result of their work, CAC has also become a resource for the health professional

boards themselves. They have built expertise in the areas of professional regulation and the public

perspectives and demands for a safe and effective health care system. One might consider that

regulatory bodies should be engaging groups like the Citizens Advocacy Center when making policy

decisions about continuing competence

In 2004, the CAC produced a landmark report entitled "*Maintaining and improving health

professional competence".* This report highlighted the historic and current challenges to ensure health

professional maintain, and they state, improve their competence. The CAC (2004) states that an initial

license to practise should not equate to competence even though that is all that many regulators

require. They argue this is a century old approach to regulation and in the rapidly changing world of

health care, this is simply not good enough. The CAC (2004) concede that some regulators in recent

years have attempted to improve their systems for ensuring continuing competence. Many have moved

towards CE as a way to demonstrate competence. For many professionals, they must only show proof

they have attended a course which has insufficient rigor to promote competence. The CAC states that,

"whether the chosen courses are relevant to the licensee's specific practice, or whether the information

presented in the course has been understood, is not subject to regulatory review" (CAC, pg. 2, 2004). In

support of the CAC view, the literature review on continuing competence methodology showed that

although CE was most commonly used, there is very little substantive evidence to support that the CE

actually leads to more positive patient outcomes. The CAC report challenges that the CE requirements are imposed by regulatory bodies without prior competency assessment and the course tailored to the professional learning needs does little to guarantee to the public that the professional is safe and effective in health care delivery.

Based on these views, the CAC offers a road map for a national program to effectively and efficiently assessing and assuring competence. This road map to maintaining and improving competence of health professionals is based on a number of fundamental principles. These include: collaboration among key stakeholders, quality care, evidence-based practice, building on what works, accountability of the health professionals and making programs mandatory. The CAC has recommended a five step model based on these principals: routine periodic assessments, development of a learning plan, implement the plan, documentation, and the demonstration and evaluation of competence.

When this road map is compared to the current continuing competence models that were reviewed, it is consistent with the current approaches used by the regulators but adds a more rigorous process (CRNNS, 2012). The CAC recognizes that self-assessment has benefit and is cost effective but they do recommend an additional phased-in approach of an independent third party assessment. The majority of regulators who were reviewed prescribed to the methods of self-assessment but the move to third party assessment would be a fundamental shift in both thinking and budget planning for regulatory bodies.

This approach to continuing competence is the first in this literature review that provided a clear, concise and detailed method for regulators to promote continuing competence. They have based their recommendations on how the public members of the Citizens Advocacy Center have interpreted the literature on patient safety and quality care. It is therefore important to share and discuss this with approach with other regulators.

The CAC road map refers to important reports such as to *Err is Human: Building a Safer Health System (*Kohn, Corrigan & Donaldson, 1999*), Health Professions Education- A Bridge to Quality* (Institute of Medicine, 2003) *Crossing the Quality Chasm: A New Health System for the 21st Century (Institute* of Medicine, 2001) and to highlight the urgent need to rethink how regulatory bodies promote competence. These landmark reports offer solutions for regulators to promote continuing competence.

Kohn, Corrigan & Donaldson (1999) recommend that regulatory and oversight bodies begin to assess and ensure the ongoing competence of all practitioners throughout their careers. They argue that professional regulatory bodies possess the authority to effect universal change in the health and safety of the public. A visible commitment to patient safety in the form of professional development and continuing competence is essential. Kohn, Corrigan & Donaldson (1999) specifically recommend that regulatory bodies should implement periodic reexamination, relicensing health professionals and work with certifying and credentialing organizations to develop more effective methods to identify unsafe providers and take action. This report supports the views of the public in the Lazarus & Genell Lee (2006) study in that a reexamination or revalidation exam of health professionals could be considered.

The Institute of Medicine (IOM) report *Crossing the Quality Chasm: A New Health System for the 21st Century* (2001) is less prescriptive in their recommendations to regulators to ensure continuing competence. They state that despite present healthcare regulation being a dense patchwork and slow to adapt to change, it is a necessary to ensure safe care. The IOM (2001) states "properly conceived and executed, regulation can both protect the public's interest and support the ability of health care professionals and organizations to innovate and change to meet the needs of their patients."

An additional report from IOM *Health Professions Education- A Bridge to Quality* (2003) offers that professional competence assurance is a responsibility of the public and the regulators. They recommend that regulators should move towards requiring health professionals to demonstrate

periodically their ability to deliver safe patient care. The report suggested competence should be measured though direct measures of technical competence, patient assessment, evaluation of patient outcomes, and other evidence-based assessment methods.

The main conclusion drawn from this literature review is that further research is required in the area of public perceptions of competence and continuing competence for registered nurses. The limited literature that was available revealed incongruence between members of the profession and the public in the perceptions of effective mechanism to measure continuing competence. Despite this lack of evidence, regulators continue to mandate CE as a part of a continuing competence program with the goal of ensuing patient safety. The public has spoken but have regulators listened?

Patient safety advocates such as the Institute of Medicine have been offering regulatory solutions for over a decade now and regulators have not acted on these recommendations. In addition, the CAC offers a road map for a national program for effectively and efficiently assessing and assuring competence, a program that appears to be innovative and should be further explored among regulators.

This review of the literature points to the need for further research related to the integration of the public perceptions of continuing competence for registered nurses into regulations. If further research was conducted, regulators could then take this evidence and evolve the process for ensuring continuing competence of their members. This would help regulators meet their mandate of public safety while at the same time helping them to consider what the informed public wants in a continuing competence program. This evidence and lack thereof, supports the need for a project such as this to increase the body of evidence for regulators.

Patient involvement in regulatory decision making

An emerging trend in the literature included the involvement of patients in regulatory decision making. Johnson, Beusterien, Ozdemir, and Wilson (2017) and Klein, Hardy, Lim and Marshall (2016) explore these concepts in two separate articles. While these articles examined regulatory decisions about drugs with Health Canada (HC) and the Federal Drug Agency(FDA) and not nursing regulatory decisions, the concepts could be considered in this application.

Klein, Hardy, Lim and Marshall (2016) describe the Canadian context of patient involvement in policy decisions related to drug approval. In Canada, patient have been involved in expert panels to obtain their opinions as well as to educate them on the drug approval process. A pilot project in 2014 involved patients in decisions making related to rare diseases. They acknowledged that with rare diseases, the patient may be the best expert in the lived experience of that disease and their opinions should be considered in policy decisions. The opinions sought related to the impact of the disease, the experience with current treatments, unmet medical needs and the patient's level of risk tolerance.

Klein, Hardy, Lim and Marshall (2016) discussed the need to expand these types of project to gain more experience in the field of patient involvement in decision making as well as to increase the body of scientific knowledge in this new area of research. One of the main limitations of this approach, as identified by Klein, Hardy, Lim and Marshall (2016), is lack of knowledge by individual patients of the approval process by HC and the feeling of frustration by these patient within these processes.

Johnson, Beusterien, Ozdemir, and Wilson (2017) described the process used by the FDA to involve patients in decisions related to the risk benefit analysis and approval of drugs. Similar to the expert panel approach by HC, the Patient- Focused Drug Development Program involves meetings with patients to obtain their perspective on disease severity, the state of current available treatments and

unmet medical needs. This program recognizes that the patient with a chronic disease are experts in

that disease as far as the symptoms and the impacts on quality of life. The article acknowledges that this

perspective had been missing prior to the Patient- Focused Drug Development Program.

Johnson, Beusterien, Ozdemir, and Wilson (2017) discuss the risks with this approach to

regulatory decisions making, including lack of expertise in the field of patient preferences in decision

making. To mitigate some of the risk, the FDA had developed guidelines related to patient preferences

in the inclusion of regulatory policy decisions which has helped to ensure the safety and validity of these

decisions. Johnson, Beusterien, Ozdemir, and Wilson (2017) also points to the need for further research

in this field.

These two articles point to a preferred future of patient involvement in regulatory decision

making which may influence nursing policy decisions related to continuing competencies. Nursing

regulators could use the lessons learned by both HC and FDA to determine how to safely include patient

in nursing policy decisions

Method

This project is a descriptive project with quantitative data collection and analysis. The project

replicated portions of the Lazarus & Genell Lee (2006) study using a modified telephone questionnaire

to survey the public. The survey asked a combination of open ended questions seeking verbatim

answers and structured questions where the subject chose an answer from a list. The research firm

MQO Research was contracted to conduct the telephone survey. The questions were part of a larger

public survey which is conducted on a yearly basis for the College of Registered Nurses of Nova Scotia.

Sample

MQO research conducted the telephone survey with a representative sample of 400 adults (18 years of age and older) from within Nova Scotia. This sample was created using systematic sampling procedures and matched the geographical distribution of the population within the province. To ensure the sample matched the geographical distribution of the population within the province, regional quotas in proportion to the population distribution within Nova Scotia was developed by MQO Research.

Table 1

Region	Population Estimate[1] (those 18 years of age and older)	Proportion of Nova Scotia Covered by Region	Quotas
South Shore	96,330	13%	52
Annapolis Valley	99,090	13%	52
Cape Breton	110,905	15%	60
North Eastern	126,435	17%	68
Halifax (HRM)	317,195	42%	168
Total	**749,955**	**100%**	**400**

A two-staged stratified random sampling technique was utilized. The first stage of sample selection was a random (systematic) selection of households. Telephone listings for this research was obtained from ASDE Survey Sampler. ASDE Survey Sampler is an up to date listing of all listed telephone numbers in the province. Telephone listings are updated every six months. MQO ensured that approximately 20% of the numbers in the sampling frame came from cell phone numbers which were randomly selected using taking all of the existing mobile NNXs in the province (the first three digits of the number) and then generating all possible combinations of the remaining four digits. This method generated numbers that had not been assigned to phone holders, but by the use of a predictive dialer MQO was able to assign only active calls to interviewers.

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[1] Source: Statistics Canada.

To maximize the response rate, MQO administered at least four call-back attempts on all numbers before a telephone number was deemed unreachable. This helped minimize a 'not at home' bias and ensured CRNNS achieved the highest response rate possible. These call-backs were conducted during various days of the week and times of the day to ensure respondents had an ample opportunity to participate.

In the second stage of sample selection, one individual from each household was selected. Randomness was assured at this point by asking to speak to a person in the household, 18 years of age or older. Those surveyed were recipients of healthcare services in a facility in Nova Scotia within the past 12 months or had members of their households who were recipients of these services within this same timeframe. The interviewer asked the individuals if they had or another member of their immediate family received either home care services, care in a nursing home or healthcare services in a facility such as a hospital or community clinic in Nova Scotia in the past 12 months. If they answered no, the interview was terminated and they were screened out. If they answered yes, the interviewer reassured them that they were not selling or promoting any products or services and were simply interested in your opinions and all the responses will be treated confidentially. They were then asked if they have a few minutes to answer the questions. If they answer yes, the survey continued and if not, the survey was terminated and individuals were screened out.

Consent

Survey consent was obtained by MQO Research by asking the participant to be part of the survey. If they had questions about the validity of the research or about MQO, they were provided with the following information to further the consent process:

"MQO Research has been conducting research studies in Canada and abroad for 30 years. We

are a Member of the Canadian Marketing Research and Intelligence Association (MRIA) which is

responsible for regulating marketing research practices in Canada. MQO adheres strictly to all

guidelines of professionalism and privacy as outlined by the MRIA. This study is registered with

the Association. If you would like to contact the MRIA to verify the legitimacy of this research

study or our company please call 1-888-602-6742, ext. 8728 toll free and reference survey

number: XXXX."

If they had questions related to the confidentiality of the survey, they were provided with the

following information to further the consent process:

"As a member of the Marketing Research and Intelligence Association (MRIA) we adhere to

strict standards of privacy and confidentiality. Our data is presented in aggregate form.

Information will never be released to our client or any other third party in a manner that could

be used in an attempt to disclose your identity."

Screening Questions

Participants who continued to participate in the survey were then asked if they or someone in

their household currently worked as a registered nurse, nurse practitioner, licensed practical nurse or

physician. If they answered yes to this question, they were screened out. If they answered no, they were

asked to think back over the past twelve months about the type of care they or their family member has

received. They were then asked if the care was from home care services in Nova Scotia, nursing home or

long term care facility in Nova Scotia, healthcare services in a hospital in Nova Scotia or healthcare

services in a community clinic in Nova Scotia. If they answered no to any of these questions, they were

screened out. If they answer yes, they were asked to think about their most recent health care

experience and whether they had personally met and interacted with either an RN or (NP). If they

answered no, they were screened out. This was the end of the screened questions. These questions

were in place to ensure the participants or members of their family were not RNs, LPNs, NPs or

physicians and to ensure that the participants remaining had received health care services from a RN or

NP in the last 12 months.

Survey Instrument

Review of the literature did not provide a pre-existing survey tool that would meet the project

needs, with the possible exception of the Lazarus & Genell Lee (2006) study. The author planned to

replicate the survey questions in their 2006 study; however, the questionnaire was not included in the

study appendix. Attempts to contact the Alabama State Board of Nursing (ASBN) to obtain a copy of the

questionnaire, since the study was conducted in their jurisdiction, were unsuccessful. The author

reviewed the research study and attempted to formulate the questions that appeared to be asked by

the authors in the original 2006 questionnaire. Therefore, the survey instrument used in this project was

developed specifically for this project.

The full tool, which includes the introduction, screening questions and demographics, can be

found in Appendix B. The following questions related to the project problem and questions was asked of

the respondents by MQO:

1a. Overall, how confident did you feel in the knowledge, skills, and abilities of the <nurse

practitioner/registered nurse> who cared for <you/the patient>?

 Please use a scale of 1 to 10 where 1 is 'not at all confident and 10 is 'extremely confident.

1b. If rating of 7 or less to Q1a, ask: And why do you feel that way?

2. What actions or behaviors made you feel that the <nurse practitioner/registered nurse> caring for <you/the patient> was competent (that is, had the knowledge, skills and abilities required)?

3. Still thinking about your most recent experience receiving <recall service type> with a <nurse practitioner/registered nurse> do you strongly agree, agree, disagree or strongly disagree with each of the following statements. The <nurse practitioner/registered nurse> . . . .

   i.   involved you in decisions about care and treatment as much as you wanted to be (Competent)
   ii.   provided you with information needed about <your/the patient's> health condition and the care received(Competent)
   iii.   was able to handle an emergency or crisis situation(Safe)
   iv.   talked with you about how you can maintain or improve <your/the patient's> health (Competent)
   v.   was responsive to <your/the patient's> diverse needs (Compassionate)

   vi.   was sensitive and knowledgeable about the needs of <your/the patient's> family (Compassionate)

   vii.   had a courteous and caring approach (Compassionate)
   viii.   had a neat and clean appearance (Competent)

4. . Still thinking about your most recent experience receiving <recall service type> with a <nurse practitioner/registered nurse> do you strongly agree, agree, disagree or strongly disagree with each of the following statements. The <nurse practitioner/registered nurse> . . . .

   i.   made <you/the patient> feel safe (Safe)
   ii.   respected <your/the patient's> privacy (Ethical)

   iii.   treated <you/the patient> with dignity and respect (Ethical)
   iv.   valued <your/the patient's> beliefs and opinions (Ethical)

   v.   worked well with other health care professionals (Competent)
   vi.   knew how to use equipment (Safe)
   vii.   appeared confident in the way they did their job (Competent)

5. How much influence do you think the following have on nursing competence? Please use a

scale of 1 to 10 where 1 is 'no influence' and 10 is 'extremely influential'

      i.   Educational preparation
     ii.   Number of patients
    iii.   Knowledge of procedures
    iv.   Length of shift/Hours worked in a shift
     v.   Attitude
    vi.   Working conditions
   vii.   Involvement in continuing education
  viii.   Are there others? Collect verbatim

When answering the next couple of questions, I would like you to think about continuing competence as the ongoing ability of a registered nurse or a nurse practitioner to apply their knowledge and skills to practise safely.

6. How important are the following in insuring continuing nursing competence? *Please use a scale of 1 to 10 where 1 is 'important ' and 10 is 'extremely important'*
   i. Initial Licensing exam
   ii. Regularly scheduled re-licensing exams
   iii. RN refresher/re-entry program
   iv. continuing education selected by the nurse
   v. continuing education mandated by the licensing authority
   vi. employee evaluation
   vii. self-evaluation
   viii. peer evaluation
   ix. additional university course
   x. portfolio/record of accomplishments
   xi. certificate in specialized practice area
   xii. defined number of annual practice hours
   xiii. Are there others? Verbatim

7. Should competence of nurses be demonstrated on a regular basis to maintain nursing license?
   i. Yes
   ii. No-
   iii. Refused
   iv. Not Sure/Don't Know
   v. Why do you say that? Gather verbatim

7b. If yes what do you think is the best way(s)- verbatim

8. Should a nursing license be good for life?
   i. Yes

ii. No
iii. Refused
iv. Not Sure/Don't Know
v. Why do you say that? Gather verbatim

Validity and reliability

Prior to full-scale data collection, a pre-test was conducted by MQO to ensure the validity and reliability of the results as well as to test for the efficient and effective flow of information. A small sample of seventeen interviews were conducted as part of the pre-test. No changes were made to the questionnaire as a result of the pre-test.

Statistical Analysis

All quantitative analysis was carried out using SPSS. Various analytical techniques were used to interpret data. Statistical tests of significance were conducted to ensure observed differences are real and not due to the normal occurrence of non-controllable sampling error. Percentages and means were calculated for all questions. When calculating means, a formula was used to identify outliers and remove them from the analysis, thus reducing the impact of extreme values on the results.

MQO calculated the correlation between demographic information and the responses to the survey questions where sufficient sample sizes allow. This analysis allowed for a deeper understanding of the survey results, as key differences were found to exist among various subpopulations.

An overall score was calculated in the responses to questions three and four. Each response has been categorized by the author as representing competence, compassion or ethics. This score was used to interpret the results of the question in relation to how much emphasis is placed by the respondent on these three elements of nursing practice.

MQO provided the raw data response's to all the verbatim questions. A thematic analysis was conducted by the author to determine the theme related to the responses.

Results

400 Nova Scotians who met the screening criteria were surveyed using the telephone questionnaire from May 13th 2016 to June 27th 2016. A Computer-Assisted Telephone Interviewing (CATI) System was used to minimize the probability of errors and ensure data integrity and quality. This collection method and sampling ensured that survey results were accurate to within ±4.89% (at the 95% confidence level) in cases of maximum variability (p=.5).

Demographics

Sixty-six percent (66%) of those interviewed were female and the majority of respondents had post-secondary training. The majority of those surveyed reported an income level of less than $99,000. Sixty-five percent (65%) were over the age of 55. The demographic profile of respondents is presented in Table 2.

Table 2: Respondent Profile

- All Respondents -

Demographics	Percentage
Age	
18-34 years	6%

35-54 years	29%
55+ years	65%
Gender	
Male	34%
Female	66%
Income	
<$50K	36%
$50K – $99K	34%
$100K+	18%
Prefer not to say	12%
Education	
High school or less	27%
Some post-secondary	19%
Graduated post-secondary	53%
Prefer not to say	1%

Confidence in Nurse

Almost all respondents (98%) reported they were either very confident or confident in the knowledge, skills and abilities of the nurse practitioner/registered nurse. Seventy-seven percent (77%) were very confident in the knowledge, skills and abilities of the nurse practitioner/registered nurse (that is, provided a rating of 9 or 10 on a 10-point confidence scale) and 21% were confident in their knowledge, skills and abilities (provided a rating of 7 or 8 on a 10-point confidence scale).

Respondents who rated this question are 7 or less were asked why they felt this was. Thirty responses were received and analyzed. Responses were themed in 3 categories. The first category was the nurse demonstrated lack of knowledge (15). The second category was lack of or ineffective communication (6). The third category was attitude, for example laziness or complacent behavior (3).

How did you know the nurse was competent?

This was a verbatim question and 376 responses were received and analyzed. They were then themed into six categories. The first category was the nurse demonstrated knowledge (178). The second category was skills and actions (59). The third category was effective communication (57). The fourth category was demonstrated caring behaviors (50). The fifth category was professionalism (35). The last category was confidence (17).

Measures of Competence

In terms of competent care, more than 80% of respondents agreed with the following statements about their experience with the nurse practitioner/registered nurse. The nurse practitioner/registered nurse: had a neat and clean appearance (100%), appeared confident in the way they did their job (99%), always provided you with information needed about the patient's health condition and the care received (88%), worked well with other health care professionals (86%), and involved you in decisions about care and treatment as much as you wanted to be (85%). These measures of competence statement were taken from the Lazarus & Genell Lee (2006) study. An overall score for competent care was calculated by taking the percentage that strongly agree or agree with the six statements and determining the average. Competent care received an overall score of 88%

Influencing Factors on Continuing Competence

Procedural knowledge (80%), attitude (69%), educational preparation (68%) and working conditions (62%) are the top factors in terms of the level of influence on nurses' ability to apply their skills and knowledge. Number of patients and length of the shift were the least influential at 55% and 53%, respectively. Table 3 represent all the responses to the question "How much influence do you think the following would have on the nurse's ability to apply their knowledge and skills?"

Table 3
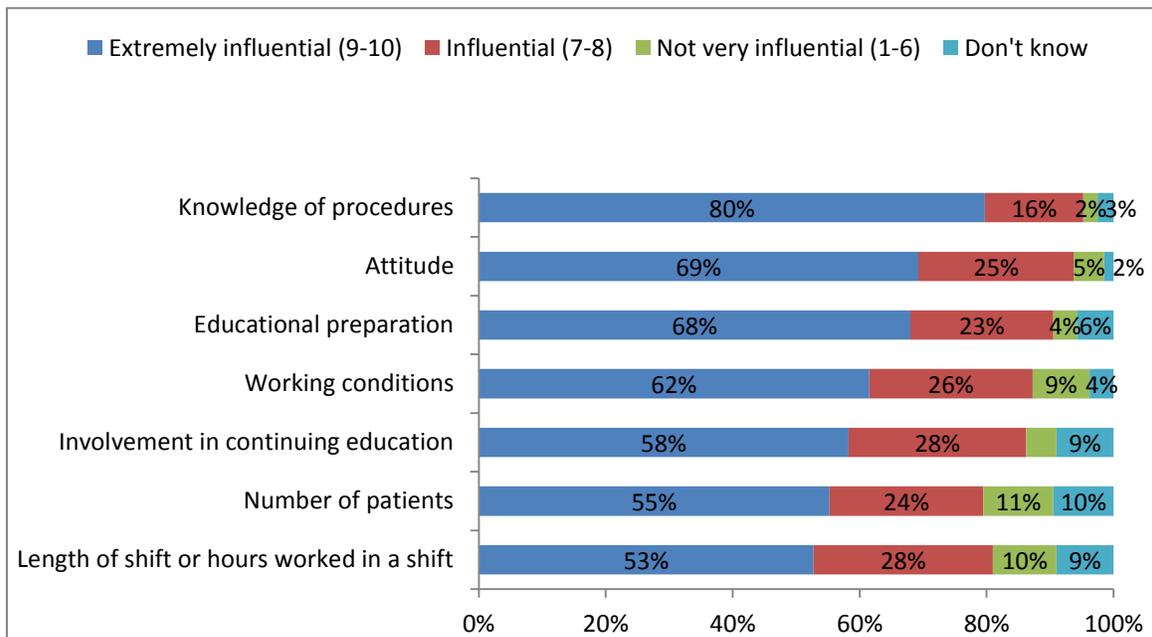
The respondents were then asked if they could think of anything else which may influence a nurse's ability to apply their knowledge and skills. One hundred and thirty-three responses were analyzed and themed. Five themes emerged, working conditions (22), teamwork (20), number of patients (18), attitude (18), and personal factors such as health, lifestyle, and stress (17).

Demonstrating Competence

The majority of respondents (88%) believed that continuing competence should be demonstrated on a regular basis in order to maintain their nursing license. When asked to explain their response, respondents offered a variety of suggestions (n=366), the majority of which referenced keeping up with rapidly changing medical science (136). Other themes identified include acting as a system safeguard (48), promoting involvement in continuing education (41), attitude (20), maintain currency of experience (20), and personal factors which included the age of the nurse (19). An example of a verbatim responses themed in the personal factors (age) was "*Because I am one of these people that I think everyone should have to rewrite their driver's license every 5 years. As you age you lose things, forget things. It is very important to stay on top of the field your in especially when it's related to health.*"

How can a nurse demonstrate competence?

When asked the best way for nurses to demonstrate competency, respondents offered a variety of suggestions (n=282). The responses were analyzed and themed into seven categories. Themes identified include system testing by employer or other (60), demonstrating knowledge (42), continuing education (26), experience/practice hours (25), caring behaviors (22), communication (24) and attitude (16).

Influence on continuing competence

Respondents were asked to rate 12 actions in terms of the importance of each in influencing the continuing competence of nurses, using a scale of 1 to 10 with 1 being 'not at all important and 10 being 'extremely important'. The "Initial licensing exam" response was rated the highest in importance (74% rated this factor 9 or 10 out of 10), followed distantly by "continuing education mandated by the

licensing authority" (58%), "certificate in specialized practice area" (57%)," continuing education as selected by the nurse" (55%) and "employee evaluation" (54%) were the top four factors influencing a nurse's ability to apply his or her knowledge and skills. In the respondent's view, "regularly scheduled re-licensing exams" and "additional university courses" were the least important at 38% and 31%, respectively. Table 4 represents all respondents answers to the question "How important are each of the following in influencing the continuing competence of nurses"

Table 4
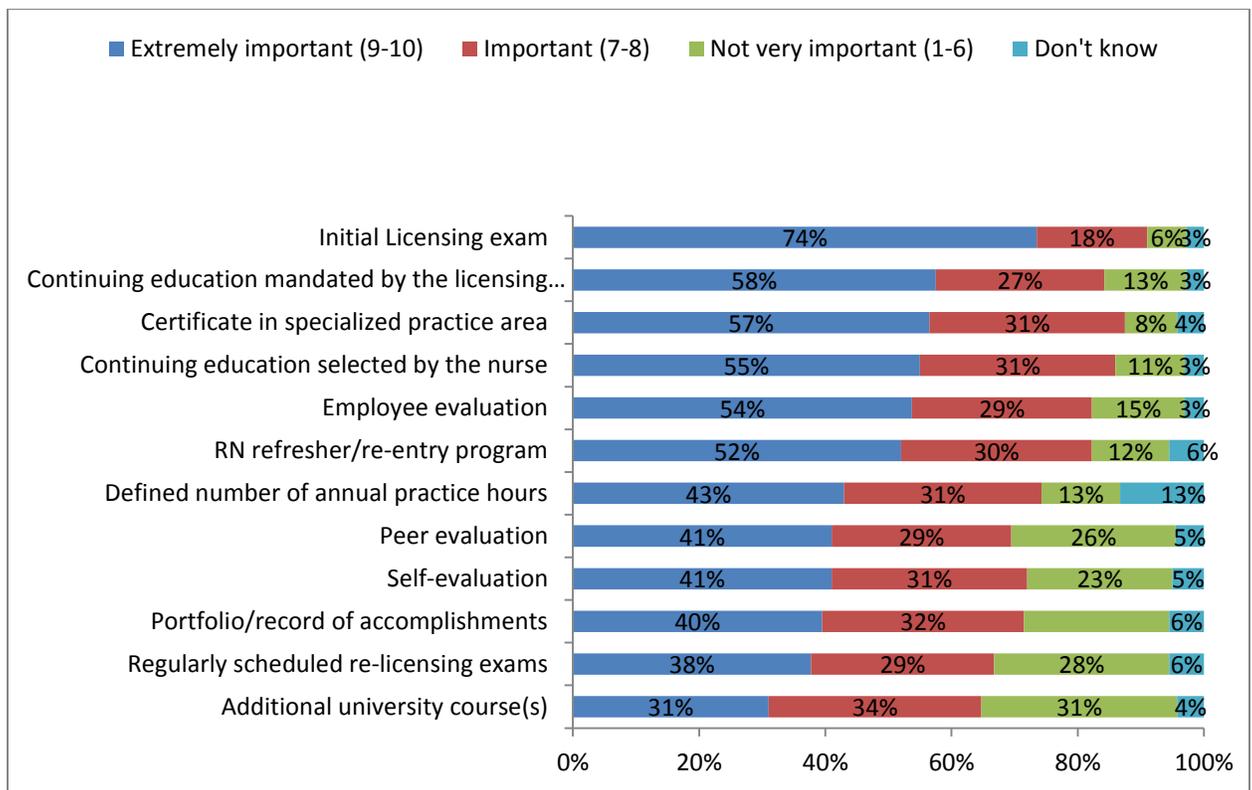
When asked if there were any other factors not already mentioned that influence continuing competence, respondents offered a variety of suggestions (n=80). Responses were analyzed and themed into four categories. These categories included, working conditions (16), compensation (11), patient feedback (6) and personal factors (6).

Correlation coefficients were calculated and several statistically significant relationships were reported as negative. As the level of income and education decreased, the more the respondents agreed certain factors had an influence on continuing competence. Table 5 represents the correlation coefficient between these factors and income and table 6 represents the correlation coefficient between these factors and education.

Table 5

Income

Factor influencing continuing competence	Correlation coefficients
Regularly scheduled re-licensing exams	-0.183
RN Refresher	-0.117
Continuing education selected by the nurse	-0.212
Employee evaluation	-0.218
Self-evaluation	-0.228
Additional university course	-0.180
Portfolio	-0.198
Certificate in specialized practice area	-0.247

Table 6

Education

Factor influencing continuing competence	Correlation coefficients
Regularly scheduled re-licensing exams	-0.236

Continuing education selected by the nurse	-0.226
Peer evaluation	-0.238
Employee evaluation	-0.24
Self-evaluation	-0.264
Additional university course	-0.17
Portfolio	-0.195
Certificate in specialized practice area	-0.221
Defined number of annual practice hours	-0.221

Should a license be good for life?

Slightly over half of respondents (55%) did not believe that a nursing license should be good for life. Correlation coefficients were calculated for this questions relating age and education. Correlation coefficient between answering yes and age was positive (0.118), so the older the respondents the more likely are to respond yes. The correlation coefficient between level of education and answering yes was negative (-0.166), meaning the lower the level of education the more likely the respondents was to say yes**.**

When asked the reason for their response, respondents offered a variety of comments (n=367). The responses were themed into six categories. These included new knowledge and technology (98), the age of the nurse (25), system safeguards (70), the currency of the experience of the nurse (53), personal factors such as health and family commitments (13) and involvement in continuing education (57).

Conclusion

Limitations

One limitation of this project is the concept of the informed public. The participants in this project were asked if they or a family member has received care from and RN or NP in the last 12 months. If they answered yes, they were considered the informed public and if they answered no, they were excluded from the survey. One has to ask if this simple screening question is enough to consider the public as "informed".

Madison (2010) states "Consumers lack of full information, expertise and experience limits their ability to successfully intervene, and the infrastructure that surrounds their involvement in care is insufficient to fully overcome these limitations" (pg. 24). Based on this, a simple screening question about the public receiving care could be interpreted as not being rigorous enough to define an informed public. In the CRNNS public surveys, demographic data has been collected such as income and highest level of education completed. These demographic have been used in a correlational analysis of the data. In 2014 for example, the results of this question showed that 96% of respondents treated the care received as competent to extremely competent (providing a rating of 7 or more). It is interesting to note that respondents with a high school diploma or less are significantly more likely to rate the care as very competent (rating of 9 or higher). This raises the question about whether the sample is truly an informed public and how would you measure this? Does level of education dictate the informed public? The correlation coefficient demonstrates that respondents with a lower the level of education thought nurses require a less rigorous process for maintaining licensure; in fact, these respondents thought a licence should be good for life. The higher the level of education however, the more respondents felt measures should be put in place to maintain a licence and that a licence should not be good for life.

Does the level of education equate to an informed public? This concept should be explored more fully in follow-up research.

Another limitation of the project is the ability to view the results as a true replication of the Lazarus & Genell Lee (2006) study. As the exact survey tool that was used by Lazarus & Genell Lee was not located, it may be difficult to interpret the results as a true replication study. This may lessen the significance of the findings and may require others to first replicate this project to use the themes and data to make policy changes in nursing regulation.

Implications for Regulation

This project generated a wealthy of information that CRNNS and other nursing regulators can use to conduct future projects, research and influence policy decisions. Primarily, the data demonstrated there is a clear lack of public understanding of how and why nurses maintain competence. Verbatim comments that referenced nurses needing to balance caring for their children and maintaining their skills revealed that the public still may have a stereotypical vision of nursing. These comments demonstrate that the public understands nursing as a vocation and not a science. If regulators want to further engage the public in policy decisions, they will need to educate the public on the profession and on nursing regulation.

The results of the project revealed that the public is concerned about the age of nurses and their level of competence as they age in the profession. As the public of Nova Scotia ages, with 65% of respondents were over the age of 55, they may perceive the changes they themselves are experiencing with aging as the same that nurses must also be experiencing. Verbatim comments such as "*I think as we get older our abilities and mind set changes to a certain degree. With our health deteriorating we get to the point to where we can't lift the way we used to. So as a nurse gets older they would have more*

difficulty in moving patient's around." would lead to the conclusion that the public sees older nurses as less competent. As regulators, these perceptions should be explored and further research should be conducted on the older nurse and their continuing competence. As previously mentioned, if regulators want to further engage the public in policy decisions, they should engage them in both this research and in education.

The project has demonstrated that the public has a good understanding of what nursing regulators have traditionally considered to influence continuing competence. After the initial licensing exam (74% rated 9 or higher), the public reported continuing education as mandated by licensing authority (58%) followed by certificate in specialized practice area (57%) and continuing education as selected by the nurse (55%) as the top choices for influence on continuing competence. The literature pointed to certification and continued education and two of the top choices of mechanism to promote continuing competence. In Nova Scotia, a new continuing competence program was introduced in 2016 and included continuing education as mandated by CRNNS; in this province, the topic is chosen and created by the regulator and the nurses is tested on their knowledge of the education topic. For CRNNS, the results of this project validated the decision to move towards continuing education as mandated by licensing authority as an appropriate mechanism to promote continuing competence.

Lastly, the project has provided regulators with additional mechanisms to be considered to promote continuing competence. In the verbatim responses, the public suggested mechanisms such as patient feedback as a way to influence the continuing competence of nurses. Comments suggested that nurses could benefit from receiving patient feedback in the form of surveys. Nursing regulators have examined peer review as a mechanism to promote continuing competence but the concept of patient feedback in as a mechanism is an emerging field (Johnson, Beusterien, Ozdemir, Wilson, 2017). This new

evidence, along with the data generated from this project, can be used by regulators when makes changes to existing continuing competence programs.

The continuing competence of health care professionals is of the utmost importance to a diverse range of stakeholders including the public, regulatory bodies, health care providers and their patients/clients, and employers. Maintaining competence is a professional responsibility and the hallmark of self-regulated professionals. It is generally well-accepted by all health professional regulators today that they must require and promote the continuing competence of their members to respond to increasing public expectations for safe, competent and ethical health care. However, regulators have different methods of promoting continuing competence and have been criticized for the lack of rigor and validation in existing continuing competence programs. In our evolving health care system, all health professionals including nurses must continually maintain and enhance their practice.

Nursing regulators' primary purpose is public protection; yet the measurement and maintenance for continuing competence has traditionally been decided upon by members of the profession. Previous research on competence and continuing competence has primarily focused on opinions of the members of the profession and the regulator. This project generated new knowledge on the opinions of the public related to what makes them feel safe, which is the primary mandate of nursing regulators. Engaging the public will assist regulators in making meaningful policy decisions related to continuing competence.

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Appendix A

Questionnaire

INTRODUCTION

Hello, my name is _____ from MQO Research - a professional research firm in Nova Scotia. Today we are conducting a survey about **healthcare services provided to Nova Scotians by registered nurses and nurse practitioners**. I would appreciate a few moments of your time.

Please be assured that we are not selling or promoting anything.

May I please speak with the person 18 years of age or older in your household, would you be that person?

IF NOT ALREADY ON THE LINE: Ask to speak to that person.

IF PERSON IS NOT AVAILABLE: Arrange for a convenient time to call back.

IF ANOTHER INDIVIDUAL COMES ON THE LINE: Repeat introduction and ask the following: Before we proceed, are you 18 years of age or older?

ONCE CORRECT INDIVIDUAL IS ON THE LINE: Thinking back over the past twelve months, have you or another member of your immediate family received either home care services, care in a nursing home or healthcare services in a facility such as a hospital or community clinic in Nova Scotia?

IF NO: Thank and terminate.
IF YES, ADD: *Please be assured that we are not selling or promoting any products or services and are simply interested in your opinions. All of your responses will be treated confidentially. Do you have a few minutes to answer the questions?*

Yes 1   **CONTINUE**
No 2   *Is there a more convenient time for me to call back?*
                                        ARRANGE FOR A CALLBACK OR THANK AND TERMINATE.

IF RESPONDENT INQUIRIES ABOUT THE LENGTH OF THE SURVEY: This survey will take approximately 8 to 10 minutes to complete, depending upon your responses.

IF RESPONDENT AGREES TO CONTINUE, ADD: This call may be monitored for quality purposes.

If a respondent questions the validity of the survey, the call or MQO Research please state: MQO Research has been conducting research studies in Canada and abroad for 30 years. We are a Member of the Canadian Marketing Research and Intelligence Association (MRIA) which is responsible for regulating marketing research practices in Canada. MQO adheres strictly to all guidelines of professionalism and privacy as outlined by the MRIA. This study is registered with the Association. If you would like to contact the MRIA to verify the legitimacy of this research study or our company please call 1-888-602-6742, ext. 8728 toll free and reference survey number: 20150902-916X.

If a respondent questions the confidentiality of the information that they are providing, please state the following: As a member of the Marketing Research and Intelligence Association (MRIA) we adhere to strict standards of privacy and confidentiality. Our data is presented in aggregate form. Information will never be released to our client or any other third party in a manner that could be used in an attempt to disclose your identity.

SCREENING QUESTIONS

Thank you very much for agreeing to participate. Before we begin, I would like to ask you a question or two to ensure that you qualify to complete this survey.

S1. Do you or someone in your household currently work as a registered nurse, nurse practitioner, licensed practical nurse or physician?

Yes	1	**THANK & TERMINATE**
No	2	
Refused	8	**THANK & TERMINATE**
Not Sure/Don't Know	9	**THANK & TERMINATE**

S2. Thinking back over the past twelve months, have you or another member of your immediate family received...

a. home care services in Nova Scotia?
b. care in a nursing home or long term care facility in Nova Scotia?
c. healthcare services in a hospital in Nova Scotia?
d. healthcare services in a community clinic in Nova Scotia?

Yes	1
No	2
Refused	8

THANK AND TERMINATE IF RESPONDENT DOES NOT SAY 'YES' TO EITHER S2A OR S2B OR S2C OR S2D.

S3. **ASK ONLY IF RESPONDENT SAYS 'YES' TO MORE THAN ONE OPTION IN S2:** You mentioned that you have had experience with **<recall all 'yes' responses to S2>** over the past twelve months. Which one of these experiences occurred most recently?

Receiving home care services	1	
Receiving care in a nursing home or long term care facility	2	
Receiving healthcare services in a hospital	3	
Receiving healthcare services in a community clinic	4	
Refused	8	**THANK & TERMINATE**
Not Sure/Don't Know	9	**THANK & TERMINATE**

S4. Thinking about your *most recent* experience with *<recall service type>* in Nova Scotia, **did you personally** meet and interact with the following healthcare providers...?

ROTATE LIST

    a. A registered nurse
    b. A nurse practitioner

Yes	1
No	2
Refused	8
Not Sure/Don't Know	9

If *'yes'* is not selected to either S4A or S4B thank and terminate.

Q1a. Overall, how confident did you feel in the knowledge, skills, and abilities of the ***<nurse practitioner/registered nurse>*** who cared for <you/the patient>? Please use a scale of 1 to 10 where 1 is *'not at all confident* and 10 is '*extremely confident*.

Record Rating 1-10 _____	
Refused	98
Not Sure/Don't Know	99

Q1b. **IF RATING OF 7 OR LESS TO Q1A, ASK***:* And why do you feel that way?

Q2. What actions or behaviors made you feel that the ***<nurse practitioner/registered nurse>*** caring for <you/the patient> was competent (that is, had the knowledge, skills and abilities required)?

Q3. Still thinking about your most recent experience receiving **<recall service type>** with a ***<nurse practitioner/registered nurse>*** do you strongly agree, agree, disagree or strongly disagree with each of the following statements.

READ TO ALL: If any given statement is not applicable to you, please let me know and we'll move on to the next statement.

The ***<nurse practitioner/registered nurse> . . . .***

    a. involved you in decisions about care and treatment as much as you wanted to be *(Competent)*
    b. provided you with information needed about <your/the patient's> health condition and the care received *(Competent)*
    c. was able to handle an emergency or crisis situation *(Safe)*
    d. talked with you about how you can maintain or improve <your/the patient's> health *(Competent*)
    e. was responsive to <your/the patient's> diverse needs *(Compassionate)*
    f. was sensitive and knowledgeable about the needs of <your/the patient's> family *(Compassionate)*
    g. had a courteous and caring approach *(Compassionate)*
    h. had a neat and clean appearance *(Competent)*

Strongly agree	5
Agree	4
Neither agree nor disagree (VOL)	3
Disagree	2
Strongly disagree	1
Not Applicable	7
Refused	8
Not Sure/Don't Know	9

Q4. Still thinking about your most recent experience receiving **<recall service type>** with a ***<nurse practitioner/registered nurse>*** do you strongly agree, agree, disagree or strongly disagree with each of the following statements.

READ TO ALL: If any given statement is not applicable to you, please let me know and we'll move on to the next statement.

The ***<nurse practitioner/registered nurse> . . . .***

a. made <you/the patient> feel safe *(Safe)*
b. respected <your/the patient's> privacy *(Ethical)*
c. treated <you/the patient> with dignity and respect *(Ethical)*
d. valued <your/the patient's> beliefs and opinions *(Ethical)*
e. respected <your/the patient's> culture, sexual orientation, and different abilities *(Ethical)*
f. worked well with other health care professionals (Competent)
g. knew how to use equipment (Safe)
h. appeared confident in the way they did their job (Competent)

Strongly agree	5
Agree	4
Neither agree nor disagree (VOL)	3
Disagree	2
Strongly disagree	1
Not Applicable	7
Refused	8
Not Sure/Don't Know	9

Q5. How much influence do you think the following have on nursing competence? Please use a

scale of 1 to 10 where 1 is 'no influence' and 10 is 'extremely influential'

i. Educational preparation
ii. Number of patients
iii. Knowledge of procedures
iv. Length of shift/Hours worked in a shift

     v.   Attitude
     vi.   Working conditions
     vii.   Involvement in continuing education
     viii.   Are there others? Collect verbatim

When answering the next couple of questions, I would like you to think about continuing competence as the ongoing ability of a registered nurse or a nurse practitioner to apply their knowledge and skills to practise safely.

Q6. How important are the following in insuring continuing nursing competence? *Please use a scale of 1 to 10 where 1 is 'important ' and 10 is 'extremely important'*

    i.   Initial Licensing exam
    ii.   Regularly scheduled re-licensing exams
    iii.   RN refresher/re-entry program
    iv.   continuing education selected by the nurse
    v.   continuing education mandated by the licensing authority
    vi.   employee evaluation
    vii.   self-evaluation
    viii.   peer evaluation
    ix.   additional university course
    x.   portfolio/record of accomplishments
    xi.   certificate in specialized practice area
    xii.   defined number of annual practice hours
    xiii.   Are there others? Verbatim

Q7aShould competence of nurses be demonstrated on a regular basis to maintain nursing license?

    i.   Yes
    ii.   No-
    iii.   Refused
    iv.   Not Sure/Don't Know
    v.   Why do you say that? Gather verbatim

7b. If yes what do you think is the best way(s)- verbatim

Q8. Should a nursing license be good for life?

    i.   Yes
    ii.   No
    iii.   Refused
    iv.   Not Sure/Don't Know
    v.   Why do you say that? Gather verbatim

Demographics

We now have just a few final questions to ask you. These questions will **ONLY BE** used to help us analyze the results. Please be assured that your responses will be kept strictly confidential.

Gender: **BY OBSERVATION**

D1.   Male
          Female

D2. Into which of the following categories does your age fall?

INTERVIEWER NOTE: READ CHOICES 1 TO 4.

      i.   18 – 34
     ii.   35 – 54
   iii.   55 – 69
   iv.   70 years of age or older
     v.   Refused

D3a. Is your total household income $50,000 per year or more?

      i.   Yes
     ii.   No
   iii.   Refused
   iv.   Don't' Know

D3b. Is your household income $75,000 per year or more?

      i.   Yes
     ii.   No
   iii.   Refused
   iv.   Don't' Know

D3c. Is your household income $100,000 per year or more?

      i.   Yes
     ii.   No
   iii.   Refused
   iv.   Don't' Know

D3d. Is your household income $25,000 per year or more?

      i.   Yes
     ii.   No
    iii.   Refused
    iv.   Don't' Know

D4. What is the highest level of education you have completed? **[READ OPTIONS 1 THRU 6]**

      i.   Less than high school
     ii.   Graduated high school
    iii.   Some trade/technical college
    iv.   Graduated trade/technical college
     v.   Some university
    vi.   Graduated university
   vii.   Refused

THANK YOU VERY MUCH FOR YOUR TIME!
HAVE A NICE DAY/EVENING

Appendix B Budget

Budget Item	Budget Amount
Personnel/Contracting	
Cost of 2016 Public Survey which includes analysis of the data paid to MQO Research	In kind contribution $14,777.57from CRNNS
Cost of additional 5 questions in 2016 related to the IRE project which includes analysis of the data paid to MQO Research	$2,630
Research Ethics Board Review by the Nova Scotia Health Authority (NSHA)	In kind contribution from NSHA
Supplies and Materials	
Literature Search in 2014 ($25.00) with article retrieval($10.00/per article) from Dalhousie University	In kind from CRNNS $175.00
Literature Search in 2015($25.00) with article retrieval($10.00/per article) from Dalhousie University	In kind from CRNNS $45.00
Literature Search in 2017($25.00) with article retrieval($10.00/per article) from Dalhousie University	$55.00
Poster printing for final	$315.00
Total	$17,997.57 Amount requested from NCSBN $3,000.00