NURSING EDUCATION PLANNING COUNCIL – FINAL REPORT SUBMITTED JULY 5TH, 2019

Province of British Columbia - Ministry of Health

NURSING EDUCATION PLANNING COUNCIL

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Acknowledgement

The Nursing Education Planning Council gratefully acknowledges the traditional, ancestral, and unceded territory of the Coast Salish people where our council gathered on numerous occasions to complete this important work.

Executive Summary

The following report outlines a new, transformative nursing practice education and transition model for undergraduate registered nurse (RN) education in British Columbia (BC). The model is supported by collaborative governance and excellence in a culture of learning across the academic and practice settings.

Background and Context

In 2012, the Canadian Nurses Association (CNA) National Expert Commission challenged nurse leaders to "work collaboratively to reach consensus on the scientific knowledge, education, competencies and skills demanded of effective 21st century registered nurses".[1] Other Canadian nurse leaders echoed the need to, "Develop practice learning options in partnership with the service sector to bridge new nurses from a solid generalist education to a specialized, continually learning workforce". [2] Recently, the World Health Organization (WHO) and their partners presented a report that suggests, "health workforce investments coupled with the right policy action could unleash enormous socioeconomic gains in quality education, gender equality, decent work, inclusive economic growth, and health and well-being". [3]

In June of 2018, under the leadership of the Associate Deputy Minister, Clinical Leadership, within the Ministry of Health (Ministry), the Nursing Policy Secretariat (NPS) launched a review to identify changes required to modernize and strengthen the *efficiency, effectiveness* and sustainability of RNs' undergraduate education and newly graduate nurses (NGNs) *transition* to professional practice. The Nursing Education Planning Council (NEPC) was formed with representation from health authorities, post secondary institutes, unions, regulatory bodies, and public members. The Council 's mandate was to review the current nursing (RN) education program, transition to professional practice and the sustainment of nursing faculty to serve the needs of future *population health* and care delivery.

*"**Together**, we are building a new transformative practice education and transition model for British Columbia."*

Note: Throughout the report all *italicized* words are defined in Appendix 1 Definitions of Terms.

Executive Summary: Key Messages

Over the past 12 months, the NEPC reviewed evidence, met with partners and looked at health care industry's best practices. The following key messages permeated the conversations:

In British Columbia there is a good rapport between education and service, but there is no formal governance in place needed for full collaboration. A governance system across practice and academia will be required to realize the transformation.

In British Columbia there is limited province-wide data on nursing workforce migration patterns to fully inform forecasting and priority decision-making. A provincial database will be essential and must include accurate statistics on students, NGNs, nurses, *nursing faculty* and *nurse educators* across the province.

In Canada, nurses graduate with a generalist degree, but increasingly employers require them to be able to practice in highly specialized clinical settings. Under current circumstances, this is an unrealistic expectation for most NGNs.

It is estimated that over 44% of licensed registered nurses work in practice areas that require post-graduate preparation, e.g. peri-operative or critical care. This is costly to the health system and may not be sustainable.

In Canada, there are alarming statistics regarding NGNs exiting the profession. 33-61% of NGNs change their place of employment or leave the nursing profession within the first two years, 45.5% express uncertainty about their decision to remain in practice, and a startling 25% claim they would actively discourage someone from going into nursing. Further, it is estimated that 13% of new graduate nurses intend to leave the nursing profession due to lack of support in the workplace and undesirable work conditions.[4]

In British Columbia there is competing demands for clinical placements in service settings. This problem is common across Canada and globally. Clinical areas experience pressure to support student placement opportunities, at times beyond what is feasible to manage; and, academic institutions experience pressure to find suitable placements for their students that match appropriate clinical placement opportunities with their learning needs in care settings across the continuum.

"It is estimated that over 44% of licensed registered nurses work in practice areas that require post-graduate preparation such as peri-operative or critical care."

Executive Summary: Key Messages Cont.

The availability of spaces is further affected by broader, emerging practice changes, such as increases in outpatient surgery and shorter stays for inpatient services. Employers and educators, including those located in areas that are geographically remote, would like to collaborate in the planning and implementation of both traditional placements and finding unique clinical experiences for students.

Many BC schools of nursing have undergone significant curriculum reviews; a complex, costly and time-consuming endeavour. Most faculty continue to make ongoing program modifications to keep current. It is not feasible to expect faculty to make rapid, major changes to curricula without time to evaluate the effectiveness of the change already made.

Nursing practice and education leaders have recognized that we are in a time of unprecedented change and practice settings are facing significant transformation to meet the needs of the population, and at the same time implement large-scale changes, i.e. introduction of electronic health records. There is room for different, stronger and more energized partnerships between education and service that could fuel effectiveness across the system.

The challenges in rural and remote areas of BC are unique and require additional engagement and partnership to ensure plausibility of NEPC's recommendations. It is important to acknowledge, learn from and partner with Indigenous nurses and First Nations Communities to further enhance this transformative nursing practice education and transition model embracing traditional ways of knowing and ensuring cultural safety and humility is hardwired within the system of health care in BC.

There is a requirement to ensure all Health Authority partners, including First Nations Health Authority in its unique governance structure, are supported equitably to optimize the recommendations put forth in this model.

"Nursing practice and education leaders have recognized that we are in a time of unprecedented change and practice settings are facing significant transformation to meet the needs of the population, and at the same time implement large-scale changes, i.e. introduction of electronic health records."

Executive Summary: A Call to Action

To address these opportunities and challenges the NEPC set forward a course of action. Below is a summary of the work to date.

From June – September 2018, the council formed and confirmed their terms of reference, conducted a current state analysis and developed the future state framework. The framework consisted of establishing three work streams; practice education model, new graduate transition and faculty/educator preparation and faculty sustainment.

From October 2018 – March 2019, a multi-step iterative process of drafting, consulting, and creating high level recommendations occurred. Each workstream completed a comprehensive literature review and synthesis and engaged with key informants in BC and across the country. The work groups authenticated the findings at a validation session held on March 7th, 2019. See Appendix 2 Evidence and Key Informants.

From April 2019 – June 2019, the council began the careful process of integrating the work stream findings into a final report, following an intensive one-day, face-to-face meeting on May 2nd, 2019.

Collectively, through forthright discussions, reflection and examination of the best evidence available, the council presents the following recommendations:

Timelines

June, 2018	*Establish Council Terms of reference*
July, 2018	*Current state review*
Aug, 2018	*Future state framework Formulate plan*
Sept, 2018	*Establish work groups*
Winter 2019	*Key informants Focus groups Analysis*
Feb, 2019	*Work groups present draft recommendations to NEPC*
March, 2019	*Validation session Finalize Recommendations*
Spring, 2019	*Draft report for Planning Board*
July, 2019	*Submit NEPC recommendations to Planning Board.*

Executive Summary: Recommendations

1. Adopt a proposed new **BSN practice education and transition model** that fosters a culture of learning and is responsive to a sustainable health and education system and engaged workforce. See Figure 1.

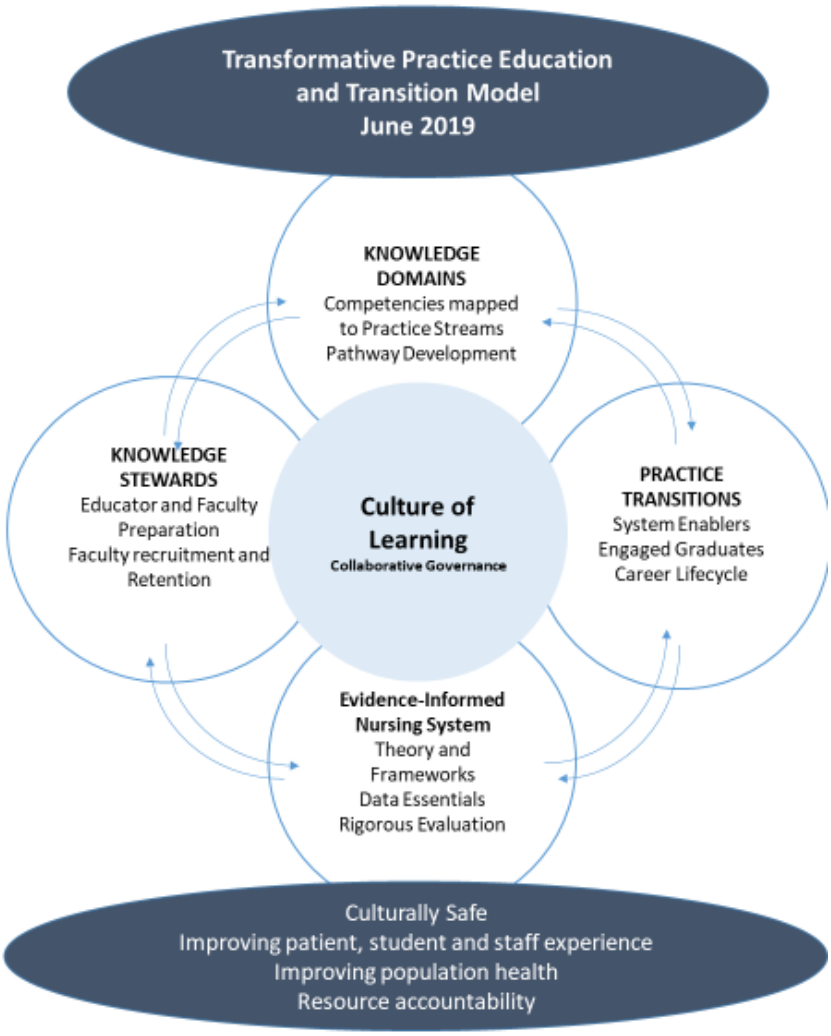


Figure 1 Transformative Practice Education and Transition Model

2. Establish collaborative governance oversight including key partners, i.e. education, practice, union and regulator to identify and articulate *knowledge domains* as well as support the design and implementation of pathways for learning (theory and practice education) for upper level undergraduate nursing education as appropriate.

"The model fosters strong cultures of learning and is responsive to a sustainable health and education system and engaged workforce."

3. Create a sustainable framework that will support the successful transition of end of undergraduate program practicum up to 12 months post hire of NGNs into complex professional practice environments which utilizes a leveled trajectory for *knowledge acquisition*. Key aspects of the program to include supernumerary time, evidence-based transition theory, dedicated roles for support and clinical alignment.
4. Prepare faculty and educators to act as knowledge stewards to support and sustain excellent cultures of learning across practice and academic system including simulation and learning technology. Key aspects of the program to include standardized provincial career pathways, continuing professional development opportunities (including clinical time to maintain competency in practice), newly created *hybrid roles* across sectors that work collaboratively with newly created *transition facilitators* positions.
5. Activate a robust data strategy to inform priority recommendations and track progress on targets including data on students, NGN, nurses, faculty and educators.
6. Establish a detailed implementation strategy with initial focus on priority areas of practice aligned to strategic workforce priority planning needs. Enact a phased approach and include diverse areas to study impact.
7. Create and implement a rigorous evaluation framework for the development of knowledge domains, a learning culture, educational pathways, and new graduate transition support model.
8. Establish a detailed implementation strategy to mitigate nursing faculty shortage.

"The Council believes that the eight recommendations should be endorsed in their entirety and recommended next steps for implementation should be actioned."

Executive Summary: A Vision for the Future

The following vision demonstrates the potential if NEPC's recommendations are implemented in their entirety:

The *faculty fellowship program* and *pay equity agreement* has helped to recruit younger nurses into faculty career tracks. Through this incentive program several nurses have now attained their MSN or PHD. In addition, the part time/flexible faculty positions have encouraged some senior faculty members to continue working beyond retirement years and take on unique opportunities. They are mentoring and sharing their knowledge with newer members of faculty.

The *Intelligence Unit* is closely tracking nursing workforce migration patterns and trends across the province. The hiring of a *database specialist* has been positive in seeing where we can leverage current systems such as HSPnet and CASN data and build new systems with minimum data sets to align with international efforts in extracting the necessary data for both provincial and global forecasting.

The results from 'proof of concept' evaluation in the first knowledge domain pathways has been positive. Domains of knowledge in other areas (i.e. emergency nursing or mental health) have now been mapped to competencies according to foundational, in-depth and advanced knowledge by the *advanced practice nurses* in each domain. The competencies underpin strong online curricula for theory that have been developed by *curriculum specialists* partnering with *learning technology*. Upper level nursing undergraduate students can now enroll in these electives.

Health authority managers in partnership with *hybrid faculty-educator role* are finding students practice placements in their final term and potential regular employment upon graduation. The system in place for matching student to forecasted vacancies has worked well and students are pleased with prospects of consistent work after graduation in the same unit as their final practicum. The intended learning outcomes for final practicum and transition program are clear and built upon the CASN framework and supported by the *transition facilitators*.

The creation of a *center of simulation excellence* for the province and hiring of a *simulation team* has proven effective as a method to assist nurses in reaching advanced competencies in knowledge domain in the workplace setting. The simulation team has provided numerous interprofessional simulations to build advanced competencies in knowledge domain. Evaluations show this has positively impacted *team-based care* and the NGNs 2-year attrition rate.

Note: Future roles or systems that may be created to realize the transformation are italicised above.

"The work over the next year is to create a detailed plan to realize this vision."

Nursing Education Planning Council Report

Acknowledgements

NEPC Membership

We extend our gratitude to the NEPC membership who gave their time and expertise to engage, work diligently, and care deeply about the future of nursing in the province and the care they provide to patients, families and communities.

Validation Session Participants

Many sources of information informed the NEPC report, including peer reviewed literature, industry leaders within BC as well as nationally and internationally, consultation with nurses at all levels across the province, and supportive, trusted colleagues who attended the validation session in March 2019. Thank you for sharing your insights and wisdom.

In addition, three pieces of work were relevant in informing sections of the NEPC report.

Purkis Report

In 2015, the Ministry of Health hired an external contractor to conduct a review of current challenges faced by educators and health system leaders in meeting current needs for nurses in specialty practice settings. Dr. Mary Ellen Purkis' draft report, "Preparing Registered Nurses for a Health System in Transformation: A BSN Curriculum Framework"[5] presents an action plan towards a Bachelor of Science in Nursing (BSN) curriculum that will improve alignment between graduate outcomes and health care system expectations.

Nursing Policy Secretariat: Priority Recommendations

In 2017, the NPS reviewed the current state of nursing practice in the province and the existing legislative and regulatory framework governing nursing including standards, limits, conditions, and other elements that guide nursing practice.

This review included consultations with over 1,700 nurses working in direct care roles across the province. The NPS also met with nursing partners including health authority representatives, nursing unions, associations,

"The NPS consulted with over 1700 nurses working in direct care roles across the province to help inform the 2018 Priority Recommendations Report."

nurse educators, Vice President's Academic, regulatory bodies, the provincial Seniors Advocate and the Ministry of Advanced Education, Skills and Training.[6]

The consultative process resulted in generating 13 themes and 50 recommendations that may be considered for provincial nursing policy. The NPS will lead the implementation of the recommendations, which will be used to inform a provincial nursing strategy on the future of nursing regulation, practice, and education. See Appendix 4 for a summary on education-related items contained within the NPS priority recommendations report and NEPC's response.

BC Provincial Health Workforce Strategy (2018 – 2021)

The British Columbia Provincial Health Workforce Strategy[7] reflects a comprehensive approach to addressing priority issues facing the health workforce. Through the Provincial Health Workforce Planning process, the Ministry has identified thirteen priority professions and four service areas with labour market challenges that are under consideration for provincial action. These have been analyzed within the context of the Ministry's strategic priority areas: Primary Care Services, Adults with Complex Conditions and/or Frailty, Surgical Services, and Mental Health and Substance Use.

"Registered nurses working in specialized areas of practice (such as peri-operative and critical care) have been identified as provincial priorities by the workforce planning process."

Registered nurses working in specialized areas of practice are considered one of the health care providers that have been identified as provincial priorities by the workforce planning process. Building on the data and information collected through the planning process, the Provincial Health Workforce Strategy was created to provide a set of provincial-level initiatives for the health workforce to ensure patient and population health needs can be met now and in the future. The workforce strategy will help inform the necessary provincial training programs required to serve the future needs of the population of BC.

We extend our appreciation for our colleagues' contributions. These reports provided valuable background for NEPC to begin work to re-imagine a new model for BSN education and practice that fosters a culture of learning and is responsive to a sustainable health and education system and engaged workforce.

Call for Action

The following is a direct message from a NGN. It has not been edited or altered in any way. It is a call for action that is difficult to disregard.

"I graduated with my BSN in 2017. For the first 6 months as a new graduate, I worked casual on the same unit I had precepted. It was a fairly supportive environment as I had a good rapport with the nursing staff. However, given I was casual with little to no seniority, I was only getting occasional shifts and rarely a few days in a row. I was a strong nursing student and feel I was well prepared by my program but the lack of consistency of work experience was negatively impacting the development of my practice. The lack of steady work meant my practice barely progressed beyond the level I had achieved by the end of my nursing program. Each shift was a terrifying experience. In order to access a temporary full time line, I decided to move to a new hospital but remained in the same context of practice. I was anxious about this change and lacked confidence in my abilities which was so disheartening as I so wanted to be successful in my practice.

The change to a new hospital proved to be a devastating experience for a few reasons. I was working with nurses that did not know me, and given I was a grad of 6 months they had expectations that my level of practice would be much higher than it was. I was also working with some nurses who had trained 20 years ago and were highly experienced. I felt I was being compared to when they were new graduates, but practice is very different now – acuity is much higher and practice is more complex with advancements in technology, and staffing shortages are now the new norm rather than the exception. I just didn't get the support and mentorship I needed and as a result felt completely incompetent and overwhelmed in my practice. I had worked so hard to become a nurse but felt I was a complete failure.

I decided to stick with it and now a year later I am still working on this unit but only just starting to feel competent in my practice. There have been many times that I have questioned my choice of profession and have considered leaving. In the last 5 months, I have witnessed 5 new graduates leave my unit. These graduates did not feel they received the support they needed and sought out other areas of practice or employment. Nursing students are high achievers and work hard for their success and so entering a profession where one dreads going to work and feels they just can't cope is very disheartening. So, I am not surprised that many new nurses either leave the profession or seek new employment opportunities. I hope I can stick it out as I know I am a good nurse and I really care about my patients."

"We cannot afford to lose a single newly graduated nurse. The hidden cost, lost opportunity and lengthy time to replace one RN is significant."

A Case for Change

Unfortunately, stories like these are not uncommon.

There is a need to create a sustainable model that will support the transition of students in their end of undergraduate program practicum to NGNs working in complex professional practice environments for up to the first 12 months of employment.

What if?

In our **current state**, nursing students are telling us, "It is very stressful as a new graduate, I contemplated leaving the profession".

In **future state**, nursing students will tell us, "I am graduating with the knowledge and skills to enter the challenging and changing practice environments. The internship made all the difference in setting me up for success in my career".

In **current state**, leaders are telling us, "Specialty education is costly, it is not sustainable".

In **future state**, practice leaders will tell us, "The academic-practice gap has improved, graduates are moving into new domains of practice with the theoretical and clinical preparation required to launch their careers, and with strong clinical supports available in their selected practice setting".

In **current state**, we are hearing, "We need to break down the walls between academia and practice, it needs to move to a collaborative partnership".

In **future state**, we will hear, "There has been a transformation. There is now a seamless system in place and the flow of decision-making, communication and hiring of joint roles has produced strong learning cultures across the nursing system. This has impacted patient care in a positive manner".

*"What if, **together**, we could create a new model for BSN practice and education that fosters a learning culture and is responsive to a sustainable health and education system and engaged workforce."*

Background and Context

NPEC met for the first time in June 2018. The group's initial priority focus was on addressing the education recommendations in the NPS Priority Recommendations report[8], particularly with regards to needed changes to the entry to practice bachelor of science in nursing (BSN) education program and transition to practice support, as well as alignment of entry-to-practice with health sector needs.

The following principles guided the work of NEPC:

- Collaborative governance across education and practice system.
- Value scholarship of teaching and learning and the developmental process of a *learner (student)-centred*
- Holding a system view across the continuum
- Evidence-informed, including consideration of national and international context and decision-making informed by data
- Shared responsibility for preparing for the work and actively engaging in and having/ bringing input into the work and sharing work back to respective constituency that we each represent
- Constructive conflicts – respectful dialogue/ acknowledge diverse perspectives and respectfully work through issues when there may be differing views
- Innovative and forward thinking – examine own assumptions/ biases to allow for exploration/ consideration of innovative ideas to transform the system

"Today's health system needs are complex and truly require all partners to collaborate and identify workable solutions. The NEPC has demonstrated how working together can bring about transformational change."

Joanne Maclaren,
Co-chair NEPC

The initial meetings of the group focused on establishing the current and desired future state of education, practice and regulation in BSN nursing and a full day meeting was held in September 2018 with several key subject matter experts to determine a focus and plan for the work ahead. Three work streams were established to advance priority needs:

- Clinical Practice Education (e.g. education model/ specialty nursing/ priority areas of practice);
- New Graduate Transition (e.g. supporting successful transition into complex professional practice environments); and
- Faculty/ Educator Development and Support (e.g. focus on faculty recruitment/ retention).

Summary of Key Activities

Each of the work streams noted above took an evidence-based approach to identifying opportunities and solutions to advance nursing education and practice towards the desired future state.

Each work stream conducted a literature review, jurisdictional review and held discussions with subject matter experts to inform their work and recommendations. Finally, a provincial consultation forum was held to present the draft recommendations for further discussion and input before finalizing.

As NEPC commenced this work, we saw examples of strong collaborations across the province, working to improve the system. We also heard of the challenges that practice and education leaders currently face. A brief description follows.

"Each work stream conducted a literature review, jurisdictional review and held discussions with subject matter experts to inform their work and recommendations."

Challenges Ahead

It is important to note: The challenges outlined below are not unique to British Columbia or even Canada. There is international interest in finding solutions to sustaining a nursing workforce. [9]

Registered Nurse Workforce

There are 54,795 practising nurses licensed in B.C.[10]

Registered Nurses	38,408
Licensed Practical Nurses	13,070
Registered Psychiatric Nurses	2,819
Nurse Practitioners	498

"44% of registered nurses work in areas that require specialty preparation. Nurses working in specialty areas of practice have been identified as one of the Ministry's top 13 priority professions."

To practice as a registered nurse (RN) in BC, the minimum educational requirement is a BSN degree (or equivalent). Many post-secondary institutions offer programs accredited by the Canadian Association of Schools of Nursing (CASN). See Appendix 3 for the BCCNP list of recognized programs. The BCCNP recognized BSN programs range from three to four years in length, except for shorter second-degree programs which are also recognized. Prerequisites and admission requirements range according to the post-secondary institution.

According to Canadian Institute for Health Information (CIHI), Canada's nursing workforce is experiencing its slowest growth in a decade. The CNA has estimated that by 2022 Canada could experience a shortage of 60,000 full-time equivalent registered nurses if the trend continues.[11] As such, it is imperative that the recruitment of nurses remain a high priority and attention must be focused on how we can best support and retain NGNs.

Increased Need for Specialty-trained Nurses

Current data from the CIHI[12] illustrates that 44% of registered nurses work in what have traditionally been described as "specialty" practice settings (e.g. emergency, intensive and critical care, perioperative etc.) and in the lower mainland region this number is thought to be closer to 50%.[13]

Specialty nursing practice can be described as practice that builds on a base of generalist preparation and focuses on a specific field of nursing practice. As such, nurses have been required to obtain additional post-basic education to be able to become employed to provide safe, competent care in these settings. Often health authorities assume the costs (salary and

tuition) for RNs to complete further education and gain competency in specialized areas of practice, and the need for specialty nurses is growing as practice settings gain complexity and acuity.[14]

Faculty Workforce Shortage

A 2017 survey of Canadian schools of nursing (83% response rate) conducted by the Canadian Association of the Schools of Nursing (CASN) showed an imminent shortage of qualified faculty. [15] In 2017 there were 9,123 RN faculty in schools of nursing (SONs) across Canada:

Permanent faculty*	2,349 (25.7%)
Full time contracts	944 (10.35%)
Part time contracts	5,830 (63.9%)

*21.6% of the permanent faculty are over 60 years of age and increasing numbers of faculty are retiring.

"Approximately 40% of current nursing faculty in Canada are 55 years or older."

In 2017, Canadian SONs reported 709 MN graduates and 64 PhD graduates. Of the 509 current students enrolled in PhD programs, 119 are already in current faculty positions; therefore, leaving only 390 PhD graduates available for replacing faculty. Schools are not able to fill current positions and the projection of needing to hire additional faculty is not feasible without a focused strategy. [16] In BC, the faculty shortage is also fueled by lack of salary equity across the sectors.

The challenges in nursing workforce planning are significant and costly. We are facing an unprecedented challenge in supplying enough nurses, especially in specialty practice settings and faculty in Schools of Nursing. With increases in labour shortages and an increased demand for specialized nursing skills, new graduate competency and retention is critical for quality patient care. Unfortunately, new graduates have significantly higher rates of turnover and this cohort incur the highest turnover costs, due to lost productivity. [17]

Collectively, we must monitor the trends closely and activate a robust data strategy to track and inform nursing workforce patterns. This must include accurate data on students, NGN, nurses, faculty and educators. The database should attempt to align with minimum data sets for workforce registry as recommended by the WHO to ensure Canada is aligning with international efforts in workforce sustainment. [18] A strong database will inform priority actions to mitigate the crisis.

Consensus from Global Nursing Leaders

Global leaders echo the call for educational reform in nursing practice and education. In 2010, two early reports surfaced and forewarned of a need for a radical transformation in nursing education: The Carnegie Foundation Report: Educating Nurses: A Call for Radical Transformation[19] and the Institute of Medicine's (IOM) Future of Nursing Report.[20] Although these reports were centered on the American context, both reports challenged nurse educators and practice leaders to embrace evidenced-informed curricula that is both flexible and responsive to students and practice setting needs. Benner outlines the need for radical transformation including curriculum revisions, student recruitment, entry to practice residency programs and organizational change in oversight. [21] Further, the Institute of Medicine stated that, "Nursing education must be fundamentally improved both before and after nurses receive their licenses". [22]

In 2012, CNA also challenged nurse leaders to "work collaboratively to reach consensus on the scientific knowledge, education, competencies and skills demanded of effective 21st century registered nurses". [23] Other Canadian nurse leaders echoed the need to, "Develop practice learning options in partnership with the service sector to bridge new nurses from a solid generalist education to a specialized, continually learning workforce".[24]

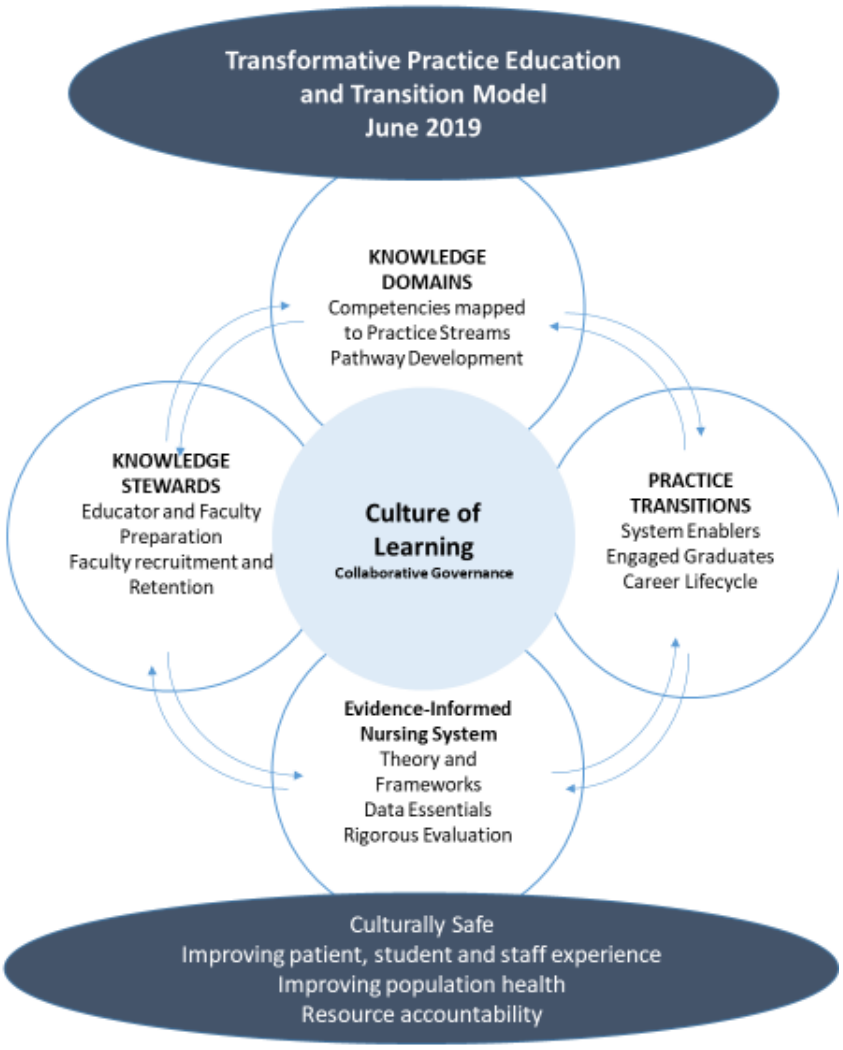
Collectively, the nurse leaders are emphasizing, "innovation in nursing curricula and transition to practice is needed to prepare nurses to meet the challenges of a diverse population, to serve as clinical leaders, to deliver safe, high quality patient care, and to function at the top of their nursing practice".[25]

The call for reform across the system is clear and there is consensus across global nursing leaders. In BC, many schools of nursing and practice settings have acted on this call and have completed or are undergoing significant curriculum revisions. Many practice settings have launched transition programs to better support NGNs. We can build on work done, to collaborate and create a new model for BSN practice and education that fosters a learning culture and is responsive to a sustainable health and education system and engaged workforce.

"Across the system many SONs and practice settings have acted on this call and are undergoing major curricula revisions or have launched transition programs to better support NGNs."

Moving Forward in British Columbia

In September 2018, NEPC formed three work streams to conduct focused analysis and make recommendations to transform nursing education in BC. The result is a proposed integrated transformative practice education and transition model. A brief description of each component of the model follows:



"At the center of proposed model is the focus on strengthening and sustaining strong cultures of learning across the system. A collaborative governance structure will be an essential component for success."

Culture of Learning

At the center of NEPC's proposed model is the focus on strengthening and sustaining a strong culture of learning across practice and academic settings. It is critical that cultures of learning pervade and are supported in every clinical practice setting across the province for the benefit of students, staff, providers and ultimately patient care.

There is substantial evidence to suggest best practices should include: a focus on the quality of student experience in practice settings[26], use of simulation in conjunction with clinical experience to build nurses' competencies.[27] [28] [29] [30] [31] and introduction of flipped classrooms design.[32] In rural and remote regions there is the need to capitalize on and strengthen the current tele-education, tele-simulation, and quality online learning assets to provide access to education 24/7.

Other emerging *pedagogies* are being trialled in health profession educational contexts with some early promising results.[33] Such pedagogies include the use of virtual reality, augmented reality or 3D immersive learning environments where students can practice responding to emerging scenarios; establishing communities of practice or partake in virtual student placement in emerging fields of practice.

These technologies are being trialled for nurses in clinical placements in primary care in the United Kingdom[34] , long-term care in BC[35] and Peer-Assisted Learning (PAL) to encourage collaborative learning and optimize placement capacity. [36] Building any professional development program or building new curricula must include due diligence to the technological trends of the next decade.[37]

It is important to acknowledge that BC has some foundational pieces in place to support practice education. BC utilizes an online platform that enables us to coordinate and monitor student practice education - Health Sciences Placement Network (HSPnet). HSPnet could be leveraged to better utilize the collection of data on student practice activities for all academic institutions and health organizations. Appropriate presentation and distribution of the data could facilitate deeper collaboration and planning between health and education sectors.

In addition, as suggested in the PLACES study, a robust evaluation framework to support the monitoring of practice activity trends, themes, issues, opportunities and responsiveness would help to ensure that students have a positive experience that strongly contributes to their preparation to enter and grow within the profession.[38]

"Settings with more clinical nurse educator time had higher practice education readiness scores."

PLACES Final Report, 2015

Knowledge Domains

The challenge of preparing nurses for nursing practice in complex acute clinical settings has been on the agendas of BC nurses and governments for decades. Since 2003, the issue of specialty practice and education in nursing has since been discussed in many different venues and is currently on the agenda of the Ministry's NPS. Strategies put in place based on this discourse of educating nurses for "specialty areas" have not resolved the issues and therefore warrant careful analysis. There are various perspectives on how "specialization", "specialty practice" and "specialty education" in nursing are understood.

Most recently, the CNA National Nursing Network defined specialty nursing practice as, "a branch of nursing that concentrates on a specific area of clinical nursing in which the focus of practice may be related to age (such as gerontology), an issue (such as infection prevention and control), a disease (such as cancer) or a practice setting (such as community health)".[39] Based on this definition, all domains of nursing practice constitute focused areas of knowledge and skill. The CASN National Nursing Education Framework provides the organizing structure for mapping the continuum of foundational – in-depth – advanced levels of knowledge associated with all domains of practice. [40]

Through months of deliberation, consultation and literature review, the NEPC has worked toward a more in depth understanding of the preparation of nurses and the underlying policy problem of sustaining a nursing workforce in practice settings designated as "specialty". We define the policy problem and underlying strategy as follows:

> *The absence of a comprehensive strategy to support Registered Nurses (and potentially other nurses) in the development of competencies (knowledge, skills, attitudes) to practice in many practice domains including those traditionally identified as "specialty areas" has led to hard to fill vacancies and low retention rates. Therefore, a comprehensive strategy is needed to go beyond what has been exclusively the domain of continuing education approaches or "specialty education". Essential to addressing current and future healthcare needs is the immediate implementation of comprehensive transition models and pathways for graduates and other nurses transitioning to new practice settings, populations or domains*.

***Knowledge domains** are defined as an area of nursing practice with specific foundational, in-depth, and advanced knowledge required to competently care for the intended patient population.*

Clinical Practice Workstream

Deliverable:

Identify strategies to strengthen clinical practice education and new clinical learning models.

Membership:

Susan Duncan, Chair, UVIC
Christie Diamond, PHSA
Heather Mak, VCH
Joanne Maclaren, MoH
Debbie McDougall, FNHA
Kathy Scarborough, FH
Andrea Starck, NH
Leslie Sundby, VIU

Further, current discourse that refers to specialty practice and education must be avoided and reframed in policy definitions and strategy in order to more accurately map the acquisition of knowledge and competencies to identified practice domains. Avoiding reference to some practice domains as "specialty" is essential to addressing the more in-depth and authentic factors leading to nursing workforce preparation and retention and to ensure that policy solutions are addressing both current and future states of practice realities.

While there have been attempts to understand and work with the various perspectives on what constitutes a "specialty" and preparation for practice, there continues to be lack of a clear definition of the policy problem and solution. Practice leaders' express concerns that nurses are not well prepared to begin practice or transition into "specialty areas" and therefore require more education. Educators refer to the RN entry level competencies as foundational with a trajectory to the more complex. As the nursing policy community in BC engages in discussion and grapples with diverse perspectives, it is important to come to a shared commitment to definition and strategy.

"As the nursing policy community in BC engages in discussion and grapples with diverse perspectives, it is important to come to a shared commitment to definition and strategy."

There are Canadian provinces who have started this work although none have proposed a transformative comprehensive practice education and transition model. In June of 2013, the Council of Ontario Universities submitted "Integrating Clinical Education into Ontario's Changing Health Care System[41]" and in 2015 Nova Scotia introduced a blueprint for education review.[42] Both models examined changes in undergraduate curriculum to facilitate the transition to professional practice. Nova Scotia, for example, has introduced Nursing Certificate Options to explore an area of nursing in-depth, aligned to service sector demands in various targeted areas of nursing practice such as oncology, public health, mental health, and acute/critical care.

Practice Transitions

Newly graduated nurses (NGN) struggle to find a balance between the standards and best practices taught in undergraduate education and the challenges and realities of the contemporary workplace. Failure to adequately resolve this struggle is playing out in alarming statistics in western Canada: 33-61% of NGNs change their place of employment or leave the nursing profession within the first two years, 45.5% express uncertainty about their decision to remain in practice, and a startling 25% claim they would actively discourage someone from going into nursing. Further, it is estimated that 13% of new graduate nurses intend to leave the nursing profession due to lack of support in the workplace and undesirable work conditions.[43] Canadian nurse leaders fear with the increasing complexity of professional practice environments, the situation may become far worse.

This situation threatens the retention of a vibrant nursing workforce as we face a peak in the exit of baby boomers. This further exacerbates the existing nursing human resource challenge in Canada that is being fueled by historical and enduring collective social workplace attitudes that perpetuate a 'sink or swim' culture of transition. This dynamic creates opportunities for bullying and other forms of horizontal aggression, which the evidence suggests can be mitigated by formal transition programs. A recent synthesis of evidence related to international transition programs over the past 20 years revealed a continuing trend of suboptimal NGN transition support programming. [44]

From a provincial perspective, partners have been active in efforts to provide transition support for NGNs. Yet, the design, implementation, and evaluation of policies and programs in BC have been fragmented and do not recognize the need for a gradual progression of roles, responsibilities, relationships, knowledge and skills over the initial year of professional practice. Recently held focus groups with health authority NGN program leads, representative unit managers and NGNs, echoed that the demand for NGNs to work independently immediately post graduation undermines the current support and participation in programming.

Further, a lack of standardized and coordinated provincial policy may perpetuate inconsistent or ineffective guidance to health authority partners as they work to prepare, orientate, integrate, transition and stabilize the newest members of the nursing profession.

***Practice transitions** are defined as the shift between being a student in academic setting to being a NGN in professional practice. The biggest challenge is reconstructing a professional sense of self that fuses the ideals of their education with the realities of their practice."*
Dr. Judy Boychuk Duchscher

New Graduate Transition Workstream

Deliverable:

Identify a sustainable framework that will support the successful transition from student to new graduate.

Membership

Julie Fraser (Chair), FH

Judy Boychuk-Duchscher, TRU

Cheryl Isaac, BCIT

Hannah MacDonald, UFV

Sharon Parkes, Island Health

Ben Aubrey, BSN Student

Dr. Boychuk Duchscher documented the stages of transition and transition shock.[45] The first 12 months of transition, the journey is by no means linear, prescriptive nor always strictly progressive. It is evolutionary and ultimately transformative. There is a call for greater awareness of the stages of transition and how nursing professional development and others can assist the NGN to make the transition to professional practice by applying transition theory and staged *knowledge acquisition*.

Benner agreed and recommended, "a coached immersion experience and to foster situated learning over time. Repeated practice through clinical experiences and a positive support system facilitates sound clinical judgment development". [46] Newly graduated nurses need to allow thinking to develop in a very strategic way, and not short circuit pattern recognition development.

The literature suggests the best practices for a transition programs include: a *nurse residency/internship* with simulation for skill development, formal training for *preceptorship*, formal support system 24/7, connection with peers and organizations ensuring clinical units have healthy work environments[47] and *mentorship* to solidify professional identify. [4849]

A systematic review of the effectiveness of these strategies and interventions to improve the transition from student to NGN suggests the overall impact of support strategies such as preceptorship, mentorship, internship and externship programs do collectively lead to improvements in confidence, *competence*, job satisfaction, critical thinking and reduction in stress and anxiety for the NGN. [50] There is no evidence at the current time to suggest one intervention is preferred over another.

Note: In 2019, Edwards registered the intent with Joanna Briggs Institute (JBI) to update the 2011 review and include a focus on cost/benefit analysis, externships with simulation and long-term retention rates. [51] NEPC recommends following this work closely to determine if select interventions are deemed more effective over others.

"Overall impact of support strategies such as preceptorship, mentorship, internship and externship programs do collectively lead to improvements in confidence, competence, job satisfaction, critical thinking and reduction in stress and anxiety for the NGN."

In BC, the difficulty of transitioning from student to NGN is fueled by regulatory limits to scope of practice in the student role. One integrative review recommends nurse residency/internship programs to help bridge the transition to professional practice. Residency/internship is defined as a program to transition the novice nurse to full practice by providing supplemental education/support within the context of the workplace. [52] Residency programs have shown to improve nurse satisfaction two-fold and decrease turnover by 55%. To date, there is no clear body of evidence to recommend optimal length of internship.[53]

The American Academy of Nursing (AAN) has issued a policy brief citing the substantial evidence that all NGNs should be offered a residency program as part of their transition to practice.[54]

"Residency programs have shown to improve nurse satisfaction two-fold and decrease turnover by 55%."

Recently, CASN has supported a nursing residency program project proposal. [55] The goal of the pilot is to develop and implement a residency program for nurses entering practice in collaboration with employers of new graduates.

The first pilot includes a 12-month residency program targets: acute care of adults and older adults in hospital settings and critical care of adults and older adults in hospital setting. The theoretical component of the residency would be developed by CASN through online learning modules, the health care institute would be responsible for the delivery of the simulation learning opportunities and for the orientation and preceptorship of each nurse resident. NEPC recommends following this work closely as it unfolds as a potential future state model for new graduate residency program in BC. Evidence is mounting to strongly recommend nurse residency programs become a condition of employment for all NGNs. [56]

Another strong theme that emerged from focus groups was the need for competencies in the role of charge nurse. NEPC strongly recommends adoption of a 24/7 support system if NGNs are acting in charge nurse roles in first year of practice.

It must be acknowledged that there are other real barriers to supporting transition programs including: deficiencies in the organizational structure, management, personal characteristics of colleagues and cultural barriers.[57]

In summary, NEPC strongly recommends development of a BC New Graduate Transition Model framed upon the following theory: Duchscher's Stages of Transition and Transition Shock, Benner's Novice to Expert Skill Acquisition, and Kramer's complexity/synchronicity/multiplicity model. Key aspects of the program must include supernumerary time, evidence-based transition theory, dedicated support roles including the facilitator transition role and excellent preceptorship and mentorship programs for up to 12 months of a NGN's first year of practice.

The upfront investment in one of our greatest resources, nurses, must be made consistently by all academic and workplace settings across the province. There is strong evidence to support the costs of these programs and interventions are easily recovered by decreasing NGNs attrition rates. High rates of turnover have resulted in a perceived "culture of turnover," an acceptance and resignation that the new nurse is replaceable, which ultimately leads to more turnover.[58]

Researchers are beginning to uncover the economic impact of nurse turnover. Applying the Nursing Turnover Cost Calculation Methodology, it is estimated that in Canada it costs $26,652 US funds per nurse (cost calculation methodology utilizes US currency). To put that in context, in 2017, 1466 registered nurses graduated in BC. [59] Using a conservative turnover rate of 20% for NGNs in their first year of practice, the cost to health care system would be close to 9 million Canadian dollars. [60] To project these costs to the entire nursing workforce is staggering. In 2020, when the new 'working short' premium comes into effect for unionized nurses, it is expected to cost the province an additional $100 million if employers cannot hire and retain staff.[61] NEPC strongly recommends that data on turnover and attrition inform a full cost-benefit analysis (CBA) once recommendations are approved.

New graduate transition programs are a financially viable solution to improve retention and competency. The transition program will allow NGNs to increasingly gain sound clinical judgement and decision-making, promote resilience, skill acquisition, and professional socialization within complex and chaotic practice environments.

"In 2020, when the new 'working short' premium comes into effect for unionized nurses, it is expected to cost the province an additional $100 million if employers cannot hire and retain staff."

Faculty and Educator Preparation

To act as ambassadors for the transformative practice education model, NEPC recognizes that both faculty and educators will be strong supports to champion the transformation. Educator is defined as the teacher who oversees staff in the practice setting and is primarily employed by the health authorities and faculty is defined as the teacher who oversees students in the practice setting and is primarily employed by the academic institutes. Along with the interprofessional team, the educators and faculty roles are essential to sustaining strong cultures of learning across the system and an engaged workforce.

NEPC believes that in addition to the valued roles of faculty and educator, there is a need for newly created hybrid faculty-educator role. This role would collaborate with the transition facilitator role (supporting NGNs) and with advanced practice nurses in defined knowledge domains. Collectively, the support roles would be accountable for staff and student support across service and academic settings and transcend the boundaries that currently exist today.

The NEPC recommends a robust strategy to prepare and support faculty and educators to work within the newly defined domains of practice, and to utilize evidenced-informed teaching and learning practices. Outstanding professional development programs for educators and faculty exist today and can be used as exemplars, but there is a lack of standardization and access across the province.

Preparation of our essential pool of teachers require a competency-based curriculum for professional development, a mentorship program to support roles in first year of practice and strong onboarding/orientation programs to build relationships with the health authority. Competencies must include skills in simulation, tele-sim, tele-health, virtual care and modern workplace learning.

NEPC recommends these programs be jointly developed and supported by academia and practice settings. The focus groups for faculty and educators validated this recommendation and identified other challenges and opportunities.

Faculty and Educator Workstream

Deliverable:

Build sustainment strategy for recruitment/development of clinical educators/faculty to support practice education model.

Membership

Shelley Fraser (Chair), NPS

Joyce Black, BCCNP

Pam Cawley, Douglas

Allison Dennis, Pt Partner

Elizabeth Saewyc, UBC

Heather Straight, BCNU

Barb Langlois, VCH

Focus Groups

Over the winter of 2018/19 faculty and educator focus groups were conducted. The engagement and conversations were inspiring. A total of 48 faculty and 26 educators took part in both rural and urban sites across the province. We heard from educators and faculty on the opportunities and challenges they face in their roles. [62]

Educator emerging themes:

- For educators in rural settings a strong theme of "isolation" emerged.[63] Isolation included lack of access to continuing profession development programs and isolation from other team members.
- Educators spoke of being pulled to other activities such as "filling sick calls" or "administrative work", and not being available to staff on the units. They also spoke about turnover on units and a constant stream of new nurses to orientate.
- Educators spoke of their role not being well understood. Their unique skill set in teaching and learning not consistently recognized as essential to cultures of learning.
- The implementation of large-scale practice changes was increasingly taking them away from mentoring in the clinical unit to developing policy or building curricula. The pace of change was "exhausting".
- Educators highlighted the need to review educator support across the province for equity. They spoke of areas (and disciplines) with no access to educator support.

"For educators in rural settings a strong theme of "isolation" emerged. Isolation included lack of access to continuing profession development programs and isolation from other team members."

Faculty emerging themes:

- Faculty care deeply for students' experience and their desire to support them in practice settings.
- Strong relationships between faculty and the practice setting is key to a positive student experience.
- The transition to practice is very difficult for NGNs.
- Equity in compensation across sectors must be addressed.
- Employers have a requirement of 400 hours/year to maintain casual status in health authorities. This is difficult to maintain while working FT as faculty. *

**Note: We must work collaboratively with the union to ensure members understand that the obligation of 400 hours per year is at the discretion of the employer. If the staff have a bona fide reason, then the 400 hours requirement would not apply.*

Faculty Shortages

Faculty, defined as teachers in clinical setting who are primarily employed by academia, expressed concern for the future and the ability to find qualified faculty to teach students and provide educational leadership in academic and practice settings. This is consistent across the nation and globally. Addressing the looming shortage of faculty underpins the ability to execute the proposed practice education model.

One author echoed concerns that, "in addition to a global shortage of nurses, there is a shortage of academically qualified faculty available to teach in schools of nursing". [64] The author sites rationale that were consistent with some of the focus group themes: an aging faculty, a reduced younger hiring pool, decreased satisfaction with the faculty role, and faculty salaries not being competitive with positions outside of academia.

Wyte and Needleman suggested the need to attract younger faculty through fellowship programs and possibly access to higher education as an incentive to stay in faculty career track. [65]

Programs to retain faculty in years before retirement were also emphasized including creation of part time positions and strong professional development supports for faculty such as online resources for faculty development and teacher education in graduate nursing schools. [66]

The Nursing Education Council of British Columbia (NECBC) highlighted the need to address the faculty shortage in their 2019 Faculty Shortage Policy Brief. [67] This brief echoed the previous recommendations including addressing the salary gap; innovative recruitment/retention strategies, increase capacity in PhD and MN programs with incentives for faculty to access to higher education, and collaborative models for dual appointments. NEPC agrees with NECBC and recommends actioning these items in an expedited manner to avoid crisis.

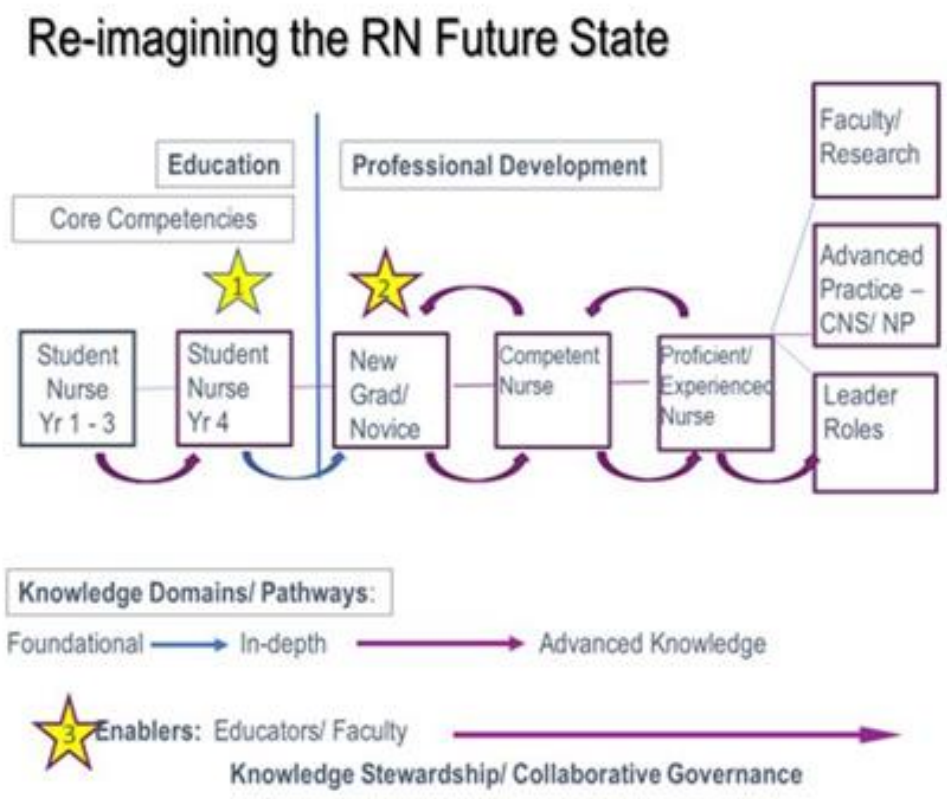
It is important to note: Educators, defined as teachers of staff in the clinical setting who are primarily employed by the health authorities, do not appear to have the significant predicted shortages on the horizon. In fact, anecdotal reports suggest that vacancy rates are low. However, NEPC recommends creation of a database that includes educators across the province to monitor trends closely.

Emerging theme from rural educator focus group, 2019:

"Isolation in the role was a central theme, technology was suggested to mitigate educator's feelings of isolation in rural and remote practice settings."

Recommendations

A comprehensive set of recommendations have clearly emerged from this work of the NEPC for a proposed Nursing (BSN) Practice Education and Transition Model. This model frames nursing education within a philosophy of fostering a strong learning environment within and across the education and practice sectors. The NEPC clearly values and recognizes the necessity of a collaborative partnership to optimally prepare, retain, and support registered nurses through their career journey.



"NEPC values and recognizes the necessity of a collaborative partnership to optimally prepare, retain, and support registered nurses through their career journey."

Practice Education and Transition Model

Recommendations

1. Adopt proposed new **BSN practice education and transition model** that fosters a culture of learning and is responsive to a sustainable health and education system and engaged workforce.
2. Establish a collaborative governance structure including key partners i.e., education, practice, union and regulator to identify and articulate knowledge domains as well as support the design and implementation of pathways for learning (theory and practice education) for upper level undergraduate nursing education as appropriate.
3. Create a sustainable framework that will support the successful transition of end of undergraduate program practicum up to 12 months post hire of NGNs into complex professional practice environments which utilizes a leveled trajectory. Key aspects of the program to include supernumerary time, evidence-based transition theory, dedicated roles for support and clinical alignment.
4. Prepare faculty and educators to act as knowledge stewards to support and sustain excellent learning cultures across practice and academic settings including simulation and learning technology. Key aspects of the program to include standardized provincial career pathways, continuing professional development opportunities (including clinical time to maintain competency in practice), newly created hybrid roles across sectors that work collaboratively with transition facilitators.
5. Activate a robust data strategy to inform priority recommendations and track progress on targets including data on students, NGN, nurses, faculty and educators.
6. Establish a detailed implementation strategy with initial focus on priority areas of practice aligned to strategic workforce priority planning needs. Enforce a phased approach and include diverse areas to study impact.
7. Create and implement a rigorous evaluation framework for the development of knowledge domains, a learning culture, educational pathways, and new graduate transition support model.
8. Establish a detailed implementation strategy to mitigate nursing faculty shortage.

"In order to advance and propel nursing education and recruitment/ retention of nurses, the Council believes that these recommendations should be endorsed in their entirety and recommended next step for implementation should be actioned."

Next Steps for Implementation

Moving the new model from theory to reality will require a concerted, coordinated, and resourced province-wide effort. Next high-level steps are proposed here, based on the understanding that the complexity of the change will necessitate development of a more detailed plan in the coming months.

- Establish the pillars of (a) executive sponsorship, (b) communication, (c) change and project management frameworks for approved recommendations.
- Establish high-level principles and collaborative governance structure to build implementation strategy for approved recommendations.
- Establish a detailed plan and sequencing of work (including potential costing/ resources for both start-up and ongoing) to support implementation of approved recommendations.
- Determine necessary infrastructure (databases, learning assets) to support implementation of the model.
- Develop an evaluation strategy for approved recommendations.
- Provide regular progress reports to the Planning Board for Health and Medical Education.

"The complexity of the change will necessitate development of a more detailed plan over the coming months."

Summary

Together, we have developed a proposed new model for practice education and transition that fosters a culture of learning and is responsive to a sustainable health and education system and engaged workforce. The model puts our students, NGNs and the nurses who teach them in sharp focus and, together with patients and all health care providers, firmly at the centre of all our efforts.

New partnerships already have begun to emerge, and some activities recommended in the report are already underway. There is a strong commitment among nursing schools and the service sector to modernize the practice education environments, and to work together to build the structures and supports needed to help students make the transition from education to professional practice. It is only in the context of true collaboration that NEPC believes we can successfully attain our shared goals.

NEPC is committed to implementing the model and to carefully evaluating each change to ensure that the outcomes strengthen the students' academic experience, nursing practice, transition for student to practice and contribution to interprofessional collaborative practice in the workplace. NEPC also acknowledges that evidence on best practices continues to emerge. The Council strongly recommends monitoring trends to ensure research continues to inform all policy decisions.

Our next step is to create an implementation plan, including determining governance, communication, resources required, to launch the new direction forward.

"Our proposed new model for practice education and transition fosters a culture of learning and is responsive to a sustainable health and education system and engaged workforce."

Appendix 1 Definition of Terms

- **Competency** – a mechanism that supports health professionals in providing high-quality, safe care. The construct of nursing competency "attempts to capture the myriad of personal characteristics or attributes that underlie competent performance of a professional person." Competencies are holistic entities that are carried out within clinical contexts and are composed of multiple attributes including knowledge, psychomotor skills, and affective skills.[68]

- **Culturally safe**: Providing care that recognizes and respects the differences in each individual. Providers listen and learn in a way that maintains personal dignity and supports an authentic relationship of trust, respect, and teamwork to ensure people feel safe receiving health care. Culturally safe care supports access to health care services, improved health outcomes, and healthier working relationships.

- **Educator –** the teacher who oversees staff in the practice setting and is primarily employed by the health authorities.

- **Effectiveness**: Care that is known to achieve intended outcomes.

- **Efficiency**: Optimal use of resources to yield maximum benefits and results.

- **Faculty –** the teacher who oversee students in the practice settings but is primarily employed by the university or colleges.

- **Hybrid faculty–educator role –** newly created roles that report jointly to both academia and practice and oversee the supervision of staff and/or students in both settings.

- **Knowledge Acquisition** – a specific, intentional pathway to acquire the competencies needed to practice in foundational, in-depth and advanced practice knowledge domain.

- **Knowledge Domains** – defined area of nursing practice with specific foundational, in-depth and advanced knowledge require to competently care for the intended patient population.

- **Learner (student)**-centred – Teaching the focuses on the experience of the learners. The learner is at the forefront of the educational activity.[69]

- **Mentorship** – A relationship where another individual takes a special interest in helping another person develop into a successful professional[70]

- **New graduate transition -** the initial 12 months of transition from student to professional nurse It is not linear, prescriptive nor always strictly progressive, it is evolutionary and ultimately transformative[71]

- **Nursing internship/residency**- terms are used interchangeably to mean a program to transition the novice nurse to full practice by providing supplemental education and support within the context of the workplace.

- **Pedagogy** – the work of a teacher; the art and science of teaching; instructional methods and strategies.[72]

- **Person- and family-centred**: A way of thinking and doing things with patients, families and caregivers as equal partners in health care, rather than doing things to or for them. To be person- centred the health care culture needs to shift away from being disease-centred and provider/administrator focused. Person-centred care is an approach that puts the patient and their family at the centre of every decision and empowers them to be genuine partners in their care at the level of their choosing. This participation could be partnering with health care professionals, working with community organizations, or getting involved in meaningful efforts to design and improve care. Patients, families and caregivers become both participants and beneficiaries of a health system that responds to their needs, values and preferences in a respectful, empathetic and holistic way.

- **Population health:** an approach to health that aims to improve the health of the entire population and to reduce health inequities among population groups.

- **Preceptorship** – Preceptors are practitioners who support the learning experiences of students enrolled in a designated program of study with a post-secondary institute, for a defined period.

- **Quadruple Aim**: Framework developed by the Institute for Healthcare Improvement which optimizes health system performance with four dimensions: improving the patient experience of care (including quality and satisfaction); improving the health of populations; reducing the per capita costs of health care and improving the experience of providing care.

- **Quality care:** Quality care recognizes that every patient has a unique journey, that local context matters, and that everyone touched by the health system needs to collaborate to achieve high quality and sustainable health care for all. The seven dimensions of quality are Acceptability, Appropriate, Accessibility, Safety, Effectiveness, Equity, and Efficiency.

- **Team-based care**: Team-based care is fundamentally a person-centred approach to care that promotes patient voice, safety, and acceptability in care delivery, thereby creating better experiences for individuals, their families and caregivers, and providers in the health system. Teams will meet the care needs of individuals (across the life course) and the community population by providing access to quality health care services at sustainable per capita costs

- **Transition facilitator role** – a newly created role that works in practice setting to oversee all aspects of the New Grad Transition Program.

Appendix 2 Evidence and Key Informants

The following activities were conducted by each of the work streams: Comprehensive literature review, review of grey literature, jurisdictional review across Canada and International, key informants' interviews and focus groups. Below is a breakdown of activities per work stream.

1. The **Clinical Practice Model Work Stream** conducted scan/telephone interviews with Nova Scotia (Registered Nurse Education Review), Ontario (Integrating Clinical Education into Ontario's Changing Health care System) and Alberta (Provincial Education Framework). Information was also gleaned from the critical care pathway in Northern Health and emergency career pathway in Fraser Health.

   The policy recommendations from this work stream were socialized with:
   - Specialty Nursing Leaders in Health Authorities
   - Lower Mainland Nursing Clinical Education Steering Committee
   - Nursing Education Council of BC
   - First Nations Professional Practice and Education Leads
   - Provincial Health Services Association Nursing Practice and Education Leads

2. The **Practice Transitions Work Stream** conducted scan/telephone interviews with Provincial New Graduate Policy Table, National Non-Profit New Graduate Organizations, Global Health Human Resource Incentive Trends, Nursing Attrition Rates.

   Focus groups were conducted. The first session focused on vignettes of student and new graduate experience:
   - Dr. Judy Duchscher RN, BScN, MN, PhD Associate Professor School of Nursing, TRU- Review of literature regarding new graduate experience and support strategies.
   - Cheryl Isaac Senior Associate Dean Nursing and Specialty Nursing, BCIT – Overview of BCIT Specialty Programs approach with new graduate nurses.
   - Current New Graduate Nurse Programs in BC, representation from Health Authorities

FH Shannon Griffin	CW Kristy Macarthur
PH Nala Murray	IH Tricia McBain
NH Cathy Czechmeister	CW Sonya VanDriel
VIHA Fanny Vermes	VCH Carrie Edge
PHC Sara Charlton	PHC Neeta Nagra
CW Kimberley Thornton	

   The second session focused on process and introduced the following elements:
   - Reviewed the phases of the new graduate experience and intentional supports (Duchscher Model)
   - Identified feedback on each phase for each of the following curriculum/orientation; competencies/scope; and key supports and resources.
   - How would these be different for speciality practice area or a primary and community care setting?

3. The **Faculty Educator Work Stream** held focus groups with educators and faculty across the province.

Focus Group	Date	# of Participants	Schools/Regions Represented
Rural Educator	Nov. 29th 2018	4	Bella Bella, Bella Coola, Powell River,
Urban Educator	Nov. 29th 2018	22	Richmond Hospital, Lion's Gate Hospital, UBC Hospital.
Faculty	Jan. 25th, 2019	10	University of Victoria, Kwantlen Polytechnic University, College of New Caledonia, College of the Rockies, Thompson Rivers University, North Island College, BCIT
Faculty	Jan. 25th, 2019	12	Langara College, BCIT, College of the Rockies, College of New Caledonia
Faculty	Jan. 29th, 2019	13	University of Victoria, Selkirk College, Kwantlen Polytechnical University, Thompson Rivers University, BCIT, Douglas College, University of Northern British Columbia, College of New Caledonia.

Note: It is acknowledged that educators and faculty were under-represented in some regions of the province. A concerted effort was made to include the under-represented regions at the validation session.

Focus Group Guiding Questions

1. Within the past 5 years, have you been employed in both in a clinical and academic role simultaneously? Please describe experience.

2. Within the past 5 years, describe any employment opportunities to be able to practice clinically and teach clinically simultaneously. Describe any challenges, both structural and/or boundary issues. Describe experience with role clarity when working on unit that you teach on?

3. Describe the support for learning in the practice settings. How do practice settings support students, faculty and educators? How are students and faculty perceived by staff in practice settings? Describe the role of clinical educator in a practice setting? What recommendations would contribute to excellence in learning in practice settings?

4. Describe the opportunities for orientation and continuing professional development available to you as faculty and educator? Describe biggest opportunities and challenges?

Validation Participants, March 7th, 2019

- Alison Dennis, Patient Partner
- Alison Swalwell-Franks, Director, Community, VCH
- Andrea Ingstrup, Manager, Clinical Education, FNHA
- Andrea Taylor, Practice Consultant & NG Lead, Island Health
- Aneta D'Angela, Regional Practice Leader, Interior Health
- Arlene Fortin, Manager, Fraser Health
- Becky Palmer, CNO, First Nations Health Authority
- Ben Aubrey, 4th year BSN student, Thompson Rivers
- Bernice Budz, VP Patient Experience & IP practice, BCCA
- Carrie Edge, Manager, new graduate program, VCH
- Carrie Meagher, Specialty Faculty, BCIT & CNE/ MN student
- Cheryl Isaak, Sr. Associate Dean Nursing/Specialty, BCIT
- Christie Diamond, Corporate Director, Academic Education, PHSA
- Courtney Syme, CNE, Providence Health Care
- David Byres, Associate Deputy Minister, Clinical Leadership, MoH
- Dawn Nedzelski, Chief Nursing Officer, Island Health
- Debbie McDougall, Director, Collaborative Practice, FNHA
- Deborah Runge, Acting Health Service Director, Interior Health
- Dr. Judy Boychuk Duchscher, Associate Professor, School of Nursing, TRU
- Dr. Martha MacLeod, Professor, UNBC
- Erin Wiltse, Nursing Practice Consultant, FNHA
- Gary Housty, Director, Clinical Services, FNHA
- Hannah MacDonald, Director, School of Health Studies, UFV
- Heather Mak, Professional Practice Director, VCH
- Heather Straight, Director, Professional Practice, BCNU
- Holly Gale, New Graduate Nurse – Island Health
- Joanne Maclaren, Executive Director, Nursing Policy Secretariat, MoH
- Joyce Black, Senior Education Consultant, BCCNP
- Julie Fraser, Director, Professional Practice, Fraser Health
- Kathy Kennedy, Emergency Nursing Program Head, BCIT
- Kathy Scarborough, Director, Clinical Professional Development, FH
- Lisa Almos, Point of Care Nurse, UFV and Fraser Health
- Lisa Bower, Manager (student portfolio), VCH
- Manna Saunders, Policy Analyst, Nursing Policy Secretariat
- Marina Kolar, New Graduate Nurse, VCH
- Mary Van Osch, Clinical Nurse Specialist, Fraser Health
- Michael Prevost, CNE Primary Care, Northern Health
- Monica Swanson, Faculty, North Island College
- Neeta Nagra, Collaborative Practice Leader, PHSA
- Pam Cawley, Dean of Health Sciences, Douglas College
- Patti Telford, Acting Director, NNPBC
- RaeAnn Hartman, Faculty, North Island College
- Rona Miller, Point of Care Nurse, UFV and Fraser Health
- Ryan Stunden, New Graduate Nurse, Fraser Health
- Sandra Regan, Deputy Registrar, BCCNP
- Sandy Tatla, Director, New Knowledge & Innovation, C&W
- Sharon Parkes, Site Director, Victoria General, Island Health
- Shelley Fraser, Director Practice Education Strategy, Nursing Policy Secretariat
- Susan Duncan, Director, School of Nursing, UVIC
- Victoria Treacy, 4th year BSN Student VIU
- Viva Swanson, Patient Partner

Appendix 3 List of BSN Programs Recognized by BCCNP

- British Columbia Institute of Technology
- Camosun College with University of Victoria
- Coast Mountain College with University of Northern British Columbia
- College of New Caledonia with University of Northern British Columbia
- College of the Rockies with University of Victoria
- Douglas College
- Kwantlen Polytechnic University
- Langara College
- North Island College with Vancouver Island University
- Okanagan College with University of British Columbia
- Selkirk College with University of Victoria
- Thompson Rivers University
- Trinity Western University
- University of British Columbia
- University of British Columbia-Okanagan
- University of the Fraser Valley
- University of Victoria
- Vancouver Community College
- Vancouver Island University

Appendix 4 Priority Recommendations with NEPC Response

Education Recommendations	NEPC Response
Recommendation #32 The NPS recommends enabling a process to allow nursing educators to maintain experience in direct nursing practice.	• Discussions held with Chief Nursing Officer Council re: need to continue to support academic faculty to maintain casual status positions in health authorities. • Focus groups held with faculty and nurse educators across province. • **See NEPC recommendation #4 (page 28).**
Recommendation #33 The Nursing Policy Secretariat recommends a baccalaureate degree in psychiatric nursing as the entry to practice requirement for registered psychiatric nurses in BC.	• Discussions held with Ministry of Advanced Education Training and Skills (AEST), BC College of Nursing Professionals (BCCNP), and Ministry of Health Workforce Planning and Development Branch. • Jurisdictional review completed of RPN training programs in Canada.
Recommendation #34 Collaborate with the First Nations Education Steering Committee and Ministry of Advanced Education, Skills and Training to identify priority actions for reducing disparities in nursing education.	• Discussions held between Ministry of Health, Nursing Policy Secretariat with Ministry of Advanced Education Training and Skills (AEST). • AEST to support linkage with FNESC to have discussion re: priority actions.
Recommendation #35 Future discussion of entry to practice education should consider input from practice, education, operations, regulation, and government and determine:	• BCCNP initiating evaluation of current certified practice model and will include exploration of elements of regulatory framework as well as scope of practice (which would include discussion re: what may be considered entry to practice in the future). • NEPC's philosophy for education model supports interprofessional education e.g. simulation and collaborative learning models for clinical practice.
Recommendation # 36 The Nursing Policy Secretariat will bring representatives from the practice, operational, education and government sectors to establish an educational model for the future that considers requirements in both acute, community, and primary care sectors.	• June 2018 NEPC established with cross sector representation. • NEPC developed framework that including three work streams: Clinical practice education, new graduate transitions and faculty/educator support and sustainment. • Each work stream took an evidenced-based approach to identifying opportunities and solutions to advance nursing education and practice environments. • NEPC validated recommendations with representatives from across the province. • **See NEPC recommendation # 1-8 (page 28).**

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