## REGISTERED NURSE EDUCATION REVIEW IN NOVA SCOTIA

**Final Report** 

### Building our future

A new, collaborative model for undergraduate nursing education in Nova Scotia

### Submitted by

Cindy Cruickshank Executive Director, Health System Workforce Branch Nova Scotia Department of Health and Wellness

Greg Ells Executive Director, Universities and Colleges Branch Nova Scotia Department of Labour and Advanced Education

**Co-chairs, Steering Committee** Registered Nurse Education Review in Nova Scotia

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## Executive Summary

## **Building our future.** A new, collaborative model for undergraduate nursing education in Nova Scotia

### **Background and context**

In the autumn of 2012, Nova Scotia launched a review to identify changes required to modernize and strengthen the quality, effectiveness, sustainability and accountability of registered nurse undergraduate education. A steering committee representing the Departments of Health and Wellness and Labour and Advanced Education, Cape Breton University (CBU), Dalhousie University (Dal) and St. Francis Xavier University (StFX) collaborated to review current programs and delivery models, and make recommendations on a new, collaborative model of undergraduate nursing education to better meet current and future population health and care delivery needs.

### Summary and messages of the Registered Nurse Education Review process

Activities of the Registered Nurse Education Review included background research, a commissioned rapid synthesis review of outcomes among different curricula and models of delivery, a discussion paper led by the directors of the schools of nursing and a comprehensive stakeholder engagement plan that included ongoing consultation with an external advisory group, telephone interviews with 32 key informants, and in-person group consultations with 82 stakeholders across Sydney, Antigonish and Halifax.

There was strong support across the province for meaningful change in nursing education with particular attention to: reducing duplication of costs and efforts, recognition of prior learning at all points across nursing education, practice- and job readiness of new graduates, the whole area of clinical practice education, timing of graduations of large cohorts of new nurses, the need to consider new ways to embed specialty clinical training within a generalist BScN program, and attention to interprofessional team functioning and leadership. Background research and the various consultations pointed to the need for changes in the areas of entry into nursing education, progression through it, and graduation and the successful transition from student to effective professional. There was little appetite for tinkering or marginal shifts; rather, most stakeholders spoke to the need for a transformative leap forward.

### Nova Scotia's new collaborative model for undergraduate nursing education

With students firmly at the center of all efforts, a new, collaborative model for undergraduate nursing education in Nova Scotia was developed to:

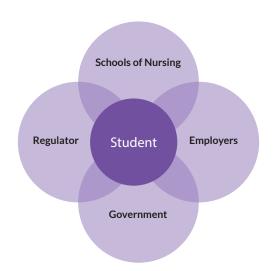
- Offer a rich mix of shared/common services, resources and talents to students at each school while also providing specialized skills, programs and talents that are unique to each school.
- Provide a level playing field for students across the province while meeting regional and local needs.
- Improve the student experience within and across schools of nursing and in transition from student to professional.
- Meet the needs of employers, including knowledge and skills of generalist graduates entering highly specialized practice settings.
- Scale up access to distance education learning and a range of programs at each site.
- Reduce costs and duplication of effort and improve efficiency and effectiveness through shared purchasing and deployment of human and other resources.

The new collaborative model will facilitate access to undergraduate education across the province in two main streams - a traditional four-year program offered at StFX, and an accelerated program for students with previous university courses or degrees offered at all three schools - as well as access to an RN diplomato-BScN stream and fair and consistent recognition of prior learning and experience for LPNs. Principle features of the new Pathways to nursing education success model (see page 2) include new levels of collaboration among Dal, StFX and CBU to align entry requirements and curricula, shared expertise, online specialty focus electives, clear pathways to entry and progression, innovative delivery methods, recognition of prior learning, opportunity to transfer among schools, optimization of resources and preparation of graduates ready to meet Nova Scotia's current and future system needs. The new model recasts the future of nursing education in Nova Scotia with an ambitious action plan to launch the new direction forward starting with the first cohort of new students in September 2016.

### Pathways to nursing education success

Key features of the new model of undergraduate registered nurse education in Nova Scotia

Students and novice RNs are firmly at the centre of all we do



### i. Admission

- ✓ Staggered program start times
- ✓ Full recognition or specific block credit for prior learning
- ✓ Prerequisites, entrance requirements and curriculum aligned across the province
- ✓ Modernized content and delivery of nursing curriculum with common first year curriculum framework within each mode of of nursing education delivery
- ✓ One policy for entry to accelerated programs for all schools of nursing
- ✓ Accelerated nursing program at each school

### ii. Progression

- Education better aligned with modern practice settings
- Clinical education redesigned to share placements, clinical instructors, preceptors and interprofessional facilitators
- Consolidated university and employer clinical mentorship and preceptor resources for consistency and efficiency
- ✓ Specialty clinical concentrations ✓ based on population health and provincial care delivery needs
- ✓ innovative delivery methods at each school including access to high-fidelity simulation training and distance learning technologies

### iii. Graduation and Transition

- ✓ Staggered program graduation times
- ✓ Identify and implement bestpractice guidelines across schools and with clinical partners province wide
- ✓ Standardized 13-week consolidation experience in the practice setting ideally where student will be employed
- ✓ Transition to practice experiences that align with needs of educational and service sector partners and make innovative use of existing funds
- ✓ Province-wide strategy to support registration exam pass rates

### Special considerations in each pillar

Consult minority under-represented Nova Scotians and incorporate best practices known to increase enrolment, improve academic success and support transition to practice.

Incorporate and integrate principles and best practices around intra-and interprofessional education and practice into curriculum and teaching.

Develop and implement a strategy for faculty renewal including exploration of DNP programs for Canada. Coordinate purchasing and faculty deployment to maximize efficiency and effectiveness.

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## Background and context

In the autumn of 2012, Nova Scotia embarked on an ambitious journey to review its undergraduate registered nurse (RN) education programs and explore changes required to modernize and strengthen their quality, effectiveness, sustainability, and accountability.

The Departments of Health and Wellness and Labour and Advanced Education initiated work with Cape Breton University, Dalhousie University and St. Francis Xavier University to review current programs and delivery models, and strengthen them to better meet current population health and care delivery needs.

But more than meeting today's demands, the review and subsequent education reforms hold the promise to put the province in the strongest possible position to manage emerging population health needs and the changing nursing practices that will be required to meet them.

The purpose of this review was to develop a series of recommendations to government on a new collaborative model of baccalaureate nursing education in Nova Scotia to improve system quality, sustainability and accountability. The overall vision is to have well-prepared RN graduates who are equipped to meet the needs of the Nova Scotia health care sector across a continuum of care settings.

Following establishment of a project charter, a Steering Committee comprised of university and government representatives, informed by an Advisory Group that included employer and regulatory body representatives (see Appendix A), met and worked extensively since 2012 to develop a collaborative model that would enhance shared planning and delivery of effective RN undergraduate university education. Supporting evidence was gathered, a rapid synthesis review of nursing education models was commissioned and tabled, a paper proposing possible elements of a new model was circulated for discussion, and stakeholders from across the province and beyond were engaged to inform the work.

After extensive deliberation, the Steering Committee came to strong and unanimous agreement on the elements of an exciting, new and collaborative model of undergraduate nursing education that puts Nova Scotia at the leading edge of education reform in Canada.

We cannot fight this century's unique health battles when health personnel, those truly on the frontline, have been educated and trained for a 20th century job.

Dr. Margaret Chan, Director General, WHO, 2010

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## Nursing demographics and nursing education in Nova Scotia

### Provincial demographics and health system: Highlights

Canada's second-smallest province in size, Nova Scotia is more rural in nature than most of the country and has Canada's second-highest population density. About 55 per cent of its 922,000 citizens live in urban centres, the largest of which is the capital, Halifax Regional Municipality, with a population nearing 400,000.

Until recently, Nova Scotia's health care system was administered through nine district health authorities (DHAs) that were "responsible for all hospitals, community health services, mental health services and public health programs in their districts." A full range of health care services, from primary to tertiary, is offered at various sites across the province. Government committed to reducing the number of DHAs from ten to two, and on April 1, 2015, the nine existing DHAs were consolidated into one provincial authority, the Nova Scotia Health Authority (NSHA), with the Izaak Walton Killam (IWK) Health Centre remaining as a separate authority.

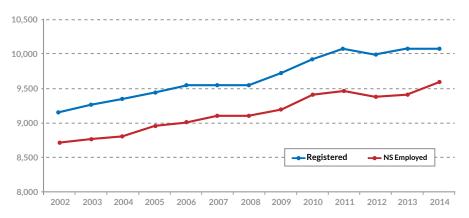
Nova Scotia's health care system includes 3,374 acute-care hospital beds and 7,834 long-term care beds. Queen Elizabeth II Health Sciences Centre (952 beds; adult tertiary care) and IWK (203 beds; care for women, children and youth across the province) are anomalous both in their size and degree of specialization. Other than these Halifax institutions and the hospitals in Sydney and Yarmouth, most of the 43 hospitals in Nova Scotia have between 10 and 150 beds. In 2013, the Conference Board of Canada gave Nova Scotia an "A" rating for hospital beds per capita.

### Nova Scotia's registered nurses

As with all Canadian jurisdictions, RNs are the largest health provider group in Nova Scotia. In 2014, there were 10,045 RNs registered to practice in the province, of which 95.4 per cent were employed in nursing. The other regulated nursing groups in Nova Scotia, licensed

practical nurses and nurse practitioners, had 4,002 and 149 members respectively registered in 2014. Nova Scotia consistently exceeds the Canadian average for nurse-to-population ratios for all three regulated nursing groups.

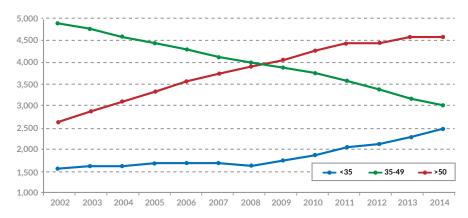
Figure 2 - RNs registered to practice vs. employed in nursing, NS, 2000-2013



Since the introduction of the *Nova Scotia Nursing Strategy* in 2001, the number of RNs, both registered to practice and employed in nursing, has rebounded to early 1990 levels. Up until 2011, the nursing workforce grew by an average of 1 per cent annually, but has since leveled off (see Figure 2).

With the decline of younger nurses entering the workforce after the closure of diploma schools in the mid-1990s, the number of RNs aged 50 years and older has grown steadily. At the same time, the number of mid-career nurses, those aged 35-49, also has been steadily declining. In 2014, 45.3 per cent of RNs were 50 years of age or older up from 19 per cent in 1993.

Figure 3 - RNs employed in nursing by age group, NS, 2000-2013



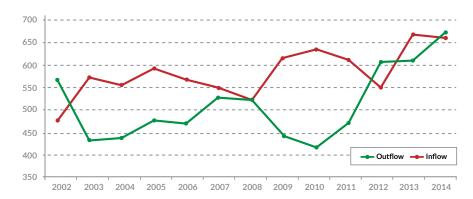
4

#### Faculty renewal

The new model of nursing education in Nova Scotia cannot be delivered without concurrently building the teaching and research faculty. In the face of significant nursing retirements, aging of the teaching workforce, and an existing worldwide shortage of adequately-prepared nursing faculty, there is a need to ensure access to educational preparation for nurses who wish to pursue an academic career.

**Strategies for faculty** renewal are proposed in Appendix B.

Figure 4 - RN workforce inflow and outflow, NS, 2000-2013



As shown in Figure 3, the 50-plus age group has outnumbered the 35-49 year old age group for the past five years. Younger nurses, those under the age of 35, were decreasing in numbers up until 2002, but have been gradually increasing since then. This trend is the combined result of incremental seat increases in Nova Scotia schools of nursing (from 330 in 2007 to 401 in 2014) and improved retention of new graduates (up from 61 per cent in 2001 to 90 per cent in 2014).

For the first time in recent years, the number of RNs exiting the workforce (*outflow*<sup>a</sup>) was greater than the number entering the workforce (*inflow*<sup>b</sup>) in 2012 (see Figure 4). In 2014, outflow (669) only marginally exceeded inflow (662).

The increased outflow since 2010 is likely due to the increase in retirements over the past few years. In 2014, 385 RNs over the age of 50 exited the workforce, compared to around 200 in 2010. At the same time new graduates entering the workforce in increasing numbers has increased the inflow — 430 new graduates from Nova Scotia and elsewhere registered in 2014 compared to 295 in 2012. Considering current nursing program attrition and graduate retention rates, it is expected that the province's 401 first-year seats will produce an annual average of 350 new graduates, approximately 305-315 of whom will remain in Nova Scotia to practice.

Finally, the aging workforce issue also impacts nursing school faculty, who are about seven years older, on average, than their counterparts in other roles in nursing. The problem is not unique to Nova Scotia or Canada. The Canadian Association of Schools of Nursing (CASN) found that "58.4 per cent of permanent faculty were 50 years of age or older,

<sup>o</sup>Outflow includes RNs who do not re-register in a particular year after having registered in the previous year. Examples of reasons for not re-registering may include retirement, maternity leave, migration and short-term absences. <sup>b</sup>Inflow includes all incoming registrants in a particular year such as new graduates, RNs from other provinces, internationally educated RNs, and RNs who for any reason did not register the previous year.

40.4 per cent were 55 years or older, and 18.8 per cent, 60 years or older."<sup>4</sup> A 2013 survey of more than 42,000 American RNs<sup>5,6</sup> found that "72% of respondents holding a principal position as full-time faculty were 50 years or older. Only 14% were younger than 40 years. Of those with a secondary faculty position, 63% were age 50 or older and 17% were younger than age 40."<sup>7</sup>

### Registered nursing education in Nova Scotia today







A baccalaureate nursing degree is required for entry to practice in Nova Scotia, along with all other Canadian jurisdictions except Quebec — and fellow Organisation for Economic Co-operation and Development nations including Australia, Iceland, Ireland, and New Zealand.8 Undergraduate nursing education in Nova Scotia is offered at Cape Breton University (CBU),9 Dalhousie University (Dal),10 and St. Francis Xavier University (StFX).11 All three programs are approved by the College of Registered Nurses of Nova Scotia (CRNNS) through a joint accreditation/approval process through CASN and CRNNS. There are no community college RN programs in Nova Scotia. Graduate nursing education (master's, nurse practitioner and doctoral degrees) is offered only at Dal. There is one diploma program for licensed practical nurses (LPNs), offered at Nova Scotia Community College and delivered at nine campuses.12

### **Funding**

The Government of Nova Scotia presently invests \$10.1 million annually in direct support of nursing education at the three nursing schools in the province. Additionally, universities receive an operating grant which, in part, supports nursing programs and related costs. One purpose of embarking upon this *Registered Nurse Education Review* was to ensure that the right level of funding was being invested in the nursing programs based on efficiently designed programs providing maximal value for the taxpayers of Nova Scotia. To that end, the review encourages universities to explore opportunities for enhanced collaboration to improve program outcomes for students while identifying potential cost savings resulting from that collaboration.

Given the fiscal realities of the province and the unprecedented fiscal challenges facing universities in Nova Scotia, all parties have a shared responsibility to ensure that the new nursing education model is cost effective, thereby minimizing the funding burden upon the province, university operations and students.

The government recognizes that the conversion to a collaborative and coordinated curriculum may involve universities incurring certain, one-time developmental costs. Ideally, these expenses can be covered from internal savings resulting from collaboration and coordination. Should this not be possible, the schools will be expected to develop an itemized budget of costs for consideration by the province. For ongoing funding for nursing education, the province will consider extracting nursing education funding from the general operating grant and targeting it specifically toward nursing education, tied to specific accountabilities and with annual reporting requirements. It is recommended that the \$10.1 million being provided by the Province in direct support of nursing education remain in place to support the 401 annual seats currently available until there is a change in the number of seats, or a change in the overall funding allocation mechanism.

### **Current seats and programs**

Up from 330 seats in 2008, there now are 401 seats funded for entry to undergraduate nursing programs each year across Nova Scotia, dispersed as shown in Table 1. Currently all seats are filled and some programs are over-subscribed beyond the funded numbers, resulting in a higher cost:revenue ratio for those programs.

Table 1. Funded undergraduate seats and programs in Nova Scotia schools of nursing, 2013

School of Nursing	CBU	DAL	ST.FX		
Number of seats (total=401)	71	210°	120		
Joint CASN/CRNNS accredited	х	х	х		
Programs Offered	Programs Offered				
4-year BScN	х	х	х		
3-year BScN, accelerated, post other university credits		X <sup>d</sup>	Xe		
2-year BScN, accelerated, post other university credits		х			
2-year BScN, accelerated, post other university degree			х		
BScN, post RN diploma		X <sup>f</sup>	х		
BScN, special program for residents of Nunavut		х			

<sup>°185</sup> seats at Halifax campus, 25 seats at Yarmouth campus <sup>a</sup>Program currently being phased out; no new admissions being accepted °3.5 year program 'Program currently being phased out; 11 students remaining, to be completed by 2018

Table 1 illustrates the multiple points of entry to the Bachelor of Science in Nursing (BScN) degree in Nova Scotia. Traditionally, students entered a four-year BScN program from high school. However, that pattern is changing: More than half of entrants at Dal, 36-49% of CBU students, and 15-20% of students at StFX enter the nursing program with university credit or other post-secondary experience. In some cases, these students were unsuccessful in applying to a BScN program and were completing non-nursing courses with a plan to reapply for admission in a subsequent year. Both Dal and StFX have accommodated this demand by offering accelerated and post-degree options for individuals with full or partial degrees. CBU does not currently have an accelerated program option.

There is significant demand for transfer to nursing programs for students with one or more years of university courses. However, due to program design constraints, including the sequenced nature of core nursing courses that usually are offered only once per year, those transitions can be difficult. As a result, many students having significant university credits still end up taking three, if not four, years to complete a nursing program.

Some schools across the country offer compressed, post-degree programs over 1.8 years (e.g. the University of British Columbia) as well as accelerated option programs over 3-3.5 years. A few schools, like the University of Toronto and University of British Columbia, now offer only a two-year BScN with the undergraduate nursing curriculum compressed into either five or six terms. They admit candidates who already have the pre-requisite credits in the sciences, social sciences and humanities.

While the number of post-diploma BScN programs in Canada is decreasing, there is still a demand by RNs who earned diplomas from hospital schools of nursing or community colleges to be able to complete the BScN. Diploma-prepared RNs may be exempted or offered credit for some of the nursing courses or given block credit for up to 50 per cent of their degree courses. Post-diploma candidates can graduate in two years but, because many of those candidates are working, a much longer time to complete the program is more common. After peaking nationally in 2006, the number of graduates from post-diploma programs continues to wane likely reflecting dwindling numbers of diploma-prepared RNs still in the workforce. In

Insufficient evidence exists to determine the effectiveness of various educational models of delivery and/ or competency-directed interventions.

Stevens, Hamel & Garritty, 2013

Nova Scotia, StFX is the only school offering an ongoing post-diploma program at this time; however, this program may be phased out as demand decreases.

While nursing education models have evolved over the past two decades to address stakeholder concerns, no single, best model is supported by research. Instead it is important for leaders of nursing programs to collaborate with their institutional partners and government leaders to respond to local needs, national standards and health system trends.

## Summary of the Registered Nurse Education Review process

Compelled by changing population health needs, a changing and aging nursing workforce, performance gaps identified by nurse employers, and calls for reform of nursing education from the profession itself, Nova Scotia embarked in 2012 on the Registered Nurse Education Review to define and build a new, collaborative model of undergraduate nursing education for the province. Key project activities and milestones are summarized in Table 2.

Table 2. Key project activities and milestones

DATE	ACTIVITY/MILESTONE		
Dec 2012	Establishment of project charter <sup>15</sup>		
2013-2014	Steering Committee terms of reference established, members recruited, and meetings held regularly from Jan 2013 to Jun 2014 <sup>16</sup>		
Oct 2013	Discussion paper submitted by directors of the schools of nursing, October 10, 2013:		
	Options for collaboration among Nova Scotia schools of nursing (undergraduate programs): Draft paper for discussion <sup>17</sup>		
Nov 2013	Rapid synthesis review submitted by The Knowledge Synthesis Group, KS Canada, November 7, 2013:		
	Do outcomes vary among different curricula or models of delivery for pre-licensure nursing education? A rapid review <sup>18</sup>		
Jan 2014	Stakeholder engagement plan submitted and approved by Steering Committee <sup>19</sup>		
Feb 2014	Key informant interviews conducted		
Mar 2014	Discussion paper circulated to stakeholders:		
	Toward a new model for collaborative undergraduate nursing education in Nova Scotia <sup>20</sup>		
May 2014	Listening to Stakeholders sessions held in Sydney, Antigonish and Halifax		
Sep 2014	Final report tabled		

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## Synthesis: Key messages and outcomes

### 1 Government perspectives

### Collaboration between education and service

Government decision makers have a high-level understanding of nursing practice and nursing education, but they have a number of concerns. They struggle to understand why they are hearing concerns from employers that graduates are not meeting service needs at the time of graduation. They assume that leaders within schools of nursing and practice settings collaborate closely on clinical education. Governments are seeking best value solutions for the large public investments in nursing for which they are accountable. In Nova Scotia there is tremendous openness to dialogue between education and service, but without the structures and processes needed for full collaboration. Collaboration is necessary to create graduates who are well prepared for current and future practice.

### Efficiency, effectiveness and value

Decision makers in government have also expressed concern as to whether there is unnecessary duplication across the three university nursing programs, or whether a single curriculum across existing sites would be more efficient and less costly. Given the diversity across the province, and the need to prepare nurses for a wide range of different types of practice, a single model of nursing education may not be responsive to community needs. However, more collaboration and commonality between the universities is clearly required.

### Recognition of prior learning

Failure to recognize prior learning is another longstanding concern. This problem applies to those students with degrees or partial degrees, and to practicing LPNs.

As in other jurisdictions, LPNs in Nova Scotia have been asking for pathways to BScN credentialing as a career mobility strategy for many

years. Currently, none of the three universities in Nova Scotia have a designated LPN-to-BScN pathway. As a result, experienced LPNs must study for a full four years after the LPN program with recognition of only a few credits for prior learning and none for work experience. Many LPNs want to be able to specialize and continue their careers, but there are few opportunities for LPNs to continue to develop advanced knowledge and skills the way RNs do. An LPN-to-BScN pathway is one strategy to graduate greater numbers of RNs (in particular LPNs having prior caregiving experience in the health-care system) more quickly to help meet provincial nursing human resource needs. Currently, LPNs from Nova Scotia are eligible for the Post-LPN to BN program through Athabasca University in Alberta. However, students must obtain and maintain registration with the College of Licensed Practical Nurses of Alberta for the duration of their program and complete part of their clinical practice in Alberta. A collaborative study is underway between the College of Licensed Practical Nurses of Nova Scotia, the Nova Scotia Community College, CBU and StFX to explore LPN-to-BScN pathways in Nova Scotia.

The primary goal of undergraduate nursing education is the preparation of graduates able to function as competent beginning clinicians.

Spence, Valiant, Roud & Aspinall, 2008, p.8

### (2) Service perspectives

### **Practice readiness**

Service providers face the relentless challenge of delivering increasing amounts of care, doing so faster and with less (or at least no more) resources, and producing ever-better outcomes. Their demands of their own employees are no less rigorous. Mirroring many jurisdictions, members of the Advisory Group have expressed frustration over a seeming mismatch between the clinical needs of their service settings and the practice readiness of new graduates. A key variable is that Canadian nurses graduate with a generalist degree, but employers require them to be able to practice largely in highly specialized clinical settings from the outset, such as critical care, emergency care and public health.

Apart from clinical skills, the issue of graduates' ability to function effectively in teams – often in complex, multi-professional teams – has been called into question. To give concrete examples, some employers in Nova Scotia have noted negative attitudes on the parts of new RN graduates toward LPNs and care team assistants; others report the

reverse, i.e. negative attitudes of the existing RN and LPN staff toward the new RN graduates. It has also been reported that new RN graduates are unprepared for the rigors of broader intra- and inter-professional team leadership, delegation, communication and coordination. The issue of effective team functioning is prominent across all jurisdictions and is a key pillar of the work of the Council of the Federation.<sup>8</sup>

All of this lands the costs of longer orientation periods squarely in the laps of employers – giving rise, at least in part, to the complaint that new RN graduates are not "practice ready."

### Clinical practice experiences

There is tremendous competition for clinical practice experiences in service settings. The problem is common nationally and globally. Employers see current methods of assigning brief nursing clinical experiences to be ineffective for high quality learning to occur. Timing is largely restricted to weekdays during business hours, from September to April. The availability of spaces is further affected by broader, emerging practice changes, such as more outpatient surgery and shorter stays for inpatient services especially in such areas as pediatrics and labour and delivery. Employers, including those located in areas that are geographically remote from schools of nursing, would like to be better integrated in the planning and implementation of clinical education.

### Timing of graduations

The vast majority (about 97 per cent) of nursing graduates in Nova Scotia convocate in May. Dal also graduates about 10 nursing students in October and StFX graduates about 20 every December. Employers find it difficult to place and integrate large cohorts of nurses when they all graduate at the same time, especially just before the summer months. They could better manage workforce planning if there was more variation in graduation times.

### Generalists, long-term care and specialties

Canadian nurses currently graduate with a generalist degree that prepares them to write a comprehensive examination based on entry-to-practice competencies. The Advisory Group noted that new graduates tend not to choose careers in long-term care. Employers

believe that placement of students' clinical exposure to frail elderly clients early in nursing programs may play a role. Employers perceive that graduates do not have an appreciation for the complexity of long-term care or the potential impact of RNs on improving patient outcomes in long-term care. Additionally, some employers, especially in the large urban centres, have noted that they would like to see new graduates prepared with specialty training due to vacancies that they have been unable to fill from within their organizations. Traditionally, specialty nursing would have required a minimum of two years' experience and job or certificate training. However, new graduates are increasingly being hired directly into specialty areas at graduation.

A new system needs new service providers. Turning around health and health-care systems the way we envision will require radical change in health-care education. New topics, teaching methods, science and research are all needed to prepare health professionals for a very different health system.

National Expert Commission, 2012

### 3 Education perspectives

### The struggle to align education with service

Educators respond to concerns about practice readiness by noting that quality clinical placements offered by the service sector in response to education requests are often insufficient (in numbers, quality and level of collaboration) to prepare graduates for the demands of patient care in the current work environment. There is also often a disconnection between educators and service sector leaders regarding the definitions of practice readiness and work readiness. The issue of practice readiness is a shared responsibility between the health service sector and education. Work readiness should be developed though cooperative learning placements and consolidation placements.

Most nursing leaders also assert that something has been lost with the move from hospital-based schools of nursing to post-secondary institutions, especially universities. The familiar observation that graduate nurses can "theorize but not catheterize" reflects the concern that graduate nurses often lack practical skills despite their significant knowledge of nursing process and theory. However, educators would counter that the current "nurse du jour" system of assigning care without attention to continuity does not reflect holistic, patient-centred, and best-practice care. Reconciling the ideal world and the real world is never easy. The tendency by educators is to keep the students cloistered from the realities of fragmented, less than ideal practice. It is often difficult for individual educators to respond to learning challenges in the workplace, because educators are guests of the institution, and they are reluctant to rock the boat, fearing they might jeopardize scarce placement and organizational relationships.

## 14

There is an urgent need to dismantle old barriers and put in place exciting, innovative and strategic bridges, links and partnerships among education and diverse sectors including practice/ service, policy leaders and professional associations. Efforts must be intensified to bridge education and practice, to redefine the roles of education and the service sector. In all this, the transition from student to professional must be eased and strengthened, and mutual benefits for education and service identified and realized.

Think Tank on the Future of Undergraduate Nursing Education, 2013

### Nursing education leaders know that reform is needed

In universities, major curriculum change is a labour-intensive, costly and time-consuming endeavor. As a result, most faculties make minor adjustments over time to avoid triggering a host of complex approval processes. It is not feasible to expect schools to make rapid program changes. To some extent, they have learned how to work within their respective systems to respond to local employer needs. With that said, nurse education leaders themselves have recognized that the sector sometimes has been slow to strategize effectively when facing emerging trends and needs, sometimes operates too much in isolation from real practice and job training, has been resistant to making more nimble changes, and could do more to streamline its own models and processes. Nursing education has not been seen as cutting edge across the country, and that image can be problematic when it is the incubator for its clinical health care partners, which are viewed as the vanguard of knowledge, professionalism and leadership. There is room for different, stronger and more energized partnerships between education and service that could fuel effectiveness on both sides.

### Interprofessional education and practice

There is a general consensus that Canadian health care needs more skill in understanding and operating within team-focused, multiprofessional education and practice settings. Across Nova Scotia there is patchy recognition and buy-in for interprofessional practice. Dalhousie University has established interprofessional education (IPE) as a major priority area of development, with the Faculty of Health Professions now having an explicit IPE requirement for graduation for all entry-to-practice students, and with common times in the timetable for IPE experiences. It has proved challenging at best to move beyond classroom experiences and incorporate IPE team work experiences into student practicum placements despite students from different professions (often different institutions) being in the same site at the same time. The focus and funding for IPE over the past decade<sup>23</sup> has not yet translated to real interprofessional practice in most settings, and recent graduates report frustration with being introduced to interprofessional collaboration in their programs but not finding it in practice in their employment settings. In this area, Nova Scotia has an opportunity to be an innovative leader because of the number of professions being educated, the size and scale of the province, and the current DHA reorganization.

### Responding to current needs while planning for future change

Finally, but importantly, nursing education is being challenged at the national level through work on scope of practice and nursing education spearheaded by the Canadian Nurses Association to start planning a transition to new ways of practice to include advanced diagnostics and prescribing. In response to the National Expert Commission, a *Think tank on the future of undergraduate nursing education* hosted at Dal in November 2012 called for change and recommended a national review of nursing education. In its wake, national summits on scope of practice and the future of undergraduate nursing education already have been held.<sup>25</sup> So nursing educators are confronted with juggling curriculum and delivery challenges for today, for some period of transition, and then for an entirely new generation of nursing practice a decade down the line. No national consensus on that direction has been reached.

### 4 What did key informants say?

The initial step of the stakeholder engagement plan entailed private interviews with 32 informants identified by the Steering Committee and the Advisory Group (see Appendix C). A brief series of openended questions was used by the researcher to guide the interviews (see Appendix D), which were undertaken to allow the participants, including members of the Steering Committee and Advisory Group, the opportunity to speak frankly in private about a range of issues related to the review. Confidentiality was assured and results of the interviews were shared with the Steering Committee in aggregate form only. Each interview lasted from 30 to 60 minutes. Results of the interviews are summarized below.

### Summary of interview findings

### **General reflections**

• There was unanimous and enthusiastic support for the review from every informant. While there were differing views on the how, there was complete agreement on the need for an immediate and significant shift in the model of undergraduate education, from admission through graduation and into the transition stage from student to professional.

### **Key informants**

Nova Scotia participants Paula Bond Andrea Boyd-White **Judy Chisholm** Cindy Cruickshank Carmelle d'Entremont Donna Denney Diane Duff **Greg Ells** Katherine Fraser Lisa Grandy Mary Ellen Gurnham **Janet Hazelton** Maureen MacEachern Kathleen MacMillan Darla MacPherson Ann Mann Carolyn Maxwell Lori McCracken **Judy Morrow** Josephine Muxlow Willena Nemeth Mary Lou O'Neill **Janet Purvis** Ken Scott Krista Smith Elizabeth Snyder Cathy Walls

External participants Cynthia Baker Shirley McKay Anne Marie Rafferty Linda Silas Michelle Su Sally Thorne  Participants external to Nova Scotia were more encouraging about (or perhaps less anxious about) the magnitude of the change that they believed should be recommended in the new model. However, there were many internal participants who also advocated for a truly radical overhaul of the model of nursing education in Nova Scotia. One external participant said, for example,

"Nova Scotia could see this as an opportunity to pole vault ahead of the game versus settling for a marginal shift. They have a chance to make a really big leap forward, to create structures that accelerate the pathways toward the degree, and make the required major investment to upgrade qualification of the whole workforce."

- Informants commonly spoke to the need for a fluid, frank dialogue, leading to mutually reinforcing relationships among the education, regulatory and service worlds saying, for example, "In the next era the whole model has to shift. There has to be much deeper and constant collaboration between education and service."
- Participants spoke to the need to focus on education that launches a "life cycle" and grounds a career structure. Making that change "will demand significant and sustained investment to realize gains in the long-term."
- There was extremely strong (nearly unanimous) support for continuation of a generalist BScN (as opposed to breaking the education into specialty degrees, for example) that supports broad thinking and analytical skills, strong decision-making skills and very well developed core competencies that translate across settings.
- Acknowledging that highly specialized practice is the new reality in nursing, there was a lot of talk from participants about the need for more training in a population health or clinical specialty, which could take the shape of a clinical concentration, an academic minor, or some similar structure.
- Some participants spoke to the "big difference between *practice ready* and *job ready*" and cautioned about over-specialization tailored to any specific employer.
- There was a *strong* theme running through many of the interviews around the notion of "jaded memories" that are summarized in the comment of one participant, who said,

"Some nurses have a deep and abiding memory of a time that never was: the time — inevitably when *they* graduated — when all nurses were fully experienced on the first day. It's not possible and never was; they are deluded."

### Others noted,

"Nursing takes years to master just like medicine. So there are unrealistic expectations from some employers, and a sort of arrogance on the part of academia that we know what's best," leading to a bad clash of perspectives and values with the nurse caught in the middle.

There was unanimous agreement, however, that the pace, complexity, and demands of all health practice settings have all scaled up dramatically — and that reality has to be addressed in the new model.

### **Admission**

- There was strong, although not unanimous, support for students coming to nursing schools having already attained at least some university credits.
- There was some interest in students coming with another degree and then entering into accelerated programs that would teach only the nursing elements (e.g. be admitted with a BSc and then complete nursing in a 2-year accelerated program over six terms).
- There was strong, but not unanimous, interest in the idea of only offering accelerated nursing programs that follow other university credits (not a full degree).
- Many participants believed it would be smart if all health professions were admitted into basic science programs together before splitting off to their various specialties (e.g. nursing, medicine, pharmacy).
- There was strong support for any structures that would bring the three schools closer together. There was valuing of a distributive education model versus a centralized model (e.g. one program delivered at multiple sites), but participants want common registration and admission criteria and some common core curriculum, courses and clinical experiences.

• There was significant concern about the need to recognize prior learning for students coming in as diploma-educated RNs, those coming from other professions, and LPNs. Many participants spoke to the need to build meaningful, non-punitive, bridge models for LPNs, including thinking about an exit model with more common education among RNs and LPNs at the outset. Several said that a must in the new model has to be "recognition of prior learning and no more duplication."

### **Progression**

- The strongest theme running through the interviews was the
  unanimous, deep concern about issues around clinical teaching,
  clinical placements, the clinical teachers themselves, preceptors in
  clinical settings, and mentoring all of which seem to need a drastic
  overhaul in approach, training and execution.
- Some participants believed that all clinical teachers and preceptors should have to attain a specialty certification before working with nursing students.
- There was very strong, although not unanimous, support for the idea of an academic minor or clinical concentration in a specialty area, as long as it would not narrow the student's choices or talents too early in the education or career track.
- There were extensive comments about the challenges of interprofessional education with feelings that RNs are "vulnerable if we don't stake a place" (as nurses, that is), but also that we must educate and participate broadly in a world of teams. So the issue was about striking the balance between finding one's feet as a professional RN and being a multi-professional team member and leader and how best to educate nurses to take on the two challenges.
- Several stakeholders raised the issue that a university with a
  graduate school is a very different sort of place than one without
  and may have to play things out differently to meet those needs and
  realities.
- Stakeholders repeatedly raised concerns that certain collective agreements within the schools limit flexibility in how teaching is assigned and conducted.

• Those having experience with accelerated programs noted the need to proceed with eyes wide open about how different the students are from those ones coming directly from high school; their knowledge is deeper and broader, they are normally a little older and they require teachers who can respond to that difference. And in terms of the accelerated program structure, "there is no buffer, the pace is all lock-step; schools will have to consider if their faculty can actually deliver these programs." Again it was raised (not from the schools) that it might be different in a more research-intensive setting with a graduate school.

### **Graduation and transition**

- An external informant encouraged the review team, noting "Readiness for employment is a perception not just endemic to Canada, but one that has repercussions, reach and resonance in many other health jurisdictions."
- There was significant concern about the unrealistic expectations of newly-graduated nurses, saying for example that,

"In no other profession do we expect a new graduate to be the fully finished product; education is the first rung on a lifelong ladder. For example, we give the docs a full year internship to learn all those things we are being critical about nurses not knowing on day one."

- Others noted that some programs do seem to graduate practitioners who are more practice ready — and they urged that the team look for successes in other professions to see what they do differently in their undergraduate education. Physiotherapy was one example cited.
- Employers unanimously noted that the difference in graduates coming from accelerated programs is "just unbelievable," saying that from the gate they are "invigorated, more professional and more mature."
- There was unanimous agreement that the system is producing very bright new graduates with a lot of knowledge. They spoke to the value of theoretical knowledge, however, many service participants said that new graduates come with too much of the wrong theory. They cited examples such as graduates knowing about nurse

theorists but being very light on the areas they need to function in practice, i.e. theories around fundamentals of care, forming patient relationships, individualized care, leadership, delegation, interprofessional behaviour, and how the health system works, such as the parts they need to undertake discharge planning.

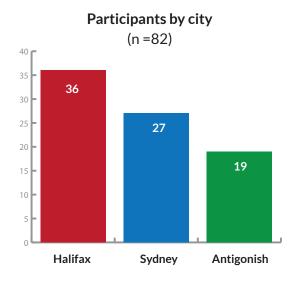
- The idea of a formalized, 26-week student-to-professional internship with a job guarantee was of significant (nearly unanimous) interest. Concerns were expressed related to costs and impacts on unions. Union participants believed that such a structure could be managed through special agreements.
- Service sector participants offered several examples when asked specifically by the researcher, "What do you mean by not practice ready?"
  - Inability to think critically and make decisions required in the course of care; a lack of "sharpness" in their thinking.
  - New graduates are not able to manage a full, average caseload or understand the flow of care (including shift work), saying they believe the schools do not teach this well. Mirroring other informants, one said, "They just can't manage at all. We see their student caseload of two patients in fourth year right before they graduate. It's ridiculous." Also mirroring other comments, one participant said, "Their clinical training is so broken up that it's no wonder they can't learn. As students they never see things anything all the way through, and they don't see how things get managed. So how can we expect them to know that?"
  - There are problems with some very basic skills; there is a perception among some employers that students can "dodge" learning certain clinical skills all through their program so may graduate without actually having completed some skills they need in practice.

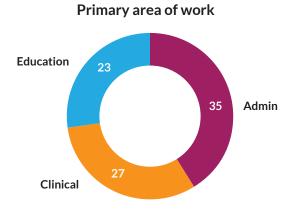
## What did we hear during the Listening to Stakeholders sessions?

During the Listening to Stakeholders sessions held in Sydney, Antigonish and Halifax in May, the 82 participants were invited to enter into dialogue and to take part in a modified Delphi-type process to react to potential elements of a new, collaborative model of nursing education. Participants were told during each session that the purpose was, in a sense, a pulse-taking exercise to gauge their reactions to the larger review as well as the specific elements introduced in the precirculated background paper.<sup>26</sup>

Participants tended to be mature, with more than half having more than 20 years of experience in nursing, and they worked across a variety of administration, clinical and education roles consistent with their generally long tenure in the profession (see Figure 5).

Figure 5. Stakeholder session participants by city and areas of work





Reactions to the review, the framework under discussion, and the elements floated seemed positive and highly encouraging across the three sites. While there were questions about details and specifics, there was no overtly worrying reaction to the reasons for the review, to the process of the project, or to any of the elements of a potential future model of nursing education for Nova Scotia. Participants were engaged, took part in the *Dotmocracy* exercise, generated lively conversations, and provided extensive narrative feedback. Mirroring what was said during the key informant interviews, most participants in the stakeholder sessions expressed a need for change – in many cases for a drastic overhaul – and spoke to the need for fast action.

## What did participants say about the elements of a possible new model?

From among the possible elements for a model to improve undergraduate nursing in Nova Scotia, the top 11 solutions chosen (in sum) by the most participants across the three sites were as follows:

### Admission

- 1. Collaborate to ensure prior learning is recognized and pathways are developed to provide credit including LPN-to-BScN bridging.
- 2. Sequence/stagger admission times.

### **Progression**

### **Structure**

3. Develop specialty streaming for undergraduate students in defined areas. Students will need to access and complete these courses to obtain a specialty certificate (e.g. through a specialty certification or academic minor) with BScN credential.

### Curriculum and content

- 4. Develop and share elective courses among the university schools of nursing directed to specialty practice settings to narrow the gap between generalist preparation and service sector HR needs.
- 5. Align the courses ands curricula for more similarity across the three schools.

### Clinical

- 6. Collaborate for clinical placements and support students in placements that best meet learning needs, career choices or geographic preference. Placements will provide a range of experiences, including rural and urban. May require shift to block placements for greater concentration and ease of scheduling. Support for provincial planning and student travel and accommodation is a consideration.
- 7. Build more effective clinical mentors and preceptors through stronger university links and recognition.

### **Innovative delivery**

- 8. Maximize distance education through available information and communications technology (e.g. online learning).
- 9. Scale up and spread access to hi-tech, high-fidelity human patient simulation.
- 10. Offer core/shared programming within one overall provincial model of nursing education in which the three separate schools participate via a range of distributive delivery models.

### **Graduation and transition**

11. Develop a similar final-term full time consolidation term (13 weeks) at all three schools in consultation with agency partners to ensure capacity.

### A note about the regulator's role

The CRNNS has the legislative mandate to approve existing and new nursing education programs to ensure new graduates meet the licensure requirements in the RN Act (2006) and the Regulations (2009). In 2008, CRNNS entered into an agreement with the universities and CASN to work collaboratively to develop a joint process for accreditation and approval. The joint process has been very successful and is an attempt to align processes to manage the amount of resources that previously went into two separate processes – accreditation and approval.

Given the perspectives and issues outlined above, it is important to keep in mind that success rates of graduates from the three schools in the nursing registration examination exceed the national average. So the schools appear to be providing the right learning for nursing graduates to meet the *generalist practitioner* expectations of the regulatory college. The Steering Committee record of decisions notes that, "Employer expectations of new nursing graduates are consistent with the entry level competencies for RNs according to CRNNS"27– and yet the same employers have identified multiple issues around new graduate readiness to practice. They also share a role in program accreditation.

# From student to professional: Building blocks for a new nursing education model in Nova Scotia

The Steering Committee heard the clear message that **nursing undergraduate education in Nova Scotia has to change. And that change must be significant, transformative and rapid.** There is little appetite for dabbling or incremental change. Stakeholders hold great hope that the new model creates the opportunity to vault Nova Scotia forward — indeed ahead of any other jurisdiction — to maximize the achievement of every student, launch new graduates into a successful transition to professional nursing practice, expose them safely to the challenges of leadership, decision-making and team work they will be expected to lead in short order, and help groom them for successful careers in the long term.

To respond effectively to the considerable expectations of Nova Scotians, the Steering Committee looked to the advice of its Advisory Group, the input of individual informants and consultation with groups of stakeholders, and scientific evidence about what strategies might work best. The Committee proposes new directions for nursing education in Nova Scotia that are fresh, will bring new energy and that sharpen the focus of all partners — government, the regulator, the service sector and the schools themselves — firmly on the students and novice nurses we all want to succeed.

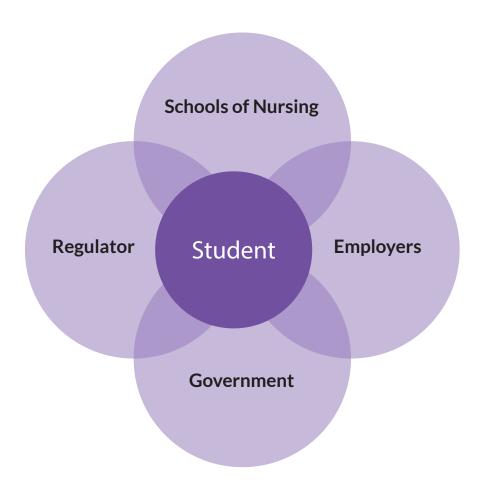
### Philosophy of our new approach...

**Together** we have developed a new model of undergraduate nursing education that puts our students, novice RNs and the nurses who teach them sharply in focus and, together with patients, firmly at the centre of all our efforts.

**Together** we will redouble our efforts to focus our programs and partnerships strongly on our students and new graduates.

**Together** we will develop, test and evaluate each of our new programs and partnerships to ensure that they strengthen the success of every student's academic experience, nursing practice, transition from nursing student to novice professional RN in the workplace, and contribution to intra- and interprofessional collaborative practice in the workplace.

Students and novice RNs are firmly at the centre of all we do



In the lead: Nova Scotia's new collaborative model for undergraduate nursing education

### **Guiding principles**

The new, collaborative model for undergraduate nursing education in Nova Scotia was developed with several guiding principles in mind. The principles guided the development of a new model that will:

- Offer a rich mix of shared (common) services, resources and talents to students at each school while also providing specialized skills, programs and talents that are unique to each school.
- Provide a level playing field for students across the province while meeting regional and local needs.
- Improve the student experience within and across schools of nursing and in transition from student to professional.
- Meet the needs of employers in the service sector, including the knowledge and skill of generalist baccalaureate graduates entering highly specialized practice settings.
- Scale up access to distance education and a range of programs at each site.
- Reduce costs and duplication of effort, and improve efficiency and effectiveness, through shared purchasing and deployment of human and other resources.

#### Pathways to nursing education success in Nova Scotia

To transform undergraduate nursing education in Nova Scotia, goals and actions are recommended in three main areas:

- i. Admission to our schools of nursing,
- ii. Progression through our schools of nursing, and
- *iii. Graduation* from our schools of nursing and transition to professional practice.

Health professionals have made enormous contributions to health and development over the past century, but complacency will only perpetuate the ineffective application of 20th century educational strategies that are unfit to tackle 21st century challenges.

Therefore, we call for a global social movement of all stakeholders—educators, students and young health workers, professional bodies, universities, non-governmental organisations, international agencies, donors, and foundations—that can propel action on this vision and these recommendations to promote a new century of transformative professional education.

The result will be more equitable and better performing health systems than at present, with consequent benefits for patients and populations everywhere in our interdependent world.

The Lancet Report, 2010

There are also four goals and related actions that should underpin, influence and support these three main pillars; these have been gathered in a fourth category, *labeled Special considerations*. Goals and actions in the four areas of the model are summarized in Figure 6 and on the following pages.

Figure 6. Pathways to nursing education success in Nova Scotia

#### Admission

#### ✓ Staggered program start times

- ✓ Full recognition or specific block credit for prior learning
- ✓ Prerequisites, entrance requirements and curriculum aligned across the province
- ✓ Modernized content and delivery of nursing curriculum with common first year curriculum framework within each mode of of nursing education delivery
- ✓ One policy for entry to accelerated programs for all schools of nursing
- Accelerated nursing program at each school

### ii. Progression

#### Education better aligned with modern practice settings

- ✓ Clinical education redesigned to share placements, clinical instructors, preceptors and interprofessional facilitators
- ✓ Consolidated university and employer clinical mentorship and preceptor resources for consistency and efficiency
- ✓ Specialty clinical concentrations ✓ based on population health and provincial care delivery needs
- innovative delivery methods at each school including access to high-fidelity simulation training and distance learning technologies

# iii. Graduation and Transition

- ✓ Staggered program graduation times
- ✓ Identify and implement bestpractice guidelines across schools and with clinical partners province wide
- ✓ Standardized 13-week consolidation experience in the practice setting ideally where student will be employed
- ✓ Transition to practice experiences that align with needs of educational and service sector partners and make innovative use of existing funds
- ✓ Province-wide strategy to support registration exam pass rates

# Special considerations in each pillar

Consult minority under-represented Nova Scotians and incorporate best practices known to increase enrolment, improve academic success and support transition to practice.

Incorporate and integrate principles and best practices around intra-and interprofessional education and practice into curriculum and teaching.

Develop and implement a strategy for faculty renewal including exploration of DNP programs for Canada.

Coordinate purchasing and faculty deployment to maximize efficiency and effectiveness.

Admission

# • Establish a common framework for admission to all Nova Scotia schools of nursing.

- Increase flexibility of admission (and in turn, graduation) times.
- Improve ability to transfer across programs and improve equity of access across the province.
- Eliminate barriers to rapid advancement in nursing education.
- Reduce repetition of content previously learned, time, and costs for diploma-prepared RNs and LPNs, and students having previous university credits.

- ✓ Stagger program start times.
- ✓ Provide full recognition or specific block credit for prior learning.

**Actions: Making it happen** 

- ✓ Align all prerequisites and entrance requirements across the three schools of nursing.
- ✓ Modernize the development, content and delivery of nursing curriculum.
- ✓ Within each mode of nursing education delivery, develop a common first year curriculum framework across all three schools of nursing.
- ✓ Align the full undergraduate curricula more strongly across the three schools of nursing.
- ✓ Develop one policy for entry to accelerated programs for all schools of nursing.
- ✓ Provide students having the prerequisite courses with the opportunity to enter a 6-semester (2 or 3 calendar year) accelerated nursing program at each school (noting that students do not have to have a degree to enter an accelerated program).

# Actions: Making it happen

# ii. Progression

- Improve student achievement and progression within and across schools of nursing.
- Prepare graduates within a generalist curriculum who can more easily meet the needs of modern, highly specialized practice settings by narrowing the gap between practice readiness for specialized areas and novice practitioner.
- Provide coordinated opportunities for students who are unsuccessful in a course to access a repeat course without missing a full academic year.
- Improve preceptoring and mentorship relationships between professional RNs in practice settings and the students they teach.
- Share clinical teachers, placements and preceptors to increase student placements and explore shared employment models with NSHA/ IWK/long-term care.

- ✓ Redesign nursing practice education to align with the complexity of 21st-century practice settings (longer, more concentrated clinical experiences, better-prepared clinical instructors, integration of service-based preceptors into university programs).
- ✓ Develop mechanisms and strategies to share placements, clinical instructors, preceptors and IPE facilitators where individual programs do not place large numbers of students (e.g. more rural areas) to achieve effective student to instructor ratios. Work to place groups of students *from multiple professions* from one or more university on site, based on province-wide planning.
- ✓ Consolidate existing university and employer clinical mentorship and preceptor resources for consistency and efficiency.
- ✓ Provide all nursing students with the opportunity to concentrate their clinical learning in a specialty area based on population health and provincial care delivery needs.
- ✓ Scale up access to high-fidelity simulation training, including interprofessional simulations and distance learning technologies at each site.

## iii. Graduation and Transition

- Improve the transition experience from student to successful, novice professional RNs.
- Reduce orientation costs for employers by having better prepared graduates.
- Increase satisfaction of employers and their teams working with new graduates during transition to nursing practice.
- ✓ Staggered program graduation times.
- ✓ Identify and implement a set of common, bestpractice guidelines across schools and with clinical partners.

Actions: Making it happen

- ✓ Provide every student with a senior 13-week consolidation experience.
- ✓ Provide all students with the opportunity to complete their senior consolidation experience in the practice setting where they may be employed, while being responsive to educational requirements as a first priority.
- ✓ Create models for transition to practice that align with the needs of educational and service sector partners and consider opportunities to use existing funds differently.
- ✓ Implement a province-wide strategy to support registration exam pass rates.

## Actions: Making it happen

### iv. Special Considerations

- Increase the number and success of minority underrepresented Nova Scotians in nursing.
- Ensure that Nova Scotia graduates are prepared to function effectively in modern intra- and interprofessional team settings and that there is a common understanding among employers, employees, universities and students/recent graduates as to what intra- and interprofessional teamwork actually means and entails in different health delivery contexts.
- Develop and implement a renewal strategy for faculty approaching retirement.
- Reduce costs and duplication of effort, and improve efficiency and effectiveness, through shared purchasing and deployment of human and other resources.

- ✓ Consult minority underrepresented Nova Scotians and incorporate best practices known to increase enrolment, improve academic success and support transition to practice.
- ✓ Incorporate and integrate principles and best practices around intra- and interprofessional education and practice into curriculum and teaching.<sup>28</sup>
- ✓ Develop and implement a strategy for faculty renewal including exploration of DNP programs for Canada.
- ✓ Coordinate purchasing and faculty deployment to maximize efficiency and effectiveness.

# Proposed delivery modes for undergraduate nursing education in Nova Scotia

The new collaborative model will facilitate access to undergraduate education across the province in two main streams: a traditional four-year program and an accelerated program. An RN diploma-to-BScN stream will continue to be available at StFX until such time as the demand ceases. Key features of these streams are highlighted in Table 3.

As the collaborative model is developed and refined, universities will also establish a feasible approach for fair and consistent recognition of prior learning and experience for qualified LPNs entering the BScN program. Possible considerations include assigning credit to LPNs for electives in the 30 university credits required for entry to the accelerated BScN program and developing challenge exams to determine level of knowledge of LPNs who wish to obtain advanced standing in the nursing program.

Table 3. Delivery modes for undergraduate nursing education in Nova Scotia

Program type:	4-YEAR BSCN	ACCELERATED BSCN	RN-TO-BSCN
Entry point:	Secondary school or later	Entry with prior 30 university credits <sup>h</sup>	Registered nurse diploma
Entry requirements:	Secondary school diploma with required science credits and 70% grade average (Note: competitive program so minimum average does not guarantee acceptance)	Must have pre-requisite course credits (common list) and 3.5 GPA in final semester; Transfer of credit for pre-requisite courses (Note: competitive program so minimum GPA does not guarantee acceptance)	Current RN registration in a Canadian jurisdiction in good standing
Opportunity to transfer between schools in NS:	After year 1 of the program only	After completing pre- requisites and before starting nursing courses	No, but geographic access to courses is supported

Delivery model:	Combination of theory classes, simulation laboratory, tutorial, seminar and online learning and clinical/ field placement 8 academic semesters Total 120 credits	Combination of theory classes, simulation laboratory, tutorial, seminar and online learning and clinical/ field placement  6 academic semesters over 2 or 3 calendar years  Total 120 credits	Primarily online with seminars, simulation laboratory and clinical/ field placement Total 63 credits		
Program lead/ site:	StFX	CBU, Dal and StFX	StFX (potentially phasing out)		
Principle features of the new model:	<ul> <li>Collaboration among CBU, Dal and StFX to align curricula</li> <li>Shared expertise</li> <li>Online specialty focus electives</li> <li>Clear pathways</li> </ul>				

# Making it real: A high-level blueprint for action

. Admission

ii. Progression

iii. Graduation and Transition

Moving the new model from theory to reality will require a concerted, coordinated and resourced province-wide effort that will follow tight timelines. An initial project map is proposed here, based on understanding that the complexity of the change will necessitate development of a more detailed plan.

## Tier I Activities: To be initiated in 2014

#### September-December 2014

#### **Project management**

- 1. Engage an experienced curriculum expert across three universities to lead curriculum change.
- 2. Engage all nursing school faculty and immediate service partners in a feasible change management process and develop a full road map for implementation of the new model.

#### Early action on clinical education change can start now!

- 3. Confirm common entry requirements across the three schools.
- 4. Identify a set of common, best-practice guidelines across schools and with clinical partners, incorporating guidelines related to intraand interprofessional team experiences; Implement in 2015.
- 5. Identify current resources and undertake necessary planning and funding proposals for high-fidelity patient simulation, including interprofessional simulations, across all schools.
- 6. Consult minority underrepresented Nova Scotians to identify issues of concern and best practices known to increase enrolment, improve academic success and support transition to practice.

- 7. Initiate discussions with employers and the Registered Nurses Professional Development Centre (RN-PDC) to explore existing university and employer clinical mentorship and preceptor resources for consistency and efficiency.
- 8. Develop mechanisms and strategies to share placements, clinical instructors, preceptors and IPE facilitators where individual programs do not currently place large numbers of students (e.g. more rural areas) to achieve effective student-to-instructor ratios.
- Collaborate to place groups of students from multiple professions from one or more universities on site, based on province-wide planning.
- 10. In collaboration with the health authority and the IWK, strike a task group to resolve nursing clinical placement challenges and develop new models for clinical practice education.
- 11. Create models for transition to practice that align with the needs of educational and service sector partners and consider opportunities to use existing funds differently.
- 12. Establish structures for ongoing dialogue and communication between service and education partners at local and provincial levels.

# Tier II Activities: Completed in 2015

#### January-June 2015

- Engage an experienced curriculum expert across three universities Complete the comprehensive undergraduate curriculum review already underway at each school and consider the proposal for an LPN-to-BScN pathway.
- 2. Compare and contrast curricula across the three schools.
- 3. Confirm specialty streaming certification, resources and teaching capacity in the schools.
- 4. Explore and identify opportunities to share services, resources and teaching capacity across the schools.

- 5. Implement any required changes to the provincial co-op program resulting from the forthcoming, new consolidation and bridge-to-practice initiatives.
- 6. Strike a working group to propose elements of an Atlantic strategy for faculty renewal.

### July-December 2015

- 1. For each mode of education delivery (see Table 3), propose common, core, first-year curricular framework.
- 2. Identify transfer points and pathways across the schools.
- 3. Develop one policy for entry to accelerated programs for all schools of nursing.
- 4. Develop a province-wide curricular framework for a 6-semester advanced standing stream that includes 2- or 3-calendar-year delivery options.
- 5. Continue to develop online and hybrid teaching and learning resources.
- 6. Develop a new, 13-week final clinical consolidation that will be responsive to the student learning needs, and take place in the setting of the student's future employment where possible/appropriate.
- 7. Propose models for transition to practice that fit with education and service sector partners and consider opportunities to use existing funds differently.
- 8. Propose mechanism(s) to identify and grant equitable credit for prior university learning across the three schools, including RN diploma graduates.
- 9. Launch marketing of the new strategy to percolate public awareness.

# Tier III Activities: Completed in 2016

### January-June 2016

- 1. Develop new courses within and across the schools.
- 2. Develop online teaching and learning resources.
- 3. Develop classroom and clinical resources for specialty concentration.
- 4. Enhance teaching and learning strategies of faculty, nursing practice educators, preceptors and mentors in patient simulation.
- 5. Complete design of the 13-week clinical consolidation and transition to practice model(s).
- 6. Test scheduling models in practice settings for new clinical practice education model.
- 7. Continue to advance education of faculty and nursing practice educators in patient simulation.
- 8. Schedule clinical education for fall 2016 using newly designed model.

# Tier IV Activities: Implementation

#### September-December 2016

- 1. Launch new curricula in all three schools, and admit first cohort of students into the new programs.
- 2. Begin to launch accelerated programs in all schools with staggered entry times.
- 3. Continue to develop new courses within and across the schools.
- 4. Continue to develop online teaching and learning resources.
- 5. Continue training of faculty, preceptors and mentors in patient simulation.
- 6. Introduce preceptors and mentors to new program structures, content and delivery.
- 7. Implement the new transition to practice model(s).

# Summary and next steps

Almost from the outset, the establishment of the Registered Nurse Education Review in Nova Scotia began to exert an impact on thinking and behaviour across the province. Leaders from each sector frequently commented that, almost immediately, communication and relationships within and across sectors began to change, grow and improve.

New partnerships already have begun to emerge, and some activities recommended in the action plan already are underway. There is a strong commitment among the nursing schools and the service sector to really modernize the student experience — especially to work together to create more effective and satisfying clinical learning experiences and build the structures needed to help students make the transition from education to professional practice.

The Steering Committee was given the task of identifying changes required to modernize and strengthen the quality, effectiveness, sustainability and accountability of nursing education programs in Nova Scotia. Contingent on funding approvals, in support of the recommendations offered in this report, our committee has suggested a new and collaborative model of nursing education for Nova Scotia, and a blueprint for action to implement the new model within two years. We believe the new model recasts the future of nursing education in Nova Scotia, and that our action plan, while ambitious, is a feasible strategy to launch the new direction forward starting with the first cohort of new students in September 2016.

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# **Appendices**

# Appendix A

### **Advisory Group**

#### Paula Bond

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#### Andrea Boyd-White

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#### **Donna Denney**

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#### Darla MacPherson

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#### **Beth Snyder**

Director of Interprofessional Practice Annapolis Valley District Health Authority

#### **Cathy Walls**

Chief Nursing Officer IWK Health Centre

Appendix B

**Faculty renewal** 

In the face of a projected nursing shortage and an existing worldwide shortage of adequately prepared nursing faculty, there is a need to ensure access to educational preparation for nurses who wish to pursue an academic career. Academic nursing consists of two primary foci: teaching and research. The teaching functions need to cover both undergraduate and graduate teaching and faculty need to be prepared to contribute to nursing education at both levels. Generally, this is interpreted to require a Doctor of Philosophy degree (PhD) in Nursing or in a related discipline. In Atlantic Canada, only Dalhousie University and Memorial University of Newfoundland offer a PhD program, the latter having started in September 2013. Enrolments are limited by faculty capacity to supervise MSc and PhD students who are conducting research as part of their graduate studies. It is unlikely that reliance on these PhD programs to produce faculty to replace those who are retiring will meet projected Atlantic Canada needs.

The PhD is designed to prepare individuals for a research career and not everyone is suited for, or wishes to pursue, this kind of research-intense, academic preparation – which can take up to seven years to complete. In the US, UK and other jurisdictions, a second academic credential is available – the professional Doctorate or Doctor of Nursing Practice (DNP). The DNP is a professional terminal credential that typically offered in three streams: management/leadership, education, and/or clinical practice. Graduates of these programs are prepared to support knowledge transfer and adoption of evidence informed practice in a senior organizational leadership role, as a clinical nurse specialist or nurse practitioner, or as a university professor. Courses include some that would be similar to a PhD, but the program does not require conduct of original research and preparation of a thesis. There is usually a capstone project that may consist of application of current evidence to a specific health issue or problem of interest. An example might be a systematic review of the literature. Generally, students can complete the program within four years, even with parttime study. Canadian universities have not yet established a mechanism to grant tenure to non-research faculty and this track needs to be explored further to support job security and retention of teaching faculty.

Increasing the number of nurses in Nova Scotia who hold doctoral level qualifications (either PhD or DNP) would have a number of positive benefits for nursing education and service. It would support an adequate number of qualified faculty to teach the required number of nurses; it would advance nursing leadership and build capacity for evidence informed practice; and it would support nurse practitioners and clinical nurse specialists to contribute to the application of evidence to practice – ultimately improving patient care and health services delivery. The PhD is a vital stream to support the research that grounds practice.

In 2013, only 11.7 per cent of the Nova Scotia nurses who identified themselves in leadership roles (Managers/Assistant Managers, Directors/Assistant Directors, Chief Nursing Officers/ CEOs) had a graduate degree — 79 per cent of these held

# Appendix B

#### **Faculty renewal**

a Masters level credential in nursing.<sup>29</sup> Only four RNs in leadership roles had a PhD. It is important to note that almost half of nurses in leadership roles in Nova Scotia are aged 55 years and older – pointing to an emerging shortage of nurse leaders – and a graduate credential is viewed as essential for such leadership roles.

No DNP programs are currently available in Canada. Seeking this option outside the country incurs additional expenses for candidates and has been a barrier. The Canadian nursing academic community has been reluctant to support the DNP — citing concerns about how this option might impact PhD programs (e.g. through competition for resources, faculty and enrolments). However, evidence from other jurisdictions indicates that the option of DNP studies has had no negative impact on PhD programs; in fact enrolments in both streams have been steadily growing.<sup>30</sup>

At this time, the Dalhousie University School of Nursing is interested in offering greater access to Masters level programming via distance learning in anticipation of growing and unmet needs. Dalhousie is not able to consider offering a DNP program because it is focusing on the PhD program at this time. However, there is a need to support access to the DNP stream of study in Atlantic Canada — likely via strategic partnerships with universities in the U.K. or the U.S. that will support improved access while balancing costs to students. It is also possible that another Atlantic university might be interested in offering this stream of study alone or in partnership and this option should be explored. Supporting access to DNP studies for Nova Scotia nurses is an important policy lever to ensure adequate number of appropriately prepared nurses for leadership and academic roles.

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#### Janet Hazelton

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#### Maureen MacEachern

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#### Kathleen MacMillan

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# Appendix C

**Key informants** 

# Appendix C

#### **Key informants**

#### **Judy Morrow**

Manager, Practical Nursing Program Nova Scotia Community College

#### Josephine Muxlow

Nurse Practitioner, First Nations & Inuit Health, Atlantic Region, Health Canada

#### Willena Nemeth

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#### **External participants**

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#### Anne Marie Rafferty

Professor and Dean Emerita, Florence Nightingale School of Nursing and Midwifery King's College, London

#### Linda Silas

President Canadian Federation of Nurses Unions

#### Ken Scott

Director, Mental Health & Addictions Department of Health and Wellness

#### Krista Smith

Representative to Provincial Nursing Task Force

#### Beth Snyder

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#### **Cathy Walls**

Chief of Nursing IWK Health Centre

#### Michelle Su

Nurse Educator, Langara College, and Board Member, Aboriginal Nurses Association of Canada

#### Sally Thorne

Professor and Director Emerita, School of Nursing, University of British Columbia 1. What are your general comments on the Registered Nurse Education Review process to date?

# Appendix D

Key informant interview questions

- 2. With reference to the pre-circulated discussion paper:
  - a. Which of these ideas make the most sense to you based on your understanding of the current state of things and supporting evidence?
  - b. Which of these ideas do you believe could or should have the most traction among decision makers and stakeholders who will be charged with delivering the change?
  - c. Would any of these proposals be a *deal-breaker* for you, or that you think would be so for others and, if so, what are they?
  - d. What is missing from this list, and/or what should be changed here?
- 3. The Registered Nurse Education Review is interested in hearing from stakeholders, and one strategy that may be used is an anonymous, online survey. If you were developing that survey, are there specific questions you believe should be included and, if so, what are they?
- 4. What are the greatest strengths of the current state of nursing education in Nova Scotia that you believe should be preserved in a new model?
- 5. What current aspects of nursing education in Nova Scotia do you believe absolutely must change in a new model?
- 6. If you have concerns about the current nursing education review process, what are they, and what could be done to resolve or mitigate them?
- 7. What issues, if any, would you like to share anonymously with the nursing education review teams?

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# References

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<sup>8</sup>Canadian Association of Schools of Nursing. (2011.) *Position statement: Education of registered nurses in Canada*. Ottawa: Author.

<sup>9</sup>See: http://www.cbu.ca/academics/nursing/.

<sup>10</sup> See: http://www.dal.ca/faculty/healthprofessions/nursing.html

<sup>11</sup>See: http://www.stfx.ca/faculties/science/nursing/

<sup>12</sup>See: Practical nursing. <a href="http://www.nscc.ca/learning\_programs/programs/">http://www.nscc.ca/learning\_programs/programs/</a> PlanDescr.aspx?prg=PNUR&pln=PRACNURDIP.

<sup>13</sup>Canadian Association of Schools of Nursing. (2002). New and emerging models of nursing education. Ottawa: Author.

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- <sup>15</sup> All documents, including *Records of decisions* available from the project leader, DHW.
- <sup>16</sup> All documents, including *Records of decisions* available from the project leader, DHW.
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- <sup>26</sup>Discussion paper circulated to stakeholders: Toward a new model for collaborative undergraduate nursing education in Nova Scotia. (2014).
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<sup>29</sup>Based on 2013 RN registration data provided by the College of Registered Nurses of Nova Scotia.

<sup>30</sup>Personal communication with Dr. K. MacMillan from sources at the University of Wisconsin, University of Michigan, and Case Western Reserve University, June 2014.



# REGISTERED NURSE EDUCATION REVIEW IN NOVA SCOTIA

**Final Report**