

The National Student and Faculty Survey of Canadian Schools of Nursing 2004-2005: Survey Methodology

Registered nurses (RNs) are the backbone of the health care system. Ensuring an adequate supply of RNs is of critical importance to the system's smooth functioning. The annual output of new nurse supply from nursing education programs (programs entitling successful graduates to apply for RN licensure) is the principal source of new additions to the Canadian RN workforce.

CNA, in collaboration with CASN, has been collecting student and faculty data for the last two decades. In the summer of 2002, CNA contracted Dr. Eva Ryten to review its data collection methods and the statistical results of the annual survey of schools of nursing. One outcome of Dr. Ryten's work was a suggestion to redesign the student and faculty survey methodology and format to ensure the accurate capture of the increasing complexity and variety of nursing education programs, the proliferation of sites at which they are offered and the multiple entry points into nursing, with a particular focus on qualification earned. A collaborative project was therefore undertaken by CASN and CNA to redesign the survey forms both to solve the problems encountered with the data collected in recent years and to ensure that counting was complete and reflective of the new realities of nursing education in the 21st century.

The data from this survey support accurate projections of the number of graduates eligible to enter the nursing workforce by a given date, detail the number of nurses obtaining graduate and postgraduate qualifications and provide important information on the composition of faculty required to deliver nursing education.

GENERAL METHODOLOGY

Background

A few years after CNA adopted a policy of baccalaureate education for new RNs, provinces and territories moved to phase out community college diploma programs and convert all new nurse supply education programs to undergraduate university degree programs. Conversion to degree programs is complete in all the Atlantic provinces and in Saskatchewan. A few diploma programs remain in Manitoba. Alberta converted to degree programs with a diploma exit option for some students and has proposed that the transition to baccalaureate be complete by the end of December 2009. British Columbia completed the transition at the end of 2005. Ontario adopted baccalaureate as of January 2005. The Registered Nurses Association of the Northwest Territories and Nunavut holds the position that the baccalaureate should be required. Quebec continues to provide diploma programs while supporting the development of baccalaureate partnerships between CEGEPs and universities. The Yukon has no entry-level educational programs.

Additional information about provincial positions on the adoption of baccalaureate education for new RNs is available in the CNA fact sheet *Nursing in Canada*, in the section entitled "The Transition Process."

The conversion from diploma to degree programs brought in its wake many statistical complications. The mechanism adopted to convert from diploma to degree programs was the introduction of collaborative degree programs. "Collaborative" refers to a relationship of cooperation between a university and one or more college-level institutions. The extent and type of collaboration existing between a university and its collaborating partner or partners varies greatly. At one extreme, the university may be responsible only for ensuring that the curriculum meets university degree standards, and the college may deliver the entire curriculum on its sites. At the other extreme, the university may be heavily involved not only in approving academic standards, but also in delivering sizable amounts of the curriculum on its campuses.

In light of the trend towards baccalaureate education, CNA, with CASN's agreement, adopted a data record linking process. The process links college admission and enrolment data for diploma exit and collaborative degree programs to the corresponding baccalaureate program enrolment and graduate data of the university partner. This approach allows for the statistical tracking of nursing students by qualification earned from the point of admission, by each year of enrolment, through to graduation.

Data Collection

The survey requests the following:

- ❖ Program Inventory – covers all nursing programs leading to initial licensure (e.g., diploma, diploma exit, baccalaureate, collaborative baccalaureate) as well as formal programs furthering an RN's education (e.g. post-RN, master's, doctorate, nurse practitioner); includes programs offered via distance, multiple language offerings and multiple partnership arrangements. *Collection period: academic year.*
- ❖ Quota, Admission and Enrolment – for each of the programs listed in the program inventory, by partner, by site, where available. *Collection period: academic year.*
- ❖ Graduates – by qualification earned, graduates by gender for each program listed in the program inventory, by partner, by site, where available. *Collection period: calendar year.*
- ❖ Faculty Demographics – details on faculty responsible for the delivery of programs listed in the program inventory, by gender, rank and status; these data include components such as highest academic credential, age cohorts and average age of retirement. *Collection period: academic year.*

Admission and enrolment data are collected for the previous academic year to ensure that fall, winter and summer intake data are gathered. Graduate data are collected for the calendar year to align with annual licensing examination practices and health human resource planning. Faculty data are collected during the academic year to allow for comparisons to student admission and enrolment data.

The data are completed by the appropriate designate at each school and are reviewed and approved by the dean, director, program head or equivalent. On receipt, the data are reviewed by CNA and CASN to ensure that all programs, sites, partners and data elements have been included. Comparisons are made to program

inventories from previous years as well as program data listed on each school website to ensure that data are representative of all programs offered by the school.

Questions that arise before or after data entry are resolved by CNA and the dean, director or program head. That person attests to the data's accuracy and completeness and approves the use of the data to prepare reports and to support research and policy decisions affecting the future supply of nurses in Canada.

In the event that data are not reported, the omitted data are sorted by data type and captured in one of two categories: (1) not available (2) not appropriate or applicable. Omitted data are identified in the reports.

Data Organization

As mentioned earlier, the data derived from the survey accommodate the increasing variety and complexity of nursing education in Canada. The data are organized to allow for statistical trends to be tracked at provincial/territorial and national levels by qualification earned.

Another component of data organization accommodates the increasing variety of nurse practitioner (NP) programs. Nurse practitioner programs may be combined (i.e., integrated) with baccalaureate, post-RN or master's degree programs, and schools may report separate data for these integrated programs. In these instances, data are recorded under the NP program and the corresponding degree program. As a result, baccalaureate, post-RN and master's degree programs contain admission, enrolment and graduate data that are counted in both the degree program and the NP program; however, the percentage of such "double-count" totals, when compared to the total counts, is minimal.

If the school is not able to provide the data separately (e.g., some BScN/NP programs are reported such that all enrolment or graduate data are included in another baccalaureate program), the under-reporting of the NP data is noted.

Many schools are in the process of phasing out diploma programs or have introduced collaborative baccalaureate programs that may include a diploma exit option. The data for these programs are handled as follows:

- ❖ If a college is no longer accepting new diploma students but continues to educate Year 2 or Year 3 students, a diploma program is attributed to this school. The admission, enrolment and graduate data are recorded in the college's data.
- ❖ If a college offers a collaborative baccalaureate program with a diploma exit option in partnership with a degree-granting institution, a diploma program and a collaborative baccalaureate program are attributed to the college. The college admission and enrolment data are linked to the degree-granting institution's corresponding enrolment and graduate data. Graduates exiting with a diploma are recorded in the graduate data of the college awarding the diploma. Graduate data for students electing to pursue a baccalaureate degree are included in the graduate data reported by the degree-granting institution.

Links are established between college and university partners offering collaborative baccalaureate programs such that admission, enrolment and graduate data records mirror the delivery of each partner. A baccalaureate program is attributed to each

partner offering a part of the baccalaureate program. This approach allows for the statistical tracking of nursing students by qualification earned from the point of admission, by each year of enrolment, at each partner sitethrough to graduation.

Collaborative partnerships exist across provincial/territorial boundaries. Data records identify these out-of-province/territory partnerships while handling admission, enrolment and graduate data as previously detailed.

During the survey period 2004–2005, there were four out-of-province/territory baccalaureate collaborative partnerships: Aurora College, N.W.T., partnered with the University of Victoria, B.C.; College Universitaire Saint-Boniface, M.B., partnered with University of Ottawa / Université d'Ottawa, Ont., Nunavut Arctic College, N.T., partnered with Dalhousie University, N.S.; and Humber College, Ont., partnered with the University of New Brunswick, N.B.

Reports

The survey data are summarized in five reports for distribution to schools of nursing and interested parties (e.g., CNA jurisdiction members, CASN member schools, researchers, government departments). Each report contains important notes covering data scope, updates to previous years' data, omissions and acknowledgments. The reports are posted to the CNA and CASN websites.

It is important to review the program names included in each of the program categories listed in the various reports. Equally important is an understanding of the approach taken to collaborative baccalaureate programs, data pertaining to NP programs and partnerships outside provincial/territorial boundaries. See the sections General Methodology, Background for information on this point as well as the section titled Data Organization. A review of the Definitions section, Appendix A, is also recommended.

Data Confidentiality and Privacy

As part of the 2004–2005 survey submission procedures, each school completes a confidentiality release form authorizing CNA and CASN to release the data for purposes of research, policy-making, advocacy, etc. In addition, CNA staff adheres to CNA's policy Protection of Personal Information, which is available on the CNA website, and CASN staff adheres to CASN's privacy policy, which is posted on the CASN website.

Attachments:

Appendix A, Definitions

Appendix A: DEFINITIONS

Admission	Total number of first-time nursing students admitted to Year 1 of the program, calculated after allowed withdrawal date
Baccalaureate program, University delivery	Entire curriculum is offered and delivered at university site
Baccalaureate program, Collaborative delivery	A program offered in partnership between a university and another institution
College	A college, CEGEP or other non-university school of nursing
Continuing student	A student who was enrolled in the previous year of study in the previous academic year
Enrolment	The number of students enrolled in each year of the program; includes first-time entrants, continuing students, advanced entry students entering from another nursing program or another university program, repeaters and students returning from a leave of absence
First-timer	A student enrolled in the program for the very first time; a new entrant
Intake	The times during an academic year when students are accepted and enter into programs
Post-RN program	Completion of program by an RN resulting in achievement of a baccalaureate degree
Quota	The number of provincially funded slots for new first-year entrants or the school's own quota for the program
Repeater	A student who was enrolled in the same year of study in the previous academic year
Returnee/ Leave of Absence (L.O.A.)	A student who has returned to study after an interruption or leave of absence (e.g., maternity leave)
University	The institution is either a university, a university college or an institution authorized to confer a degree