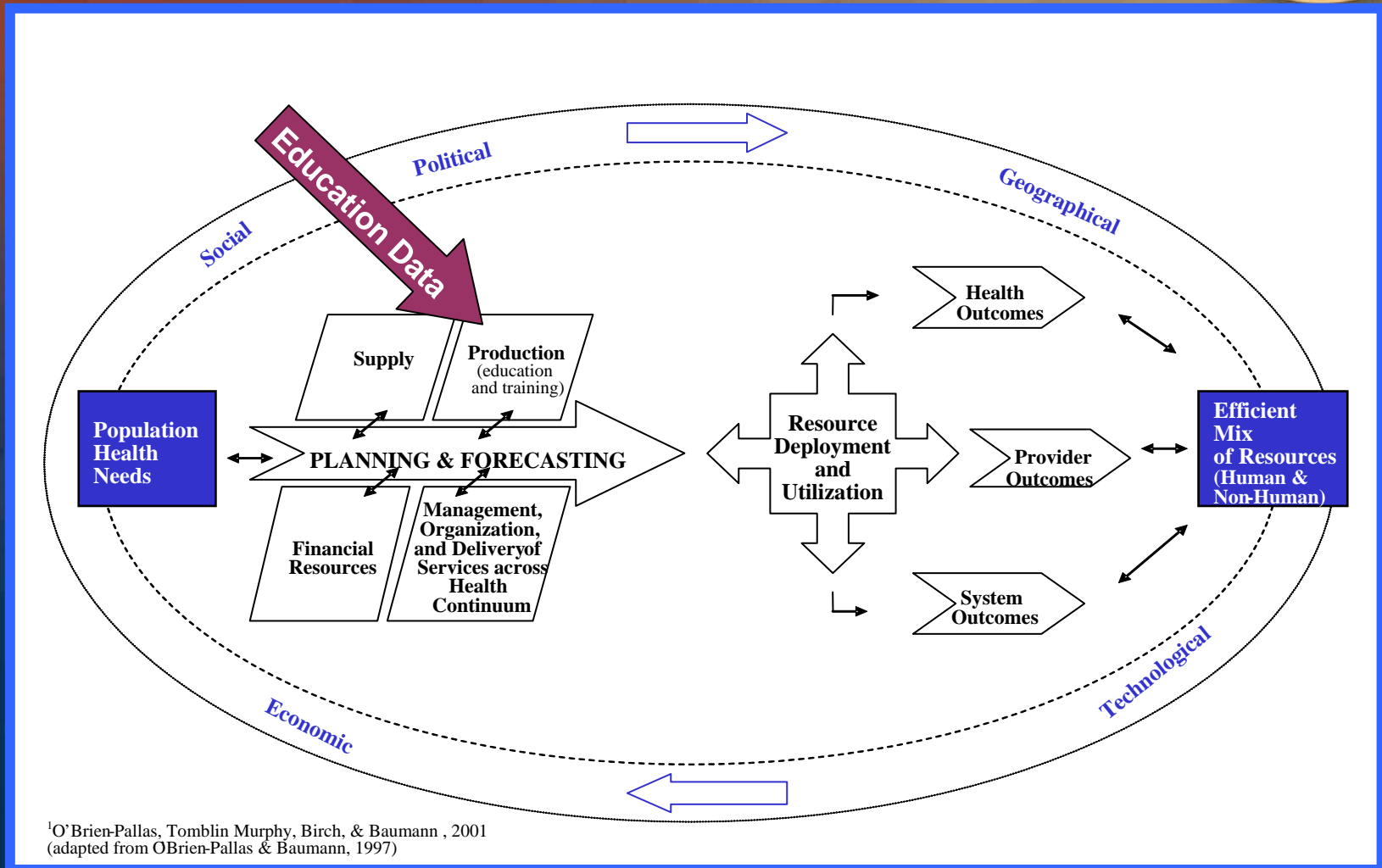
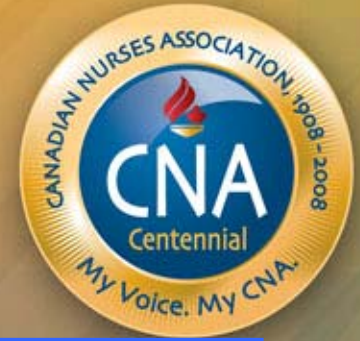




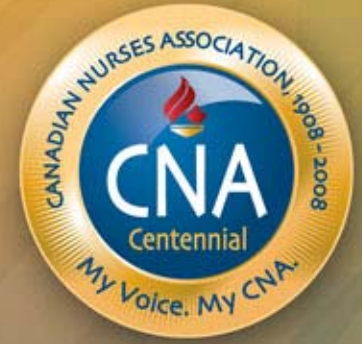
Utilizing Nursing Education Data to Inform HHR Policy and Planning

Nancy Field, Data Analyst
December 2007

Health Human Resources Conceptual Framework ¹



¹O'Brien-Pallas, Tomblin Murphy, Birch, & Baumann, 2001
(adapted from O'Brien-Pallas & Baumann, 1997)



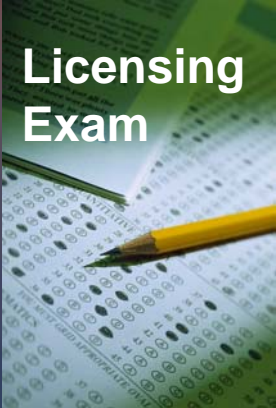
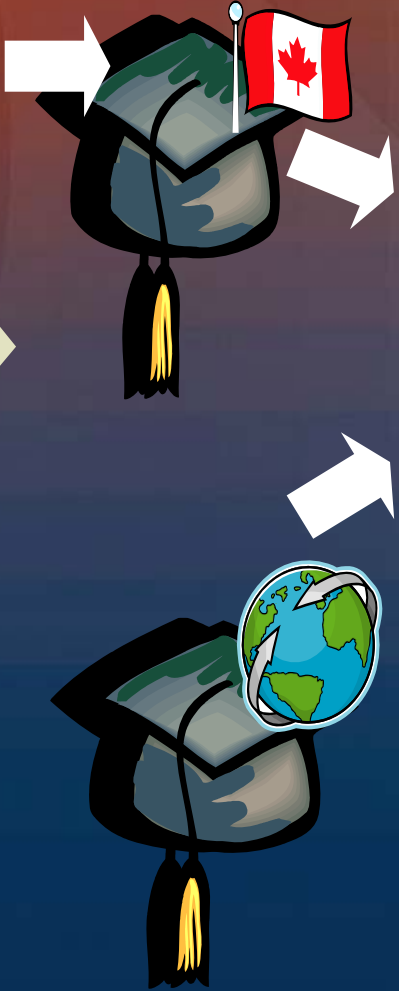
Three key sources of data for understanding the number of nursing students and prospective graduates, entering the system:

- National Student and Faculty Survey (CNA/CASN)
- Canadian Registered Nurse Exam (CNA/ASI)
- Enhanced Student Information System (Statistics Canada)

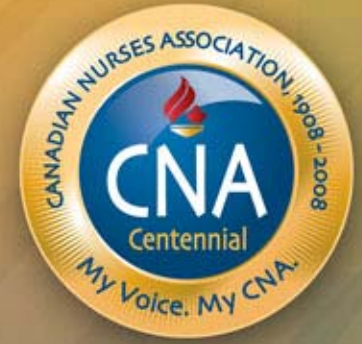
Production



Annual Student and Faculty Survey



National Student and Faculty Survey



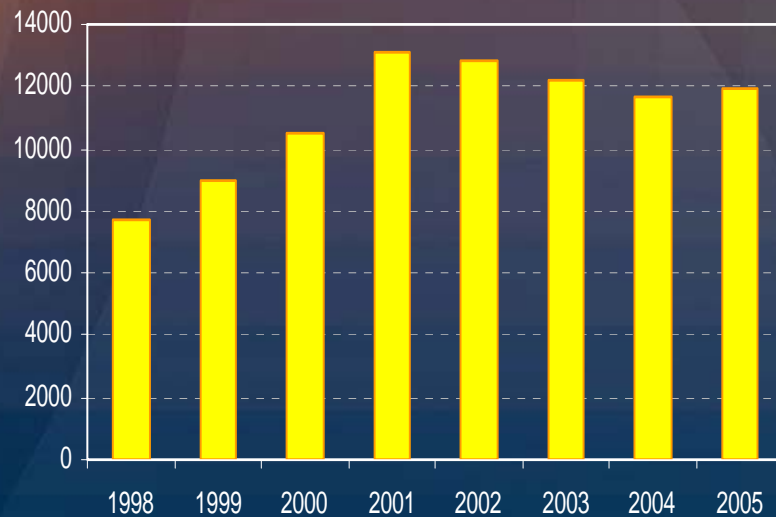
- 135 schools of nursing
- Collaborative partnerships
- Interprovincial partnerships
- 100% response rate in all P/T except Quebec; 90% average
- RPN/LPN expansion

www.cna-aiic.ca/CNA/nursing/statistics

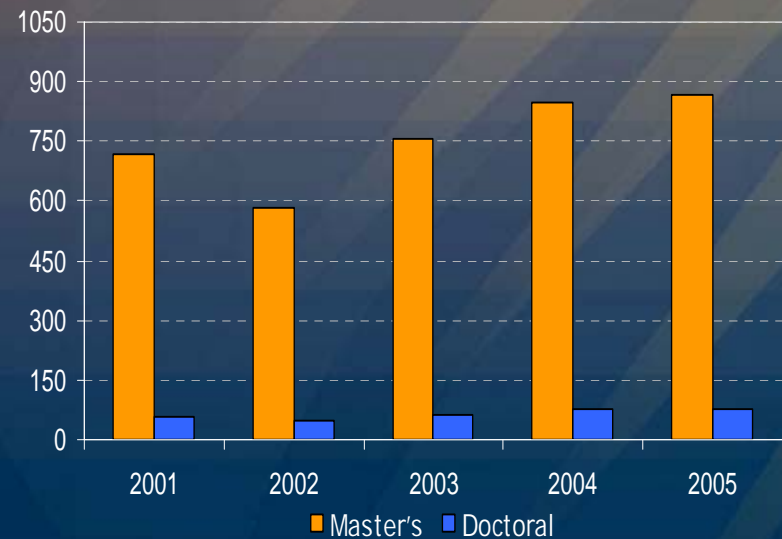
Predicting Future Supply



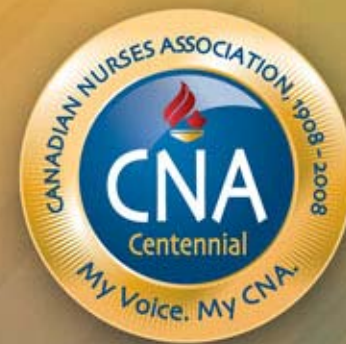
ETP Admissions



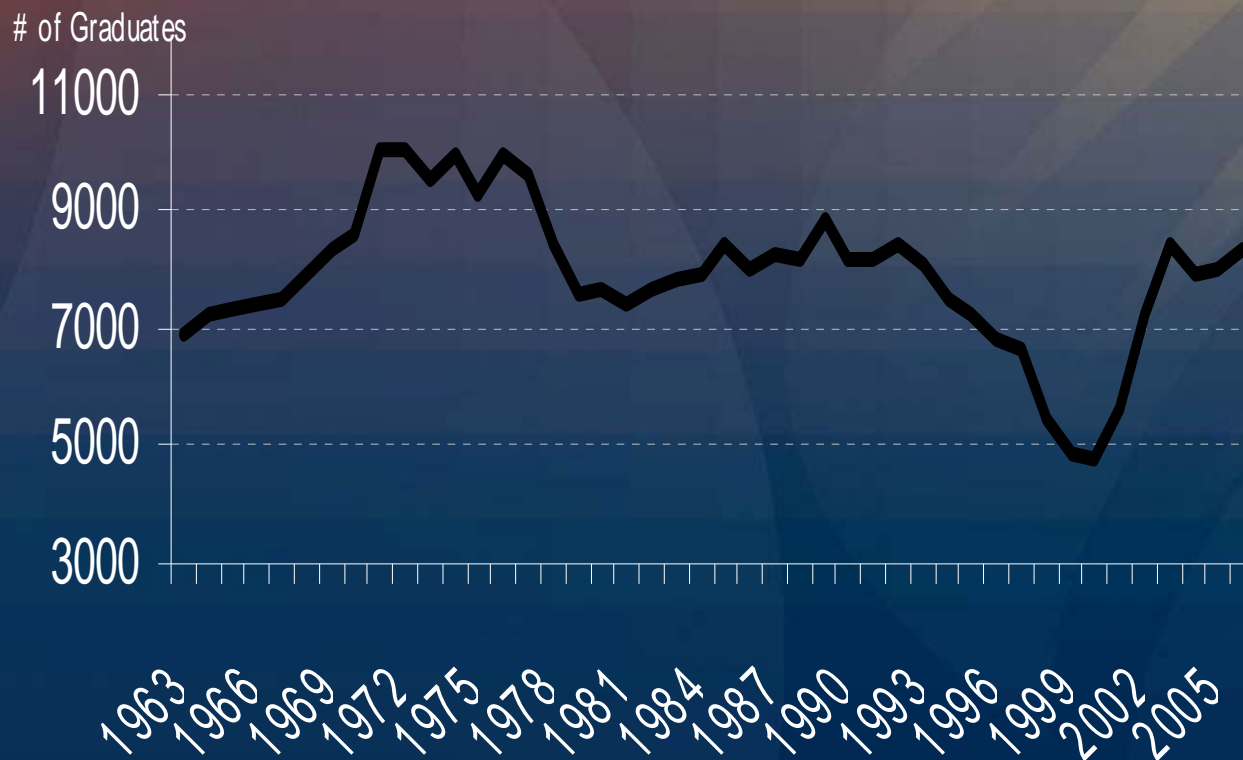
Master's and PhD Admissions



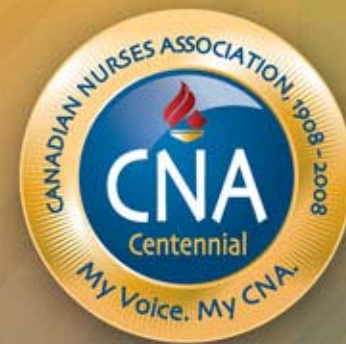
Graduate Results



ETP Graduates 1963 to 2006



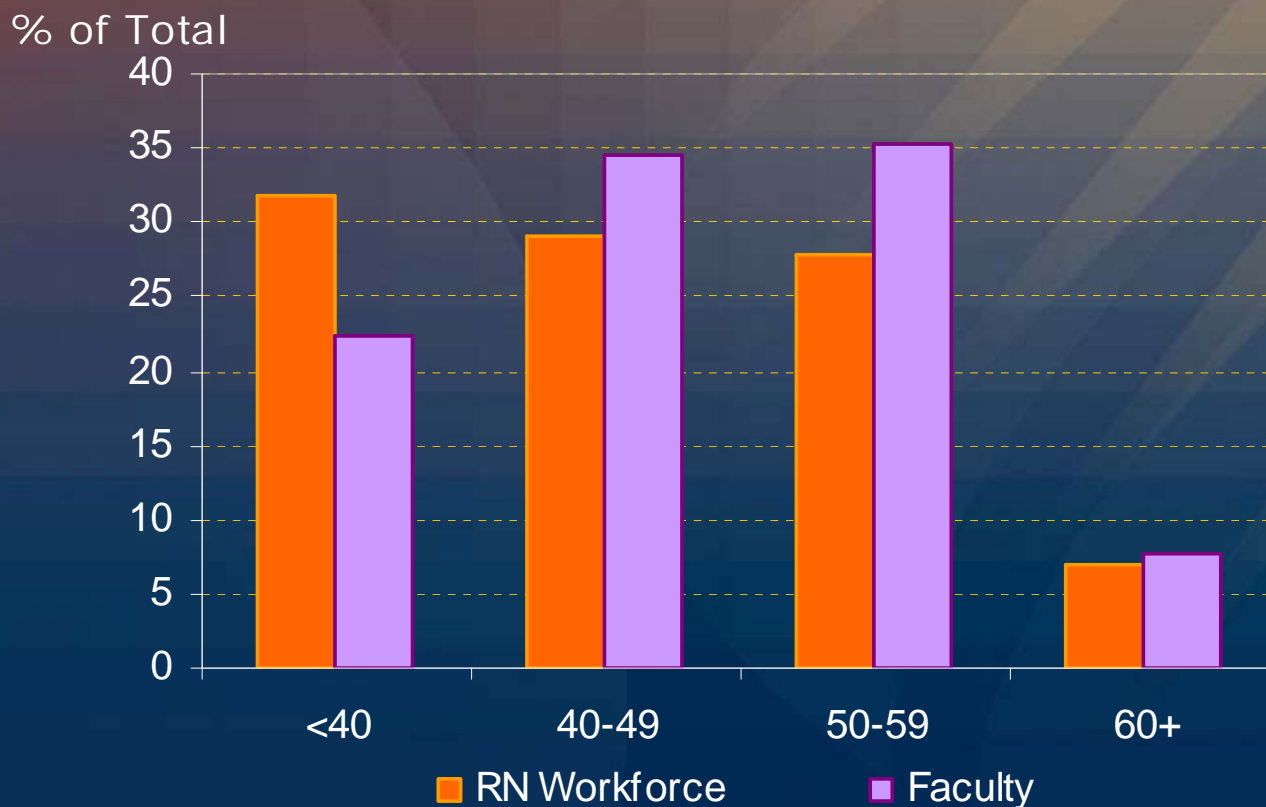
Faculty Results



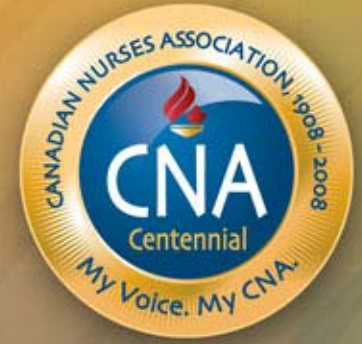
Age Cohorts 2005: RN Workforce Compared to Faculty

400+ recruited in 2005

350 vacancies in 2006



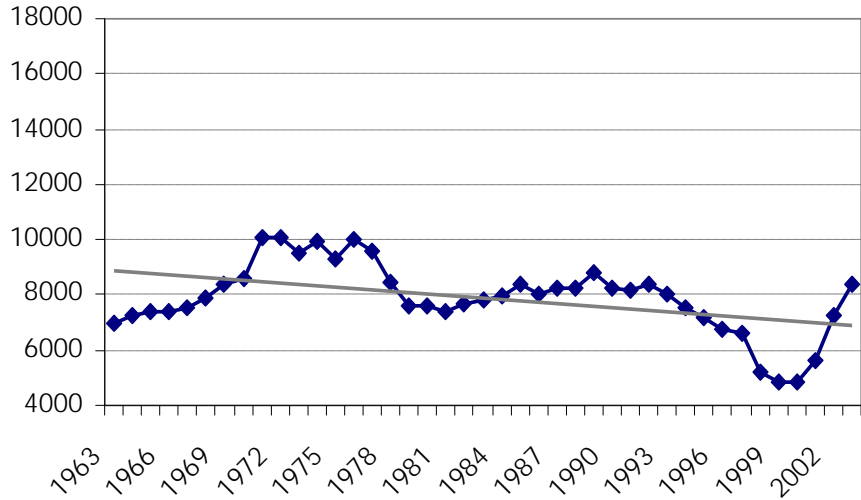
Program Innovations



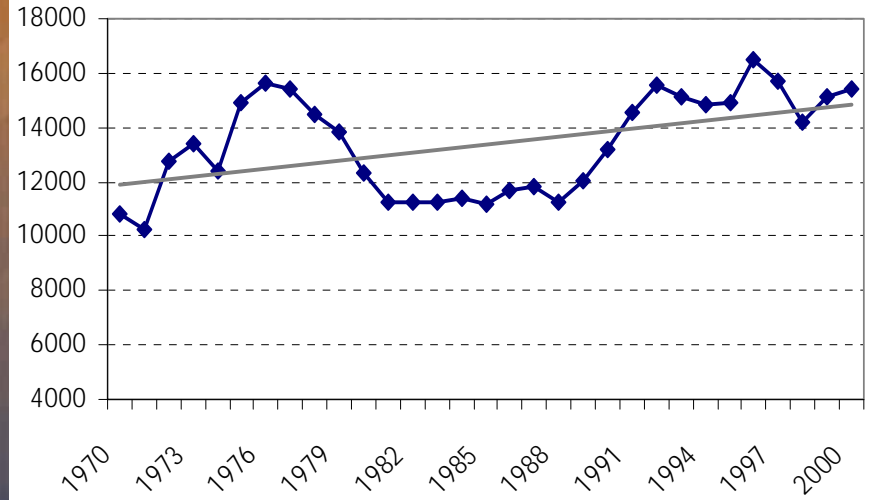
In 2005-2006

- 32 programs offered to fast-track students; 23% more than in 2003
- 37 baccalaureate, 19 masters and 6 PhD programs were offered via distance
- Fast-tracking ETP programs available in every P/T except PEI

Registered Nurse Graduates
Canadian Diploma and Baccalaureate Programs
1963 to 2003

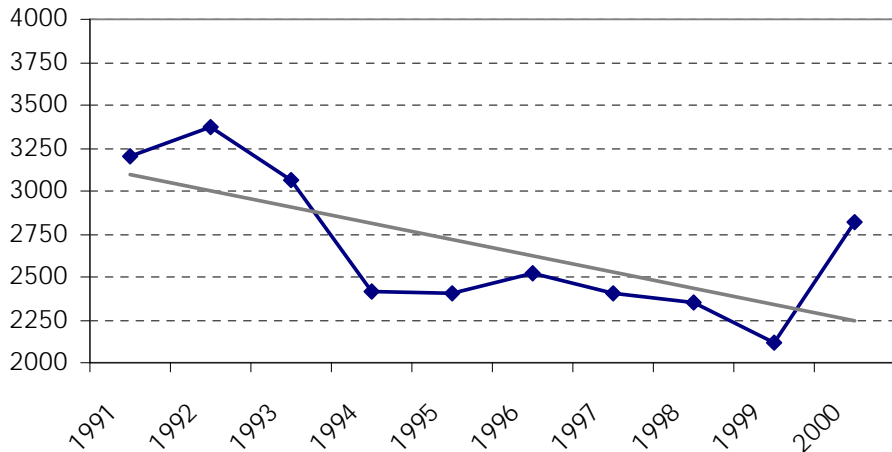


Elementary and Secondary School Teacher Graduates
Canadian Bachelor Degree Programs
1970 to 2000

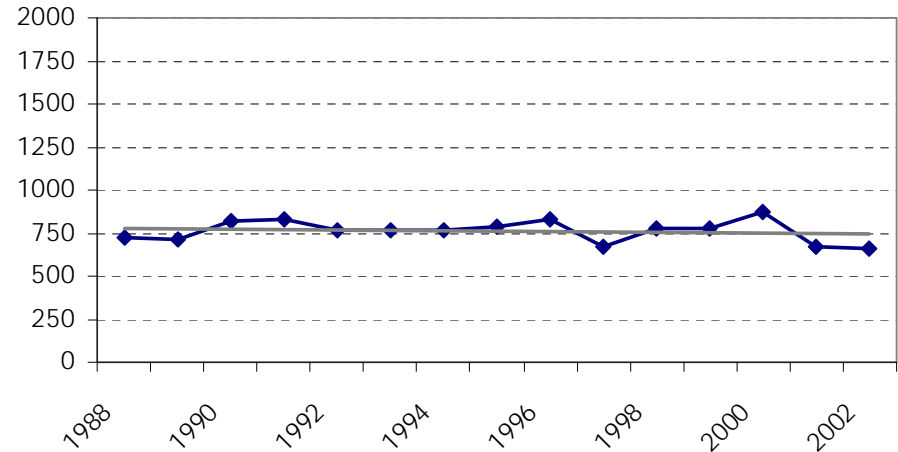


Collaboration

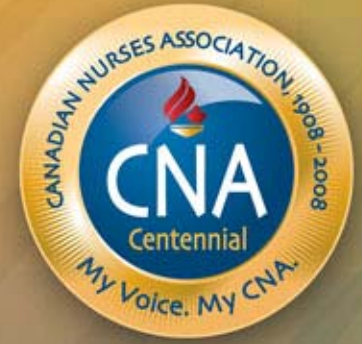
Licensed Practical Nurse Graduates
Provincially Approved Programs
1991 to 2000



Pharmacy Graduates
Canadian Degree Programs
1988 to 2002

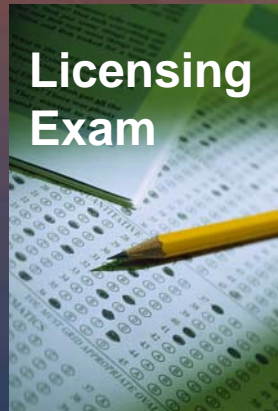
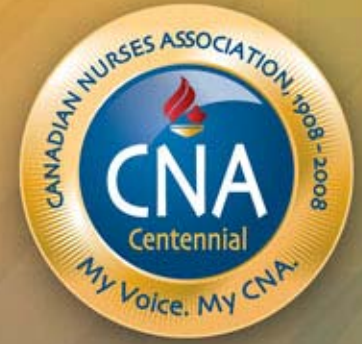


Data Limitations



- Not mandatory – OIIQ / CEGEPs
- Unique identifier
 - Age of students
 - Aboriginal students
 - Visible minorities
- Human resources and information systems

Production



Exam Statistics



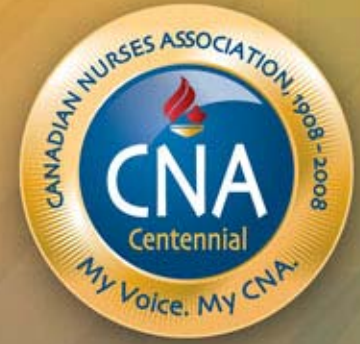
What is the CRNE?



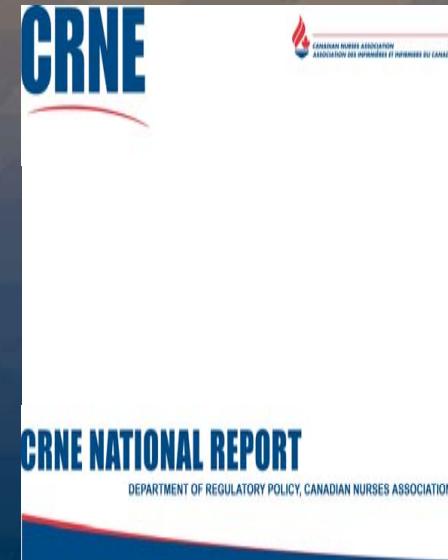
- Canada's National Nursing Licensure Examination
- Used by all provinces and territories except Quebec



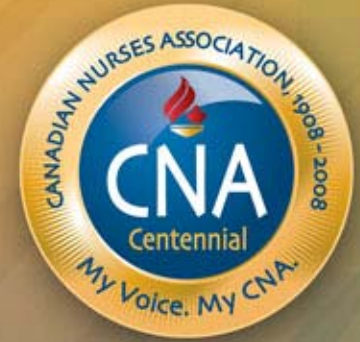
CRNE Data



- CNA collects and analyzes data on CRNE writers
 - Performance data
 - Demographic data

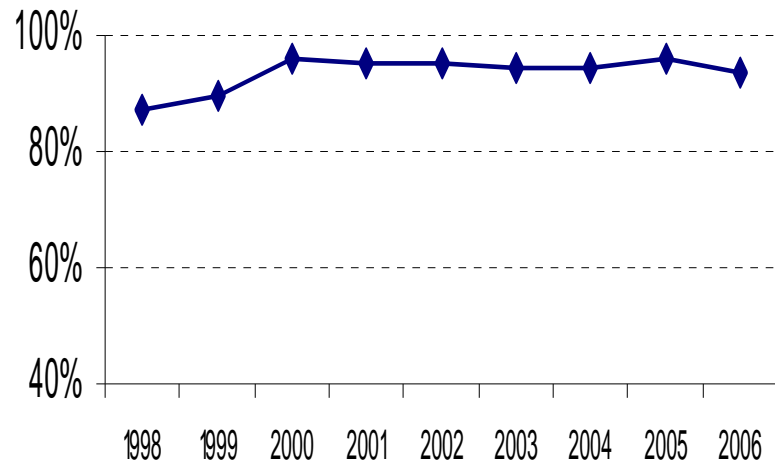


Performance Data

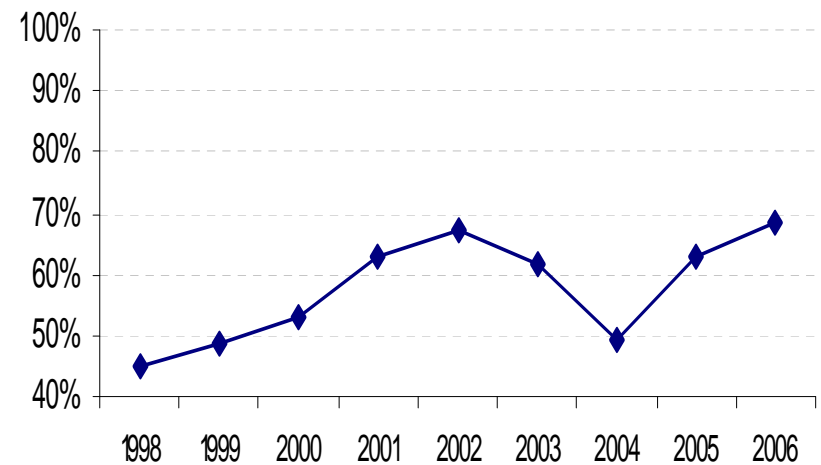


- Since 1998 pass rate for first time IEN writers ranged from 45% to 68% whereas Canada educated nurses ranged from 88% to 96%

First-time Canada-educated Pass Rate



First-time Internationally-educated Pass Rate



Demographic Data



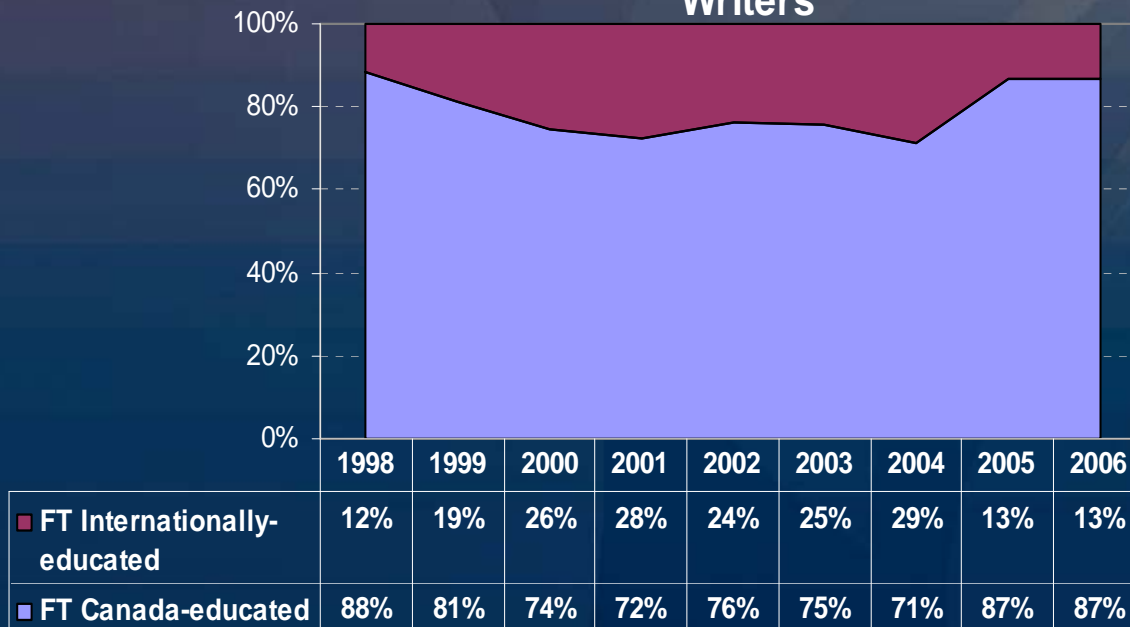
- Overall numbers of first time writers in the 1998 to 2006 period ranged from 4,797 writers to 10992 writers
- IEN
 - Range of a low of 582 (in 1998) to a high of 3188 (in 2004)
- Canada educated
 - Range from a low of 3596 (in 2000) to a high of 7804 (in 2004)

Distribution of Writers



- Between 1998 and 2006 the percentage
- of first time writers that were internationally educated ranged from 12% to 29%.

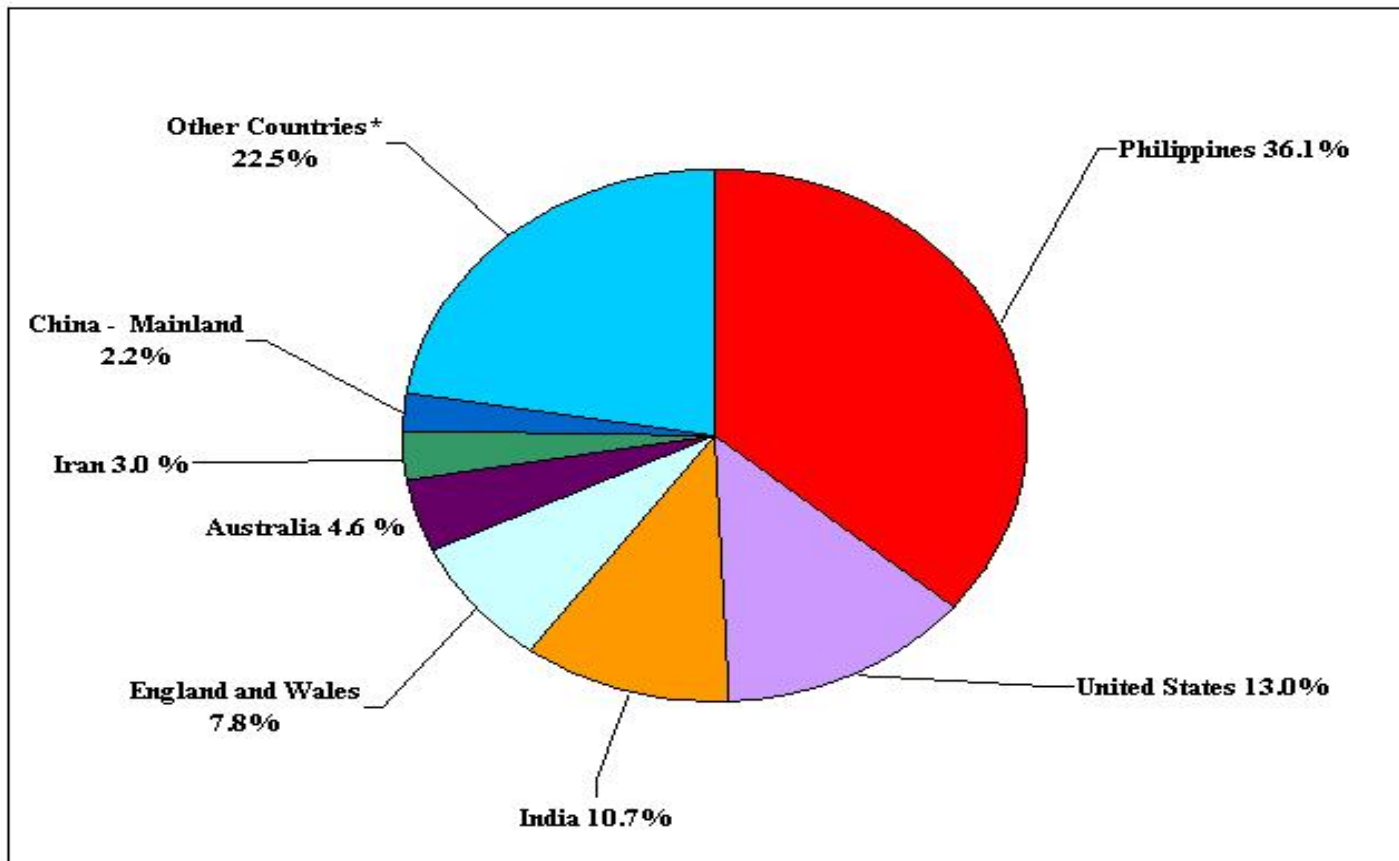
Canada vs Internationally-educated CRNE Writers



Source Countries of IENs First Time Writers, 2006



Country of Education of First-Time Internationally Educated CRNE Candidates
Calendar Year 2006



Source: Canadian Nurses Association, Department of Regulatory Policy

* Other Countries represent 53 countries each with less than 2% of the total number of first-time internationally educated candidates

Passing Candidates



- **CRNE**

- In 2004, IENs accounted for 25.9% of all candidates passing the CRNE
- In 2005, this proportion dropped to 12.2%
- In 2006, 11.7% of all candidates passing the CRNE were IENs

Age of CRNE Passing Candidates, 2006



- Canada educated
 - Average age is 26
 - The youngest is 20 and the oldest is 62
 - Most common age range is 20-29 years
- IEN
 - Average age is 35
 - The youngest is 21 and the oldest is 60
 - Most common age range is 30-39 years



Thank you.