



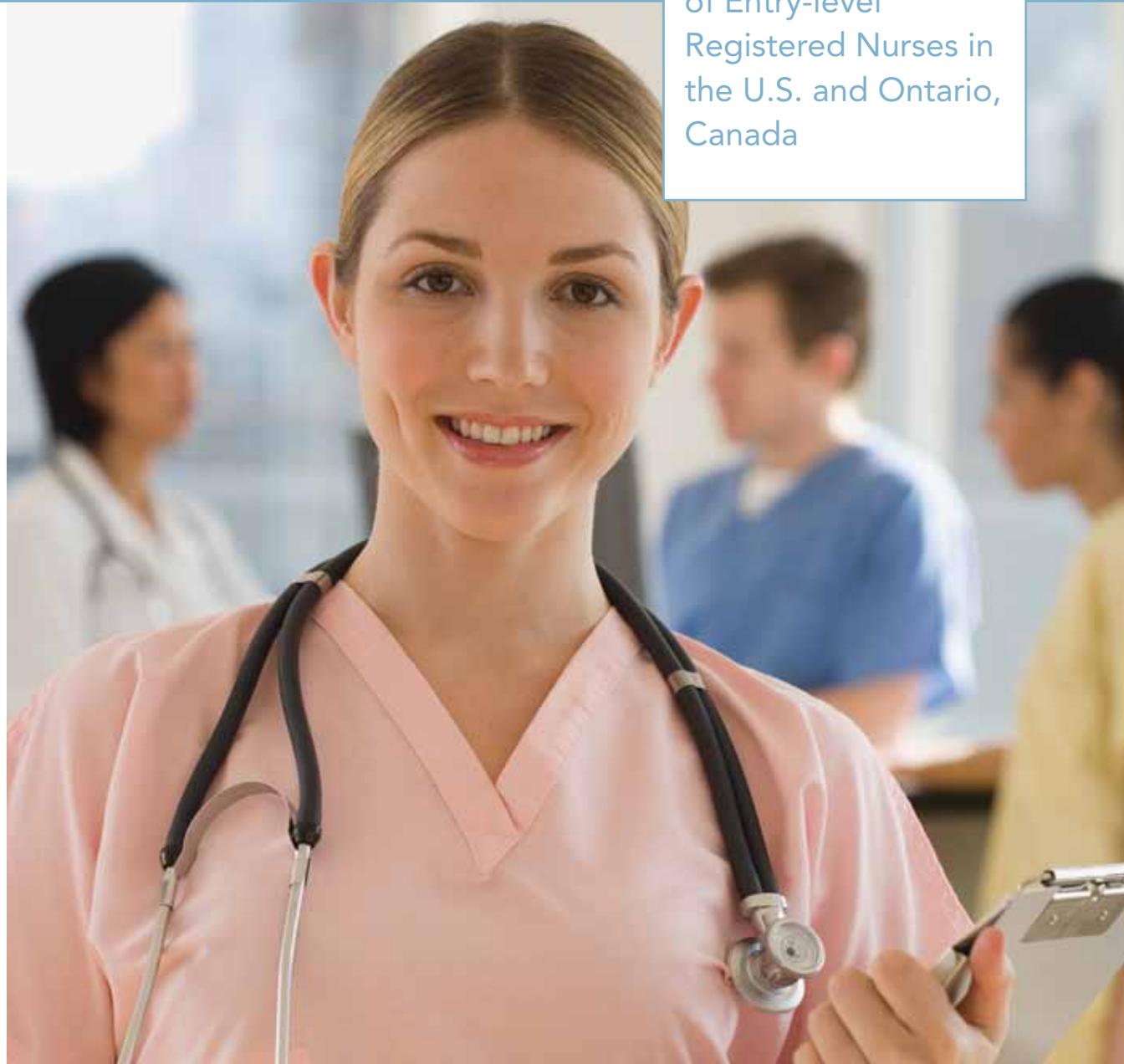
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National Council of State Boards of Nursing

NCSBN RESEARCH BRIEF

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Report of Findings
from the Comparison
of Entry-level
Registered Nurses in
the U.S. and Ontario,
Canada



Report of Findings from the

**COMPARISON OF ENTRY-LEVEL
REGISTERED NURSES IN THE U.S. AND
ONTARIO, CANADA**

National Council of State Boards of Nursing, Inc. (NCSBN®)

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EXECUTIVE SUMMARY

The purpose of this study was to compare entry-level nursing activities of U.S. registered nurses (RNs) with a cohort from Ontario, Canada. The College of Nurses of Ontario (CNO) collaborated with the National Council of State Boards of Nursing (NCSBN®) on this initiative. CNO managed the distribution of the surveys and collection of data from registrants who successfully completed the June 2009 administration of the Canadian Registered Nurse Examination (CRNE®). The goal was to determine if there is similarity between RNs in the U.S. and Ontario, with respect to a list of 142 entry-level RN nursing activities based on entry-level nurses in the U.S. The RN nursing activities were developed using a rigorous process and were validated by a large-scale survey of U.S. entry-level RNs. Activities from the *2008 RN Practice Analysis: Linking NCLEX-RN® Examination to Practice* were used to assess similarities between entry-level nursing practices in the two regions.

Survey Development

A total of 142 nursing activity statements from the 2008 RN Practice Analysis were incorporated into the Comparison of Entry-level Registered Nurses in the U.S. and Ontario, Canada Survey, which also included questions about the nurses' practice settings, past experiences and demographics. It was sent to the summer 2009 cohort of entry-level nurses in Ontario. A sample of 1,697 entry-level RNs were sent a paper version of the survey.

Survey Process

Sample Selection

All 1,697 RNs who registered with CNO after successfully completing the CRNE in its June 2009 administration were invited to take part in the study.

Mailing Procedure

A five-stage mailing process was used to engage the participants in the study. All potential participants were promised confidentiality with regard to their participation and responses. The survey was conducted from October through December 2009.

Return Rates

Of the 1,697 prenotice postcards that were sent, eight were returned as undeliverable. A total of 1,689 were mailed after adjusting for the eight returned prenotice postcards. At the survey stage, one survey was returned due to an incorrect address, resulting in 1,688 total mailed surveys. Among the surveys sent, 540 were received for an adjusted return rate of 32.0%. There were 99 individuals who did not qualify for survey ratings because they were not currently working in Ontario and/or were working less than 20 hours per week providing direct care to clients as an RN. After adjusting for incorrect addresses and removals, the analyzable response rate was 26.1%.

RN Ontario Comparability Survey Nonresponder Study

In order to ensure the validity of the results, a survey of nonresponders was conducted to determine if those Ontario RNs not responding would have rated the survey activity statements comparably. Based on the nonresponder data, the ratings for nonresponders were similar to the ratings of responders, which provides support to the validity of the survey results.

Demographics, Experiences and Practice Environments of Participants

Demographics/Past Experiences

The majority of Ontario responders reported being female (91.8%). This result was similar to that of the U.S. cohort (88.3% female). The age of responder Ontario nurses averaged 27.30 years (SD 7.10 years), while the U.S. cohort reported an average age of 31.89 years (SD 8.94 years).

Ontario responders listed obtaining an RN baccalaureate degree most frequently (95.1%); this percentage is considerably higher than that among the U.S. cohort (35.9%), which mostly reported associate degree as the educational qualifying program to take the NCLEX® (56.1%).

Approximately 34.8% of the Ontario respond

ers reported working an average of 2.1 years as a personal support worker (PSW) before becoming an RN, compared to 51.7% of the U.S. cohort reporting an average of 3.1 years of nurse aide/nursing assistant (NA) work prior to becoming an RN.

Orientation

The majority of entry-level Ontario responders reported working with an assigned preceptor or mentor during orientation (71.5%). This percentage was comparable to the U.S. cohort (73.4%). No formal orientation was reported by 1.1% of Ontario responders.

Certifications Earned

In the current study, 38.3% of Ontario responders reported earning basic life support as an area of additional training. This is considerably lower than the 63.1% reported by the U.S. cohort that had the same additional training. Along with basic life support, intravenous therapy (28.5%), other coursework or certification (14.1%) and advance cardiac life support (12.0%) were among the most frequently reported certifications among Ontario responders.

Facilities

Similar to the U.S. cohort, the majority (87.8%) of Ontario responders reported working in hospitals. Only 5.0% reported working in long-term care and 6.8% reported working in community-based facilities. The number of beds most frequently reported in hospitals or nursing homes was 500 or more (25.9%). Approximately 21.2% of Ontario responders indicated that they did not know the number of beds available in the hospital where they worked. The majority of Ontario responders (70.9%) reported working in urban or metropolitan areas, 18.5% worked in suburban areas and 10.7% worked in rural areas.

Practice Settings

There were 41.1% of Ontario responders who reported working in a medical/surgical setting, which is comparable to the proportion of entry-level medical/surgical nurses (39.5%) in the U.S. cohort. Critical care (19.3%) was also a commonly cited work setting among Ontario responders.

Client Health Conditions and Ages

Ontario responders reported caring for acutely ill clients (56.9%), clients with stable chronic conditions (22.6%), clients with unstable chronic conditions (18.7%) and clients with behavioral/emotional conditions (16.1%). This ranking pattern is consistent with entry-level RNs in the U.S. The majority of entry-level Ontario RNs reported caring for older adult clients aged 65 to 85 (51.5%), adult clients aged 31 to 64 (42.0%), older adult clients aged 85 and older (19.3%) and young adults aged 19 to 30 (17.0%). This ranking is consistent with the U.S. cohort, who reported caring mostly for older adult clients aged 65 to 85, adult clients aged 31 to 64, older adult clients aged 85 and older and young adults aged 19 to 30.

Shifts Worked

The majority of Ontario responders indicated working rotating shifts (77.1%). This is quite different from the U.S. cohort who most commonly worked day (42.3%) and night (34.8%) shifts, with only 13.1% reported working rotating shifts.

Time Spent in Different Categories of Nursing Activities

Ontario responders reported spending the greatest amount of time per day in physiological adaptation (average 3.96 hours), management of care (average 3.78 hours), and basic care and comfort (average 3.41 hours). Responders of this study reported devoting between two to three hours of time per workday on safety and infection control, health promotion and maintenance, psychosocial integrity, pharmacological and parenteral therapies, and reduction of risk potential. Results of the U.S. study indicated that entry-level nurses in the U.S. cohort spent more time per day, as compared to Ontario responders, on nursing activities in all categories except physiological adaptation.

Administrative Responsibilities/Primary Administrative Position

Of the Ontario responders, 13.6% reported having administrative responsibilities compared to 16.0% of the U.S. cohort who reported having such responsibilities.

Activity Statement Performance Findings

Reliability

Reliability indices were calculated to assess the capability of the survey to measure the activities relevant to safe and effective practice of entry-level RNs. The survey had a reliability value of 0.99 for both importance and frequency ratings. These high-reliability values indicate the survey is reliably measuring entry-level nursing activities. The reliability indices found in the Ontario responders are comparable to those found among the U.S. cohort.

Applicability of Activities to Practice Setting

Ontario responders indicated the applicability of each of the activities to his or her work setting. The activities ranged from 28.4% applicability (28.4% of the responders reported that the activity was performed within their work setting) to 100.0% (all of the responders reported the activity was performed within their work setting).

Frequency of Activity Performance

Responders were asked to rate the frequency of performance of all activities that were applicable to their work setting on a six-point scale: 0 times to 5 times or more. Average setting-specific frequencies ranged from 0.30 to 4.90. The correlation of average frequency ratings for Ontario responders and the U.S. cohort was 0.96.

Importance of Activity Performance

Responders were asked to rate the importance of performing each nursing activity in regard to the maintenance of client safety and/or threat of complications or distress using a five-point scale: 1 (not important) to 5 (critically important). Average setting-specific importance ratings ranged from 3.64 to 4.87. The correlation of average importance ratings for Ontario responders and the U.S. cohort was 0.88.

Conclusion

Given the strong correlations between importance and frequency ratings, the nursing activities appear

to be comparable with respect to importance and performance frequency across the jurisdictions. The results of the data analyses strongly suggest that entry-level RNs view practice similarly in Ontario and the U.S.

Report of Findings from the

**COMPARISON OF ENTRY-LEVEL
REGISTERED NURSES IN THE U.S. AND
ONTARIO, CANADA**

National Council of State Boards of Nursing, Inc. (NCSBN®)

BACKGROUND OF STUDY

The purpose of this study was to compare entry-level nursing activities between entry-level RNs from the U.S. and Ontario, Canada. The College of Nurses of Ontario (CNO) collaborated with the National Council of State Boards of Nursing (NCSBN®) on this initiative. CNO managed the distribution of the surveys to examinees who successfully completed the Canadian Registered Nurse Examination (CRNE®) at its June 2009 administration and then registered with CNO. The goal was to determine if there is similarity between RNs in Ontario and the U.S. with respect to a list of 142 entry-level RN nursing activity statements based on entry-level nurses in the U.S. The RN nursing activities were created using a rigorous process and validated by a large-scale survey of U.S. entry-level RNs (Wendt, 2008). Activities from the *2008 RN Practice Analysis: Linking NCLEX-RN® Examination to Practice* were used to assess similarities between entry-level nursing practices in the two regions.

NCSBN®

NCSBN is responsible to its members, the boards of nursing in the U.S. and its territories, for the preparation of psychometrically sound and legally defensible nursing licensure examinations. The periodic performance of practice analyses (i.e., job analysis) studies assists NCSBN in evaluating the validity of the test plan that guides content distribution of the licensure examination. Furthermore, practice analysis studies have long been recognized by measurement and testing professions as important sources of validity evidence for licensure examinations (APA, AERA and NCME, 1999; Raymond and Neustel, 2006).

CNO

CNO is the regulatory body of Ontario's 150,000 RNs, registered practical nurses (RPNs) and nurse practitioners (NPs). CNO is responsible for articulating and promoting practice standards, establishing requirements for entry into practice, administering a quality assurance program, and enforcing standards of practice and conduct.

METHODOLOGY

This section provides a description of the methodology used to conduct the Comparison of Entry-level Registered Nurses in the U.S. and Ontario, Canada Survey. Survey development, sample selection and data collection procedures are provided, as well as information about assurance of confidentiality, response rates and the degree to which participants were representative of the population of newly licensed entry-level RNs in Ontario.

Survey Development

A number of processes were used to create, evaluate and refine the survey instrument used for the Comparison of Entry-level Registered Nurses in the U.S. and Ontario, Canada Survey. The survey used in the Ontario study was based on entry-level nursing activity statements used in the *2008 RN Practice Analysis: Linking NCLEX-RN® Examination to Practice*. In 2008, activity statements created by a panel of experts were reviewed and edited by the NCLEX® Examination Committee, then surveyed in the U.S. as part of the 2008 RN Practice Analysis. These activity statements provide a current and comprehensive picture of entry-level RN practice in the U.S. This list of activity statements also provides a logical starting point to study the similarity of entry-level nursing practices within the U.S. and Ontario. There were four external psychometricians who evaluated the study methodology and survey procedures of the 2008 practice analysis. The methodology for the 2008 study was found to be psychometrically sound, legally defensible and in compliance with nursing industry standards for practice analyses. See *Appendix A for a listing of methodology experts*.

The 142 entry-level RN activity statements validated in the 2008 practice analysis were reviewed and approved for use in this study by NCSBN and CNO nurse experts. Additionally, the experts of both organizations collaborated on the survey instrument to ensure that the survey questions were clear and understandable for the Ontario participants, and were as congruent as possible between Ontario and U.S. nurses so that meaningful comparisons could be made about entry-level RN practice.

Based on feedback from CNO experts, one survey form containing all 142 activity statements was used. In order to increase the likelihood that surveys would be completed and returned, the letters and survey featured logos from both organizations. Moreover, the mailings originated from and the return envelopes were sent to CNO.

The list of activity statements was reviewed by CNO for consistency with nursing practice in Ontario. Minor changes were made to address differences between the two regions.

The resulting Ontario survey contained six sections. In the first section, there were questions related to the type of nursing license, nursing practice in Ontario and direct care of clients; activity statements were also listed in this section. The second section contained questions about the experience as an RN, type and length of work orientation, and certifications earned. The third section focused on work environment, including type and age of clients, employment setting, and type and size of facility. Section four described the last day of work; section five addressed demographic information; and section six provided an area for comments. *The survey used in the Comparison of Entry-level Registered Nurses in the U.S. and Ontario, Canada Survey may be found in Appendix B.*

Survey Process

Sample Selection and Representativeness

A sample was selected from the candidates who successfully passed the CRNE during its June 2009 administration and who had subsequently registered as members of CNO by Sept. 22, 2009. This resulted in a sample of 1,697 entry-level CNO RNs. The CRNE is administered three times per year in February, June and October. Per suggestions from CNO, the June cohort was chosen for the present study as it makes up the largest group of annual nurse licensure applicants in Ontario.

Mailing Procedure

CNO managed the distribution of the surveys. Joint NCSBN and CNO letterhead was used for

the five-stage mailing process to engage participants in the study. A presurvey postcard was sent to each person in the sample. A week later, the paper survey, along with a cover letter and postage-paid return envelope, was mailed. Reminder postcards were sent two weeks later to nonresponders, reiterating the importance of the study and urging participation. A second reminder postcard was sent two weeks after the first, and the third and final reminder postcard was sent approximately 10 days later. Data collection for the surveys was conducted from October through December 2009.

Confidentiality

All nurses surveyed were promised confidentiality with regard to their participation and responses. Files containing mailing information were kept separate from the data files. Preassigned codes were used to facilitate cost-effective follow-up mailings and data confidentiality.

Return Rates

Of the 1,697 prenotice postcards that were sent, eight were returned as undeliverable. A total of 1,689 surveys were mailed after adjusting for the eight returned prenotice postcards. One survey was returned due to an incorrect address, resulting in 1,688 total mailed surveys. A total of 540 completed surveys were returned and scanned for an adjusted return rate of 32.0%. A total of 99 individuals did not qualify for analysis of survey rating scales because they were not currently working in Ontario as an RN (n=53) and/or they were working less than 20 hours per week providing direct care to clients as an RN or not providing direct care (n=46). Since the RNs targeted for this survey were entry level, there is an expectation that some are not working yet. After adjusting for incorrect addresses and removals, the analyzable response rate was 26.1%.

RN CNO Comparability Survey Nonresponder Study

To provide additional support for the validity of the results, a survey of nonresponders was conducted to determine if CNO RNs who did not respond rated the survey activity statements similarly to the responders. If there are no systematic differences in

responders versus nonresponders, there is further evidence that the survey results are unbiased. The nonresponders rated the activity statements similarly to the responders, adding to the validity of the results. See *Appendix C for a full report of the non-responder study.*

Summary

A data collection instrument was developed and revised before being sent to 1,688 entry-level RNs selected from lists of candidates who recently passed the CNO examination in June 2009. The survey response rate was 32.0%. After adjusting for incorrect addresses and removals, the analyzable response rate was 26.1% and contained the responses of 441 entry-level RNs.

DEMOGRAPHICS, EXPERIENCES AND PRACTICE ENVIRONMENTS OF PARTICIPANTS

Demographics/Past Experiences

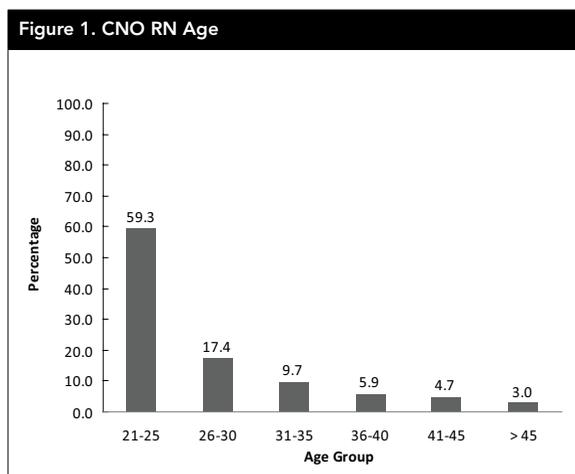
Demographic information, including gender, age and educational preparation, are presented, along with responders' work environments, including settings, shifts worked and client characteristics. In addition, data from the *2008 RN Practice Analysis: Linking NCLEX-RN® Examination to Practice* will be presented for comparison purposes.

Gender

The majority of Ontario responders (91.8%) reported being female. For the 2008 U.S. study, 88.3% reported being female.

Age

The average age of CNO responders was 27.30 years (SD 7.10 years); 76.7% of the responders indicated they were 30 years old or younger. Figure 1 shows the age distribution for Ontario responders. For the U.S. study, the average age of responders was 31.89 years (SD 8.94 years). The CNO responder cohort was, on average, about four years younger than its U.S. counterpart. See *Figure 1*.



Educational Background

In the CNO study, entry-level RNs listed obtaining an RN-baccalaureate degree in Canada most frequently (95.1%) as their educational qualifying program to take the CRNE. Approximately 4.1% of

the responders indicated having graduated from nursing programs outside of Canada. In the U.S. study, 92.0% of responders indicated obtaining either an associate or baccalaureate degree. When interpreting these data, it is important to note that educational requirements for obtaining a nursing license are different in the two jurisdictions. In the U.S., a nursing candidate may become eligible to sit for the licensure examination after completing the academic requirements from nursing programs approved by his/her board of nursing. These programs range from diploma to post-graduate levels. In Ontario, successful completion of baccalaureate level training is a minimum prerequisite for sitting for the CRNE.

Prelicensure Nursing Work Experience

Approximately 34.8% of Ontario responders reported working an average of 2.1 years as a PSW and 7.1% indicated working as an RPN for an average of 3.6 years before becoming an RN. For the U.S. study, 51.7% of the responders indicated working as a nurse aide/nursing assistant (NA) for an average of 3.1 years and 18.6% indicated that they worked an average 5.3 years as a licensed practical/vocational nurse (LPN/VN).

For the CNO study, data was collected regarding the number of weeks the responders worked with a temporary registration (permit) class. Many (62.0%) of the responders indicated working with a temporary registration for an average of eight weeks. No comparable statistics are available for the U.S. cohort. See *Table 1*.

Orientation

The majority of entry-level Ontario responders (71.5%) indicated that they received some type of formal orientation by working with assigned preceptors. Few responders indicated that their orientation consisted of classroom instruction with only a skills lab (1.1%). A similar percentage of U.S. responders (73.4%) worked with an assigned preceptor(s) or mentor(s) with or without additional classroom or skills lab work. The average length of orientation (for all types of orientation) received

Table 1. Time in Prior Nursing Roles

Previous Nurse Role	CNO % Selecting	CNO Average Experience			U.S. % Selecting	U.S. Avg. Experience
		Years	Months	Weeks		Years
PSW	34.8	2.1	4.8	n/a	n/a	n/a
RPN	7.1	3.6	4.2	n/a	n/a	n/a
NA	n/a	n/a	n/a	n/a	51.7	3.1
LPN/VN	n/a	n/a	n/a	n/a	18.6	5.3
Registered RN Temp Class	62.0	n/a	n/a	8.1	n/a	n/a

Table 2. Type and Length of Orientation

Type of Orientation	CNO %	CNO Avg. Weeks	U.S. %	U.S. Avg. Weeks
No formal orientation	1.1	0.0	1.4	0.0
Classroom instruction skills lab only	1.1	1.4	7	8.6
Classroom and/or skills lab plus supervised work with clients	11.6	4.0	5.1	8.7
Work with an assigned preceptor(s) or mentor(s) with or without additional classroom or skills lab work	71.5	5.6	73.4	9.9
A formal internship/residency program with or without additional classroom or skills lab work	8.7	7.4	5.0	14.3
Other	5.9	6.8	8.1	12.4

Note: For CNO, days were converted to weeks (7 days) and 99 was the max # of days responders could report in the survey.

Table 3. Additional Coursework/Certifications

Type of Additional Coursework/Certification	CNO %	U.S. %
Advanced Cardiac Life Support	12.0	21.5
Basic Life Support	38.3	63.1
Behavioral Management	4.4	N/A
Chemotherapy	1.7	1.7
Conscious/Moderate Sedation	2.2	9.4
Coronary Care	4.4	4.4
Critical Care	5.0	10.0
Intravenous Therapy	28.5	20.7
Neonatal Resuscitation Program	8.0	8.8
Pediatric Advanced Life Support	1.3	7.2
Peritoneal Dialysis	1.1	2.6
Rehabilitation	0.2	1.0
None	16.7	20.0
Other, please specify	14.1	12.8

by Ontario responders was 38.4 days (SD=35.28 days) and for the 2008 U.S. study, the average was 10.78 weeks (SD=2.49 weeks). Approximately 98.9% of the Ontario responders and 98.6% of the U.S. responders indicated having received some type of orientation. See Table 2 for type and length of orientation.

Certifications Earned

In the current study, 38.3% of Ontario responders selected basic life support as an area of additional training compared to 63.1% of U.S. responders who selected this option. About 28.5% of Ontario responders reported earning additional coursework or certifications in intravenous therapy, compared to 20.7% of U.S. responders. About 16.7% of Ontario responders indicated they had no additional coursework or certifications, which is consistent with U.S. responders (20.0%). See Table 3. The ability to provide multiple answers allowed for percentages to equal more than 100%.

Type of Facility/Organization	CNO %	U.S. %
Hospital	87.8	89.2
Long-term care	5.0	5.3
Community-based or ambulatory care facility/organization	6.8	3.9
Other	0.5	1.6

Setting Characteristics	CNO %	U.S. %
Number of Hospital or Nursing Home Beds		
Under 50 beds	8.3	5.9
50–99 beds	4.0	6.4
100–299 beds	16.5	25.8
300–499 beds	17.9	23.3
500 or more beds	25.9	25.6
Don't know	21.2	8.8
Other work setting	6.1	4.2
Location of Employment		
Urban/metropolitan	70.9	60.1
Suburban	18.5	27.9
Rural	10.7	12.0

Work Settings

Facilities

The majority of Ontario responders (87.8%) and U.S. RNs (89.2%) reported working in hospitals. The distribution of responders by employment facility was similar for CNO and U.S. cohorts. See *Table 4*.

The size of the hospital or nursing home varied across the number of bed categories. Approximately 25.9% of Ontario responders worked in facilities with 500 or more beds, 17.9% worked in facilities with 300 to 499 beds and 21.2% did not know facility bed size. For the Ontario responders and U.S. cohort, the category that was among the highest percentage was 500 or more beds. See *Table 5*.

Most (70.9%) of the Ontario responders reported working in urban or metropolitan areas and 18.5% selected suburban areas, with responders from rural areas accounting for the remaining 10.7%. The distribution of responders by location of employment setting was similar for Ontario responders and the U.S. cohort. See *Table 5*.

Practice Setting	CNO %	U.S. %
Critical care (e.g., Intensive Care Unit (ICU), Critical Care Unit (CCU), step-down units, pediatric/neonatal intensive care, emergency department, post-anesthesia recovery unit)	19.3	34.5
Medical/surgical unit or any of its sub-specialties (e.g., oncology, orthopedics, neurology)	41.1	39.5
Pediatrics	4.1	6.1
Nursery	1.1	3.0
Labor and delivery	2.4	3.7
Postpartum unit	4.8	3.9
Psychiatry or any of its sub-specialties (e.g., detox)	4.3	2.9
Operating room, including outpatient surgery and surgicenters	0.7	3.1
Nursing home, skilled or intermediate care	4.4	5.0
Assisted living	0.0	--
Other long-term care (e.g., residential care, developmental disability)	2.6	1.1
Rehabilitation	1.7	3.3
Subacute unit	1.7	1.6
Transitional care unit	0.2	1.1
Physician/dentist office	0.0	0.5
Occupational health	0.2	0.1
Outpatient clinic	1.1	1.4
Home health, including visiting nurses associations	3.0	2.0
Public health	1.1	0.3
Student/school health	0.4	0.5
Hospice care	0.9	1.3
Prison/correctional facilities/jails	0.6	0.3
Other	4.1	5.8

Practice Settings

Overall, the majority of Ontario responders reported working in a medical/surgical unit (41.1%), while critical care was reported by 19.3%. A similar percentage of U.S. responders (39.5%) worked in a medical/surgical unit, while a higher percentage of U.S. responders selected critical care (34.5%). The ability to provide multiple answers allowed for percentages to equal more than 100%. See *Table 6*.

Table 7: Client Health Conditions

Client Type	CNO %	U.S. %
Well clients, possibly with minor illnesses	10.4	17.1
OB (maternity) clients	5.7	8.0
Clients with stabilized chronic conditions	22.6	38.6
Clients with unstabilized chronic conditions	18.7	30.7
Clients with acute conditions, including clients with medical, surgical or critical conditions	56.9	67.5
Clients at end-of-life	15.4	19.7
Clients with behavioral/emotional conditions	16.1	20.7
Other	3.7	7.4

Table 8: Client Ages

Client Ages	CNO %	U.S. %
Newborns (less than 1 month)	7.6	11.0
Infants/children (1 month-12 years)	8.3	11.7
Adolescent (ages 13-18)	5.4	10.5
Young adult (ages 19-30)	17.0	24.6
Adult (ages 31-64)	42.0	60.6
Older adult (ages 65-85)	51.5	61.6
Older adult (85 years and older)	19.3	25.8

Client Health Conditions

Ontario responders reported caring most frequently for clients with acute conditions (56.9%) and clients with stabilized chronic conditions (22.6%). Similarly, the U.S. group selected clients with acute conditions more frequently than other categories. The ability to give multiple answers allowed for percentages to equal more than 100%. See *Table 7*.

Client Ages

The majority of Ontario responders reported caring for older adult clients aged 65 to 85 (51.5%) and adult clients aged 31 to 64 (42.0%). Likewise, U.S. responders selected adult clients (ages 31-64) and older adult clients (ages 65-85) most frequently. The ability to give multiple answers allowed for percentages to equal more than 100%. See *Table 8*.

Shifts Worked

The shift most commonly worked by Ontario responders was rotating shift (77.1%) and days (17.9%). For U.S. responders, only 13.1% selected

Table 9: Shifts Worked

Shift	CNO %	U.S. %
Days	17.9	42.3
Evenings	1.4	8.6
Nights	2.3	34.8
Rotating shift	77.1	13.1
Other	1.4	1.2

rotating shift; most indicated working days (42.3%). A very small percentage of Ontario responders (1.4%) indicated that they worked other types of shifts. See *Table 9*. The majority of Ontario responders (78.7%) indicated that they worked 12-hour shifts and 15.8% worked eight-hour shifts; the rest (5.5%) worked on other shifts.

Time Spent in Different Categories of Nursing Activities

The responders to the current study were asked to record the numbers of hours spent performing specific categories of activities. The rating scale ranged from 0 to >8 using one-hour intervals. To calculate the average number of hours spent in each category, the >8 value was converted to 9. To that end, the reported averages are conservative estimates of the real reported hours. Ontario responders indicated that they spent, on average, the most time in physiological adaptation (3.96 hours). U.S. responders indicated that they spent, on average, the most time in management of care (4.10 hours). See *Table 10*.

Administrative Responsibilities/ Primary Administrative Position

Ontario responders were asked if they had administrative responsibilities within their nursing position, such as being a unit/area manager, team leader, charge nurse, coordinator, etc. Of all responders, 13.6% reported having such responsibilities. Of U.S. responders, 16.0% reported having such responsibilities. Ontario responders were also asked to report if this was their primary position and only 3.0% indicated having administrative responsibilities as their primary position.

Table 10: Average Time Spent in Different Categories of Nursing Activities

Nursing Category	Average Hours CNO	Standardized Proportion Hours CNO	Average Hours U.S.	Standardized Proportion Hours U.S.
Management of Care	3.78	0.15	4.10	0.14
Safety and Infection Control	2.78	0.12	3.62	0.13
Health Promotion and Maintenance	2.65	0.11	3.22	0.11
Psychosocial Integrity	2.36	0.10	2.95	0.10
Basic Care and Comfort	3.41	0.14	3.94	0.14
Pharmacological and Parenteral Therapies	2.91	0.12	3.89	0.14
Reduction of Risk Potential	2.44	0.10	3.31	0.12
Physiological Adaptation	3.96	0.16	3.57	0.12

Summary

Those responding to the Ontario survey were primarily female with an average age of 27 years. Most worked rotating shifts in hospitals. The majority were provided an orientation with an assigned preceptor or mentor for an average of about 38 days. Responders cared for young adult and older adult clients with acute conditions.

In 2008, the U.S. cohort responding to the survey were primarily female with an average age of 32 years. Most worked day shifts in hospitals. The majority were provided an orientation with an assigned preceptor or mentor for an average of about 10 weeks. A large group of responders cared for clients with acute conditions who were adults or older adults.

Demographics and practice settings for Ontario responders and the U.S. cohort appear to be similar in many instances. Shifts worked and certifications/ additional coursework have some differences.

ACTIVITY STATEMENT PERFORMANCE FINDINGS

Findings relative to the activities performed by entry-level CNO RNs are presented in this section of the report. The methods used to collect and analyze activity statement findings, the representativeness of activity statements, applicability to practice settings, frequency of performance and importance of the activities will be discussed. See *Appendix D for activities in survey order*.

Overview of Methods

The Comparison of Entry-level Registered Nurses in the U.S. and Ontario, Canada Survey asked responders to answer two questions about each activity statement. Question A addressed the frequency of activity performance. The scale of frequency ranged from never performed in work setting to 5 or more times. Responders were instructed to mark never performed in work setting if an activity did not apply to their work setting and then to move to the next activity. If the activity did apply to their work setting, they were asked how often, utilizing a six-point scale of 0 times to 5 or more times, reflecting the frequency with which they had performed the activity on their last day of work. In question B, they were then asked to rate the overall importance of the activity, considering client safety and/or threat of complications or distress, on a scale of 1 to 5, with 1 being not important and 5 being critically important. Applicability to practice setting was assessed by analyzing the number of responders having performed each activity statement, excluding those who marked never performed in work setting from frequency and importance average rating calculations.

In addition, to calculate the average ratings for frequency and importance, only those indicating they performed the activity in their setting were used (setting-specific). The rationale is that only those performing the task should be included in the analyses. If the responder selected never performed in work setting, they were removed from average rating scale analyses. See *Appendix E for average setting-specific, as well as average total group importance ratings*.

Activity Performance Characteristics

Reliability

Reliability indices were calculated to assess the capability of the survey to measure the activities relevant to safe and effective practice of entry-level RNs. Cronbach's alpha coefficients were calculated for frequency and importance ratings to measure the internal consistency of the instrument (Cronbach, 1951). For the importance rating scale, the reliability estimate was 0.99 and for the frequency rating scale, the reliability estimate was 0.99. The scales exhibit good reliability, and measure importance and frequency of the activities with minimal statistical error.

Applicability of Activities to Practice Setting

Ontario responders indicated if each of the activities was not applicable to his or her work setting by marking the never performed in work setting response. The percentages of entry-level nurses indicating that the activities were applicable are reported in Table 11. The activities ranged from 28.4% applicability (28.4% of the responders reported that the activity was performed within their work settings) to 100.0% (100.0% of the responders reported the activity was performed within their work setting). The activities with the lowest percentage of applicability were *Provide care and education that meets the special needs of the school-age client, ages 5 to 12 years* (28.4%) and *Provide care and education that meets the special needs of the preschool client ages 1 year to 4 years* (28.7%). There were 10 activities with the highest percentage of applicability (100.0%) for responders.

Table 11: Activity Applicability to Setting and Average Frequency of Performance and Importance Ratings among CNO Sample

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
7	Collaborate with health care members in other disciplines when providing client care	100.0	436	3.58	0.07	429	4.50	0.03
16	Maintain client confidentiality/privacy	100.0	434	4.52	0.05	430	4.75	0.02
23	Use approved abbreviations and standard terminology when documenting care	100.0	432	4.50	0.05	428	4.00	0.04
24	Prioritize workload to manage time effectively	100.0	429	4.57	0.05	424	4.51	0.03
26	Practises in a manner consistent with a code of ethics for nurses	100.0	429	4.61	0.05	428	4.64	0.03
27	Provide care within the legislated scope of practice	100.0	422	4.71	0.04	419	4.75	0.02
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	100.0	429	4.90	0.03	429	4.87	0.02
70	Use therapeutic communication techniques to provide support to client	100.0	421	4.01	0.07	416	4.33	0.03
75	Establish and maintain a therapeutic relationship with client	100.0	426	4.33	0.06	418	4.55	0.03
90	Evaluate therapeutic effect of medications	100.0	422	3.84	0.07	419	4.40	0.03
4	Act as a client advocate	99.8	426	3.10	0.08	422	4.45	0.03
35	Ensure proper identification of client when providing care	99.8	429	4.54	0.05	424	4.80	0.02
72	Recognize non-verbal cues to physical and/or psychological stressors	99.8	429	3.08	0.08	418	4.11	0.04
92	Prepare and administer medications, using rights of medication administration	99.8	430	4.66	0.05	417	4.81	0.02
29	Protect client from injury (e.g., falls, electrical hazards)	99.5	429	3.73	0.08	426	4.63	0.03
91	Evaluate appropriateness/accuracy of medication order for client per institution policy including reconciling orders	99.5	430	3.23	0.09	419	4.49	0.03
97	Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)	99.5	429	4.19	0.06	422	4.69	0.03
101	Educate client about medications	99.5	429	2.95	0.09	421	4.30	0.03
30	Verify appropriateness and/or accuracy of a treatment order	99.5	422	3.40	0.08	416	4.64	0.03
36	Facilitate appropriate and safe use of equipment	99.5	426	3.67	0.08	427	4.33	0.03
73	Recognize impact of illness/disease on individual/family lifestyle	99.5	425	2.79	0.09	411	4.03	0.04
119	Recognize trends and changes in client condition and intervene appropriately	99.5	426	2.83	0.08	417	4.59	0.03
22	Incorporate evidence-based practice/research results when providing care	99.3	426	3.17	0.08	419	4.35	0.03
110	Evaluate responses to procedures and treatments	99.3	427	3.37	0.09	416	4.38	0.03

Table 11: Activity Applicability to Setting and Average Frequency of Performance and Importance Ratings among CNO Sample

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
17	Recognize limitations of self/others, seek assistance and/or begin corrective measures at the earliest opportunity	99.1	436	3.26	0.08	432	4.61	0.03
8	Receive and/or transcribe health care provider orders	99.1	428	3.58	0.08	419	4.58	0.03
69	Provide support to client in coping with life changes (e.g., loss, new diagnosis, role change, stress)	99.1	424	2.10	0.09	412	4.14	0.04
105	Assess and respond to changes in client vital signs	99.1	428	3.23	0.09	414	4.68	0.03
31	Follow procedures for handling biohazardous materials	99.1	418	2.57	0.10	413	4.47	0.03
2	Provide and receive report on assigned clients	98.9	430	3.56	0.07	426	4.59	0.03
1	Perform procedures necessary to safely admit, transfer or discharge a client	98.6	434	2.44	0.08	427	4.28	0.03
65	Incorporate client cultural practice and beliefs when planning and providing care	98.6	426	1.86	0.09	415	3.99	0.04
93	Perform calculations needed for medication administration	98.6	427	2.98	0.09	413	4.67	0.03
116	Educate client about treatments and procedures	98.6	421	2.69	0.09	415	4.18	0.04
40	Educate client and staff regarding infection control measures	98.4	422	2.04	0.09	422	4.41	0.03
13	Recognize the need for referrals and obtain necessary orders	98.4	419	1.91	0.08	414	4.08	0.04
104	Use pharmacological measures for pain management as needed	98.1	421	3.67	0.08	413	4.45	0.03
140	Identify signs and symptoms related to an acute or chronic condition	98.1	410	2.87	0.09	409	4.35	0.04
86	Assess client need for sleep/rest and intervene as needed	97.9	423	2.54	0.09	408	3.94	0.04
84	Assess client need for pain management and intervene as needed using non-pharmacological comfort measures	97.9	420	3.19	0.09	405	4.29	0.04
33	Use safe client handling when providing care (e.g., assistive devices, proper lifting)	97.9	418	3.60	0.09	412	4.45	0.03
41	Assess for client allergies/sensitivities and intervene as needed (e.g., food, latex, environmental allergies)	97.7	423	2.50	0.10	414	4.51	0.03
102	Manage client experiencing side effects and adverse reactions of medication	97.7	421	1.29	0.09	410	4.43	0.04
71	Incorporate behavioural management techniques when caring for a client (e.g., positive reinforcement, setting limits)	97.7	419	2.54	0.09	409	4.00	0.04
11	Verify that the client comprehends and consents to care/procedures, including procedures requiring informed consent	97.5	426	2.59	0.09	417	4.52	0.03
96	Comply with requirements governing controlled substances	97.4	415	3.34	0.09	405	4.44	0.04

Table 11: Activity Applicability to Setting and Average Frequency of Performance and Importance Ratings among CNO Sample

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
142	Recognize complications of an acute or chronic illness and intervene	97.4	415	1.94	0.09	406	4.51	0.03
106	Perform focused assessment and re-assessment (e.g., gastrointestinal, respiratory, cardiac)	97.3	426	3.70	0.08	411	4.54	0.03
117	Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine specimens)	97.2	419	1.80	0.09	413	4.05	0.04
124	Perform wound care and/or assist with dressing change	97.2	416	2.24	0.09	409	4.17	0.03
139	Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis	97.2	413	2.77	0.10	395	4.31	0.04
89	Promote circulation (e.g., active or passive range of motion, positioning and mobilization)	97.0	424	2.88	0.09	411	4.11	0.04
87	Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)	97.0	417	2.11	0.09	406	3.95	0.04
82	Assess and manage client with an alteration in elimination (e.g., bowel, urinary)	97.0	413	3.13	0.09	399	4.19	0.04
14	Initiate, evaluate, and update plan of care, care map, clinical pathway used to guide and evaluate client care	96.8	423	2.82	0.09	409	4.10	0.04
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	96.8	420	3.75	0.08	400	4.47	0.03
76	Assess and intervene in client performance of activities of daily living (ADL) and instrumental activities of daily living (IADL)	96.8	417	3.28	0.09	400	4.10	0.04
88	Calculate client intake and output	96.6	422	3.04	0.09	412	4.08	0.04
98	Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)	96.6	421	2.54	0.10	411	4.61	0.03
49	Perform comprehensive health assessment	96.5	411	3.44	0.09	406	4.48	0.04
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	96.3	420	2.99	0.10	411	3.97	0.04
21	Recognize ethical dilemmas and take appropriate action	96.3	418	0.88	0.07	406	4.12	0.04
12	Educate client and staff about client rights and responsibilities (e.g., ethical/legal issues)	96.3	416	1.28	0.08	409	4.10	0.04
81	Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)	96.0	411	3.67	0.08	405	4.45	0.03
85	Manage the client who has an alteration in nutritional intake (e.g., adjust diet, monitor height and weight, change delivery to include method, time and food preferences)	96.0	410	1.69	0.09	399	3.93	0.04
64	Provide a therapeutic environment for clients with emotional/behavioural issues	95.7	418	2.11	0.09	405	4.05	0.04

Table 11: Activity Applicability to Setting and Average Frequency of Performance and Importance Ratings among CNO Sample

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
80	Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)	95.1	406	2.49	0.09	399	3.98	0.04
115	Use precautions to prevent injury and/or complications associated with a procedure or diagnosis	94.9	408	2.60	0.10	395	4.33	0.04
60	Assess psychosocial, spiritual and occupational factors affecting care and plan interventions as appropriate	94.7	411	1.75	0.09	395	3.88	0.04
137	Manage the care of the client with a fluid and electrolyte imbalance	94.6	403	1.93	0.09	392	4.38	0.04
15	Maintain continuity of care between/among health care agencies	94.3	412	1.92	0.09	401	4.00	0.04
34	Acknowledge and document practice error (e.g., incident report for medication error)	94.0	407	0.48	0.05	396	4.37	0.04
63	Provide care and education for acute and chronic behavioural health issues (e.g., anxiety, depression, dementia, eating disorders)	94.0	404	1.86	0.09	393	4.04	0.04
50	Assess readiness to learn, learning preferences and barriers to learning	93.7	403	2.01	0.09	392	3.88	0.04
94	Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access)	93.5	404	3.54	0.09	399	4.51	0.03
68	Assess family dynamics in order to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)	93.5	400	1.73	0.09	395	3.96	0.04
118	Insert, maintain and remove nasogastric tubes and/or urethral catheters	93.3	402	1.51	0.08	391	4.09	0.04
19	Manage conflict among clients and health care staff	92.9	405	0.82	0.06	397	3.92	0.04
39	Comply with provincial/federal/institutional requirements regarding the use of client restraints and/or safety devices	92.6	402	1.45	0.09	398	4.24	0.04
108	Evaluate the results of diagnostic testing and intervene as needed	92.6	402	2.12	0.10	380	4.22	0.04
62	Assess client for drug/alcohol related dependencies, withdrawal, or toxicities and intervene when appropriate	92.6	400	1.27	0.08	391	4.09	0.04
61	Assess client for potential or actual abuse/neglect and intervene when appropriate	92.2	402	0.98	0.08	384	4.14	0.04
133	Maintain desired temperature of client (e.g., cooling and/or warming blanket)	91.8	394	1.86	0.10	377	4.00	0.05
74	Address client needs based on visual, auditory or cognitive distortions (e.g., hallucinations)	91.6	394	1.56	0.09	382	3.99	0.04
37	Educate client on home safety issues	91.5	389	1.41	0.09	379	3.94	0.04
9	Integrate advance directives into client plan of care	90.9	390	1.56	0.09	381	4.08	0.04

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
132	Manage the care of a client with impaired ventilation/oxygenation	90.9	388	1.86	0.09	377	4.49	0.04
95	Insert, maintain and remove a peripheral intravenous line	90.5	391	2.36	0.10	375	4.32	0.04
25	Use emerging technology in managing client health care (e.g., telehealth, electronic records)	90.4	394	2.67	0.10	386	3.78	0.05
120	Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)	89.9	383	1.27	0.08	370	3.96	0.04
55	Provide care and education that meets the special needs of the adult client, ages 19 to 64 years	88.9	384	3.26	0.09	373	4.12	0.04
77	Provide client nutrition through continuous or intermittent tube feedings	88.8	380	1.43	0.10	375	4.10	0.04
129	Perform suctioning (e.g., oral, nasopharyngeal, endotracheal, tracheal)	88.8	379	1.32	0.10	368	4.25	0.04
47	Provide information about healthy behaviours and health promotion/maintenance recommendations (e.g., physician visits, immunizations)	88.5	386	1.70	0.09	375	3.99	0.04
79	Perform irrigations (e.g., of bladder, ear, eye)	88.4	375	0.77	0.07	360	3.80	0.05
122	Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust manoeuvre, respiratory support, automated external defibrillator)	88.3	379	0.37	0.05	374	4.74	0.03
67	Assess the potential for violence and initiate/maintain safety precautions (e.g., suicide, homicide, self-destructive behaviour)	88.3	376	0.96	0.08	365	4.25	0.05
56	Provide care and education that meets the special needs of the older adult client, ages 65 to 85 years	87.7	378	3.25	0.09	371	4.12	0.04
121	Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)	87.0	369	1.24	0.09	364	4.20	0.04
126	Provide ostomy care and education (e.g., tracheal, enteral)	86.6	368	0.97	0.08	362	3.96	0.05
59	Assess and teach client about health risks based on known population or community characteristics	86.3	372	1.30	0.09	357	3.82	0.04
18	Comply with provincial/federal and/or state requirements for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)	86.2	374	0.60	0.07	363	4.25	0.04
138	Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)	86.1	366	1.40	0.09	357	4.36	0.04
58	Assess client understanding of and ability to manage self care in the home environment (e.g., community resources)	85.9	370	1.88	0.09	355	4.05	0.04
5	Assess/triage client(s) to prioritize the order of care delivery	85.7	366	3.30	0.10	366	4.43	0.04

Table 11: Activity Applicability to Setting and Average Frequency of Performance and Importance Ratings among CNO Sample

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
10	Report unsafe practice of health care personnel to internal/external entities and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)	85.6	373	0.51	0.06	365	4.39	0.04
103	Administer parenteral nutrition and evaluate client response (e.g., TPN)	85.3	370	0.82	0.08	354	4.17	0.05
99	Administer blood products and evaluate client response	85.0	368	0.85	0.08	353	4.66	0.03
6	Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)	85.0	373	1.43	0.09	360	3.64	0.05
57	Provide care and education that meets the special needs of the older adult client, over 85 years	84.5	360	2.16	0.11	349	4.11	0.04
100	Access venous access devices, including tunneled, implanted and central lines	84.5	364	1.64	0.10	351	4.30	0.04
3	Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)	84.2	368	1.85	0.10	357	3.70	0.05
66	Provide end of life care and education to clients (e.g., hospice)	82.3	353	0.94	0.08	342	4.12	0.04
130	Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)	81.3	343	1.26	0.09	334	4.07	0.05
38	Implement emergency response plans (e.g., internal/external disaster)	80.8	349	0.36	0.06	345	4.06	0.05
114	Obtain blood specimens peripherally or through central line	80.7	351	1.72	0.10	338	4.13	0.04
46	Provide information for prevention of high risk health behaviours (e.g., smoking cessation, safe sexual practice, drug education)	79.6	344	1.33	0.09	333	3.95	0.05
83	Apply, maintain or remove orthopaedic devices (e.g., traction, splints, braces, casts)	79.1	337	0.93	0.09	328	3.76	0.05
78	Perform post-mortem care	78.5	339	0.45	0.06	328	3.80	0.05
32	Participate in institution security plan (e.g., newborn nursery security, bomb threats)	77.6	339	0.65	0.07	325	4.08	0.05
135	Manage the care of a client with a pacing device (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)	77.2	329	0.65	0.07	320	4.13	0.05
127	Provide postoperative care	77.2	328	1.74	0.11	320	4.23	0.05
111	Provide pre and/or postoperative education	76.9	329	1.76	0.11	318	4.18	0.04
113	Manage client during and following procedure with moderate sedation	74.4	323	1.28	0.10	310	4.29	0.05
112	Provide preoperative care	69.8	298	0.94	0.09	283	4.08	0.05
131	Manage the care of a client on telemetry	63.0	269	1.79	0.13	258	4.32	0.05
136	Monitor and maintain arterial lines	62.0	261	0.89	0.11	250	4.24	0.05
125	Assist with invasive procedures (e.g., central line placement)	58.7	250	0.50	0.08	239	4.04	0.06

Table 11: Activity Applicability to Setting and Average Frequency of Performance and Importance Ratings among CNO Sample

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
141	Manage the care of a client receiving haemodialysis	51.9	224	0.50	0.08	212	4.11	0.06
128	Perform and manage care of client receiving peritoneal dialysis	50.5	217	0.38	0.07	205	4.05	0.07
123	Monitor and care for clients on a ventilator	46.8	198	0.96	0.13	197	4.58	0.05
44	Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)	44.1	191	0.91	0.11	184	3.67	0.07
107	Provide intraoperative care	41.0	175	0.78	0.12	168	4.16	0.07
134	Implement and monitor phototherapy	38.4	163	0.30	0.07	156	3.74	0.08
54	Provide care and education that meets the special needs of the adolescent client, ages 13 to 18 years	38.0	165	1.33	0.14	158	4.04	0.06
42	Provide pre-natal care and education	30.7	134	0.93	0.15	129	4.10	0.07
51	Provide care and education that meets the special needs of the infant client, 1 month to 1 year	30.6	133	1.38	0.17	129	4.12	0.06
43	Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education)	30.5	133	0.63	0.12	129	3.64	0.08
45	Provide newborn care and education	30.2	130	1.78	0.19	126	4.13	0.07
48	Provide post-partum care and education	29.2	126	1.29	0.17	123	4.02	0.07
52	Provide care and education that meets the special needs of the preschool client, ages 1 year to 4 years	28.7	125	1.14	0.15	119	4.09	0.07
53	Provide care and education that meets the special needs of the school age client, ages 5 to 12 years	28.4	122	1.25	0.16	118	4.06	0.07

Frequency of Activity Performance

Responders were asked to rate the frequency of performance of all activities that were applicable to their work settings. They reported how frequently they performed the activity on the last day they worked on a six-point scale: 0 times to 5 times or more. Average frequency statistics were calculated by using the setting-specific frequency, which was then calculated by averaging the frequency ratings of those responders providing ratings (e.g., responders indicating that the activity applied to their work setting). See Table 12 for average setting-specific frequency ratings.

Average frequencies ranged from 0.30 to 4.90. The activities performed with the lowest frequency were

Implement and monitor phototherapy (0.30), Implement emergency response plans (e.g., internal/external disaster) (0.36) and Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust maneuver, respiratory support, automated external defibrillator) (0.37).

The activities with the highest setting-specific average frequencies of performance were *Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions) (4.90), Provide care within the legislated scope of practice (4.71) and Prepare and administer medications, using rights of medication administration (4.66).*

Table 12: Average Setting-specific Frequency Ratings (Lowest to Highest)

Activity #	Activity	Average Frequency (Setting-specific)		
		N	Avg	Std. Err.
134	Implement and monitor phototherapy	163	0.30	0.07
38	Implement emergency response plans (e.g., internal/external disaster)	349	0.36	0.06
122	Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust manoeuvre, respiratory support, automated external defibrillator)	379	0.37	0.05
128	Perform and manage care of client receiving peritoneal dialysis	217	0.38	0.07
78	Perform post-mortem care	339	0.45	0.06
34	Acknowledge and document practice error (e.g., incident report for medication error)	407	0.48	0.05
141	Manage the care of a client receiving haemodialysis	224	0.50	0.08
125	Assist with invasive procedures (e.g., central line placement)	250	0.50	0.08
10	Report unsafe practice of health care personnel to internal/external entities and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)	373	0.51	0.06
18	Comply with provincial/federal and/or state requirements for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)	374	0.60	0.07
43	Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education)	133	0.63	0.12
135	Manage the care of a client with a pacing device (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)	329	0.65	0.07
32	Participate in institution security plan (e.g., newborn nursery security, bomb threats)	339	0.65	0.07
79	Perform irrigations (e.g., of bladder, ear, eye)	375	0.77	0.07
107	Provide intraoperative care	175	0.78	0.12
103	Administer parenteral nutrition and evaluate client response (e.g., TPN)	370	0.82	0.08
19	Manage conflict among clients and health care staff	405	0.82	0.06
99	Administer blood products and evaluate client response	368	0.85	0.08
21	Recognize ethical dilemmas and take appropriate action	418	0.88	0.07
136	Monitor and maintain arterial lines	261	0.89	0.11
44	Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)	191	0.91	0.11
42	Provide pre-natal care and education	134	0.93	0.15
83	Apply, maintain or remove orthopaedic devices (e.g., traction, splints, braces, casts)	337	0.93	0.09
112	Provide preoperative care	298	0.94	0.09
66	Provide end of life care and education to clients (e.g., hospice)	353	0.94	0.08
123	Monitor and care for clients on a ventilator	198	0.96	0.13
67	Assess the potential for violence and initiate/maintain safety precautions (e.g., suicide, homicide, self-destructive behaviour)	376	0.96	0.08
126	Provide ostomy care and education (e.g., tracheal, enteral)	368	0.97	0.08
61	Assess client for potential or actual abuse/neglect and intervene when appropriate	402	0.98	0.08
52	Provide care and education that meets the special needs of the preschool client, ages 1 year to 4 years	125	1.14	0.15
121	Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)	369	1.24	0.09
53	Provide care and education that meets the special needs of the school age client, ages 5 to 12 years	122	1.25	0.16

Activity #	Activity	Average Frequency (Setting-specific)		
		N	Avg	Std. Err.
130	Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)	343	1.26	0.09
120	Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)	383	1.27	0.08
62	Assess client for drug/alcohol related dependencies, withdrawal, or toxicities and intervene when appropriate	400	1.27	0.08
113	Manage client during and following procedure with moderate sedation	323	1.28	0.10
12	Educate client and staff about client rights and responsibilities (e.g., ethical/legal issues)	416	1.28	0.08
48	Provide post-partum care and education	126	1.29	0.17
102	Manage client experiencing side effects and adverse reactions of medication	421	1.29	0.09
59	Assess and teach client about health risks based on known population or community characteristics	372	1.30	0.09
129	Perform suctioning (e.g., oral, nasopharyngeal, endotracheal, tracheal)	379	1.32	0.10
54	Provide care and education that meets the special needs of the adolescent client, ages 13 to 18 years	165	1.33	0.14
46	Provide information for prevention of high risk health behaviours (e.g., smoking cessation, safe sexual practice, drug education)	344	1.33	0.09
51	Provide care and education that meets the special needs of the infant client, 1 month to 1 year	133	1.38	0.17
138	Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)	366	1.40	0.09
37	Educate client on home safety issues	389	1.41	0.09
6	Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)	373	1.43	0.09
77	Provide client nutrition through continuous or intermittent tube feedings	380	1.43	0.10
39	Comply with provincial/federal/institutional requirements regarding the use of client restraints and/or safety devices	402	1.45	0.09
118	Insert, maintain and remove nasogastric tubes and/or urethral catheters	402	1.51	0.08
9	Integrate advance directives into client plan of care	390	1.56	0.09
74	Address client needs based on visual, auditory or cognitive distortions (e.g., hallucinations)	394	1.56	0.09
100	Access venous access devices, including tunneled, implanted and central lines	364	1.64	0.10
85	Manage the client who has an alteration in nutritional intake (e.g., adjust diet, monitor height and weight, change delivery to include method, time and food preferences)	410	1.69	0.09
47	Provide information about healthy behaviours and health promotion/maintenance recommendations (e.g., physician visits, immunizations)	386	1.70	0.09
114	Obtain blood specimens peripherally or through central line	351	1.72	0.10
68	Assess family dynamics in order to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)	400	1.73	0.09
127	Provide postoperative care	328	1.74	0.11
60	Assess psychosocial, spiritual and occupational factors affecting care and plan interventions as appropriate	411	1.75	0.09
111	Provide pre and/or postoperative education	329	1.76	0.11
45	Provide newborn care and education	130	1.78	0.19
131	Manage the care of a client on telemetry	269	1.79	0.13

Table 12: Average Setting-specific Frequency Ratings (Lowest to Highest)

Activity #	Activity	Average Frequency (Setting-specific)		
		N	Avg	Std. Err.
117	Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine specimens)	419	1.80	0.09
3	Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)	368	1.85	0.10
132	Manage the care of a client with impaired ventilation/oxygenation	388	1.86	0.09
133	Maintain desired temperature of client (e.g., cooling and/or warming blanket)	394	1.86	0.10
63	Provide care and education for acute and chronic behavioural health issues (e.g., anxiety, depression, dementia, eating disorders)	404	1.86	0.09
65	Incorporate client cultural practice and beliefs when planning and providing care	426	1.86	0.09
58	Assess client understanding of and ability to manage self care in the home environment (e.g., community resources)	370	1.88	0.09
13	Recognize the need for referrals and obtain necessary orders	419	1.91	0.08
15	Maintain continuity of care between/among health care agencies	412	1.92	0.09
137	Manage the care of the client with a fluid and electrolyte imbalance	403	1.93	0.09
142	Recognize complications of an acute or chronic illness and intervene	415	1.94	0.09
50	Assess readiness to learn, learning preferences and barriers to learning	403	2.01	0.09
40	Educate client and staff regarding infection control measures	422	2.04	0.09
69	Provide support to client in coping with life changes (e.g., loss, new diagnosis, role change, stress)	424	2.10	0.09
87	Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)	417	2.11	0.09
64	Provide a therapeutic environment for clients with emotional/behavioural issues	418	2.11	0.09
108	Evaluate the results of diagnostic testing and intervene as needed	402	2.12	0.10
57	Provide care and education that meets the special needs of the older adult client, over 85 years	360	2.16	0.11
124	Perform wound care and/or assist with dressing change	416	2.24	0.09
95	Insert, maintain and remove a peripheral intravenous line	391	2.36	0.10
1	Perform procedures necessary to safely admit, transfer or discharge a client	434	2.44	0.08
80	Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)	406	2.49	0.09
41	Assess for client allergies/sensitivities and intervene as needed (e.g., food, latex, environmental allergies)	423	2.50	0.10
71	Incorporate behavioural management techniques when caring for a client (e.g., positive reinforcement, setting limits)	419	2.54	0.09
98	Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)	421	2.54	0.10
86	Assess client need for sleep/rest and intervene as needed	423	2.54	0.09
31	Follow procedures for handling biohazardous materials	418	2.57	0.10
11	Verify that the client comprehends and consents to care/procedures, including procedures requiring informed consent	426	2.59	0.09
115	Use precautions to prevent injury and/or complications associated with a procedure or diagnosis	408	2.60	0.10
25	Use emerging technology in managing client health care (e.g., telehealth, electronic records)	394	2.67	0.10
116	Educate client about treatments and procedures	421	2.69	0.09
139	Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis	413	2.77	0.10

Activity #	Activity	Average Frequency (Setting-specific)		
		N	Avg	Std. Err.
73	Recognize impact of illness/disease on individual/family lifestyle	425	2.79	0.09
14	Initiate, evaluate, and update plan of care, care map, clinical pathway used to guide and evaluate client care	423	2.82	0.09
119	Recognize trends and changes in client condition and intervene appropriately	426	2.83	0.08
140	Identify signs and symptoms related to an acute or chronic condition	410	2.87	0.09
89	Promote circulation (e.g., active or passive range of motion, positioning and mobilization)	424	2.88	0.09
101	Educate client about medications	429	2.95	0.09
93	Perform calculations needed for medication administration	427	2.98	0.09
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	420	2.99	0.10
88	Calculate client intake and output	422	3.04	0.09
72	Recognize non-verbal cues to physical and/or psychological stressors	429	3.08	0.08
4	Act as a client advocate	426	3.10	0.08
82	Assess and manage client with an alteration in elimination (e.g., bowel, urinary)	413	3.13	0.09
22	Incorporate evidence-based practice/research results when providing care	426	3.17	0.08
84	Assess client need for pain management and intervene as needed using non-pharmacological comfort measures	420	3.19	0.09
105	Assess and respond to changes in client vital signs	428	3.23	0.09
91	Evaluate appropriateness/accuracy of medication order for client per institution policy including reconciling orders	430	3.23	0.09
56	Provide care and education that meets the special needs of the older adult client, ages 65 to 85 years	378	3.25	0.09
55	Provide care and education that meets the special needs of the adult client, ages 19 to 64 years	384	3.26	0.09
17	Recognize limitations of self/others, seek assistance and/or begin corrective measures at the earliest opportunity	436	3.26	0.08
76	Assess and intervene in client performance of activities of daily living (ADL) and instrumental activities of daily living (IADL)	417	3.28	0.09
5	Assess/triage client(s) to prioritize the order of care delivery	366	3.30	0.10
96	Comply with requirements governing controlled substances	415	3.34	0.09
110	Evaluate responses to procedures and treatments	427	3.37	0.09
30	Verify appropriateness and/or accuracy of a treatment order	422	3.40	0.08
49	Perform comprehensive health assessment	411	3.44	0.09
94	Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access)	404	3.54	0.09
2	Provide and receive report on assigned clients	430	3.56	0.07
8	Receive and/or transcribe health care provider orders	428	3.58	0.08
7	Collaborate with health care members in other disciplines when providing client care	436	3.58	0.07
33	Use safe client handling when providing care (e.g., assistive devices, proper lifting)	418	3.60	0.09
81	Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)	411	3.67	0.08
104	Use pharmacological measures for pain management as needed	421	3.67	0.08
36	Facilitate appropriate and safe use of equipment	426	3.67	0.08

Table 12: Average Setting-specific Frequency Ratings (Lowest to Highest)

Activity #	Activity	Average Frequency (Setting-specific)		
		N	Avg	Std. Err.
106	Perform focused assessment and re-assessment (e.g., gastrointestinal, respiratory, cardiac)	426	3.70	0.08
29	Protect client from injury (e.g., falls, electrical hazards)	429	3.73	0.08
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	420	3.75	0.08
90	Evaluate therapeutic effect of medications	422	3.84	0.07
70	Use therapeutic communication techniques to provide support to client	421	4.01	0.07
97	Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)	429	4.19	0.06
75	Establish and maintain a therapeutic relationship with client	426	4.33	0.06
23	Use approved abbreviations and standard terminology when documenting care	432	4.50	0.05
16	Maintain client confidentiality/privacy	434	4.52	0.05
35	Ensure proper identification of client when providing care	429	4.54	0.05
24	Prioritize workload to manage time effectively	429	4.57	0.05
26	Practises in a manner consistent with a code of ethics for nurses	429	4.61	0.05
92	Prepare and administer medications, using rights of medication administration	430	4.66	0.05
27	Provide care within the legislated scope of practice	422	4.71	0.04
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	429	4.90	0.03

Importance of Activity Performance

Responders were instructed to rate the importance of performing each nursing activity. They were asked to consider the importance with regard to the risk of unnecessary complications, impairment of function or serious distress to clients. Importance ratings were recorded using a five-point scale: 1=not important, 2=marginally important, 3=moderately important, 4=important, 5=critically important. Average importance ratings presented here were calculated using setting-specific importance. Setting-specific ratings were calculated by averaging only the ratings of responders providing frequency ratings for the activity statement (those indicating that the activity applied to their work setting). Average importance ratings based on total group ratings, which included ratings from responders who indicated that they have never performed a particular activity, are available in Appendix E.

Average importance ratings ranged from 3.64 to 4.87. The activities with the lowest importance ratings reported were *Plan and/or participate in the education of individuals in the community (e.g.,*

health fairs, school education) (3.64) and *Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)* (3.64).

The activities with the highest importance ratings were *Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)* (4.87) and *Prepare and administer medications, using rights of medication administration* (4.81). Table 13 displays activity statements rank ordered by average importance ratings.

Comparability with U.S. Ratings

To evaluate the relationship between U.S. entry-level RNs and CNO entry-level RNs, a correlation analysis was conducted between the average frequency ratings and average importance ratings. Both rating scale comparisons across jurisdictions exhibited strong correlations. The bivariate pair of CNO and U.S. average importance ratings had a correlation of 0.88, and the bivariate pair of CNO and U.S. average frequency ratings had a correlation of 0.96. This

Activity #	Activity	Average Importance (Setting-specific)		
		N	Avg	Std. Err.
6	Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)	360	3.64	0.05
43	Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education)	129	3.64	0.08
44	Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)	184	3.67	0.07
3	Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)	357	3.70	0.05
134	Implement and monitor phototherapy	156	3.74	0.08
83	Apply, maintain or remove orthopaedic devices (e.g., traction, splints, braces, casts)	328	3.76	0.05
25	Use emerging technology in managing client health care (e.g., telehealth, electronic records)	386	3.78	0.05
78	Perform post-mortem care	328	3.80	0.05
79	Perform irrigations (e.g., of bladder, ear, eye)	360	3.80	0.05
59	Assess and teach client about health risks based on known population or community characteristics	357	3.82	0.04
50	Assess readiness to learn, learning preferences and barriers to learning	392	3.88	0.04
60	Assess psychosocial, spiritual and occupational factors affecting care and plan interventions as appropriate	395	3.88	0.04
19	Manage conflict among clients and health care staff	397	3.92	0.04
85	Manage the client who has an alteration in nutritional intake (e.g., adjust diet, monitor height and weight, change delivery to include method, time and food preferences)	399	3.93	0.04
37	Educate client on home safety issues	379	3.94	0.04
86	Assess client need for sleep/rest and intervene as needed	408	3.94	0.04
46	Provide information for prevention of high risk health behaviours (e.g., smoking cessation, safe sexual practice, drug education)	333	3.95	0.05
87	Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)	406	3.95	0.04
68	Assess family dynamics in order to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)	395	3.96	0.04
120	Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)	370	3.96	0.04
126	Provide ostomy care and education (e.g., tracheal, enteral)	362	3.96	0.05
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	411	3.97	0.04
80	Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)	399	3.98	0.04
47	Provide information about healthy behaviours and health promotion/maintenance recommendations (e.g., physician visits, immunizations)	375	3.99	0.04
65	Incorporate client cultural practice and beliefs when planning and providing care	415	3.99	0.04
74	Address client needs based on visual, auditory or cognitive distortions (e.g., hallucinations)	382	3.99	0.04
15	Maintain continuity of care between/among health care agencies	401	4.00	0.04
23	Use approved abbreviations and standard terminology when documenting care	428	4.00	0.04
71	Incorporate behavioural management techniques when caring for a client (e.g., positive reinforcement, setting limits)	409	4.00	0.04

Table 13: Average Setting-specific Importance Ratings (Lowest to Highest)

Activity #	Activity	Average Importance (Setting-specific)		
		N	Avg	Std. Err.
133	Maintain desired temperature of client (e.g., cooling and/or warming blanket)	377	4.00	0.05
48	Provide post-partum care and education	123	4.02	0.07
73	Recognize impact of illness/disease on individual/family lifestyle	411	4.03	0.04
54	Provide care and education that meets the special needs of the adolescent client, ages 13 to 18 years	158	4.04	0.06
63	Provide care and education for acute and chronic behavioural health issues (e.g., anxiety, depression, dementia, eating disorders)	393	4.04	0.04
125	Assist with invasive procedures (e.g., central line placement)	239	4.04	0.06
58	Assess client understanding of and ability to manage self care in the home environment (e.g., community resources)	355	4.05	0.04
64	Provide a therapeutic environment for clients with emotional/behavioural issues	405	4.05	0.04
117	Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine specimens)	413	4.05	0.04
128	Perform and manage care of client receiving peritoneal dialysis	205	4.05	0.07
38	Implement emergency response plans (e.g., internal/external disaster)	345	4.06	0.05
53	Provide care and education that meets the special needs of the school age client, ages 5 to 12 years	118	4.06	0.07
130	Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)	334	4.07	0.05
9	Integrate advance directives into client plan of care	381	4.08	0.04
13	Recognize the need for referrals and obtain necessary orders	414	4.08	0.04
32	Participate in institution security plan (e.g., newborn nursery security, bomb threats)	325	4.08	0.05
88	Calculate client intake and output	412	4.08	0.04
112	Provide preoperative care	283	4.08	0.05
52	Provide care and education that meets the special needs of the preschool client, ages 1 year to 4 years	119	4.09	0.07
62	Assess client for drug/alcohol related dependencies, withdrawal, or toxicities and intervene when appropriate	391	4.09	0.04
118	Insert, maintain and remove nasogastric tubes and/or urethral catheters	391	4.09	0.04
12	Educate client and staff about client rights and responsibilities (e.g., ethical/legal issues)	409	4.10	0.04
14	Initiate, evaluate, and update plan of care, care map, clinical pathway used to guide and evaluate client care	409	4.10	0.04
42	Provide pre-natal care and education	129	4.10	0.07
76	Assess and intervene in client performance of activities of daily living (ADL) and instrumental activities of daily living (IADL)	400	4.10	0.04
77	Provide client nutrition through continuous or intermittent tube feedings	375	4.10	0.04
57	Provide care and education that meets the special needs of the older adult client, over 85 years	349	4.11	0.04
72	Recognize non-verbal cues to physical and/or psychological stressors	418	4.11	0.04
89	Promote circulation (e.g., active or passive range of motion, positioning and mobilization)	411	4.11	0.04
141	Manage the care of a client receiving haemodialysis	212	4.11	0.06
21	Recognize ethical dilemmas and take appropriate action	406	4.12	0.04
51	Provide care and education that meets the special needs of the infant client, 1 month to 1 year	129	4.12	0.06

Activity #	Activity	Average Importance (Setting-specific)		
		N	Avg	Std. Err.
55	Provide care and education that meets the special needs of the adult client, ages 19 to 64 years	373	4.12	0.04
56	Provide care and education that meets the special needs of the older adult client, ages 65 to 85 years	371	4.12	0.04
66	Provide end of life care and education to clients (e.g., hospice)	342	4.12	0.04
45	Provide newborn care and education	126	4.13	0.07
114	Obtain blood specimens peripherally or through central line	338	4.13	0.04
135	Manage the care of a client with a pacing device (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)	320	4.13	0.05
61	Assess client for potential or actual abuse/neglect and intervene when appropriate	384	4.14	0.04
69	Provide support to client in coping with life changes (e.g., loss, new diagnosis, role change, stress)	412	4.14	0.04
107	Provide intraoperative care	168	4.16	0.07
103	Administer parenteral nutrition and evaluate client response (e.g., TPN)	354	4.17	0.05
124	Perform wound care and/or assist with dressing change	409	4.17	0.03
111	Provide pre and/or postoperative education	318	4.18	0.04
116	Educate client about treatments and procedures	415	4.18	0.04
82	Assess and manage client with an alteration in elimination (e.g., bowel, urinary)	399	4.19	0.04
121	Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)	364	4.20	0.04
108	Evaluate the results of diagnostic testing and intervene as needed	380	4.22	0.04
127	Provide postoperative care	320	4.23	0.05
39	Comply with provincial/federal/institutional requirements regarding the use of client restraints and/or safety devices	398	4.24	0.04
136	Monitor and maintain arterial lines	250	4.24	0.05
18	Comply with provincial/federal and/or state requirements for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)	363	4.25	0.04
67	Assess the potential for violence and initiate/maintain safety precautions (e.g., suicide, homicide, self-destructive behaviour)	365	4.25	0.05
129	Perform suctioning (e.g., oral, nasopharyngeal, endotracheal, tracheal)	368	4.25	0.04
1	Perform procedures necessary to safely admit, transfer or discharge a client	427	4.28	0.03
84	Assess client need for pain management and intervene as needed using non-pharmacological comfort measures	405	4.29	0.04
113	Manage client during and following procedure with moderate sedation	310	4.29	0.05
100	Access venous access devices, including tunneled, implanted and central lines	351	4.30	0.04
101	Educate client about medications	421	4.30	0.03
139	Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis	395	4.31	0.04
95	Insert, maintain and remove a peripheral intravenous line	375	4.32	0.04
131	Manage the care of a client on telemetry	258	4.32	0.05
36	Facilitate appropriate and safe use of equipment	427	4.33	0.03
70	Use therapeutic communication techniques to provide support to client	416	4.33	0.03

Table 13: Average Setting-specific Importance Ratings (Lowest to Highest)

Activity #	Activity	Average Importance (Setting-specific)		
		N	Avg	Std. Err.
115	Use precautions to prevent injury and/or complications associated with a procedure or diagnosis	395	4.33	0.04
22	Incorporate evidence-based practice/research results when providing care	419	4.35	0.03
140	Identify signs and symptoms related to an acute or chronic condition	409	4.35	0.04
138	Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)	357	4.36	0.04
34	Acknowledge and document practice error (e.g., incident report for medication error)	396	4.37	0.04
110	Evaluate responses to procedures and treatments	416	4.38	0.03
137	Manage the care of the client with a fluid and electrolyte imbalance	392	4.38	0.04
10	Report unsafe practice of health care personnel to internal/external entities and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)	365	4.39	0.04
90	Evaluate therapeutic effect of medications	419	4.40	0.03
40	Educate client and staff regarding infection control measures	422	4.41	0.03
5	Assess/triage client(s) to prioritize the order of care delivery	366	4.43	0.04
102	Manage client experiencing side effects and adverse reactions of medication	410	4.43	0.04
96	Comply with requirements governing controlled substances	405	4.44	0.04
4	Act as a client advocate	422	4.45	0.03
33	Use safe client handling when providing care (e.g., assistive devices, proper lifting)	412	4.45	0.03
81	Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)	405	4.45	0.03
104	Use pharmacological measures for pain management as needed	413	4.45	0.03
31	Follow procedures for handling biohazardous materials	413	4.47	0.03
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	400	4.47	0.03
49	Perform comprehensive health assessment	406	4.48	0.04
91	Evaluate appropriateness/accuracy of medication order for client per institution policy including reconciling orders	419	4.49	0.03
132	Manage the care of a client with impaired ventilation/oxygenation	377	4.49	0.04
7	Collaborate with health care members in other disciplines when providing client care	429	4.50	0.03
24	Prioritize workload to manage time effectively	424	4.51	0.03
41	Assess for client allergies/sensitivities and intervene as needed (e.g., food, latex, environmental allergies)	414	4.51	0.03
94	Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access)	399	4.51	0.03
142	Recognize complications of an acute or chronic illness and intervene	406	4.51	0.03
11	Verify that the client comprehends and consents to care/procedures, including procedures requiring informed consent	417	4.52	0.03
106	Perform focused assessment and re-assessment (e.g., gastrointestinal, respiratory, cardiac)	411	4.54	0.03
75	Establish and maintain a therapeutic relationship with client	418	4.55	0.03
8	Receive and/or transcribe health care provider orders	419	4.58	0.03
123	Monitor and care for clients on a ventilator	197	4.58	0.05
2	Provide and receive report on assigned clients	426	4.59	0.03
119	Recognize trends and changes in client condition and intervene appropriately	417	4.59	0.03

Table 13: Average Setting-specific Importance Ratings (Lowest to Highest)

Activity #	Activity	Average Importance (Setting-specific)		
		N	Avg	Std. Err.
17	Recognize limitations of self/others, seek assistance and/or begin corrective measures at the earliest opportunity	432	4.61	0.03
98	Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)	411	4.61	0.03
29	Protect client from injury (e.g., falls, electrical hazards)	426	4.63	0.03
26	Practises in a manner consistent with a code of ethics for nurses	428	4.64	0.03
30	Verify appropriateness and/or accuracy of a treatment order	416	4.64	0.03
99	Administer blood products and evaluate client response	353	4.66	0.03
93	Perform calculations needed for medication administration	413	4.67	0.03
105	Assess and respond to changes in client vital signs	414	4.68	0.03
97	Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)	422	4.69	0.03
122	Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust manoeuvre, respiratory support, automated external defibrillator)	374	4.74	0.03
16	Maintain client confidentiality/privacy	430	4.75	0.02
27	Provide care within the legislated scope of practice	419	4.75	0.02
35	Ensure proper identification of client when providing care	424	4.80	0.02
92	Prepare and administer medications, using rights of medication administration	417	4.81	0.02
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	429	4.87	0.02

Table 14. Correlation Between Average Setting-specific Ratings (CNO and U.S.)

Measure	U.S. Importance	U.S. Frequency	CNO Importance	CNO Frequency
U.S. Importance		0.426*	0.882*	0.409*
U.S. Frequency			0.544*	0.957*
CNO Importance				0.584*
CNO Frequency				

*Correlation is significant at the 0.01 level (2-tailed).

suggests that entry-level CNO RNs and entry-level U.S. RNs view practice similarly based on this list of activity statements. See Table 14.

Average frequency and importance ratings were very similar among the U.S. and Ontario responders. Also note that the rankings among activity statements were also very consistent across the two groups. See Figures 2 and 3 for average ratings between CNO and the U.S. across the 142 activities.

For the frequency ratings, *Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)*

and *Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)* had the most disparate ratings. A negative value indicates the U.S. cohort rated the task, on average, higher. The absolute difference reflects the magnitude of average differences between the two cohorts. See Table 15 for the setting-specific frequency rating differences between CNO and U.S. sorted by the absolute difference value.

For these importance ratings, *Provide newborn care and education* and *Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)* had the most disparate of all 142 activity statements, with 0.53 and 0.49 scale-point discrepancies, respectively. See Table 16 for setting-specific importance rating differences between CNO and U.S. sorted by the absolute difference value.

Figure 2. Average CNO and U.S. Frequency Ratings

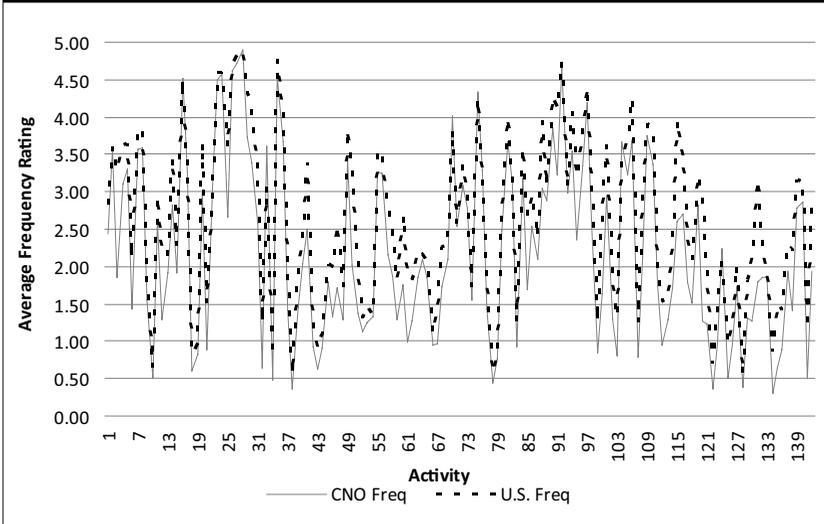
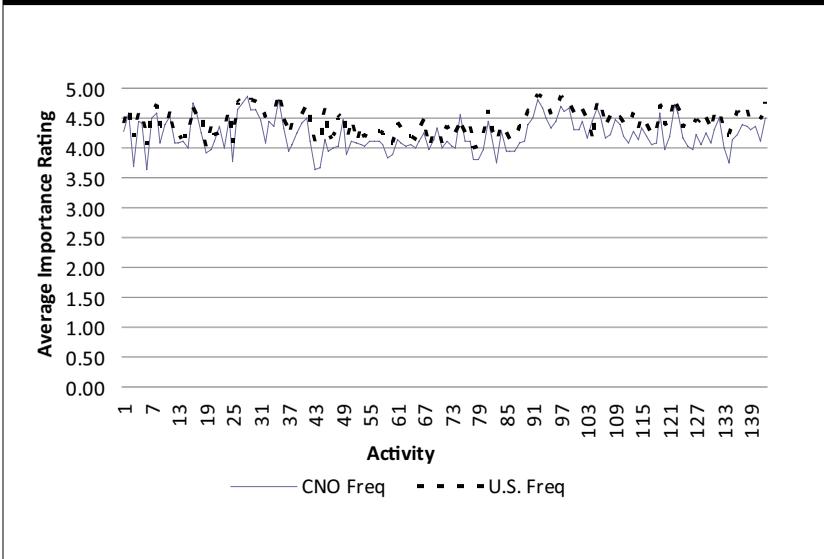


Figure 3. Average CNO and U.S. Importance Ratings



Activity #	Activity	Frequency Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
120	Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)	1.27	2.86	-1.59	1.59
3	Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)	1.85	3.29	-1.44	1.44
131	Manage the care of a client on telemetry	1.79	3.17	-1.38	1.38
115	Use precautions to prevent injury and/or complications associated with a procedure or diagnosis	2.60	3.95	-1.35	1.35
50	Assess readiness to learn, learning preferences and barriers to learning	2.01	3.26	-1.25	1.25
100	Access venous access devices, including tunneled, implanted and central lines	1.64	2.77	-1.13	1.13
85	Manage the client who has an alteration in nutritional intake (e.g., adjust diet, monitor height and weight, change delivery to include method, time and food preferences)	1.69	2.69	-1.00	1.00
142	Recognize complications of an acute or chronic illness and intervene	1.94	2.92	-0.98	0.98
25	Use emerging technology in managing client health care (e.g., telehealth, electronic records)	2.67	3.61	-0.94	0.94
60	Assess psychosocial, spiritual and occupational factors affecting care and plan interventions as appropriate	1.75	2.68	-0.93	0.93
12	Educate client and staff about client rights and responsibilities (e.g., ethical/legal issues)	1.28	2.21	-0.93	0.93
88	Calculate client intake and output	3.04	3.95	-0.91	0.91
61	Assess client for potential or actual abuse/neglect and intervene when appropriate	0.98	1.88	-0.90	0.90
91	Evaluate appropriateness/accuracy of medication order for client per institution policy including reconciling orders	3.23	4.11	-0.88	0.88
41	Assess for client allergies/sensitivities and intervene as needed (e.g., food, latex, environmental allergies)	2.50	3.38	-0.88	0.88
47	Provide information about healthy behaviours and health promotion/maintenance recommendations (e.g., physician visits, immunizations)	1.70	2.57	-0.87	0.87
130	Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)	1.26	2.12	-0.86	0.86
135	Manage the care of a client with a pacing device (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)	0.65	1.50	-0.85	0.85
95	Insert, maintain and remove a peripheral intravenous line	2.36	3.20	-0.84	0.84
138	Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)	1.40	2.21	-0.81	0.81
108	Evaluate the results of diagnostic testing and intervene as needed	2.12	2.92	-0.80	0.80
116	Educate client about treatments and procedures	2.69	3.48	-0.79	0.79
31	Follow procedures for handling biohazardous materials	2.57	3.30	-0.73	0.73
6	Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)	1.43	2.12	-0.69	0.69
30	Verify appropriateness and/or accuracy of a treatment order	3.40	4.08	-0.68	0.68
141	Manage the care of a client receiving haemodialysis	0.50	1.17	-0.67	0.67
101	Educate client about medications	2.95	3.62	-0.67	0.67
46	Provide information for prevention of high risk health behaviours (e.g., smoking cessation, safe sexual practice, drug education)	1.33	2.00	-0.67	0.67

Table 15: Average Setting-specific Frequency Ratings (Sorted by Absolute Differences)

Activity #	Activity	Frequency Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
57	Provide care and education that meets the special needs of the older adult client, over 85 years	2.16	2.81	-0.65	0.65
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	2.99	3.64	-0.65	0.65
114	Obtain blood specimens peripherally or through central line	1.72	2.36	-0.64	0.64
21	Recognize ethical dilemmas and take appropriate action	0.88	1.51	-0.63	0.63
14	Initiate, evaluate, and update plan of care, care map, clinical pathway used to guide and evaluate client care	2.82	3.44	-0.62	0.62
121	Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)	1.24	1.84	-0.60	0.60
37	Educate client on home safety issues	1.41	2.01	-0.60	0.60
29	Protect client from injury (e.g., falls, electrical hazards)	3.73	4.32	-0.59	0.59
112	Provide preoperative care	0.94	1.53	-0.59	0.59
32	Participate in institution security plan (e.g., newborn nursery security, bomb threats)	0.65	1.24	-0.59	0.59
118	Insert, maintain and remove nasogastric tubes and/or urethral catheters	1.51	2.10	-0.59	0.59
117	Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine specimens)	1.80	2.37	-0.57	0.57
134	Implement and monitor phototherapy	0.30	0.87	-0.57	0.57
58	Assess client understanding of and ability to manage self care in the home environment (e.g., community resources)	1.88	2.44	-0.56	0.56
51	Provide care and education that meets the special needs of the infant client, 1 month to 1 year	1.38	1.93	-0.55	0.55
39	Comply with provincial/federal/institutional requirements regarding the use of client restraints and/or safety devices	1.45	2.00	-0.55	0.55
106	Perform focused assessment and re-assessment (e.g., gastrointestinal, respiratory, cardiac)	3.70	4.25	-0.55	0.55
98	Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)	2.54	3.09	-0.55	0.55
62	Assess client for drug/alcohol related dependencies, withdrawal, or toxicities and intervene when appropriate	1.27	1.82	-0.55	0.55
123	Monitor and care for clients on a ventilator	0.96	1.50	-0.54	0.54
33	Use safe client handling when providing care (e.g., assistive devices, proper lifting)	3.60	3.07	0.53	0.53
94	Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access)	3.54	4.07	-0.53	0.53
136	Monitor and maintain arterial lines	0.89	1.42	-0.53	0.53
102	Manage client experiencing side effects and adverse reactions of medication	1.29	1.81	-0.52	0.52
103	Administer parenteral nutrition and evaluate client response (e.g., TPN)	0.82	1.34	-0.52	0.52
68	Assess family dynamics in order to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)	1.73	2.25	-0.52	0.52
59	Assess and teach client about health risks based on known population or community characteristics	1.30	1.81	-0.51	0.51

Activity #	Activity	Frequency Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
129	Perform suctioning (e.g., oral, nasopharyngeal, endotracheal, tracheal)	1.32	1.82	-0.50	0.50
4	Act as a client advocate	3.10	3.60	-0.50	0.50
107	Provide intraoperative care	0.78	1.26	-0.48	0.48
110	Evaluate responses to procedures and treatments	3.37	3.84	-0.47	0.47
67	Assess the potential for violence and initiate/maintain safety precautions (e.g., suicide, homicide, self-destructive behaviour)	0.96	1.42	-0.46	0.46
105	Assess and respond to changes in client vital signs	3.23	3.69	-0.46	0.46
125	Assist with invasive procedures (e.g., central line placement)	0.50	0.96	-0.46	0.46
48	Provide post-partum care and education	1.29	1.73	-0.44	0.44
90	Evaluate therapeutic effect of medications	3.84	4.28	-0.44	0.44
96	Comply with requirements governing controlled substances	3.34	3.77	-0.43	0.43
86	Assess client need for sleep/rest and intervene as needed	2.54	2.96	-0.42	0.42
99	Administer blood products and evaluate client response	0.85	1.27	-0.42	0.42
49	Perform comprehensive health assessment	3.44	3.84	-0.40	0.40
84	Assess client need for pain management and intervene as needed using non-pharmacological comfort measures	3.19	3.59	-0.40	0.40
119	Recognize trends and changes in client condition and intervene appropriately	2.83	3.22	-0.39	0.39
139	Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis	2.77	3.16	-0.39	0.39
1	Perform procedures necessary to safely admit, transfer or discharge a client	2.44	2.82	-0.38	0.38
77	Provide client nutrition through continuous or intermittent tube feedings	1.43	1.80	-0.37	0.37
63	Provide care and education for acute and chronic behavioural health issues (e.g., anxiety, depression, dementia, eating disorders)	1.86	2.22	-0.36	0.36
137	Manage the care of the client with a fluid and electrolyte imbalance	1.93	2.29	-0.36	0.36
11	Verify that the client comprehends and consents to care/procedures, including procedures requiring informed consent	2.59	2.95	-0.36	0.36
15	Maintain continuity of care between/among health care agencies	1.92	2.27	-0.35	0.35
83	Apply, maintain or remove orthopaedic devices (e.g., traction, splints, braces, casts)	0.93	1.28	-0.35	0.35
5	Assess/triage client(s) to prioritize the order of care delivery	3.30	3.64	-0.34	0.34
132	Manage the care of a client with impaired ventilation/oxygenation	1.86	2.20	-0.34	0.34
34	Acknowledge and document practice error (e.g., incident report for medication error)	0.48	0.81	-0.33	0.33
122	Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust manoeuvre, respiratory support, automated external defibrillator)	0.37	0.70	-0.33	0.33
81	Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)	3.67	4.00	-0.33	0.33
36	Facilitate appropriate and safe use of equipment	3.67	3.98	-0.31	0.31
40	Educate client and staff regarding infection control measures	2.04	2.35	-0.31	0.31
9	Integrate advance directives into client plan of care	1.56	1.87	-0.31	0.31

Table 15: Average Setting-specific Frequency Ratings (Sorted by Absolute Differences)

Activity #	Activity	Frequency Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
55	Provide care and education that meets the special needs of the adult client, ages 19 to 64 years	3.26	3.56	-0.30	0.30
87	Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)	2.11	2.40	-0.29	0.29
72	Recognize non-verbal cues to physical and/or psychological stressors	3.08	3.37	-0.29	0.29
80	Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)	2.49	2.77	-0.28	0.28
113	Manage client during and following procedure with moderate sedation	1.28	1.56	-0.28	0.28
8	Receive and/or transcribe health care provider orders	3.58	3.86	-0.28	0.28
140	Identify signs and symptoms related to an acute or chronic condition	2.87	3.14	-0.27	0.27
43	Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education)	0.63	0.90	-0.27	0.27
127	Provide postoperative care	1.74	2.01	-0.27	0.27
7	Collaborate with health care members in other disciplines when providing client care	3.58	3.84	-0.26	0.26
45	Provide newborn care and education	1.78	2.04	-0.26	0.26
126	Provide ostomy care and education (e.g., tracheal, enteral)	0.97	1.21	-0.24	0.24
18	Comply with provincial/federal and/or state requirements for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)	0.60	0.83	-0.23	0.23
35	Ensure proper identification of client when providing care	4.54	4.77	-0.23	0.23
53	Provide care and education that meets the special needs of the school age client, ages 5 to 12 years	1.25	1.48	-0.23	0.23
42	Provide pre-natal care and education	0.93	1.15	-0.22	0.22
13	Recognize the need for referrals and obtain necessary orders	1.91	2.13	-0.22	0.22
104	Use pharmacological measures for pain management as needed	3.67	3.45	0.22	0.22
38	Implement emergency response plans (e.g., internal/external disaster)	0.36	0.57	-0.21	0.21
89	Promote circulation (e.g., active or passive range of motion, positioning and mobilization)	2.88	3.09	-0.21	0.21
56	Provide care and education that meets the special needs of the older adult client, ages 65 to 85 years	3.25	3.46	-0.21	0.21
97	Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)	4.19	4.39	-0.20	0.20
73	Recognize impact of illness/disease on individual/family lifestyle	2.79	2.99	-0.20	0.20
65	Incorporate client cultural practice and beliefs when planning and providing care	1.86	2.06	-0.20	0.20
52	Provide care and education that meets the special needs of the preschool client, ages 1 year to 4 years	1.14	1.32	-0.18	0.18
128	Perform and manage care of client receiving peritoneal dialysis	0.38	0.56	-0.18	0.18
22	Incorporate evidence-based practice/research results when providing care	3.17	2.99	0.18	0.18
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	3.75	3.92	-0.17	0.17
74	Address client needs based on visual, auditory or cognitive distortions (e.g., hallucinations)	1.56	1.73	-0.17	0.17

Table 15: Average Setting-specific Frequency Ratings (Sorted by Absolute Differences)

Activity #	Activity	Frequency Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
19	Manage conflict among clients and health care staff	0.82	0.99	-0.17	0.17
44	Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)	0.91	1.08	-0.17	0.17
70	Use therapeutic communication techniques to provide support to client	4.01	3.84	0.17	0.17
69	Provide support to client in coping with life changes (e.g., loss, new diagnosis, role change, stress)	2.10	2.27	-0.17	0.17
66	Provide end of life care and education to clients (e.g., hospice)	0.94	1.10	-0.16	0.16
111	Provide pre and/or postoperative education	1.76	1.90	-0.14	0.14
133	Maintain desired temperature of client (e.g., cooling and/or warming blanket)	1.86	2.00	-0.14	0.14
124	Perform wound care and/or assist with dressing change	2.24	2.10	0.14	0.14
78	Perform post-mortem care	0.45	0.58	-0.13	0.13
10	Report unsafe practice of health care personnel to internal/external entities and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)	0.51	0.64	-0.13	0.13
79	Perform irrigations (e.g., of bladder, ear, eye)	0.77	0.90	-0.13	0.13
26	Practises in a manner consistent with a code of ethics for nurses	4.61	4.72	-0.11	0.11
27	Provide care within the legislated scope of practice	4.71	4.81	-0.10	0.10
23	Use approved abbreviations and standard terminology when documenting care	4.50	4.59	-0.09	0.09
93	Perform calculations needed for medication administration	2.98	3.06	-0.08	0.08
76	Assess and intervene in client performance of activities of daily living (ADL) and instrumental activities of daily living (IADL)	3.28	3.20	0.08	0.08
75	Establish and maintain a therapeutic relationship with client	4.33	4.26	0.07	0.07
92	Prepare and administer medications, using rights of medication administration	4.66	4.73	-0.07	0.07
2	Provide and receive report on assigned clients	3.56	3.61	-0.05	0.05
64	Provide a therapeutic environment for clients with emotional/behavioural issues	2.11	2.15	-0.04	0.04
71	Incorporate behavioural management techniques when caring for a client (e.g., positive reinforcement, setting limits)	2.54	2.58	-0.04	0.04
82	Assess and manage client with an alteration in elimination (e.g., bowel, urinary)	3.13	3.16	-0.03	0.03
54	Provide care and education that meets the special needs of the adolescent client, ages 13 to 18 years	1.33	1.36	-0.03	0.03
24	Prioritize workload to manage time effectively	4.57	4.59	-0.02	0.02
17	Recognize limitations of self/others, seek assistance and/or begin corrective measures at the earliest opportunity	3.26	3.28	-0.02	0.02
16	Maintain client confidentiality/privacy	4.52	4.51	0.01	0.01
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	4.90	4.89	0.01	0.01

Table 16: Average Setting-specific Importance Ratings (Sorted by Absolute Differences)

Activity #	Activity	Importance Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
45	Provide newborn care and education	4.13	4.66	-0.53	0.53
3	Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)	3.70	4.19	-0.49	0.49
134	Implement and monitor phototherapy	3.74	4.22	-0.48	0.48
48	Provide post-partum care and education	4.02	4.49	-0.47	0.47
43	Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education)	3.64	4.10	-0.46	0.46
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	3.97	4.43	-0.46	0.46
141	Manage the care of a client receiving haemodialysis	4.11	4.55	-0.44	0.44
120	Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)	3.96	4.39	-0.43	0.43
32	Participate in institution security plan (e.g., newborn nursery security, bomb threats)	4.08	4.51	-0.43	0.43
125	Assist with invasive procedures (e.g., central line placement)	4.04	4.46	-0.42	0.42
44	Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)	3.67	4.09	-0.42	0.42
126	Provide ostomy care and education (e.g., tracheal, enteral)	3.96	4.38	-0.42	0.42
42	Provide pre-natal care and education	4.10	4.51	-0.41	0.41
6	Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)	3.64	4.05	-0.41	0.41
38	Implement emergency response plans (e.g., internal/external disaster)	4.06	4.45	-0.39	0.39
136	Monitor and maintain arterial lines	4.24	4.61	-0.37	0.37
83	Apply, maintain or remove orthopaedic devices (e.g., traction, splints, braces, casts)	3.76	4.11	-0.35	0.35
23	Use approved abbreviations and standard terminology when documenting care	4.00	4.34	-0.34	0.34
103	Administer parenteral nutrition and evaluate client response (e.g., TPN)	4.17	4.51	-0.34	0.34
18	Comply with provincial/federal and/or state requirements for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)	4.25	4.59	-0.34	0.34
51	Provide care and education that meets the special needs of the infant client, 1 month to 1 year	4.12	4.46	-0.34	0.34
128	Perform and manage care of client receiving peritoneal dialysis	4.05	4.38	-0.33	0.33
108	Evaluate the results of diagnostic testing and intervene as needed	4.22	4.54	-0.32	0.32
25	Use emerging technology in managing client health care (e.g., telehealth, electronic records)	3.78	4.09	-0.31	0.31
138	Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)	4.36	4.67	-0.31	0.31
135	Manage the care of a client with a pacing device (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)	4.13	4.44	-0.31	0.31
104	Use pharmacological measures for pain management as needed	4.45	4.14	0.31	0.31
85	Manage the client who has an alteration in nutritional intake (e.g., adjust diet, monitor height and weight, change delivery to include method, time and food preferences)	3.93	4.24	-0.31	0.31

Table 16: Average Setting-specific Importance Ratings (Sorted by Absolute Differences)

Activity #	Activity	Importance Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
50	Assess readiness to learn, learning preferences and barriers to learning	3.88	4.18	-0.30	0.30
113	Manage client during and following procedure with moderate sedation	4.29	4.58	-0.29	0.29
53	Provide care and education that meets the special needs of the school age client, ages 5 to 12 years	4.06	4.35	-0.29	0.29
129	Perform suctioning (e.g., oral, nasopharyngeal, endotracheal, tracheal)	4.25	4.54	-0.29	0.29
77	Provide client nutrition through continuous or intermittent tube feedings	4.10	4.39	-0.29	0.29
112	Provide preoperative care	4.08	4.37	-0.29	0.29
37	Educate client on home safety issues	3.94	4.22	-0.28	0.28
9	Integrate advance directives into client plan of care	4.08	4.36	-0.28	0.28
61	Assess client for potential or actual abuse/neglect and intervene when appropriate	4.14	4.42	-0.28	0.28
88	Calculate client intake and output	4.08	4.36	-0.28	0.28
131	Manage the care of a client on telemetry	4.32	4.59	-0.27	0.27
142	Recognize complications of an acute or chronic illness and intervene	4.51	4.78	-0.27	0.27
80	Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)	3.98	4.25	-0.27	0.27
100	Access venous access devices, including tunneled, implanted and central lines	4.30	4.56	-0.26	0.26
89	Promote circulation (e.g., active or passive range of motion, positioning and mobilization)	4.11	4.36	-0.25	0.25
133	Maintain desired temperature of client (e.g., cooling and/or warming blanket)	4.00	4.25	-0.25	0.25
39	Comply with provincial/federal/institutional requirements regarding the use of client restraints and/or safety devices	4.24	4.49	-0.25	0.25
74	Address client needs based on visual, auditory or cognitive distortions (e.g., hallucinations)	3.99	4.24	-0.25	0.25
111	Provide pre and/or postoperative education	4.18	4.43	-0.25	0.25
127	Provide postoperative care	4.23	4.48	-0.25	0.25
62	Assess client for drug/alcohol related dependencies, withdrawal, or toxicities and intervene when appropriate	4.09	4.34	-0.25	0.25
67	Assess the potential for violence and initiate/maintain safety precautions (e.g., suicide, homicide, self-destructive behaviour)	4.25	4.49	-0.24	0.24
72	Recognize non-verbal cues to physical and/or psychological stressors	4.11	4.35	-0.24	0.24
59	Assess and teach client about health risks based on known population or community characteristics	3.82	4.06	-0.24	0.24
130	Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)	4.07	4.31	-0.24	0.24
95	Insert, maintain and remove a peripheral intravenous line	4.32	4.55	-0.23	0.23
79	Perform irrigations (e.g., of bladder, ear, eye)	3.80	4.03	-0.23	0.23
121	Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)	4.20	4.43	-0.23	0.23
90	Evaluate therapeutic effect of medications	4.40	4.62	-0.22	0.22
101	Educate client about medications	4.30	4.52	-0.22	0.22
94	Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access)	4.51	4.73	-0.22	0.22

Table 16: Average Setting-specific Importance Ratings (Sorted by Absolute Differences)

Activity #	Activity	Importance Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
60	Assess psychosocial, spiritual and occupational factors affecting care and plan interventions as appropriate	3.88	4.09	-0.21	0.21
58	Assess client understanding of and ability to manage self care in the home environment (e.g., community resources)	4.05	4.26	-0.21	0.21
41	Assess for client allergies/sensitivities and intervene as needed (e.g., food, latex, environmental allergies)	4.51	4.72	-0.21	0.21
87	Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)	3.95	4.16	-0.21	0.21
91	Evaluate appropriateness/accuracy of medication order for client per institution policy including reconciling orders	4.49	4.70	-0.21	0.21
47	Provide information about healthy behaviours and health promotion/maintenance recommendations (e.g., physician visits, immunizations)	3.99	4.20	-0.21	0.21
116	Educate client about treatments and procedures	4.18	4.39	-0.21	0.21
78	Perform post-mortem care	3.80	4.00	-0.20	0.20
15	Maintain continuity of care between/among health care agencies	4.00	4.20	-0.20	0.20
106	Perform focused assessment and re-assessment (e.g., gastrointestinal, respiratory, cardiac)	4.54	4.74	-0.20	0.20
114	Obtain blood specimens peripherally or through central line	4.13	4.33	-0.20	0.20
107	Provide intraoperative care	4.16	4.36	-0.20	0.20
102	Manage client experiencing side effects and adverse reactions of medication	4.43	4.63	-0.20	0.20
34	Acknowledge and document practice error (e.g., incident report for medication error)	4.37	4.57	-0.20	0.20
115	Use precautions to prevent injury and/or complications associated with a procedure or diagnosis	4.33	4.52	-0.19	0.19
81	Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)	4.45	4.64	-0.19	0.19
66	Provide end of life care and education to clients (e.g., hospice)	4.12	4.31	-0.19	0.19
31	Follow procedures for handling biohazardous materials	4.47	4.66	-0.19	0.19
57	Provide care and education that meets the special needs of the older adult client, over 85 years	4.11	4.29	-0.18	0.18
46	Provide information for prevention of high risk health behaviours (e.g., smoking cessation, safe sexual practice, drug education)	3.95	4.13	-0.18	0.18
5	Assess/triage client(s) to prioritize the order of care delivery	4.43	4.61	-0.18	0.18
137	Manage the care of the client with a fluid and electrolyte imbalance	4.38	4.56	-0.18	0.18
86	Assess client need for sleep/rest and intervene as needed	3.94	4.12	-0.18	0.18
29	Protect client from injury (e.g., falls, electrical hazards)	4.63	4.81	-0.18	0.18
36	Facilitate appropriate and safe use of equipment	4.33	4.51	-0.18	0.18
55	Provide care and education that meets the special needs of the adult client, ages 19 to 64 years	4.12	4.29	-0.17	0.17
93	Perform calculations needed for medication administration	4.67	4.84	-0.17	0.17
118	Insert, maintain and remove nasogastric tubes and/or urethral catheters	4.09	4.26	-0.17	0.17
96	Comply with requirements governing controlled substances	4.44	4.61	-0.17	0.17

Table 16: Average Setting-specific Importance Ratings (Sorted by Absolute Differences)

Activity #	Activity	Importance Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
98	Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)	4.61	4.77	-0.16	0.16
97	Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)	4.69	4.85	-0.16	0.16
117	Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine specimens)	4.05	4.21	-0.16	0.16
124	Perform wound care and/or assist with dressing change	4.17	4.33	-0.16	0.16
56	Provide care and education that meets the special needs of the older adult client, ages 65 to 85 years	4.12	4.27	-0.15	0.15
132	Manage the care of a client with impaired ventilation/oxygenation	4.49	4.64	-0.15	0.15
139	Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis	4.31	4.46	-0.15	0.15
119	Recognize trends and changes in client condition and intervene appropriately	4.59	4.73	-0.14	0.14
8	Receive and/or transcribe health care provider orders	4.58	4.72	-0.14	0.14
64	Provide a therapeutic environment for clients with emotional/behavioural issues	4.05	4.19	-0.14	0.14
65	Incorporate client cultural practice and beliefs when planning and providing care	3.99	4.13	-0.14	0.14
63	Provide care and education for acute and chronic behavioural health issues (e.g., anxiety, depression, dementia, eating disorders)	4.04	4.18	-0.14	0.14
105	Assess and respond to changes in client vital signs	4.68	4.81	-0.13	0.13
73	Recognize impact of illness/disease on individual/family lifestyle	4.03	4.16	-0.13	0.13
30	Verify appropriateness and/or accuracy of a treatment order	4.64	4.77	-0.13	0.13
4	Act as a client advocate	4.45	4.58	-0.13	0.13
1	Perform procedures necessary to safely admit, transfer or discharge a client	4.28	4.41	-0.13	0.13
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	4.47	4.60	-0.13	0.13
40	Educate client and staff regarding infection control measures	4.41	4.54	-0.13	0.13
49	Perform comprehensive health assessment	4.48	4.60	-0.12	0.12
82	Assess and manage client with an alteration in elimination (e.g., bowel, urinary)	4.19	4.31	-0.12	0.12
54	Provide care and education that meets the special needs of the adolescent client, ages 13 to 18 years	4.04	4.16	-0.12	0.12
99	Administer blood products and evaluate client response	4.66	4.78	-0.12	0.12
76	Assess and intervene in client performance of activities of daily living (ADL) and instrumental activities of daily living (IADL)	4.10	4.22	-0.12	0.12
26	Practises in a manner consistent with a code of ethics for nurses	4.64	4.76	-0.12	0.12
24	Prioritize workload to manage time effectively	4.51	4.62	-0.11	0.11
11	Verify that the client comprehends and consents to care/procedures, including procedures requiring informed consent	4.52	4.63	-0.11	0.11
110	Evaluate responses to procedures and treatments	4.38	4.49	-0.11	0.11
35	Ensure proper identification of client when providing care	4.80	4.91	-0.11	0.11
19	Manage conflict among clients and health care staff	3.92	4.03	-0.11	0.11

Table 16: Average Setting-specific Importance Ratings (Sorted by Absolute Differences)

Activity #	Activity	Importance Ratings			
		CNO Mean	U.S. Mean	Difference	Absolute Difference
140	Identify signs and symptoms related to an acute or chronic condition	4.35	4.46	-0.11	0.11
21	Recognize ethical dilemmas and take appropriate action	4.12	4.23	-0.11	0.11
69	Provide support to client in coping with life changes (e.g., loss, new diagnosis, role change, stress)	4.14	4.25	-0.11	0.11
12	Educate client and staff about client rights and responsibilities (e.g., ethical/legal issues)	4.10	4.20	-0.10	0.10
84	Assess client need for pain management and intervene as needed using non-pharmacological comfort measures	4.29	4.39	-0.10	0.10
14	Initiate, evaluate, and update plan of care, care map, clinical pathway used to guide and evaluate client care	4.10	4.20	-0.10	0.10
33	Use safe client handling when providing care (e.g., assistive devices, proper lifting)	4.45	4.55	-0.10	0.10
123	Monitor and care for clients on a ventilator	4.58	4.68	-0.10	0.10
122	Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust manoeuvre, respiratory support, automated external defibrillator)	4.74	4.83	-0.09	0.09
22	Incorporate evidence-based practice/research results when providing care	4.35	4.26	0.09	0.09
92	Prepare and administer medications, using rights of medication administration	4.81	4.90	-0.09	0.09
27	Provide care within the legislated scope of practice	4.75	4.83	-0.08	0.08
71	Incorporate behavioural management techniques when caring for a client (e.g., positive reinforcement, setting limits)	4.00	4.08	-0.08	0.08
17	Recognize limitations of self/others, seek assistance and/or begin corrective measures at the earliest opportunity	4.61	4.53	0.08	0.08
68	Assess family dynamics in order to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)	3.96	4.04	-0.08	0.08
13	Recognize the need for referrals and obtain necessary orders	4.08	4.15	-0.07	0.07
75	Establish and maintain a therapeutic relationship with client	4.55	4.48	0.07	0.07
2	Provide and receive report on assigned clients	4.59	4.66	-0.07	0.07
7	Collaborate with health care members in other disciplines when providing client care	4.50	4.56	-0.06	0.06
16	Maintain client confidentiality/privacy	4.75	4.70	0.05	0.05
10	Report unsafe practice of health care personnel to internal/external entities and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)	4.39	4.34	0.05	0.05
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	4.87	4.91	-0.04	0.04
52	Provide care and education that meets the special needs of the preschool client, ages 1 year to 4 years	4.09	4.12	-0.03	0.03
70	Use therapeutic communication techniques to provide support to client	4.33	4.31	0.02	0.02

CONCLUSIONS

A survey similar to the *2008 RN Practice Analysis: Linking NCLEX-RN® Examination to Practice* instrument was administered to entry-level RNs in Ontario using similar activity statements and identical rating scales. The rigorous processes used for the U.S. and Ontario studies were almost identical. Given the strong correlations between importance and frequency ratings, the nursing activities presented are comparable with respect to importance and performance frequency among the jurisdictions. The results of the data analyses strongly suggest that entry-level RNs view practice similarly in Ontario and the U.S.

RECOMMENDATIONS

Based on the results of this study, NCSBN and CNO may want to consider further collaboration on a joint licensure examination, which could enhance licensure portability and benefit the U.S., Ontario and, ultimately, the public.

REFERENCES

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APPENDIX A: 2008 RN PRACTICE ANALYSIS METHODOLOGY EXPERTS

Chad W. Buckendahl, PhD, is the senior psychometrician at Alpine Testing Solutions, Inc. He has conducted practice analyses as the basis for several certification and licensing examinations, and is well-published on this topic. His research interests also include standard setting and computerized adaptive testing.

Jerry Gorham, PhD, is the senior psychometrician and manager at Educational Testing Services. He has been responsible for overseeing quality licensure exams, as well as participating in technical advisory boards with testing vendors, such as Pearson VUE and Chauncey, for more than 12 years.

Gage Kingsbury, PhD, is vice president of research for the Northwest Evaluation Association. He has more than 25 years of experience in testing and psychometrics. He is a nationally recognized expert in developing computerized adaptive tests and has been on NCSBN's Joint Research Committee (JRC is an NCSBN sponsored advisory board) for more than 10 years.

Gene Kramer, PhD, is director of testing for the American Dental Association. In this capacity, he is responsible for the practice analyses that provide the basis for their national licensing examinations. Kramer has been managing these practice analyses and other psychometric analyses for more than 20 years.

APPENDIX B: CNO AND NCSBN REGISTERED NURSE SURVEY



The College of Nurses of Ontario & the National Council of State Boards of Nursing

REGISTERED NURSING SURVEY

This survey is part of a study on the comparability of practice characteristics and activities of newly registered RNs in Ontario and the U.S. This study is being conducted by the College of Nurses of Ontario (CNO) and the National Council of State Boards of Nursing (NCSBN®).

INSTRUCTIONS

Please read each question carefully and respond by selecting the option that most closely represents your answer. Choose the answer that **best** applies to your practice and select the appropriate response(s).

You will notice that many questions ask you to report what you did on your **last day of work**. It is important that we obtain information from nurses experiencing both typical and unusual workdays, so please answer the questions according to what you did on your **last** day of work, even if that day was not typical.

As used in this survey, the “client” can be an individual, family, or group. “Clients” are the same as “residents” or “patients”. Your answers will be kept confidential and your individual responses to the questions will not be released.



- Use a pencil.
- Do not use a pen.
- Make heavy dark marks that fill the oval completely.
- If you want to change an answer, erase completely.

1. What type(s) of nursing registration do you hold? (Select ALL that apply)

- RN
- RPN

2. Are you currently working as an RN in Ontario?

- Yes
- No → Skip to Section 5: Demographic Information

3. In your current position, do you provide direct care to clients?

Note: Faculty supervision of student clinical experiences is not considered “direct care”.

- Yes, 20 or more hours per week, on average → Continue to Section 1: Nursing Activities
- Yes, less than 20 hours per week, on average → Skip to Section 5: Demographic Information
- No → Skip to Section 5: Demographic Information

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SECTION 1: NURSING ACTIVITIES

This section contains a list of activities descriptive of nursing practice in a variety of settings. Please note that some activities may not apply to your setting. For each activity, two questions are asked. Please answer both questions.

QUESTION A - FREQUENCY – If the activity is performed in your work setting, how often (0 Times, 1 Time, 2 Times, 3 Times, 4 Times, or 5+ Times) did you personally perform the activity on the last day your worked? If it is never performed in your work setting or is not applicable, then select “NEVER performed in work setting” and then respond to Question B - Importance.

QUESTION B - IMPORTANCE: How important is performing this nursing activity in regard to client safety? Consider the importance with regard to the risk of unnecessary complications, impairment of function, or serious distress to clients. Rate all activities.

NOTE: Inclusion of an activity on this practice analysis survey does not imply that the activity is or would be included in the RN scope of practice defined by any specific province, territory or state. You must refer to your nursing regulatory body for information about your legislated scope of practice.

QUESTION A - FREQUENCY – If an activity does not apply to your work setting, mark “NEVER performed in work setting”, select the importance rating as noted in Question B and then move on to the next activity. If an activity is performed in your work setting mark 0-5+ reflecting the frequency of performing the activity on your last day of work, then complete Question B.

QUESTION B - IMPORTANCE – Rate the overall importance of this activity considering client safety, and/or threat of complications or distress with 1 = Not Important, 2 = Marginally Important, 3 = Moderately Important, 4 = Important, 5 = Critically Important.

ACTIVITY

1. Perform procedures necessary to safely admit, transfer or discharge a client
2. Provide and receive report on assigned clients
3. Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)
4. Act as a client advocate
5. Assess/triage client(s) to prioritize the order of care delivery
6. Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)
7. Collaborate with health care members in other disciplines when providing client care
8. Receive and/or transcribe health care provider orders
9. Integrate advance directives into client plan of care
10. Report unsafe practice of health care personnel to internal/external entities and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)
11. Verify that the client comprehends and consents to care/procedures, including procedures requiring informed consent
12. Educate client and staff about client rights and responsibilities (e.g., ethical/legal issues)
13. Recognize the need for referrals and obtain necessary orders
14. Initiate, evaluate, and update plan of care, care map, clinical pathway used to guide and evaluate client care
15. Maintain continuity of care between/among health care agencies
16. Maintain client confidentiality/privacy

	A - FREQUENCY						B - IMPORTANCE					
	NEVER performed in work setting	0 Times	1 Time	2 Times	3 Times	4 Times	5 or more Times	1 = Not Important	2 = Marginally Important	3 = Moderately Important	4 = Important	5 = Critically Important
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

QUESTION A - FREQUENCY – If an activity does not apply to your work setting, mark “NEVER performed in work setting”, select the importance rating as noted in Question B and then move on to the next activity. If an activity is performed in your work setting mark 0-5+ reflecting the frequency of performing the activity on your last day of work, then complete Question B.

QUESTION B - IMPORTANCE – Rate the overall importance of this activity considering client safety, and/or threat of complications or distress with 1 = Not Important, 2 = Marginally Important, 3 = Moderately Important, 4 = Important, 5 = Critically Important.

ACTIVITY

17. Recognize limitations of self/others, seek assistance and/or begin corrective measures at the earliest opportunity
18. Comply with provincial/federal and/or state requirements for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)
19. Manage conflict among clients and health care staff
20. Use information technology (e.g., computer, video, books) to enhance the care provided to a client
21. Recognize ethical dilemmas and take appropriate action
22. Incorporate evidence-based practice/research results when providing care
23. Use approved abbreviations and standard terminology when documenting care
24. Prioritize workload to manage time effectively
25. Use emerging technology in managing client health care (e.g., telehealth, electronic records)
26. Practises in a manner consistent with a code of ethics for nurses
27. Provide care within the legislated scope of practice
28. Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)
29. Protect client from injury (e.g., falls, electrical hazards)
30. Verify appropriateness and/or accuracy of a treatment order
31. Follow procedures for handling biohazardous materials
32. Participate in institution security plan (e.g., newborn nursery security, bomb threats)
33. Use safe client handling when providing care (e.g., assistive devices, proper lifting)
34. Acknowledge and document practice error (e.g., incident report for medication error)
35. Ensure proper identification of client when providing care
36. Facilitate appropriate and safe use of equipment
37. Educate client on home safety issues
38. Implement emergency response plans (e.g., internal/external disaster)
39. Comply with provincial/federal/institutional requirements regarding the use of client restraints and/or safety devices
40. Educate client and staff regarding infection control measures
41. Assess for client allergies/sensitivities and intervene as needed (e.g., food, latex, environmental allergies)
42. Provide pre-natal care and education

	A - FREQUENCY						B - IMPORTANCE					
	NEVER performed in work setting	0 Times	1 Time	2 Times	3 Times	4 Times	5 or more Times	1 = Not Important	2 = Marginally Important	3 = Moderately Important	4 = Important	5 = Critically Important
17												
18												
19												
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21												
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38												
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41												
42												

QUESTION A - FREQUENCY – If an activity does not apply to your work setting, mark “NEVER performed in work setting”, select the importance rating as noted in Question B and then move on to the next activity. If an activity is performed in your work setting mark 0-5+ reflecting the frequency of performing the activity on your last day of work, then complete Question B.

QUESTION B - IMPORTANCE – Rate the overall importance of this activity considering client safety, and/or threat of complications or distress with 1 = Not Important, 2 = Marginally Important, 3 = Moderately Important, 4 = Important, 5 = Critically Important.

ACTIVITY

- 43. Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education)
- 44. Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)
- 45. Provide newborn care and education
- 46. Provide information for prevention of high risk health behaviours (e.g., smoking cessation, safe sexual practice, drug education)
- 47. Provide information about healthy behaviours and health promotion/maintenance recommendations (e.g., physician visits, immunizations)
- 48. Provide post-partum care and education
- 49. Perform comprehensive health assessment
- 50. Assess readiness to learn, learning preferences and barriers to learning
- 51. Provide care and education that meets the special needs of the infant client, 1 month to 1 year
- 52. Provide care and education that meets the special needs of the preschool client, ages 1 year to 4 years
- 53. Provide care and education that meets the special needs of the school age client, ages 5 to 12 years
- 54. Provide care and education that meets the special needs of the adolescent client, ages 13 to 18 years
- 55. Provide care and education that meets the special needs of the adult client, ages 19 to 64 years
- 56. Provide care and education that meets the special needs of the older adult client, ages 65 to 85 years
- 57. Provide care and education that meets the special needs of the older adult client, over 85 years
- 58. Assess client understanding of and ability to manage self care in the home environment (e.g., community resources)
- 59. Assess and teach client about health risks based on known population or community characteristics
- 60. Assess psychosocial, spiritual and occupational factors affecting care and plan interventions as appropriate
- 61. Assess client for potential or actual abuse/neglect and intervene when appropriate
- 62. Assess client for drug/alcohol related dependencies, withdrawal, or toxicities and intervene when appropriate
- 63. Provide care and education for acute and chronic behavioural health issues (e.g., anxiety, depression, dementia, eating disorders)

	A - FREQUENCY						B - IMPORTANCE					
	NEVER performed in work setting	0 Times	1 Time	2 Times	3 Times	4 Times	5 or more Times	1 = Not Important	2 = Marginally Important	3 = Moderately Important	4 = Important	5 = Critically Important
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63.												

QUESTION A - FREQUENCY – If an activity does not apply to your work setting, mark “NEVER performed in work setting”, select the importance rating as noted in Question B and then move on to the next activity. If an activity is performed in your work setting mark 0-5+ reflecting the frequency of performing the activity on your last day of work, then complete Question B.

QUESTION B - IMPORTANCE – Rate the overall importance of this activity considering client safety, and/or threat of complications or distress with 1 = Not Important, 2 = Marginally Important, 3 = Moderately Important, 4 = Important, 5 = Critically Important.

ACTIVITY

- 64. Provide a therapeutic environment for clients with emotional/behavioural issues
- 65. Incorporate client cultural practice and beliefs when planning and providing care
- 66. Provide end of life care and education to clients (e.g., hospice)
- 67. Assess the potential for violence and initiate/maintain safety precautions (e.g., suicide, homicide, self-destructive behaviour)
- 68. Assess family dynamics in order to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)
- 69. Provide support to client in coping with life changes (e.g., loss, new diagnosis, role change, stress)
- 70. Use therapeutic communication techniques to provide support to client
- 71. Incorporate behavioural management techniques when caring for a client (e.g., positive reinforcement, setting limits)
- 72. Recognize non-verbal cues to physical and/or psychological stressors
- 73. Recognize impact of illness/disease on individual/family lifestyle
- 74. Address client needs based on visual, auditory or cognitive distortions (e.g., hallucinations)
- 75. Establish and maintain a therapeutic relationship with client
- 76. Assess and intervene in client performance of activities of daily living (ADL) and instrumental activities of daily living (IADL)
- 77. Provide client nutrition through continuous or intermittent tube feedings
- 78. Perform post-mortem care
- 79. Perform irrigations (e.g., of bladder, ear, eye)
- 80. Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)
- 81. Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)
- 82. Assess and manage client with an alteration in elimination (e.g., bowel, urinary)
- 83. Apply, maintain or remove orthopaedic devices (e.g., traction, splints, braces, casts)
- 84. Assess client need for pain management and intervene as needed using non-pharmacological comfort measures
- 85. Manage the client who has an alteration in nutritional intake (e.g., adjust diet, monitor height and weight, change delivery to include method, time and food preferences)
- 86. Assess client need for sleep/rest and intervene as needed
- 87. Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)

	A - FREQUENCY						B - IMPORTANCE					
	NEVER performed in work setting	0 Times	1 Time	2 Times	3 Times	4 Times	5 or more Times	1 = Not Important	2 = Marginally Important	3 = Moderately Important	4 = Important	5 = Critically Important
64.												
65.												
66.												
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QUESTION A - FREQUENCY – If an activity does not apply to your work setting, mark “NEVER performed in work setting”, select the importance rating as noted in Question B and then move on to the next activity. If an activity is performed in your work setting mark 0-5+ reflecting the frequency of performing the activity on your last day of work, then complete Question B.

QUESTION B - IMPORTANCE – Rate the overall importance of this activity considering client safety, and/or threat of complications or distress with 1 = Not Important, 2 = Marginally Important, 3 = Moderately Important, 4 = Important, 5 = Critically Important.

ACTIVITY

	A - FREQUENCY						B - IMPORTANCE					
	NEVER performed in work setting	0 Times	1 Time	2 Times	3 Times	4 Times	5 or more Times	1 = Not Important	2 = Marginally Important	3 = Moderately Important	4 = Important	5 = Critically Important
88. Calculate client intake and output												
89. Promote circulation (e.g., active or passive range of motion, positioning and mobilization)												
90. Evaluate therapeutic effect of medications												
91. Evaluate appropriateness/accuracy of medication order for client per institution policy including reconciling orders												
92. Prepare and administer medications, using rights of medication administration												
93. Perform calculations needed for medication administration												
94. Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access)												
95. Insert, maintain and remove a peripheral intravenous line												
96. Comply with requirements governing controlled substances												
97. Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)												
98. Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)												
99. Administer blood products and evaluate client response												
100. Access venous access devices, including tunneled, implanted and central lines												
101. Educate client about medications												
102. Manage client experiencing side effects and adverse reactions of medication												
103. Administer parenteral nutrition and evaluate client response (e.g., TPN)												
104. Use pharmacological measures for pain management as needed												
105. Assess and respond to changes in client vital signs												
106. Perform focused assessment and re-assessment (e.g., gastrointestinal, respiratory, cardiac)												
107. Provide intraoperative care												
108. Evaluate the results of diagnostic testing and intervene as needed												
109. Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)												
110. Evaluate responses to procedures and treatments												
111. Provide pre and/or postoperative education												
112. Provide preoperative care												
113. Manage client during and following procedure with moderate sedation												
114. Obtain blood specimens peripherally or through central line												
115. Use precautions to prevent injury and/or complications associated with a procedure or diagnosis												
116. Educate client about treatments and procedures												

QUESTION A - FREQUENCY – If an activity does not apply to your work setting, mark “NEVER performed in work setting”, select the importance rating as noted in Question B and then move on to the next activity. If an activity is performed in your work setting mark 0-5+ reflecting the frequency of performing the activity on your last day of work, then complete Question B.

QUESTION B - IMPORTANCE – Rate the overall importance of this activity considering client safety, and/or threat of complications or distress with 1 = Not Important, 2 = Marginally Important, 3 = Moderately Important, 4 = Important, 5 = Critically Important.

ACTIVITY

- 117. Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine specimens)
- 118. Insert, maintain and remove nasogastric tubes and/or urethral catheters
- 119. Recognize trends and changes in client condition and intervene appropriately
- 120. Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)
- 121. Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)
- 122. Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust manoeuvre, respiratory support, automated external defibrillator)
- 123. Monitor and care for clients on a ventilator
- 124. Perform wound care and/or assist with dressing change
- 125. Assist with invasive procedures (e.g., central line placement)
- 126. Provide ostomy care and education (e.g., tracheal, enteral)
- 127. Provide postoperative care
- 128. Perform and manage care of client receiving peritoneal dialysis
- 129. Perform suctioning (e.g., oral, nasopharyngeal, endotracheal, tracheal)
- 130. Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)
- 131. Manage the care of a client on telemetry
- 132. Manage the care of a client with impaired ventilation/oxygenation
- 133. Maintain desired temperature of client (e.g., cooling and/or warming blanket)
- 134. Implement and monitor phototherapy
- 135. Manage the care of a client with a pacing device (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)
- 136. Monitor and maintain arterial lines
- 137. Manage the care of the client with a fluid and electrolyte imbalance
- 138. Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)
- 139. Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis
- 140. Identify signs and symptoms related to an acute or chronic condition
- 141. Manage the care of a client receiving haemodialysis
- 142. Recognize complications of an acute or chronic illness and intervene

	A - FREQUENCY						B - IMPORTANCE					
	NEVER performed in work setting	0 Times	1 Time	2 Times	3 Times	4 Times	5 or more Times	1 = Not Important	2 = Marginally Important	3 = Moderately Important	4 = Important	5 = Critically Important
117.												
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SECTION 2: EXPERIENCE AND ORIENTATION

INSTRUCTIONS FOR SECTIONS 2-5: Please record your responses by marking the appropriate ovals. For questions concerning numbers, mark ovals in both the first and second columns so that the numbers associated with the selected ovals represent your answer. For example, if your answer is 24, you will mark the following:

2	4
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

1. What is the total number of weeks you have worked in Ontario as a registered RN?

		WEEKS
0	0	
1	1	
2	2	
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	

2. Have you ever worked outside Ontario as an RN?

- Yes → If yes, what is the total number of months you worked outside Ontario as an RN?
- No

		MONTHS
0	0	
1	1	
2	2	
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	

3. Which of the following **best** describes the orientation you received for your current position? (Select only ONE)

- No formal orientation → Skip to question 5
- Classroom instruction/skills lab work only
- Classroom and/or skills lab plus supervised work with clients
- Work with an assigned preceptor(s) or mentor(s) with or without additional classroom or skills lab work
- A formal internship/residency program with or without additional classroom or skills lab work
- Other, please specify: _____

4. If you had an orientation period, how long was it?

		NUMBER OF DAYS IN ORIENTATION
0	0	
1	1	
2	2	
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	

5. Which of the following types of certificates have you earned or courses have you completed since graduation? (Select all that apply)

- Advanced Cardiac Life Support
- Basic Life Support
- Behavioural Management
- Chemotherapy
- Conscious/Moderate Sedation
- Coronary Care
- Critical Care
- Intravenous Therapy
- Neonatal Resuscitation Program
- Paediatric Advanced Life Support
- Peritoneal Dialysis
- Rehabilitation
- None
- Other, please specify: _____

6. Do you routinely have administrative responsibilities within your nursing position (e.g., Unit Manager, Team Leader, Charge Nurse, Coordinator)?

- Yes → If yes, is this your primary position?
- Yes No
- No

SECTION 3: WORK ENVIRONMENT

1. Which of the following *best* describes *most* of your clients on the last day you worked?

(Select all that apply)

- Well clients, possibly with minor illnesses
- OB (Maternity) clients
- Clients with stabilized chronic conditions
- Clients with unstabilized chronic conditions
- Clients with acute conditions, including clients with medical, surgical or critical conditions
- Clients at end of life
- Clients with behavioural/emotional conditions
- Other, please specify:

2. Which of the following *best* describes the ages of *most* of your clients on the last day you worked?

(Select all that apply)

- Newborns (less than 1 month)
- Infants/children (1 month - 12 years)
- Adolescent (ages 13 - 18)
- Young Adult (ages 19 - 30)
- Adult (ages 31 - 64)
- Older Adult (ages 65 - 85)
- Older Adult (85 years and older)

3. Which of the following choices *best* describes your employment setting/specialty area on the last day you worked? If you worked mainly in one setting, fill in the appropriate oval for that one setting. If you worked in more than one setting, fill in the appropriate oval for all settings where you spent at least one-half of your time.

(Select no more than TWO answers)

- Critical care (e.g., ICU, CCU, step-down units, paediatric/neonatal intensive care, emergency department, post-anesthesia recovery unit)
- Medical-surgical unit or any of its sub-specialties (e.g., oncology, orthopedics, neurology)
- Paediatrics
- Nursery
- Labour and delivery
- Postpartum unit
- Psychiatry or any of its sub-specialties (e.g., detox)
- Operating room, including outpatient surgery and surgicenters
- Nursing home, skilled or intermediate care
- Assisted Living
- Other long-term care (e.g., residential care, developmental disability)
- Rehabilitation
- Subacute unit
- Transitional care unit
- Physician/Dentist office
- Occupational health
- Outpatient clinic
- Home health, including visiting nurse associations
- Public health
- Student/school health
- Hospice care
- Prison/correctional facilities/jails
- Other, please specify: _____

4. Which of the following *best* describes the type of facility/organization where your employment setting/specialty area is located? (Select only ONE)

- Hospital
- Long-term care facility
- Community-based or ambulatory care facility/organization (including public health department, visiting nurses association, home health, physician/dentist office, clinic, school, prison, etc.)
- Other, please specify: _____

SECTION 3: WORK ENVIRONMENT (continued)

5. If you work in a hospital or nursing home, how large is it? (Select only ONE)
- Less than 50 beds
 - 50-99 beds
 - 100-299 beds
 - 300-499 beds
 - 500 or more beds
 - Don't know
 - I work in a setting other than a hospital or nursing home

- 6a. Which of the following best describes your shift on a typical work day? (Select only ONE)
- Days
 - Evenings
 - Nights
 - Rotating shifts
 - Other, please specify: _____

- 6b. What is the length of your shift on a typical work day? (Select only ONE)
- 8 hours
 - 10 hours
 - 12 hours
 - Less than 8 hours
 - More than 12 hours

7. Which best describes the location of your employment setting?
- Urban/Metropolitan area
 - Suburban
 - Rural

SECTION 4: DESCRIPTION OF YOUR LAST DAY OF WORK

1. How many hours did you work on your last day of work?

HOURS

0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10

2. For how many clients were you responsible on your last day of work? This includes clients to whom you were assigned to provide direct care, indirect care (provided through others such as PSWs), or any performance of tasks or other responsibility for care during all or any part of your time in the work setting.

NUMBER OF CLIENTS

0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10

3. How much of your time was spent performing each of the following types of activities on your last day of work? For each of the sets of activities please rate the approximate amount of time you spent on that type of activity on your last day of work rounded to the nearest hour. For example, if you spent about 2¼ hours on a set of activities, select the option "2 hours." If you spent 2½ to 2¾ hours on a set of activities, select the option "3 hours." Numerous categories may be performed simultaneously; therefore total hours spent may be greater than total hours of shift worked.

**Approximate Amount of Time (Hours)
Spent on Set of Activities**

	0	1	2	3	4	5	6	7	8	>8
1. Management of Care: Provide nursing care that enhances the care delivery setting to protect client and health care personnel	<input type="radio"/>									
2. Safety and Infection Control: Protect client and health care personnel from health and environmental hazards	<input type="radio"/>									
3. Health Promotion and Maintenance: Provide nursing care of the client that incorporates expected growth and development, prevention/early detection of health problems, and strategies to achieve optimal health	<input type="radio"/>									
4. Psychosocial Integrity: Provide nursing care that promotes/supports the client experiencing stressful events, and/or mental illness	<input type="radio"/>									
5. Basic Care and Comfort: Provide comfort and assistance in the performance of activities of daily living	<input type="radio"/>									
6. Pharmacological and Parenteral Therapies: Provide care related to the administration of medications and parenteral therapies	<input type="radio"/>									
7. Reduction of Risk Potential: Reduce risk of complications/health problems related to existing conditions, treatments and procedures	<input type="radio"/>									
8. Physiological Adaptation: Provide care for clients with acute, chronic or life threatening physical health conditions	<input type="radio"/>									

SECTION 5: DEMOGRAPHIC INFORMATION

In this section you are asked to provide background information that will be summarized to describe the group that completed this survey. No individual responses will be reported.

1. Did you work as a PSW prior to becoming an RN?

- Yes → If yes, for how many years and months?
 No

YEARS		MONTHS	
0	1	0	1
1	2	1	2
2	3	2	3
3	4	3	4
4	5	4	5
5	6	5	6
6	7	6	7
7	8	7	8
8	9	8	9
9	10	9	10
10	11	10	11
11	12	11	12
12	13	12	13
13	14	13	14
14	15	14	15
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31	32	31	32
32	33	32	33
33	34	33	34
34	35	34	35
35	36	35	36
36	37	36	37
37	38	37	38
38	39	38	39
39	40	39	40
40	41	40	41
41	42	41	42
42	43	42	43
43	44	43	44
44	45	44	45
45	46	45	46
46	47	46	47
47	48	47	48
48	49	48	49
49	50	49	50

2. Did you work as an RPN prior to becoming an RN?

- Yes → If yes, for how many years and months?
 No

YEARS		MONTHS	
0	1	0	1
1	2	1	2
2	3	2	3
3	4	3	4
4	5	4	5
5	6	5	6
6	7	6	7
7	8	7	8
8	9	8	9
9	10	9	10
10	11	10	11
11	12	11	12
12	13	12	13
13	14	13	14
14	15	14	15
15	16	15	16
16	17	16	17
17	18	17	18
18	19	18	19
19	20	19	20
20	21	20	21
21	22	21	22
22	23	22	23
23	24	23	24
24	25	24	25
25	26	25	26
26	27	26	27
27	28	27	28
28	29	28	29
29	30	29	30
30	31	30	31
31	32	31	32
32	33	32	33
33	34	33	34
34	35	34	35
35	36	35	36
36	37	36	37
37	38	37	38
38	39	38	39
39	40	39	40
40	41	40	41
41	42	41	42
42	43	42	43
43	44	43	44
44	45	44	45
45	46	45	46
46	47	46	47
47	48	47	48
48	49	48	49
49	50	49	50

3. Were you registered as an RN in the temporary class prior to becoming registered in the general class?

- Yes → If yes, what is the total number of weeks you practised nursing under the temporary registration?
 No

WEEKS	
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	11
11	12
12	13
13	14
14	15
15	16
16	17
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30	31
31	32
32	33
33	34
34	35
35	36
36	37
37	38
38	39
39	40
40	41
41	42
42	43
43	44
44	45
45	46
46	47
47	48
48	49
49	50

4. Gender

- Male
 Female

5. What is your age in years?

YEARS	
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	11
11	12
12	13
13	14
14	15
15	16
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33	34
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38	39
39	40
40	41
41	42
42	43
43	44
44	45
45	46
46	47
47	48
48	49
49	50

6. What is your primary language? (Select all that apply)

- English
 French
 Another Language

7. What type of basic nursing education program qualified you to sit for the Canadian registered nursing examination have you most recently completed:

- RN - Diploma in Canada
 RN - Baccalaureate Degree in Canada
 RN - Generic Masters Degree in Canada
 Any nursing program NOT located in Canada please specify: _____

8. How many months has it been since you graduated from the above nursing education program?

MONTHS	
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	11
11	12
12	13
13	14
14	15
15	16
16	17
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18	19
19	20
20	21
21	22
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31	32
32	33
33	34
34	35
35	36
36	37
37	38
38	39
39	40
40	41
41	42
42	43
43	44
44	45
45	46
46	47
47	48
48	49
49	50

SECTION 5: DEMOGRAPHIC INFORMATION *(continued)*

9. Including your most recent attempt, how many times have you taken the Canadian Registered Nurse Exam (CRNE)?

TIMES

01	02
03	04
05	06
07	08
09	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50

10. How many months ago did you take the Canadian Registered Nurse Exam (CRNE)?

MONTHS

01	02
03	04
05	06
07	08
09	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50

SECTION 6: COMMENTS

If we need additional information in order to clarify the results of this study, we may call and/or e-mail some participants. If you would be willing to answer a few additional questions by phone or e-mail, please provide a number and/or e-mail address where you can be reached during the day or early evening.

Name: _____ Daytime or Early Evening Phone Number with Area Code: _____

E-mail: _____ () - _____

Thank you for participating in this important work!

APPENDIX C: COMPARISON OF ENTRY-LEVEL REGISTERED NURSES IN THE U.S. AND ONTARIO, CANADA NONRESPONDER STUDY

Introduction

Although the Comparison of Entry-level Registered Nurses in the U.S. and Ontario, Canada Survey had an adequate return rate of approximately 26.1%, many individuals did not respond to the survey. To evaluate the nonresponding group, a sample of those who chose not to participate in the initial survey was contacted using an abbreviated survey.

Background of Study

The findings from the Comparison of Entry-level Registered Nurses in the U.S. and Ontario, Canada, Nonresponder Study provide reasons why individuals did not participate in the present study. It will also illustrate any potential systematic differences in demographics and ratings between survey responders and nonresponders. This study was conducted to provide additional validity evidence to the survey results.

Methodology

Sample Selection

A random sample of 200 newly licensed Ontario RNs who were initially invited, but did not participate in the survey were contacted via a short survey sent by mail. The sample was derived from those 1,148 not responding to the original survey.

Survey Instrument and Process

There were 32 nonresponders who answered the mailing (16.0%). The survey first asked the nonresponders about their reasons for not completing the original survey. Possible reasons included too busy, did not care, do not like/trust surveys, did not receive or other. Second, nonresponders were asked to provide demographic information, such as employment, setting/specialty and length of time since they graduated with their nursing degree. In addition, nonresponders were asked to rate the frequency of performance and importance of 10 activities that were listed on the survey. Finally, non-

responders were thanked for their time and their data was recorded.

Nonresponder Results

Reasons for Not Responding

Reasons for not responding included too busy (40.6%), do not like/trust surveys (3.1%), did not receive it (21.9%) and other (34.4%). Other comments included misplaced survey and the survey was too long.

Months Since Graduation

Nonresponders were asked how many months it had been since graduation from a nursing education program. Nonresponders averaged 7.4 months, while responders averaged 6.9 months. The slightly longer time since graduation among nonresponders was expected as the nonresponder survey was conducted after conclusion of the main survey.

Employment Setting/Specialty

Nonresponders were asked to provide their setting/specialty area. The largest percentage among both responders (41.1%) and nonresponders (43.8%) worked in a medical/surgical unit. See *Table C-1*.

Importance Ratings

In general, the importance ratings between nonresponders and responders were very similar, with no activity statement importance rating differing by more than 0.30 scale point. See *Table C-2*.

Frequency Ratings

Frequency ratings were provided by the nonresponders and compared to the average response rating of the survey responders. Ratings between nonresponders and responders were similar, with no activity statement frequency rating differing by more than 0.73 scale point. The standard error for activity 119 (the most disparate rating) was 0.34 for the nonresponder cohort. See *Table C-3*.

Table C-1: Employment Setting/Specialty Areas

Practice Setting	Responder %	Nonresponder %
Critical care (e.g., ICU, CCU, step-down units, pediatric/ neonatal intensive care, emergency department, post-anesthesia recovery unit)	19.3	21.9
Medical-surgical unit or any of its sub-specialties (e.g., oncology, orthopedics, neurology)	41.1	43.8
Pediatrics	4.1	0.0
Nursery	1.1	0.0
Labor and delivery	2.4	6.3
Postpartum unit	4.8	0.0
Psychiatry or any of its sub-specialties (e.g., detox)	4.3	3.1
Operating room, including outpatient surgery and surgicenters	0.7	0.0
Nursing home, skilled or intermediate care	4.4	3.1
Assisted Living	0.0	0.0
Other long-term care (e.g., residential care, developmental disability)	2.6	0.0
Rehabilitation	1.7	0.0
Subacute unit	1.7	0.0
Transitional care unit	0.2	0.0
Physician/Dentist office	0.0	0.0
Occupational health	0.2	0.0
Outpatient clinic	1.1	0.0
Home health, including visiting nurses associations	3.0	6.3
Public health	1.1	6.3
Student/school health	0.4	0.0
Hospice care	0.9	0.0
Prison/correctional facilities/jails	0.6	0.0
Other	4.1	6.3

Summary

The nonresponder study suggests that the main reasons individuals did not complete the study were they were either too busy or for other reasons. Overall, these results provide important information about why individuals do not complete surveys. More importantly, the ratings of the activity statements were quite similar, which indicates that the results of the survey are not systematically biased. The nonresponder study provides support for the validity of the Comparison of Entry-level Registered Nurses in the U.S. and Ontario, Canada Survey results.

Activity #	Activity	Average Importance (Setting-specific) Responder			Average Importance (Setting-specific) Nonresponder		
		N	Avg	Std. Err.	N	Avg	Std. Err.
16	Maintain client confidentiality/privacy	430	4.75	0.02	28	4.86	0.08
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	411	3.97	0.04	28	3.89	0.14
26	Practises in a manner consistent with a code of ethics for nurses	428	4.64	0.03	27	4.89	0.06
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	429	4.87	0.02	28	4.93	0.05
35	Ensure proper identification of client when providing care	424	4.80	0.02	28	4.96	0.04
92	Prepare and administer medications, using rights of medication administration	417	4.81	0.02	28	5.00	0.00
95	Insert, maintain and remove a peripheral intravenous line	375	4.32	0.04	28	4.25	0.17
101	Educate client about medications	421	4.30	0.03	28	4.36	0.13
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	400	4.47	0.03	28	4.61	0.12
119	Recognize trends and changes in client condition and intervene appropriately	417	4.59	0.03	28	4.89	0.11

Activity #	Activity	Average Frequency (Setting-specific) Responder			Average Importance (Setting-specific) Nonresponder		
		N	Avg	Std. Err.	N	Avg	Std. Err.
16	Maintain client confidentiality/privacy	434	4.52	0.05	28	4.64	0.17
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	420	2.99	0.10	27	3.52	0.31
26	Practises in a manner consistent with a code of ethics for nurses	429	4.61	0.05	28	4.68	0.16
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	429	4.90	0.03	28	5.00	0.00
35	Ensure proper identification of client when providing care	429	4.54	0.05	28	4.86	0.08
92	Prepare and administer medications, using rights of medication administration	430	4.66	0.05	27	4.67	0.21
95	Insert, maintain and remove a peripheral intravenous line	391	2.36	0.10	24	2.88	0.35
101	Educate client about medications	429	2.95	0.09	27	2.96	0.33
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	420	3.75	0.08	27	4.07	0.34
119	Recognize trends and changes in client condition and intervene appropriately	426	2.83	0.08	27	3.56	0.34

APPENDIX D: ACTIVITY STATEMENTS IN SURVEY ORDER

Appendix D: Activity Statements in Survey Order								
Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
1	Perform procedures necessary to safely admit, transfer or discharge a client	98.6	434	2.44	0.08	427	4.28	0.03
2	Provide and receive report on assigned clients	98.9	430	3.56	0.07	426	4.59	0.03
3	Supervise care provided by others (e.g., RPNs, PSWs, assistive personnel, other RNs)	84.2	368	1.85	0.10	357	3.70	0.05
4	Act as a client advocate	99.8	426	3.10	0.08	422	4.45	0.03
5	Assess/triage client(s) to prioritize the order of care delivery	85.7	366	3.30	0.10	366	4.43	0.04
6	Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)	85.0	373	1.43	0.09	360	3.64	0.05
7	Collaborate with health care members in other disciplines when providing client care	100.0	436	3.58	0.07	429	4.50	0.03
8	Receive and/or transcribe health care provider orders	99.1	428	3.58	0.08	419	4.58	0.03
9	Integrate advance directives into client plan of care	90.9	390	1.56	0.09	381	4.08	0.04
10	Report unsafe practice of health care personnel to internal/external entities and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)	85.6	373	0.51	0.06	365	4.39	0.04
11	Verify that the client comprehends and consents to care/procedures, including procedures requiring informed consent	97.5	426	2.59	0.09	417	4.52	0.03
12	Educate client and staff about client rights and responsibilities (e.g., ethical/legal issues)	96.3	416	1.28	0.08	409	4.10	0.04
13	Recognize the need for referrals and obtain necessary orders	98.4	419	1.91	0.08	414	4.08	0.04
14	Initiate, evaluate, and update plan of care, care map, clinical pathway used to guide and evaluate client care	96.8	423	2.82	0.09	409	4.10	0.04
15	Maintain continuity of care between/among health care agencies	94.3	412	1.92	0.09	401	4.00	0.04
16	Maintain client confidentiality/privacy	100.0	434	4.52	0.05	430	4.75	0.02
17	Recognize limitations of self/others, seek assistance and/or begin corrective measures at the earliest opportunity	99.1	436	3.26	0.08	432	4.61	0.03
18	Comply with provincial/federal and/or state requirements for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)	86.2	374	0.60	0.07	363	4.25	0.04
19	Manage conflict among clients and health care staff	92.9	405	0.82	0.06	397	3.92	0.04
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	96.3	420	2.99	0.10	411	3.97	0.04

Appendix D: Activity Statements in Survey Order								
Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
21	Recognize ethical dilemmas and take appropriate action	96.3	418	0.88	0.07	406	4.12	0.04
22	Incorporate evidence-based practice/research results when providing care	99.3	426	3.17	0.08	419	4.35	0.03
23	Use approved abbreviations and standard terminology when documenting care	100.0	432	4.50	0.05	428	4.00	0.04
24	Prioritize workload to manage time effectively	100.0	429	4.57	0.05	424	4.51	0.03
25	Use emerging technology in managing client health care (e.g., telehealth, electronic records)	90.4	394	2.67	0.10	386	3.78	0.05
26	Practises in a manner consistent with a code of ethics for nurses	100.0	429	4.61	0.05	428	4.64	0.03
27	Provide care within the legislated scope of practice	100.0	422	4.71	0.04	419	4.75	0.02
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	100.0	429	4.90	0.03	429	4.87	0.02
29	Protect client from injury (e.g., falls, electrical hazards)	99.5	429	3.73	0.08	426	4.63	0.03
30	Verify appropriateness and/or accuracy of a treatment order	99.5	422	3.40	0.08	416	4.64	0.03
31	Follow procedures for handling biohazardous materials	99.1	418	2.57	0.10	413	4.47	0.03
32	Participate in institution security plan (e.g., newborn nursery security, bomb threats)	77.6	339	0.65	0.07	325	4.08	0.05
33	Use safe client handling when providing care (e.g., assistive devices, proper lifting)	97.9	418	3.60	0.09	412	4.45	0.03
34	Acknowledge and document practice error (e.g., incident report for medication error)	94.0	407	0.48	0.05	396	4.37	0.04
35	Ensure proper identification of client when providing care	99.8	429	4.54	0.05	424	4.80	0.02
36	Facilitate appropriate and safe use of equipment	99.5	426	3.67	0.08	427	4.33	0.03
37	Educate client on home safety issues	91.5	389	1.41	0.09	379	3.94	0.04
38	Implement emergency response plans (e.g., internal/external disaster)	80.8	349	0.36	0.06	345	4.06	0.05
39	Comply with provincial/federal/institutional requirements regarding the use of client restraints and/or safety devices	92.6	402	1.45	0.09	398	4.24	0.04
40	Educate client and staff regarding infection control measures	98.4	422	2.04	0.09	422	4.41	0.03
41	Assess for client allergies/sensitivities and intervene as needed (e.g., food, latex, environmental allergies)	97.7	423	2.50	0.10	414	4.51	0.03
42	Provide pre-natal care and education	30.7	134	0.93	0.15	129	4.10	0.07
43	Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education)	30.5	133	0.63	0.12	129	3.64	0.08

Appendix D: Activity Statements in Survey Order

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
44	Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)	44.1	191	0.91	0.11	184	3.67	0.07
45	Provide newborn care and education	30.2	130	1.78	0.19	126	4.13	0.07
46	Provide information for prevention of high risk health behaviours (e.g., smoking cessation, safe sexual practice, drug education)	79.6	344	1.33	0.09	333	3.95	0.05
47	Provide information about healthy behaviours and health promotion/maintenance recommendations (e.g., physician visits, immunizations)	88.5	386	1.70	0.09	375	3.99	0.04
48	Provide post-partum care and education	29.2	126	1.29	0.17	123	4.02	0.07
49	Perform comprehensive health assessment	96.5	411	3.44	0.09	406	4.48	0.04
50	Assess readiness to learn, learning preferences and barriers to learning	93.7	403	2.01	0.09	392	3.88	0.04
51	Provide care and education that meets the special needs of the infant client, 1 month to 1 year	30.6	133	1.38	0.17	129	4.12	0.06
52	Provide care and education that meets the special needs of the preschool client, ages 1 year to 4 years	28.7	125	1.14	0.15	119	4.09	0.07
53	Provide care and education that meets the special needs of the school age client, ages 5 to 12 years	28.4	122	1.25	0.16	118	4.06	0.07
54	Provide care and education that meets the special needs of the adolescent client, ages 13 to 18 years	38.0	165	1.33	0.14	158	4.04	0.06
55	Provide care and education that meets the special needs of the adult client, ages 19 to 64 years	88.9	384	3.26	0.09	373	4.12	0.04
56	Provide care and education that meets the special needs of the older adult client, ages 65 to 85 years	87.7	378	3.25	0.09	371	4.12	0.04
57	Provide care and education that meets the special needs of the older adult client, over 85 years	84.5	360	2.16	0.11	349	4.11	0.04
58	Assess client understanding of and ability to manage self care in the home environment (e.g., community resources)	85.9	370	1.88	0.09	355	4.05	0.04
59	Assess and teach client about health risks based on known population or community characteristics	86.3	372	1.30	0.09	357	3.82	0.04
60	Assess psychosocial, spiritual and occupational factors affecting care and plan interventions as appropriate	94.7	411	1.75	0.09	395	3.88	0.04
61	Assess client for potential or actual abuse/neglect and intervene when appropriate	92.2	402	0.98	0.08	384	4.14	0.04
62	Assess client for drug/alcohol related dependencies, withdrawal, or toxicities and intervene when appropriate	92.6	400	1.27	0.08	391	4.09	0.04
63	Provide care and education for acute and chronic behavioural health issues (e.g., anxiety, depression, dementia, eating disorders)	94.0	404	1.86	0.09	393	4.04	0.04
64	Provide a therapeutic environment for clients with emotional/behavioural issues	95.7	418	2.11	0.09	405	4.05	0.04

Appendix D: Activity Statements in Survey Order								
Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
65	Incorporate client cultural practice and beliefs when planning and providing care	98.6	426	1.86	0.09	415	3.99	0.04
66	Provide end of life care and education to clients (e.g., hospice)	82.3	353	0.94	0.08	342	4.12	0.04
67	Assess the potential for violence and initiate/maintain safety precautions (e.g., suicide, homicide, self-destructive behaviour)	88.3	376	0.96	0.08	365	4.25	0.05
68	Assess family dynamics in order to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)	93.5	400	1.73	0.09	395	3.96	0.04
69	Provide support to client in coping with life changes (e.g., loss, new diagnosis, role change, stress)	99.1	424	2.10	0.09	412	4.14	0.04
70	Use therapeutic communication techniques to provide support to client	100.0	421	4.01	0.07	416	4.33	0.03
71	Incorporate behavioural management techniques when caring for a client (e.g., positive reinforcement, setting limits)	97.7	419	2.54	0.09	409	4.00	0.04
72	Recognize non-verbal cues to physical and/or psychological stressors	99.8	429	3.08	0.08	418	4.11	0.04
73	Recognize impact of illness/disease on individual/family lifestyle	99.5	425	2.79	0.09	411	4.03	0.04
74	Address client needs based on visual, auditory or cognitive distortions (e.g., hallucinations)	91.6	394	1.56	0.09	382	3.99	0.04
75	Establish and maintain a therapeutic relationship with client	100.0	426	4.33	0.06	418	4.55	0.03
76	Assess and intervene in client performance of activities of daily living (ADL) and instrumental activities of daily living (IADL)	96.8	417	3.28	0.09	400	4.10	0.04
77	Provide client nutrition through continuous or intermittent tube feedings	88.8	380	1.43	0.10	375	4.10	0.04
78	Perform post-mortem care	78.5	339	0.45	0.06	328	3.80	0.05
79	Perform irrigations (e.g., of bladder, ear, eye)	88.4	375	0.77	0.07	360	3.80	0.05
80	Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)	95.1	406	2.49	0.09	399	3.98	0.04
81	Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)	96.0	411	3.67	0.08	405	4.45	0.03
82	Assess and manage client with an alteration in elimination (e.g., bowel, urinary)	97.0	413	3.13	0.09	399	4.19	0.04
83	Apply, maintain or remove orthopaedic devices (e.g., traction, splints, braces, casts)	79.1	337	0.93	0.09	328	3.76	0.05
84	Assess client need for pain management and intervene as needed using non-pharmacological comfort measures	97.9	420	3.19	0.09	405	4.29	0.04

Appendix D: Activity Statements in Survey Order

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
85	Manage the client who has an alteration in nutritional intake (e.g., adjust diet, monitor height and weight, change delivery to include method, time and food preferences)	96.0	410	1.69	0.09	399	3.93	0.04
86	Assess client need for sleep/rest and intervene as needed	97.9	423	2.54	0.09	408	3.94	0.04
87	Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)	97.0	417	2.11	0.09	406	3.95	0.04
88	Calculate client intake and output	96.6	422	3.04	0.09	412	4.08	0.04
89	Promote circulation (e.g., active or passive range of motion, positioning and mobilization)	97.0	424	2.88	0.09	411	4.11	0.04
90	Evaluate therapeutic effect of medications	100.0	422	3.84	0.07	419	4.40	0.03
91	Evaluate appropriateness/accuracy of medication order for client per institution policy including reconciling orders	99.5	430	3.23	0.09	419	4.49	0.03
92	Prepare and administer medications, using rights of medication administration	99.8	430	4.66	0.05	417	4.81	0.02
93	Perform calculations needed for medication administration	98.6	427	2.98	0.09	413	4.67	0.03
94	Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access)	93.5	404	3.54	0.09	399	4.51	0.03
95	Insert, maintain and remove a peripheral intravenous line	90.5	391	2.36	0.10	375	4.32	0.04
96	Comply with requirements governing controlled substances	97.4	415	3.34	0.09	405	4.44	0.04
97	Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)	99.5	429	4.19	0.06	422	4.69	0.03
98	Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)	96.6	421	2.54	0.10	411	4.61	0.03
99	Administer blood products and evaluate client response	85.0	368	0.85	0.08	353	4.66	0.03
100	Access venous access devices, including tunneled, implanted and central lines	84.5	364	1.64	0.10	351	4.30	0.04
101	Educate client about medications	99.5	429	2.95	0.09	421	4.30	0.03
102	Manage client experiencing side effects and adverse reactions of medication	97.7	421	1.29	0.09	410	4.43	0.04
103	Administer parenteral nutrition and evaluate client response (e.g., TPN)	85.3	370	0.82	0.08	354	4.17	0.05
104	Use pharmacological measures for pain management as needed	98.1	421	3.67	0.08	413	4.45	0.03
105	Assess and respond to changes in client vital signs	99.1	428	3.23	0.09	414	4.68	0.03
106	Perform focused assessment and re-assessment (e.g., gastrointestinal, respiratory, cardiac)	97.3	426	3.70	0.08	411	4.54	0.03

Appendix D: Activity Statements in Survey Order								
Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
107	Provide intraoperative care	41.0	175	0.78	0.12	168	4.16	0.07
108	Evaluate the results of diagnostic testing and intervene as needed	92.6	402	2.12	0.10	380	4.22	0.04
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	96.8	420	3.75	0.08	400	4.47	0.03
110	Evaluate responses to procedures and treatments	99.3	427	3.37	0.09	416	4.38	0.03
111	Provide pre and/or postoperative education	76.9	329	1.76	0.11	318	4.18	0.04
112	Provide preoperative care	69.8	298	0.94	0.09	283	4.08	0.05
113	Manage client during and following procedure with moderate sedation	74.4	323	1.28	0.10	310	4.29	0.05
114	Obtain blood specimens peripherally or through central line	80.7	351	1.72	0.10	338	4.13	0.04
115	Use precautions to prevent injury and/or complications associated with a procedure or diagnosis	94.9	408	2.60	0.10	395	4.33	0.04
116	Educate client about treatments and procedures	98.6	421	2.69	0.09	415	4.18	0.04
117	Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine specimens)	97.2	419	1.80	0.09	413	4.05	0.04
118	Insert, maintain and remove nasogastric tubes and/or urethral catheters	93.3	402	1.51	0.08	391	4.09	0.04
119	Recognize trends and changes in client condition and intervene appropriately	99.5	426	2.83	0.08	417	4.59	0.03
120	Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)	89.9	383	1.27	0.08	370	3.96	0.04
121	Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)	87.0	369	1.24	0.09	364	4.20	0.04
122	Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust manoeuvre, respiratory support, automated external defibrillator)	88.3	379	0.37	0.05	374	4.74	0.03
123	Monitor and care for clients on a ventilator	46.8	198	0.96	0.13	197	4.58	0.05
124	Perform wound care and/or assist with dressing change	97.2	416	2.24	0.09	409	4.17	0.03
125	Assist with invasive procedures (e.g., central line placement)	58.7	250	0.50	0.08	239	4.04	0.06
126	Provide ostomy care and education (e.g., tracheal, enteral)	86.6	368	0.97	0.08	362	3.96	0.05
127	Provide postoperative care	77.2	328	1.74	0.11	320	4.23	0.05
128	Perform and manage care of client receiving peritoneal dialysis	50.5	217	0.38	0.07	205	4.05	0.07
129	Perform suctioning (e.g., oral, nasopharyngeal, endotracheal, tracheal)	88.8	379	1.32	0.10	368	4.25	0.04

Appendix D: Activity Statements in Survey Order

Activity #	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)		
		%	N	Avg	Std. Err.	N	Avg	Std. Err.
130	Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)	81.3	343	1.26	0.09	334	4.07	0.05
131	Manage the care of a client on telemetry	63.0	269	1.79	0.13	258	4.32	0.05
132	Manage the care of a client with impaired ventilation/oxygenation	90.9	388	1.86	0.09	377	4.49	0.04
133	Maintain desired temperature of client (e.g., cooling and/or warming blanket)	91.8	394	1.86	0.10	377	4.00	0.05
134	Implement and monitor phototherapy	38.4	163	0.30	0.07	156	3.74	0.08
135	Manage the care of a client with a pacing device (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)	77.2	329	0.65	0.07	320	4.13	0.05
136	Monitor and maintain arterial lines	62.0	261	0.89	0.11	250	4.24	0.05
137	Manage the care of the client with a fluid and electrolyte imbalance	94.6	403	1.93	0.09	392	4.38	0.04
138	Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)	86.1	366	1.40	0.09	357	4.36	0.04
139	Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis	97.2	413	2.77	0.10	395	4.31	0.04
140	Identify signs and symptoms related to an acute or chronic condition	98.1	410	2.87	0.09	409	4.35	0.04
141	Manage the care of a client receiving haemodialysis	51.9	224	0.50	0.08	212	4.11	0.06
142	Recognize complications of an acute or chronic illness and intervene	97.4	415	1.94	0.09	406	4.51	0.03

APPENDIX E: 2009 ONTARIO TOTAL GROUP AND SETTING-SPECIFIC IMPORTANCE RATINGS

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings													
Activity #	Activity	Apply to Setting		Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.
		%	N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	Std. Err.		
1	Perform procedures necessary to safely admit, transfer or discharge a client	98.6	434	2.44	0.08	427	4.28	0.03	433	4.26	0.04	0.02	
2	Provide and receive report on assigned clients	98.9	430	3.56	0.07	426	4.59	0.03	431	4.57	0.03	0.02	
3	Supervise care provided by others (e.g., RPNs, PSMs, assistive personnel, other RNs)	84.2	368	1.85	0.10	357	3.70	0.05	414	3.58	0.05	0.12	
4	Act as a client advocate	99.8	426	3.10	0.08	422	4.45	0.03	423	4.45	0.03	0.00	
5	Assess/triage client(s) to prioritize the order of care delivery	85.7	366	3.30	0.10	366	4.43	0.04	416	4.31	0.05	0.12	
6	Participate in performance improvement/quality assurance process (e.g., collect data or participate on a team)	85.0	373	1.43	0.09	360	3.64	0.05	412	3.58	0.05	0.06	
7	Collaborate with health care members in other disciplines when providing client care	100.0	436	3.58	0.07	429	4.50	0.03	429	4.50	0.03	0.00	
8	Receive and/or transcribe health care provider orders	99.1	428	3.58	0.08	419	4.58	0.03	422	4.57	0.03	0.01	
9	Integrate advance directives into client plan of care	90.9	390	1.56	0.09	381	4.08	0.04	416	4.00	0.05	0.08	
10	Report unsafe practice of health care personnel to internal/external entities and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)	85.6	373	0.51	0.06	365	4.39	0.04	419	4.37	0.03	0.02	
11	Verify that the client comprehends and consents to care/procedures, including procedures requiring informed consent	97.5	426	2.59	0.09	417	4.52	0.03	426	4.50	0.03	0.02	
12	Educate client and staff about client rights and responsibilities (e.g., ethical/legal issues)	96.3	416	1.28	0.08	409	4.10	0.04	424	4.10	0.04	0.00	
13	Recognize the need for referrals and obtain necessary orders	98.4	419	1.91	0.08	414	4.08	0.04	420	4.07	0.04	0.01	
14	Initiate, evaluate, and update plan of care, care map, clinical pathway used to guide and evaluate client care	96.8	423	2.82	0.09	409	4.10	0.04	420	4.08	0.04	0.02	

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings

Activity #	Activity	Apply to Setting %	Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.
			N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	Std. Err.	
15	Maintain continuity of care between/among health care agencies	94.3	412	1.92	0.09	401	4.00	0.04	422	3.96	0.04	0.04
16	Maintain client confidentiality/privacy	100.0	434	4.52	0.05	430	4.75	0.02	430	4.75	0.02	0.00
17	Recognize limitations of self/others, seek assistance and/or begin corrective measures at the earliest opportunity	99.1	436	3.26	0.08	432	4.61	0.03	435	4.60	0.03	0.01
18	Comply with provincial/federal and/or state requirements for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)	86.2	374	0.60	0.07	363	4.25	0.04	414	4.25	0.04	0.00
19	Manage conflict among clients and health care staff	92.9	405	0.82	0.06	397	3.92	0.04	427	3.91	0.04	0.01
20	Use information technology (e.g., computer, video, books) to enhance the care provided to a client	96.3	420	2.99	0.10	411	3.97	0.04	427	3.91	0.04	0.06
21	Recognize ethical dilemmas and take appropriate action	96.3	418	0.88	0.07	406	4.12	0.04	419	4.12	0.04	0.00
22	Incorporate evidence-based practice/research results when providing care	99.3	426	3.17	0.08	419	4.35	0.03	422	4.34	0.03	0.01
23	Use approved abbreviations and standard terminology when documenting care	100.0	432	4.50	0.05	428	4.00	0.04	428	4.00	0.04	0.00
24	Prioritize workload to manage time effectively	100.0	429	4.57	0.05	424	4.51	0.03	424	4.51	0.03	0.00
25	Use emerging technology in managing client health care (e.g., telehealth, electronic records)	90.4	394	2.67	0.10	386	3.78	0.05	421	3.71	0.05	0.07
26	Practises in a manner consistent with a code of ethics for nurses	100.0	429	4.61	0.05	428	4.64	0.03	428	4.64	0.03	0.00
27	Provide care within the legislated scope of practice	100.0	422	4.71	0.04	419	4.75	0.02	419	4.75	0.02	0.00
28	Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	100.0	429	4.90	0.03	429	4.87	0.02	429	4.87	0.02	0.00

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings												
#	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.
			%	N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	
29	Protect client from injury (e.g., falls, electrical hazards)	99.5	429	3.73	0.08	426	4.63	0.03	427	4.63	0.03	0.00
30	Verify appropriateness and/or accuracy of a treatment order	99.5	422	3.40	0.08	416	4.64	0.03	418	4.63	0.03	0.01
31	Follow procedures for handling biohazardous materials	99.1	418	2.57	0.10	413	4.47	0.03	417	4.47	0.03	0.00
32	Participate in institution security plan (e.g., newborn nursery security, bomb threats)	77.6	339	0.65	0.07	325	4.08	0.05	407	3.99	0.05	0.09
33	Use safe client handling when providing care (e.g., assistive devices, proper lifting)	97.9	418	3.60	0.09	412	4.45	0.03	421	4.43	0.03	0.02
34	Acknowledge and document practice error (e.g., incident report for medication error)	94.0	407	0.48	0.05	396	4.37	0.04	420	4.37	0.04	0.00
35	Ensure proper identification of client when providing care	99.8	429	4.54	0.05	424	4.80	0.02	425	4.80	0.02	0.00
36	Facilitate appropriate and safe use of equipment	99.5	426	3.67	0.08	427	4.33	0.03	429	4.33	0.03	0.00
37	Educate client on home safety issues	91.5	389	1.41	0.09	379	3.94	0.04	410	3.88	0.04	0.06
38	Implement emergency response plans (e.g., internal/external disaster)	80.8	349	0.36	0.06	345	4.06	0.05	416	3.99	0.05	0.07
39	Comply with provincial/federal/institutional requirements regarding the use of client restraints and/or safety devices	92.6	402	1.45	0.09	398	4.24	0.04	427	4.19	0.04	0.05
40	Educate client and staff regarding infection control measures	98.4	422	2.04	0.09	422	4.41	0.03	428	4.41	0.03	0.00
41	Assess for client allergies/sensitivities and intervene as needed (e.g., food, latex, environmental allergies)	97.7	423	2.50	0.10	414	4.51	0.03	424	4.50	0.03	0.01
42	Provide pre-natal care and education	30.7	134	0.93	0.15	129	4.10	0.07	379	3.62	0.06	0.48
43	Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education)	30.5	133	0.63	0.12	129	3.64	0.08	389	3.39	0.06	0.25

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings

# Activity	Activity	Apply to Setting		Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.
		%	N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	Std. Err.		
44	Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)	44.1	191	0.91	0.11	184	3.67	0.07	391	3.42	0.06	0.25	
45	Provide newborn care and education	30.2	130	1.78	0.19	126	4.13	0.07	382	3.62	0.06	0.51	
46	Provide information for prevention of high risk health behaviours (e.g., smoking cessation, safe sexual practice, drug education)	79.6	344	1.33	0.09	333	3.95	0.05	407	3.85	0.05	0.10	
47	Provide information about healthy behaviours and health promotion/maintenance recommendations (e.g., physician visits, immunizations)	88.5	386	1.70	0.09	375	3.99	0.04	413	3.94	0.04	0.05	
48	Provide post-partum care and education	29.2	126	1.29	0.17	123	4.02	0.07	381	3.60	0.06	0.42	
49	Perform comprehensive health assessment	96.5	411	3.44	0.09	406	4.48	0.04	417	4.45	0.04	0.03	
50	Assess readiness to learn, learning preferences and barriers to learning	93.7	403	2.01	0.09	392	3.88	0.04	416	3.82	0.05	0.06	
51	Provide care and education that meets the special needs of the infant client, 1 month to 1 year	30.6	133	1.38	0.17	129	4.12	0.06	384	3.65	0.06	0.47	
52	Provide care and education that meets the special needs of the preschool client, ages 1 year to 4 years	28.7	125	1.14	0.15	119	4.09	0.07	381	3.64	0.06	0.45	
53	Provide care and education that meets the special needs of the school age client, ages 5 to 12 years	28.4	122	1.25	0.16	118	4.06	0.07	375	3.64	0.06	0.42	
54	Provide care and education that meets the special needs of the adolescent client, ages 13 to 18 years	38.0	165	1.33	0.14	158	4.04	0.06	377	3.71	0.06	0.33	
55	Provide care and education that meets the special needs of the adult client, ages 19 to 64 years	88.9	384	3.26	0.09	373	4.12	0.04	410	4.04	0.04	0.08	
56	Provide care and education that meets the special needs of the older adult client, ages 65 to 85 years	87.7	378	3.25	0.09	371	4.12	0.04	415	4.01	0.04	0.11	

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings												
Activity #	Activity	Apply to Setting %	Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.
			N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	Std. Err.	
57	Provide care and education that meets the special needs of the older adult client, over 85 years	84.5	360	2.16	0.11	349	4.11	0.04	407	3.98	0.05	0.13
58	Assess client understanding of and ability to manage self care in the home environment (e.g., community resources)	85.9	370	1.88	0.09	355	4.05	0.04	409	3.93	0.05	0.12
59	Assess and teach client about health risks based on known population or community characteristics	86.3	372	1.30	0.09	357	3.82	0.04	399	3.74	0.05	0.08
60	Assess psychosocial, spiritual and occupational factors affecting care and plan interventions as appropriate	94.7	411	1.75	0.09	395	3.88	0.04	410	3.87	0.04	0.01
61	Assess client for potential or actual abuse/neglect and intervene when appropriate	92.2	402	0.98	0.08	384	4.14	0.04	412	4.12	0.04	0.02
62	Assess client for drug/alcohol related dependencies, withdrawal, or toxicities and intervene when appropriate	92.6	400	1.27	0.08	391	4.09	0.04	417	4.05	0.04	0.04
63	Provide care and education for acute and chronic behavioural health issues (e.g., anxiety, depression, dementia, eating disorders)	94.0	404	1.86	0.09	393	4.04	0.04	416	4.01	0.04	0.03
64	Provide a therapeutic environment for clients with emotional/behavioural issues	95.7	418	2.11	0.09	405	4.05	0.04	421	4.04	0.04	0.01
65	Incorporate client cultural practice and beliefs when planning and providing care	98.6	426	1.86	0.09	415	3.99	0.04	421	3.97	0.04	0.02
66	Provide end of life care and education to clients (e.g., hospice)	82.3	353	0.94	0.08	342	4.12	0.04	410	4.00	0.05	0.12
67	Assess the potential for violence and initiate/maintain safety precautions (e.g., suicide, homicide, self-destructive behaviour)	88.3	376	0.96	0.08	365	4.25	0.05	408	4.21	0.05	0.04
68	Assess family dynamics in order to determine plan of care (e.g., structure, bonding, communication, boundaries, coping mechanisms)	93.5	400	1.73	0.09	395	3.96	0.04	417	3.92	0.04	0.04

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings

# Activity	Activity	Apply to Setting %	Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.
			N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	Std. Err.	
69	Provide support to client in coping with life changes (e.g., loss, new diagnosis, role change, stress)	99.1	424	2.10	0.09	412	4.14	0.04	415	4.14	0.04	0.00
70	Use therapeutic communication techniques to provide support to client	100.0	421	4.01	0.07	416	4.33	0.03	416	4.33	0.03	0.00
71	Incorporate behavioural management techniques when caring for a client (e.g., positive reinforcement, setting limits)	97.7	419	2.54	0.09	409	4.00	0.04	417	3.98	0.04	0.02
72	Recognize non-verbal cues to physical and/or psychological stressors	99.8	429	3.08	0.08	418	4.11	0.04	419	4.10	0.04	0.01
73	Recognize impact of illness/disease on individual/family lifestyle	99.5	425	2.79	0.09	411	4.03	0.04	413	4.01	0.04	0.02
74	Address client needs based on visual, auditory or cognitive distortions (e.g., hallucinations)	91.6	394	1.56	0.09	382	3.99	0.04	412	3.92	0.04	0.07
75	Establish and maintain a therapeutic relationship with client	100.0	426	4.33	0.06	418	4.55	0.03	418	4.55	0.03	0.00
76	Assess and intervene in client performance of activities of daily living (ADL) and instrumental activities of daily living (IADL)	96.8	417	3.28	0.09	400	4.10	0.04	414	4.07	0.04	0.03
77	Provide client nutrition through continuous or intermittent tube feedings	88.8	380	1.43	0.10	375	4.10	0.04	421	4.02	0.05	0.08
78	Perform post-mortem care	78.5	339	0.45	0.06	328	3.80	0.05	408	3.63	0.05	0.17
79	Perform irrigations (e.g., of bladder, ear, eye)	88.4	375	0.77	0.07	360	3.80	0.05	400	3.73	0.05	0.07
80	Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)	95.1	406	2.49	0.09	399	3.98	0.04	419	3.94	0.04	0.04
81	Perform skin assessment and implement measures to maintain skin integrity and prevent skin breakdown (e.g., turning, repositioning, pressure-relieving support surfaces)	96.0	411	3.67	0.08	405	4.45	0.03	420	4.40	0.04	0.05
82	Assess and manage client with an alteration in elimination (e.g., bowel, urinary)	97.0	413	3.13	0.09	399	4.19	0.04	412	4.15	0.04	0.04

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings														
Activity #	Activity	Apply to Setting			Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.
		%	N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	
83	Apply, maintain or remove orthopaedic devices (e.g., traction, splints, braces, casts)	79.1	337	0.93	0.09	328	3.76	0.05	400	3.66	0.05	0.10		
84	Assess client need for pain management and intervene as needed using non-pharmacological comfort measures	97.9	420	3.19	0.09	405	4.29	0.04	413	4.26	0.04	0.03		
85	Manage the client who has an alteration in nutritional intake (e.g., adjust diet, monitor height and weight, change delivery to include method, time and food preferences)	96.0	410	1.69	0.09	399	3.93	0.04	416	3.89	0.04	0.04		
86	Assess client need for sleep/rest and intervene as needed	97.9	423	2.54	0.09	408	3.94	0.04	417	3.91	0.04	0.03		
87	Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)	97.0	417	2.11	0.09	406	3.95	0.04	418	3.93	0.04	0.02		
88	Calculate client intake and output	96.6	422	3.04	0.09	412	4.08	0.04	426	4.06	0.04	0.02		
89	Promote circulation (e.g., active or passive range of motion, positioning and mobilization)	97.0	424	2.88	0.09	411	4.11	0.04	424	4.08	0.04	0.03		
90	Evaluate therapeutic effect of medications	100.0	422	3.84	0.07	419	4.40	0.03	419	4.40	0.03	0.00		
91	Evaluate appropriateness/accuracy of medication order for client per institution policy including reconciling orders	99.5	430	3.23	0.09	419	4.49	0.03	421	4.48	0.03	0.01		
92	Prepare and administer medications, using rights of medication administration	99.8	430	4.66	0.05	417	4.81	0.02	418	4.80	0.02	0.01		
93	Perform calculations needed for medication administration	98.6	427	2.98	0.09	413	4.67	0.03	419	4.65	0.03	0.02		
94	Monitor intravenous infusion and maintain site (e.g., central, PICC, epidural and venous access)	93.5	404	3.54	0.09	399	4.51	0.03	423	4.46	0.04	0.05		
95	Insert, maintain and remove a peripheral intravenous line	90.5	391	2.36	0.10	375	4.32	0.04	411	4.25	0.04	0.07		
96	Comply with requirements governing controlled substances	97.4	415	3.34	0.09	405	4.44	0.04	414	4.41	0.04	0.03		

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings

# Activity	Activity	Apply to Setting	Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.	
			%	N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg		Std. Err.
97	Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)	99.5	429	4.19	0.06	422	4.69	0.03	423	4.68	0.03	0.01	
98	Titrate dosage of medication based on assessment and ordered parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)	96.6	421	2.54	0.10	411	4.61	0.03	425	4.56	0.04	0.05	
99	Administer blood products and evaluate client response	85.0	368	0.85	0.08	353	4.66	0.03	412	4.53	0.04	0.13	
100	Access venous access devices, including tunneled, implanted and central lines	84.5	364	1.64	0.10	351	4.30	0.04	413	4.20	0.05	0.10	
101	Educate client about medications	99.5	429	2.95	0.09	421	4.30	0.03	423	4.30	0.03	0.00	
102	Manage client experiencing side effects and adverse reactions of medication	97.7	421	1.29	0.09	410	4.43	0.04	419	4.43	0.04	0.00	
103	Administer parenteral nutrition and evaluate client response (e.g., TPN)	85.3	370	0.82	0.08	354	4.17	0.05	414	4.06	0.05	0.11	
104	Use pharmacological measures for pain management as needed	98.1	421	3.67	0.08	413	4.45	0.03	421	4.40	0.03	0.05	
105	Assess and respond to changes in client vital signs	99.1	428	3.23	0.09	414	4.68	0.03	418	4.66	0.03	0.02	
106	Perform focused assessment and re-assessment (e.g., gastrointestinal, respiratory, cardiac)	97.3	426	3.70	0.08	411	4.54	0.03	422	4.50	0.03	0.04	
107	Provide intraoperative care	41.0	175	0.78	0.12	168	4.16	0.07	376	3.85	0.06	0.31	
108	Evaluate the results of diagnostic testing and intervene as needed	92.6	402	2.12	0.10	380	4.22	0.04	406	4.15	0.04	0.07	
109	Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)	96.8	420	3.75	0.08	400	4.47	0.03	414	4.41	0.04	0.06	
110	Evaluate responses to procedures and treatments	99.3	427	3.37	0.09	416	4.38	0.03	419	4.36	0.04	0.02	
111	Provide pre and/or postoperative education	76.9	329	1.76	0.11	318	4.18	0.04	393	4.05	0.05	0.13	
112	Provide preoperative care	69.8	298	0.94	0.09	283	4.08	0.05	383	3.93	0.05	0.15	

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		%	N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg		Std. Err.
113	Manage client during and following procedure with moderate sedation	74.4	323	1.28	0.10	310	4.29	0.05	403	4.10	0.05	403	4.10	0.05	0.19
114	Obtain blood specimens peripherally or through central line	80.7	351	1.72	0.10	338	4.13	0.04	412	3.95	0.05	412	3.95	0.05	0.18
115	Use precautions to prevent injury and/or complications associated with a procedure or diagnosis	94.9	408	2.60	0.10	395	4.33	0.04	415	4.27	0.04	415	4.27	0.04	0.06
116	Educate client about treatments and procedures	98.6	421	2.69	0.09	415	4.18	0.04	420	4.17	0.04	420	4.17	0.04	0.01
117	Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine specimens)	97.2	419	1.80	0.09	413	4.05	0.04	425	4.01	0.04	425	4.01	0.04	0.04
118	Insert, maintain and remove nasogastric tubes and/or urethral catheters	93.3	402	1.51	0.08	391	4.09	0.04	418	4.05	0.04	418	4.05	0.04	0.04
119	Recognize trends and changes in client condition and intervene appropriately	99.5	426	2.83	0.08	417	4.59	0.03	419	4.58	0.03	419	4.58	0.03	0.01
120	Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)	89.9	383	1.27	0.08	370	3.96	0.04	406	3.86	0.05	406	3.86	0.05	0.10
121	Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)	87.0	369	1.24	0.09	364	4.20	0.04	410	4.07	0.05	410	4.07	0.05	0.13
122	Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, abdominal thrust manoeuvre, respiratory support, automated external defibrillator)	88.3	379	0.37	0.05	374	4.74	0.03	412	4.70	0.04	412	4.70	0.04	0.04
123	Monitor and care for clients on a ventilator	46.8	198	0.96	0.13	197	4.58	0.05	383	4.37	0.05	383	4.37	0.05	0.21
124	Perform wound care and/or assist with dressing change	97.2	416	2.24	0.09	409	4.17	0.03	421	4.14	0.04	421	4.14	0.04	0.03
125	Assist with invasive procedures (e.g., central line placement)	58.7	250	0.50	0.08	239	4.04	0.06	387	3.88	0.06	387	3.88	0.06	0.16
126	Provide ostomy care and education (e.g., tracheal, enteral)	86.6	368	0.97	0.08	362	3.96	0.05	412	3.87	0.05	412	3.87	0.05	0.09

Appendix E: 2009 Ontario Total Group and Setting-specific Importance ratings

# Activity	Activity	Apply to Setting %	Average Frequency (Setting-specific)			Average Importance (Setting-specific)			Average Importance (Total Group)			Imp. Diff.
			N	Avg	Std. Err.	N	Avg	Std. Err.	N	Avg	Std. Err.	
127	Provide postoperative care	77.2	328	1.74	0.11	320	4.23	0.05	401	4.12	0.05	0.11
128	Perform and manage care of client receiving peritoneal dialysis	50.5	217	0.38	0.07	205	4.05	0.07	385	3.86	0.06	0.19
129	Perform suctioning (e.g., oral, nasopharyngeal, endotracheal, tracheal)	88.8	379	1.32	0.10	368	4.25	0.04	409	4.15	0.05	0.10
130	Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)	81.3	343	1.26	0.09	334	4.07	0.05	400	3.93	0.05	0.14
131	Manage the care of a client on telemetry	63.0	269	1.79	0.13	258	4.32	0.05	392	4.11	0.05	0.21
132	Manage the care of a client with impaired ventilation/oxygenation	90.9	388	1.86	0.09	377	4.49	0.04	411	4.40	0.04	0.09
133	Maintain desired temperature of client (e.g., cooling and/or warming blanket)	91.8	394	1.86	0.10	377	4.00	0.05	407	3.95	0.05	0.05
134	Implement and monitor phototherapy	38.4	163	0.30	0.07	156	3.74	0.08	368	3.46	0.06	0.28
135	Manage the care of a client with a pacing device (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)	77.2	329	0.65	0.07	320	4.13	0.05	397	4.04	0.05	0.09
136	Monitor and maintain arterial lines	62.0	261	0.89	0.11	250	4.24	0.05	387	4.06	0.06	0.18
137	Manage the care of the client with a fluid and electrolyte imbalance	94.6	403	1.93	0.09	392	4.38	0.04	413	4.33	0.04	0.05
138	Manage the care of a client with alteration in hemodynamics, tissue perfusion and hemostasis (e.g., cerebral, cardiac, peripheral)	86.1	366	1.40	0.09	357	4.36	0.04	406	4.28	0.05	0.08
139	Evaluate the effectiveness of the treatment regimen for a client with an acute or chronic diagnosis	97.2	413	2.77	0.10	395	4.31	0.04	406	4.28	0.04	0.03
140	Identify signs and symptoms related to an acute or chronic condition	98.1	410	2.87	0.09	409	4.35	0.04	416	4.33	0.04	0.02
141	Manage the care of a client receiving haemodialysis	51.9	224	0.50	0.08	212	4.11	0.06	382	3.94	0.06	0.17
142	Recognize complications of an acute or chronic illness and intervene	97.4	415	1.94	0.09	406	4.51	0.03	416	4.47	0.04	0.04