NCSBN Research Brief

Report of Findings from the 2002 RN Practice Analysis Update

June Smith, PhD, RN Lynda Crawford, PhD, RN, CAE

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

Report of Findings from the

2002 RN Practice Analysis Update

June Smith, PhD, RN Lynda Crawford, PhD, RN, CAE



Mission Statement

The National Council of State Boards of Nursing, composed of member boards, provides leadership to advance regulatory excellence for public protection.

Copyright © 2004 National Council of State Boards of Nursing, Inc. (NCSBN)

All rights reserved. The NCSBN logo, NCLEX®, NCLEX-RN® and NCLEX-PN® are registered trademarks of NCSBN and this document may not be used, reproduced or disseminated to any third party without written permission from NCSBN.

Permission is granted to boards of nursing to use or reproduce all or parts of this document for licensure related purposes only. Nonprofit education programs have permission to use or reproduce all or parts of this document for educational purposes only. Use or reproduction of this document for commercial or for-profit use is strictly prohibited. Any authorized reproduction of this document shall display the notice: "Copyright by the National Council of State Boards of Nursing, Inc. All rights reserved." Or, if a portion of the document is reproduced or incorporated in other materials, such written materials shall include the following credit: "Portions copyright by the National Council of State Boards of Nursing, Inc. All rights reserved."

Address inquiries in writing to NCSBN Permissions, 111 E. Wacker Drive, Suite 2900, Chicago, IL 60601-4277.

Printed in the United States of America

ISBN# 09745768-4-0



Table of Contents

Lis	st of Tables	v
Lis	st of Figures	. vi
Αc	knowledgments	1
Ex	ecutive Summary	3
l.	Background of Study	9
II.	Methodology 2002 RN Practice Analysis Panel of Experts Questionnaire Development Survey Process. Sample Selection. Representativeness of Sample. Mailing Procedure. Confidentiality Return Rates	10 11 11 11 11 11
	Summary	
111.	Survey Participants: Demographics and Work Environments Demographic Information Previous Health Care Experience Certifications Earned Work Environments Work Settings Shifts Worked Orientation Work Roles and Administrative Activities Alternative/Complementary Therapies Summary	. 13 . 13 . 14 . 14 . 14 . 16 . 16
IV.	Representativeness of Activities Representativeness of Activities Average Frequency of Activity Performance Difference in ADN and BSN Activity Frequencies Difference in Activity Frequencies Due to Past Experience as an LPN/VN Summary	. 22 . 22 . 24
٧.	Findings Related to Knowledge Categories	
	Knowledge Category Importance Ratings	40

VI. Conclusions	41
VII. References	41
Appendix A: Activity Statements with 2002 RN Practice Analysis Form Assignment	44
Appendix B: Survey Tool	49
Appendix C: Activities Rank Ordered by Overall Average Frequency	57



List of Tables

1.	Racial/Ethnic Background
2.	Certifications Earned
3.	Type of Employing Facility
4.	Work Setting
5.	Number of Employing Facility Beds
6.	Population of Employment Setting
7.	Type and Length of Orientation
8.	Average Time Spent in Different Categories of Nursing Activities 19
9.	Administrative Responsibilities
10.	Primary Administrative Position
11.	Alternative/Complementary Therapies Used in Entry-Level Practice 21
12.	Comparison of ADN and BDN Graduate Average Frequencies
13.	Comparison of Frequencies of Prior LPN/VNs and Those Who Had Not Been LPN/VNs
14.	Knowledge Category Importance and Usage Ratings



List of Figures

1.	Comparison of Shifts Worked 2002 and 2001
2.	Most and Least Performed Activities by All New Nurse Survey Subjects
3.	Activities Demonstrating the Greatest Differences in ADN and BSN Practice
4.	Activities Demonstrating the Greatest Differences Due to Prior Experience

Acknowledgments

This study would not have been possible without the support from 1,020 newly licensed registered nurses from all parts of the United States. Their willingness to complete lengthy questionnaires at such a busy, stress-filled time in their careers demonstrates an admirable commitment to the nursing profession. Our knowledge of entry-level practice has been greatly enhanced by their input. The authors also gratefully acknowledge the assistance of Lamika Obichere in coordinating the study, and Matt Diehl for his patient handling of study documents. Finally, the assistance of Rosemary Gahl in preparation of this document was essential to completion of this study.

J.S., L.C.

Executive Summary

The National Council of State Boards of Nursing (NCSBN) has a responsibility to its members, the 60 boards of nursing in the United States and five territories, to produce and maintain valid and reliable licensure examinations based on entry-level nursing practice. Because practice may change over time, formal practice analysis studies are performed every three years to validate the content of the NCLEX-RN® Examination Test Plan. While data from these studies is primarily used to describe entry-level practice, it must also be explored for any possible differences in the entry-level practices of subgroups of new nurses. Because nurses educated in associate degree (ADN) and baccalaureate degree (BSN) basic nursing programs have been identified as subgroups of new nurses, analyses must be performed to ascertain any possible differences in the entry-level practices of nurses with these types of education. A report of an analysis of data from the 2002 RN Practice Analysis study, performed for that purpose, follows.

Questionnaire Development

A panel of 10 registered nurses was assembled to assist with the practice analysis. Panel members all worked with and/or supervised the practice of registered nurses within their first six months of practice and represented all geographic areas of the country and all major nursing specialties.

The panel members identified 137 activities performed by RNs in

entry-level practice and 18 categories of knowledge necessary to the performance of those activities. The activities and knowledge categories were incorporated into a practice analysis survey. The survey also included questions about the nurses' practice settings, past experiences and demographics. The survey was pilot tested and revised prior to use within the study.

Survey Process

A stratified random sample of 4,000 RNs was selected from lists of candidates successful on the NCLEX-RN examination between March 1, 2002 and May 31, 2002. The sample was stratified by type of basic nursing education and by area of the country. The sample selected for this study was proportionally equivalent to the population from which the sample was drawn in terms of area of the country, type of basic nursing education program, subject ethnicity and subject gender. The survey was conducted October through November 2002.

Return Rates

A total of 190 of the 4,000 surveys were mailed to bad addresses. There were 1,552 returned for an overall 40.7% return rate. Of the 1,552 surveys received, 1,317 analyzable surveys met study criteria (34.6% of delivered questionnaires). Analyzable surveys included 691 ADN and 329 BSN respondents, and data from those participants formed the response set for the current study.

Demographics

There were 11.3% of ADN and 10% of BSN male respondents. The ethnic/racial backgrounds of the respondents varied in one respect: 16.4% of the ADN and 10.2% of the BSN graduates were African Americans. About 62% of ADNs and 67% of BSNs were white, 6.8% of ADNs and 8.1% of BSNs were of Asian descent, and about 11% of both groups were of Hispanic or Latino descent.

Similar percentages (55% of ADN and 62% of BSN respondents) had been an aide prior to becoming a licensed RN. However, only 6% of BSNs had previously been LPNs or LVNs compared to 32% of ADNs.

When asked about certificates earned or courses completed since graduation from nursing school, 19.7% of the ADN graduates and 15.8% of the BSN graduates reported that they had not participated in such activities. There were 27.1% of ADN graduates and 25.5% of BSN graduates who had earned Advanced Cardiac Life Support certification. Significantly more BSN graduates (66.3%) than ADN (58.6%) had earned Basic Life Support certification and had earned certification or taken a class in peritoneal dialysis (BSN 5.8% and ADN 3.2%).

Employment

Work Settings

More BSN (93.1%) than ADN (84.8%) graduates reported working in hospitals. ADNs were more likely than BSNs to work in long-term care (6.8% ADN and 3.4% BSN) and community-based settings (7.2% ADN and 3.1% BSN).

There were significant differences in ADN and BSN employment in four work settings. Significantly more ADN graduates worked in medical/surgical units (43.3% ADN and 37.1% BSN) and nursing homes (6.5% ADN and 3.3% BSN), while significantly more BSN graduates worked in critical care (30% ADN and 41.3% BSN) and pediatrics (5.1% ADN and 10% BSN).

Bed Size and Location of Employment Settings

Statistically significant differences continued to be found in the size and location of ADN and BSN employment settings. BSN graduates continued to work in greater numbers in larger facilities in more populated areas.

Shifts Worked

ADN graduates were more likely than BSN graduates to work straight day (43% ADN and 31% BSN) or evening shifts (12% ADN and 9% BSN), while BSN graduates were more likely to work straight nights (36% ADN and 44% BSN) or rotating shifts (9% ADN and 17% BSN).

Orientation

Most of the respondents to this study reported having an orientation with an assigned mentor or preceptor (71.6% ADN and 73.6% BSN). More BSN graduates reported having a formal internship (5.9% ADN and 10.6% BSN), and more ADN graduates reported having no formal orientation (6.9% ADN and 2.5% BSN).

Work Roles & Administrative Activities

Respondents to the current survey recorded the amount of time they spent in various categories of nursing activities. The percentages of time spent in the activities were remarkably similar for the two groups. The largest difference was in the area of provision of routine care to clients. The BSN graduates reported spending 2% more time in that activity than did the ADNs (ADN 14% and BSN 16%). Both groups spent the most time in assessment/ evaluation activities (20% of both ADN and BSN), medication-related activities (16% ADN and 15% BSN), routine care (14% ADN and 16% BSN), and activities related to the health care team (15% of both ADN and BSN).

The entry-level RNs working in long-term care were about three times as likely as those in hospitals to report having administrative responsibilities, and twice as likely to report having a primary administrative position. More ADN graduates reported having administrative responsibilities. Logistic regression analyses demonstrated that the type and bed size of the employing facility and type of educational preparation were significant predictors of administrative responsibilities, while only bed size and type of facility were significant predictors of an entry-level nurse having a primary administrative position.

Alternative/Complementary Therapies

Survey respondents were asked which, if any, alternative/complementary therapies they routinely used in their current nursing positions. There were 50.9% of ADN and 52.6% of BSN graduates who did not use any of the listed therapies. The most commonly used therapies

were relaxation therapy (31.5% ADN and 27.7% BSN), massage therapy (13.6% ADN and 14.3% BSN), music therapy (10.1% ADN and 14% BSN), and imagery (13.5% ADN and 8.5% BSN).

Findings Related to Activities

Respondents were asked if the activities on the survey form represented what they actually did in practice and 95.9% of them said they did. Respondents rated the daily frequency of performance of all activities they adjudged applicable to their work settings on a six-point scale: "0 times" to "5 times or more." Average frequencies ranged from 0.53 to 4.67.

The ratings of frequency of activity performance were averaged separately for ADN and BSN respondents. Twenty-seven activity items were found to be statistically significantly different between the two groups, but only eight items demonstrated differences greater than or equal to 0.5.

Respondents were grouped according to prior work as an LPN/VN and activity frequencies were averaged separately for those who had been LPN/VNs and those who had not. There were 32% of ADNs and 5.9% of BSNs who reported previous work as an LPN/VN. Differences in average frequencies of performance of the nurses who had been LPN/VNs and those who had not were greater than the differences between the ADN/BSN groups. Seventeen of the activities had differences greater than or equal to 0.5, with 37 activities evidencing statistically significant differences.

Knowledge Categories

Eighteen categories of knowledge were included on the 2002 RN Practice Analysis Survey with their definitions. Respondents were asked to rate the importance of each knowledge category to their current work. There were statistically significant differences found between the average importance ratings provided by the ADN and BSN respondents for eight of the categories.

Respondents were also asked to rate how they used each of the categories of knowledge within their current positions. Chi-square analyses were performed to find differences between the ratings provided by the ADN and BSN graduates. For eight of the knowledge categories the ADN graduates provided significantly higher ratings than the BSN graduates.

Conclusion

The results of this analysis support the findings of the 2001 RN Practice Analysis Update (Smith & Crawford, 2002) that the differences in practice between the graduates of ADN and BSN educational programs can be largely attributed to some differences in work settings and past experience.

Report of Findings from the

2002 RN Practice Analysis Update

June Smith, PhD, RN Lynda Crawford, PhD, RN, CAE 2002 RN PRACTICE ANALYSIS UPDATE

Background of Study

The National Council of State Boards of Nursing (NCSBN) is responsible to its members, the boards of nursing in the United States and five territories, for the preparation of psychometrically sound and legally defensible licensure examinations. The periodic performance of practice analysis (job analysis) studies assists NCSBN in evaluating the validity of the test plan that guides content distribution of the licensure examination. Because changes can occur in registered nurse (RN) practice, practice analysis studies are conducted on a three-year cycle.

While data from practice analysis studies is primarily used to validate the NCLEX-RN® Examination Test Plan, it must also be explored for

any possible differences in the entry-level practices of subgroups of new nurses. Because nurses educated in ADN and BSN basic nursing programs have been identified as subgroups of new nurses, analyses must be performed to ascertain any possible differences in the entry-level practices of nurses with these types of education. This study reports the secondary analysis of data from the 2002 RN Practice Analysis for that purpose.

The findings from the 2002 RN Practice Analysis Update are reported here in the tenth of a series of monographs called Research Briefs. These briefs provide the means to quickly disseminate NCSBN research findings.

Methodology

This section provides a description of the methodology used to conduct the practice analysis of newly licensed RN practice, and the procedures used in the secondary data analysis. Descriptions of the work of the panel of experts, questionnaire development, sample selection and data collection procedures are provided, as well as information about response rates, assurance of confidentiality, and the degree to which participants were representative of the population of newly licensed RNs.

2002 RN Practice Analysis Panel of Experts

A panel of 10 registered nurses was assembled to assist with the 2002 RN Practice Analysis Update. Panel members all worked with and/or supervised the practice of registered nurses within their first six months in the profession and represented all geographic areas of the country and all major nursing specialties.

The panel of experts used their unique knowledge of entry-level RN practice to complete a number of tasks. First, they reviewed summaries from activity logs completed by 107 newly licensed RNs working in various practice settings across the United States. The panel used the findings from the logs along with RN job descriptions and performance evaluation documents, past practice analysis task statements, and their own knowledge of practice to create a list of tasks performed by newly licensed RNs within the first six months of practice. This task list was subsequently reviewed by the 2002 NCSBN Examination Committee and refined to include 137 items. The list of task statements included in the 2002 RN Practice Analysis may be found in Appendix A.

The panel then discussed the types of knowledge needed to perform activities pertinent to entry level nursing practice. A list of 18 knowledge categories were identified and defined for the study.

After the activity items had undergone review and editing by the 2002 NCSBN Examination Committee, the panel of experts provided activity item ratings to be used in validating the ratings obtained from incumbent nurses. They estimated the percentage of nurses in the country who would perform each activity within their practice settings, the average frequency with which each activity was performed daily by nurses performing the activity (on a 0 to 5+ scale), and the average priority the activity would have in relation to the provision of safe client care.

Finally, panel members performed an exercise linking the knowledge categories to the activity items. Each panel member considered the 18 knowledge categories as they related to each of the 137 activity items and indicated which of the knowledge categories were used in performing each activity. The panel ratings were aggregated and knowledge categories achieving an agreement from at least five of the panel members for an individual activity item were linked to that item.

Questionnaire Development

The 137 activity items and 18 knowledge categories created by the panel of experts and reviewed by the 2002 NCSBN Examination Committee were incorporated into a survey format. The survey was used in a pilot study in May and June of 2002. The questionnaire was modified based on the findings of the pilot study. Two survey forms were created to decrease the number of activity items contained on each. Twenty-five of the activity items were included on both survey forms. Those items were carefully selected to be those most commonly performed and those performed by small numbers of nurses in specialized practice settings. The remaining 112 activity items were randomly selected for placement on the two survey forms. The resulting surveys each contained 81 activity items, and aside from the 56 activity items unique to the individual forms, the two survey questionnaires were identical.

The surveys contained six sections. In the first section, questions addressed the participant's work experience including months of work as an RN and type and length of work orientation. The second section contained questions about the respondents' work environments including questions about work settings, client characteristics and work schedules. The third section focused on nursing activity performance and the knowledge needed to practice entry-level nursing. The fourth section requested information on the respondents' last day of work including numbers of hours worked. numbers of clients for whom care

was provided and the amount of time spent in various types of nursing activities. Questions in the fifth section asked for basic demographic information. The sixth and final section provided space for respondents to write comments or suggestions about the study. Form 1 of the survey questionnaire used in the 2002 RN Practice Analysis may be found in Appendix B.

Survey Process

Sample Selection

A stratified random sample of 4,000 RNs was selected from lists of candidates successful on the NCLEX-RN examination between March 1, 2002 and May 31, 2002. The sample was stratified by type of basic nursing education and by area of the country, with processes being used to include representative numbers of subjects from each NCSBN jurisdiction. Representative numbers of successful candidates educated in foreign countries were also included.

Representativeness of Sample

The sample selected for this study was proportionally equivalent to the population from which the sample was drawn in terms of area of the country, type of basic nursing education program, subject ethnicity and subject gender.

Mailing Procedure

The sample of 4,000 was divided into two while maintaining the stratification within each sample. Each of the two survey forms was sent to 2,000 of the sampled newly licensed nurses. A five-stage mailing process was used to engage participants in the study. A preletter was

sent to each person selected for the sample. A week later, the survey, cover letter and postage-paid return envelope were mailed. One week later, a postcard was sent to all participants, reiterating the importance of the study, and urging participation. Approximately one week after the first postcard, a second reminder postcard was sent to non-respondents, and two weeks later a second survey was mailed to continued non-respondents. The survey was conducted October through November 2002.

Confidentiality

All potential participants were promised confidentiality with regard to their participation and their responses. Preassigned code numbers were used to facilitate cost-effective follow-up mailings. Files containing mailing information were kept separate from the data files. The study protocol was reviewed by NCSBN's executive director for compliance with organizational guidelines for research studies involving human subjects.

Return Rates

A total of 190 of the 4,000 surveys were mailed to bad addresses. There were 1,552 surveys returned for an overall 40.7% return rate. Of the 1,552 surveys received, 25 were unable to be analyzed, 118 respondents reported they were not

working in nursing and 92 either reported spending less than an average of 20 hours per week in direct client care or failed to answer that question on the survey. The remaining number of analyzable surveys was 1,317, or 34.6%, of delivered questionnaires. Analyzable surveys included 691 ADN and 329 BSN respondents. Data from those participants formed the response set for the current study.

This sample of ADN and BSN respondents was calculated as adequate to provide proportional estimates at +/- 1.5% of the true rate.

Summary

A panel of registered nurses expert in the practices of newly licensed nurses created a list of new nurse activities and a list of knowledge categories necessary for activity performance. A data collection instrument was piloted and revised before being sent to 4,000 individuals selected at random from among all individuals who passed the NCLEX-RN examination between March 1 and May 31, 2002. The responses included 691 from graduates of associate degree and 329 from graduates of baccalaureate degree programs. Those 1,020 response sets formed the basis for this study.

Study Participants

Demographics, Experiences and Practice Environments of Participants

Demographic information, including racial and ethnic backgrounds, educational preparation and gender of the respondents are presented next, followed by descriptions of participant work environments, including settings, shifts worked, and client characteristics.

Demographic Information

Of the respondents, 11.3% of ADNs and 10% of BSNs were male. Those percentages were not significantly different. About 62% of ADNs and 67% of BSNs were white, 6.8% of ADNs and 8.1% of BSNs were of Asian descent, and 11% of both groups were of Hispanic or Latino descent. The ethnic/racial backgrounds reported by respondents to the current study varied in only one respect: significantly more ADN (16.4%) than BSN (10.2%) graduates in 2002 were African American ($x^2=6.75$, p<.05). In 2001, the numbers of African American respondents was not significantly different. However, the numbers of Asian and Hispanic or Latino respondents were: more BSNs reported an Asian ethnic background (BSN 7.9% vs. ADN 3.7%) and significantly more ADNs reported Hispanic or Latino descent (ADN 7.7% vs. BSN 2.6%). See Table 1.

Previous Healthcare Experience

Significantly more of the BSN graduates (BSN 61.8% vs. ADN 55.3%, x^2 =3.81, p<.05) had worked as a nursing assistant or aide prior to becoming a RN and overall participants averaged 3.17 years as an aide; with ADN respondents reported significantly longer work as an aide than BSN respondents (average 3.5 years for ADNs vs. 2.3 years for BSNs, t=4.07, p<.0001).

Overall about 24% of respondents had been a LPN/VN for an average of 6.9 years (SD 6.9 years) prior to becoming a RN. Many more ADN graduates (32%) than BSNs (5.9%) had previously been LPN/VNs, and the ADNs reported working for significantly longer periods as LPN/VNs that did the BSNs (ADNs averaged 7 years as a LPN/VN vs. 4 years for BSN graduates; t=2.4, p<.02).

Certifications Earned

When asked about certificates earned or courses completed since graduation from nursing school 19.7% of the ADN graduates and 15.8% of the BSN graduates reported they had not participated in such activities. Overall this indicated an increase over the numbers of newly licensed nurses earning certification

after graduation in the 2001 study (in 2001 23.3% of ADN and 24.2% of BSN respondents reported that they hadn't earned certification or taken a class) (Smith & Crawford, 2002). There were 27.1% of ADN and 25.5% BSN respondents to the current study who had earned Advanced Cardiac Life Support certification and 30.2% of ADNs and 28.3% of BSN graduates had earned certification or taken a class in IV therapy (see Table 2). Significantly more BSN graduates (66.3%) than ADN (58.6%) had earned Basic Life Support certification ($x^2=5.5$, p<.01) and earned certification or taken a class in peritoneal dialysis (BSN 5.8% and ADN 3.2%; $x^2=3.9$, p<.03). See Table 2.

Work Environments

Work Settings

Overall, the majority (87.5%) of newly licensed nurses in this study reported working in hospitals (see Table 3). As in 2001 more BSN graduates worked in hospitals (93.1% of BSN and 84.8% of ADN graduates worked in hospitals). About equal percentages of overall respondents reported working in community-based facilities (5.9%) and long-term care (5.7%); however, twice as many ADN than BSN respondents reported working in long-term care (ADN 6.8% vs. BSN 3.4%) and community-based facilities (ADN 7.2% vs. BSN 3.1%). See Table 3.

The five most reported work settings for all respondents were medical/surgical units (41.3%), critical care units (33.6%), pediatric units (6.7%), nursing homes (5.5%) and labor and delivery units (4.8%).

The percentages of current respondents reporting work in those units were comparable to those reported in 2001 with the exception of a drop in pediatric employment from 10.14% in 2001 to 6.7% in 2002 (Smith & Crawford, 2002).

There were four statistically significant differences in the work settings of ADN and BSN graduates in this study (see Table 4). Significantly more ADN graduates reported working in medical/surgical units (ADN 43.3% vs. BSN 37.1%) and nursing homes (ADN 6.5% vs. BSN 3.3%). Significantly more BSN graduates reported working in critical care (BSN 41.3% vs. ADN 30%) and pediatrics (BSN 10% vs. ADN 5.1%).

Statistically significant differences continued to be found in the size and location of ADN and BSN employment settings (see Tables 5 and 6). BSN graduates continued to work in greater numbers in larger facilities ($x^2_{(4)} = 18.9$, p<.001) in more populated areas ($x^2_{(5)} = 15$, p<.01).

Shifts Worked

Overall, most respondents to the current study reported working straight day (38.7%) or night (38.5%) shifts. The shifts worked by ADN and BSN respondents were significantly different $(x^2_{(3)} = 25.9,$ p<.0001) with BSN graduates significantly more likely to work straight nights (BSN 44% vs. ADN 36%) and rotating shifts (BSN 17% vs. ADN 9%) and ADN graduates more likely to work straight days (ADN 43% vs. BSN 31%) and evening shifts (ADN 12% vs. BSN 9%). These numbers represented an overall decrease from the results of the 2001 study in the numbers of new nurses working

	2002 Overall ADN BSN 0				2001 Overall ADN			BSN		
Background	%	n	%	n	%	%	n	%	n	%
American Indian/Alaska Native	0.7	6	0.9	1	0.3	1.40	7	1.5	4	1.3
Asian~	7.2	45	6.8	26	8.1	5.50	17	3.7	25	7.9
Black/African American^	14.4	109	16.4	33	10.2	10.90	46	10.1	38	12.1
Hispanic or Latino~	10.8	73	11	34	10.6	5.60	35	7.7	8	2.6
Native Hawaiian/Other Pacific Islander	0.4	2	0.3	2	0.6	0.40	1	0.2	2	0.6
White	63.9	415	62.3	216	67.1	77.24	352	77.4	242	77.1
Multiethnic or racial background*	2.6	16	2.4	10	3.1					

^{*}Not included on 2001 survey.

[^]Significantly different in 2002, p<.05. ~Significantly different in 2001, p<.05.

	Overall	2002 Overall ADN BSN (2001 Overall ADN			BSN	
Type of Certification	%	n	%	n BS	%	%	n	%	n	% %
Advanced Cardiac Life Support	26.6	187	27.1	84	25.5	18.70	90	19.8	54	17.2
Basic Life Support^	61.1	405	58.6	218	66.3	51.90	229	50.3	170	54.1
Critical care	14.3	91	13.2	55	16.7	8.80	39	8.6	29	9.2
Coronary care	6.4	44	6.4	21	6.4	4.30	19	4.2	14	4.5
Chemotherapy	4.6	33	4.8	14	4.3	2.30	14	3.1	4	1.3
IV therapy*	29.6	209	30.2	93	28.3	23	118	25.9	59	18.8
Rehabilitation	1.5	11	1.6	4	1.2	0.9	4	0.9	3	0.9
Conscious sedation`	14.8	96	13.9	55	16.7					
Peritoneal dialysis`^	4.0	22	3.2	19	5.8					
None	18.4	136	19.7	52	15.8	23.7	106	23.3	76	24.2

^{*}Not included on 2001 survey.

[^]Significantly different in 2002 at p<.05. ~Significantly different in 2001 at p<.05.

Table 3. Type of Employing Facility										
Facility	Overall %	AD n	2002 N %	BS n	N %	Overall %	AD n	2001 N %	BS n	SN %
Hospital	87.5	564	84.8	299	93.1	88.70	385	85.56	290	93.25
Subacute care^						1.10	7	1.56	1	0.32
Long-term care	5.7	45	6.8	11	3.4	4.60	28	6.22	7	2.25
Community-based	5.9	48	7.2	10	3.1	4.70	24	5.33	12	3.86
Other	0.9	8	1.2	1	0.3	0.90	6	1.33	1	0.32

[^]Not included on 2002 survey.

evenings and increases in the numbers working straight day and night shifts (Smith & Crawford, 2002).

Orientation

Overall, only 5.5% of respondents did not receive an orientation. ADN graduates were significantly more likely than BSNs to report no orientation (ADN 6.9% vs. BSN 2.5%). The majority of respondents reported having a transition that included work with an assigned mentor or preceptor (ADN 71.6% and BSN 73.6%). The ADN graduates' preceptorships lasted an average of 8 weeks while the BSNs' preceptorships

averaged 9.5 weeks. More BSNs (10.6%) than ADNs (5.9%) reported having an internship with the BSN internships lasting an average of 13 weeks and ADN internships lasting an average of 11.5 weeks (see Table 7).

Work Roles and Administrative Activities

Respondents to the current survey were asked to record the amount of time they spent in various categories of nursing activities in their practice settings. The hours spent were then converted to proportions of time by dividing the number of hours reported spent working by the hours

Table 4. Work Settings`			0000			 		0004		
	Overall	2002 ADN BSN			Overall	Δ	2001 DN	BSN		
	% (n=1020)	n	%	n	%	% (n=769)	n	%	n	%
Medsurg*	41.3	299	43.3	122	37.1	39.01	190	41.76	110	35.03
Critical care*	33.60	207	30	136	41.3	31.46	135	29.67	110	35.03
Peds*^	6.7	35	5.1	33	10	10.14	34	7.47	44	14.01
Nursing home*^	5.5	45	6.5	11	3.3	6.37	40	8.79	9	2.87
Labor and delivery	4.8	30	4.3	19	5.8	4.59	22	4.84	21	3.69
Postpartum	4.1	29	4.2	13	4	4.81	20	4.4	17	5.41
OR	2.50	17	2.5	8	2.4	3.51	17	3.74	10	3.18
Psych	2.4	18	2.6	6	1.8	2.6	15	3.3	5	1.59
Rehab	2.2	17	2.5	5	1.5	2.21	10	2.2	7	2.23
Home health	2	16	2.3	4	1.2	1.04	7	1.54	1	0.32
Subacute	1.9	13	1.9	6	1.8	2.08	9	1.98	7	2.23
Physician's/dentist's office	1.5	11	1.6	4	1.2	1.43	7	1.54	4	1.27
Outpatient clinic	1.5	13	1.9	2	0.6	0.91	5	1.1	2	0.64
Transitional care+	1.1	8	1.2	3	0.9					
Hospice	1.1	10	1.4	1	0.3	0.39	1	0.22	2	0.64
Long-term care	0.7	5	0.7	2	0.6	1.17	8	1.76	1	0.32
School health	0.5	5	0.7	0	0	0.26	1	0.22	1	0.32
Prison	0.5	3	0.4	2	0.6	0	0	0	0	0
Pubic health	0.3	3	0.4	0	0	0.91	2	0.44	5	1.59
Occupational health	0.1	1	0.1	0	0	0	0	0	0	0

^{*} significantly different in 2002, ^ significantly different in 2001.

^{&#}x27;Respondents could select more than one work setting to describe their practices.

⁺Subacute and Transitional Care combined on the 2001 Survey.

Table 5. Number of Employing Facility E	Beds					
	Overall %	2002 ADN (n) %	BSN (n) %	Overall %	2001 ADN (n) %	BSN (n) %
<100 beds	11.4	(82) 13%	(25) 8%	12.00	(63) 14%	(23) 8%
100-299 beds	27.2	(187) 29.8%	(68) 21.7%	30.10	(140) 33%	(76) 26%
300-499 beds	26.9	(166) 26.5%	(87) 27.8%	23.00	(90) 21%	(75) 26%
500 or >	25.6	(143) 22.8%	(97) 30.9%	26.40	(99) 23%	(90) 30%
Don't know	8.9	(48) 7.7%	(36) 11.5%	8.50	(31) 7%	(30) 10%

2002 Stat. sig. chi-sq = 18.9, df=4, p<.001. 2001 Statistically sig., chi-sq = 17, df=4, p<.002.

Table 6. Population of Employment Setti	ng					
	Overall %	2002 ADN (n) %	BSN (n) %	Overall %	2001 ADN (n) %	BSN (n) %
< 20,000	8	(63) 9.4%	(16) 5%	6.76	(38) 9%	(12) 4%
20,000-49,999	10.2	(76) 11.4%	(25) 7.8%	13.38	(64) 15%	(35) 12%
50,000-99,999	14.9	(98) 14.7%	(49) 15.4%	12.70	(61) 14%	(33) 11%
100,000-500,000	18.2	(112) 16.8%	(67) 21%	22.84	(96) 22%	(73) 24%
> 500,000	22	(133) 19.9%	(84) 26.3%	21.22	(75) 17%	(82) 27%
Don't know	26.7	(185) 27.7%	(78) 24.5%	23.11	(106) 24%	(65) 22%

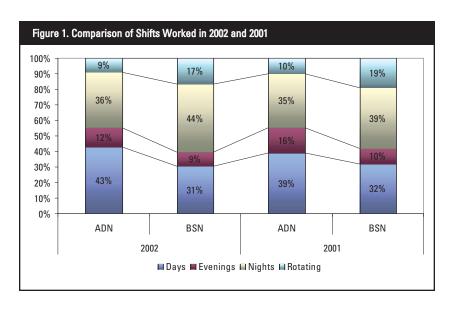
2002 Stat. sig. chi-sq = 15., df=5, p<.01. 2001 Statistically sig., chi-sq = 18, df=5, p<.003.

Table 7. Type and Length of Orientation						
	AL %	L Ave Weeks	AD %	N Ave Weeks	BS %	N Ave Weeks
No formal orientation	5.5		6.9		2.5	
Classroom instruction/skills lab only	0.8	4.0	1.1	3.3	0.3	9
Classroom and/or skills lab plus supervised work with patients	11.5	7.3	11.6	7.2	11.2	7.6
Work with an assigned preceptor with or without additional classroom or skills lab work	72.3	8.5	71.6	8.0	73.6	9.5
Formal internship with or without additional classroom or skills lab work	7.4	12.2	5.9	11.5	10.6	13
Other	2.5	7.1	2.9	6.5	1.9	8.3

reported spent on each activity. Because nurses often perform more than one type of activity at a time, such as teaching while giving medications or providing emotional support while giving routine care, these proportions did not sum to 1.0. The proportions were standardized (converted to numbers summing to 1.0) by dividing the time spent in each category of activity by the sum of hours reportedly spent in all the activities.

The standardized proportions of time spent in the activities were remarkably similar for the two groups. The largest difference was in the area of provision of routine care to clients and the BSN graduates reported spending 2% more time in that activity than did the ADNs (ADN 14% and BSN 16%). Both groups spent the most time in assessment/evaluation activities (20% of both ADN and BSN), medicationrelated activities (ADN 16% and BSN 15%), routine care (ADN 14% and BSN 16%) and activities related to the health care team (15% of both ADN and BSN). See Table 8.

Respondents were asked if their nursing position included administrative responsibilities and if it did, they were asked if they held a primarily administrative position. The entry-level RNs working in longterm care were three times as likely as those in hospitals to report having administrative responsibilities (long-term care 71.9% and hospital 23.1%) and twice as likely to report having a primary administrative position (long-term care 58.8% and hospital 23.5%). More ADN graduates reported having administrative responsibilities (ADN 30.2% vs. BSN 20.6% - combined facilities). Logistic regression analyses were performed using type of education (ADN and BSN), type of facility and number of facility beds as predictors of a "yes" answer to questions about administrative responsibilities and having a primary administrative position. It was found that the type and bed size of the employing facility and type of educational preparation were significant predictors of administrative responsibilities, while only bed size and



Categories of Activities	ALL Standardized Proportion*	ADN Standardized Proportion*	BSN Standardized Proportion*
Medication-Related Activities Perform activities necessary for safe medication administration (check for incompatibilities, give medications by appropriate routes, check for side effects and/or desired effects, etc.)	0.16	0.16	0.15
Psychological Needs Activities Perform activities related to the psychological needs of clients (assess for client and family psychological needs; provide support and interventions to assist with coping, and maintenance or improvement of psychological functioning; etc.)	0.10	0.10	0.10
Assessment/Evaluation Activities Perform activities related to assessment and/or evaluation of patients (assess physical status, evaluate lab results, monitor treatment effects, reassessment rounds, etc)	0.20	0.20	0.20
Routine Care/Procedure Activities Perform routine patient care activities (provide routine cares such as baths, VSs, ambulation, etc.; perform procedures such as wound care, placing urinary catheters, starting IVs, etc.)	0.15	0.14	0.16
Care Environment Activities Perform activities related to the care environment (assess clients' home environments, provide a safe care environment, assess for safe functioning of client care equipment, etc.)	0.06	0.06	0.05
Education Activities Provide educational support to clients and families (assess level of knowledge, teach about condition and interventions, provide information about caring for others, etc.)	0.08	0.08	0.08
Health Care Team Activities Work effectively within a health care team (supervise or guide care provided to clients by other staff; communicate with physician, dietician, physical therapy, respiratory therapy, and/or other health team members about clients; take verbal or phone orders; perform discharge planning; teach staff members, etc.)	0.15	0.15	0.15
Administrative/ Management Activities Perform administration/management activities (e.g., schedule staff hours; hire, fire, or discipline staff members; make staff assignments; plan staff education activities; order supplies, etc.	0.02	0.02	0.01
Ethical/Legal Perform activities related to the ethical or legal aspects of care (enquire about clients' advanced directives; provide for client privacy, act as a client advocate, etc.)	0.06	0.06	0.06
Other Activities	0.03	0.03	0.04

^{*}Hours spent in each category divided by sum of hours spent in all categories.

type of facility were significant predictors of an entry-level nurse reporting a primary administrative position (see Tables 9 and 10).

Alternative/Complementary Therapies

Survey respondents were asked which, if any, alternative/complementary therapies they routinely used in their current nursing positions. There were 50.9% of ADN and 52.6% of BSN graduates who reported they did not use any of the listed therapies. The most commonly used therapies were relaxation therapy (ADN 31.5% and BSN 27.7%), massage therapy (ADN 13.6% and BSN 14.3%), music therapy (ADN 10.1% and BSN 14%) and imagery (ADN 13.5% and BSN 8.5%). Significantly more ADNs reported using imagery and pet therapy (ADN 6.4% vs. BSN 3.6%) and significantly more BSNs used music therapy. See Table 11.

Summary

The majority of newly licensed nurses reported working in hospitals, mostly in medical/surgical and critical care settings. There were differences found in the work settings of ADN and BSN graduates, with BSN graduates more likely to work in critical care and pediatric units and ADN graduates working more in medical/surgical units and nursing homes. BSN graduates continued to work in greater numbers in larger facilities in more populated areas and to work more straight night and rotating shifts. The location and bed size of employing facility and type of educational preparation of the nurse were found to be predictors of administrative responsibilities and location and bed size of employing facility were predictors of having a primary administrative position.

Table 9. Administrative Responsibilities									
	Overall %	2002 ADN (n) %	BSN (n) %	Overall %	2001 ADN (n) %	BSN (n) %			
All facilities	29.7	(200) 30.2	(66) 20.6	20.81	(109) 24.06	(50) 16.08			
Hospital	23.1	(138) 24.6	(51) 17.1	15.80	(62) 16.19	(44) 15.28			
Long-term care	71.9	(34) 75.6	(8) 80.0	82.35	(25) 89.29	(3) 50.00			
Community-based	50.8	(22) 45.8	(7) 70.0	27.78	(7) 29.17	(3) 25.00			

Table 10. Primary Administrative Position*									
	Overall %	2002 ADN (n) %	BSN (n) %	Overall %	BSN (n) %				
All facilities	33.5	(64) 31.8	(21) 30.9	35.98	(40) 36.7	(19) 34.55			
Hospital	23.5	(30) 22.1	(14) 26.4	22.61	(11) 16.67	(15) 30.04			
Long-term care	58.8	(21) 67.7	(5) 50.0	76.00	(17) 77.27	(2) 66.67			
Community-based	42.40	(8) 36.4	(3) 42.9	60.00	(4) 57.14	(2) 66.67			

^{*}Data in this table represent the numbers and percentages of respondents reporting administrative responsibilities and a primary administrative position.

Table 11. Alternative/Complementary Therapies Used in Entry-Level Practice							
Alternative/Complementary Therapy	ALL %	ADN %	BSN %				
Do not use alternative/complementary therapies	51.5	50.9	52.6				
Acupressure or therapeutic touch	6.4	5.8	7.6				
Aromatherapy	1.2	1.4	0.6				
Art therapy	2.6	2.3	3.3				
Biofeedback	1.9	2.3	0.9				
Dance therapy	0.4	0.3	0.6				
Imagery*	11.9	13.5	8.5				
Massage therapy	13.8	13.6	14.3				
Music therapy*	11.4	10.1	14				
Naturopathy	0.2	0.1	0.3				
Pet therapy*	5.5	6.4	3.6				
Relaxation therapy	30.3	31.5	27.7				
Other	5.6	5.4	6.1				

^{*}ADN and BSN significantly different by chi-square analysis, p<.05.

Findings Related to Activities

Information related to the frequency of new nurse performance of entry-level activities is presented in this section. How representative the activities were of respondents' practices and the relative frequency with which activities were performed by the graduates of ADN and BSN programs will be explored and compared to the frequency of activity performance by newly licensed RNs who had previously been LPN/VNs.

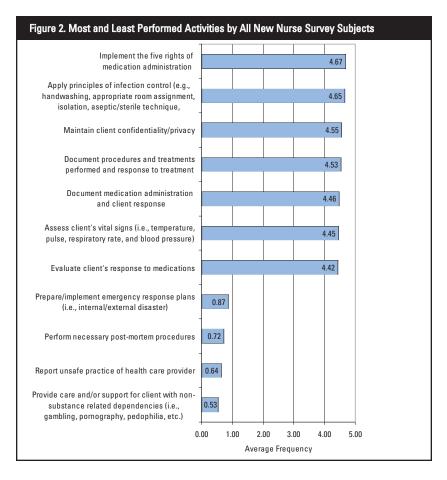
Representativeness of Activities

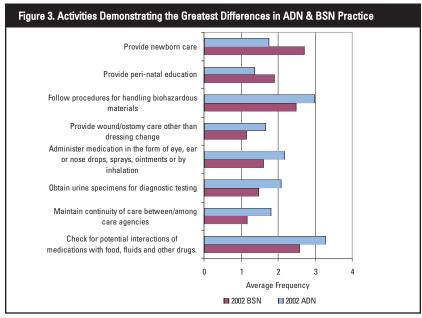
Survey respondents were asked if the activities listed on the questionnaire form they completed were representative of what they did in their nursing positions. Most (95.9%) of all respondents said they were. This included 96.7% of ADN respondents and 94.1% of BSN respondents.

Average Frequency of Activity Performance

Respondents were asked to rate the frequency of performance of all activities they adjudged applicable to their work settings. They reported how frequently they performed each activity on the last day they worked on a six-point scale: "0 times" to "5 times or more." Average frequency statistics were calculated using the data of participants who provided ratings. These statistics represented setting-specific frequencies, or how

frequently each activity was performed within applicable settings. Average frequencies ratings for the 137 activities ranged from 0.53 to 4.67. The activities performed with the lowest frequencies were "Provide care and/or support for client with non-substance-related dependencies gambling, pornography, pedophilia, etc.)" (.53), "Report unsafe practice of health care provider" (.64), "Perform necessary post-mortem procedures" (.72) and "Prepare and implement emergency response plans (i.e., internal/external disaster plans)" (.87). The activities with the highest average frequencies of performance were "Implement the 5 rights of medication administration" (4.67), "Apply principles of infection control (e.g., hand washing, appropriate room assignment, isolation, aseptic/sterile technique, universal/standard precautions)" (4.65), "Maintain client confidentiality/privacy" "Document procedures and treatments performed and response to treatment" (4.53) "Document medication administration and client response" (4.46) "Assess client's vital signs (i.e., temperature, pulse, respiratory rate, and blood pressure)" (4.45) and "Evaluate client's response to medications" (4.42). Activities rank ordered by overall average frequency can be found in Appendix C and the frequencies of the most and least performed activities can be seen in Figure 2.





Differences in ADN and BSN Activity Frequencies

Activity frequency ratings were averaged separately for ADN and BSN respondents. Overall the average frequencies of the two groups were verv similar, evidencing a Pearson R correlation of .98. There were, however, 27 activities that were statistically significantly different between the two groups; and, in findings very similar to those reported in the 2001 Practice Analysis Update (Smith & Crawford, 2002), it was noted that BSN graduates performed 35 of the activities with greater daily frequency than the ADN graduates and for 102 activities the average frequency of ADN performance was higher. From a practical standpoint, it was decided that an average daily frequency difference of .5 or more (on the 0-5 scale) would be clinically meaningful. Only eight of the activities demonstrated differences greater than or equal to .5. See Figure 3 for activities demonstrating the greatest differences in ADN and BSN practice. See Table 12 for a complete listing of ADN and BSN rating differences.

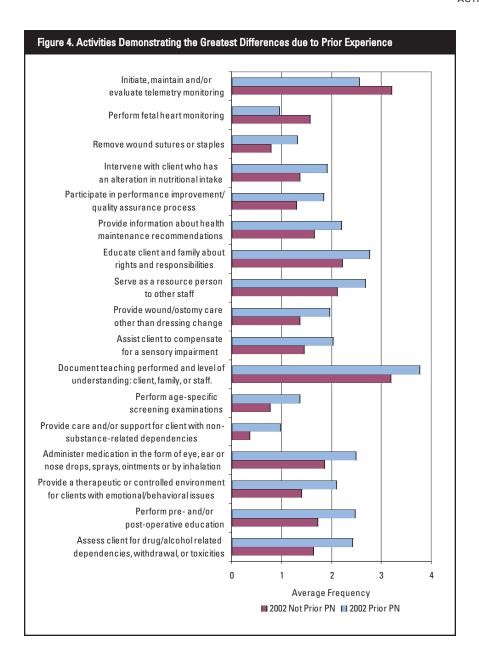
Differences in Activity Frequencies Due to Past Experience as a LPN/VN

As in the 2001 study (Smith & Crawford, 2002), there were large difference in prior health care experience between the ADN and BSN groups: 32% of the ADN graduates and only 5.9% of BSN graduates had previously practiced as LPN/VNs.

Ratings were averaged separately for those nurses that had previously been LPN/VNs and those that had not. Differences between the average frequencies of the groups defined by previous LPN/VN experience (RNs that had been previous LPN/VNs and those that had not) were greater than the differences between the groups defined by type of education (ADN and BSN). Seventeen of the activities had differences greater than or equal to .5 with 37 activities evidencing statistically significant differences. See Table 13 for comparisons of average activity frequencies for those who had and had not previously been LPN/VNs. See Figure 4 for activities demonstrating the greatest differences due to prior experience.

Summary

In findings very similar to those of the 2001 RN Practice Analysis Update, the ADN respondents reported performing many more activities with a higher frequency than did the BSN respondents. Besides type of education, it was also found that these two groups varied greatly in their past health care experience. Past experience as an LPN/VN was reported by 32% of the ADN graduates and 5.9% of the BSN graduates. The average frequencies of activity performance were compared for those respondents who had been LPN/VNs and those that had not. Greater differences were found between the prior PN/not prior PN groups than for the ADN/BSN groups.



26

Table	Table 12. Comparison of ADN and BSN Graduate Average Frequencies									
#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency	ADN- BSN	t value	p			
23	Check for potential interactions of medications with food, fluids and other drugs	3.06	3.26	2.57	0.69	3.58	0.0001			
124	Maintain continuity of care between/among care agencies	1.79	1.8	1.16	0.64	3.08	0.002			
147	Obtain urine specimens for diagnostic testing	2.00	2.07	1.46	0.61	3.31	0.001			
31	Administer medication in the form of eye, ear or nose drops, sprays, ointments, or by inhalation (including nebulizer or metered dose inhaler)	2.16	2.16	1.6	0.56	3.22	0.001			
66	Provide wound/ostomy care other than dressing change (i.e., wound irrigation, wound debridement, ostomy/fistula care, etc.)	1.65	1.66	1.14	0.52	2.81	0.005			
110	Follow procedures for handling biohazardous materials	2.94	2.97	2.47	0.5	2.56	0.01			
45	Perform or assist with dressing change (i.e., wound, central line dressing, etc.)	2.31	2.26	1.77	0.49	2.68	0.008			
29	Administer medication by SQ, IM, intradermal, or topical route	3.53	3.66	3.18	0.48	3.84	0.0001			
10	Assess client for drug/alcohol-related dependencies, withdrawal or toxicities	1.87	1.97	1.5	0.47	2.35	0.01			
137	Perform a risk assessment (i.e., sensory impairment, potential for falls, level of mobility, etc.)	2.92	2.9	2.44	0.46	2.54	0.01			
125	Provide client or family information about and/or comply with advanced directives	1.65	1.73	1.27	0.46	2.41	0.01			
102	Provide a therapeutic or controlled environment for clients with emotional/behavioral issues	1.71	1.67	1.23	0.44	2.47	0.01			
83	Perform peritoneal dialysis	1.18	1.13	0.69	0.44	2.08	0.038			
81	Provide care to client in the postoperative period	2.31	2.4	1.99	0.41	1.86	0.06			
59	Start an intravenous line (IV)	2.18	2.29	1.89	0.4	2.05	0.04			
116	Participate in performance improvement/quality assurance process (formally collect data or participate on a team)	1.48	1.55	1.15	0.4	1.89	0.05			
117	Make appropriate referrals to community resources	1.18	1.25	0.85	0.4	2.33	0.02			
70	Apply and maintain devices used to promote venous return (TED hose, sequential compression devices, etc.)	2.40	2.51	2.11	0.4	1.94	0.05			
17	Monitor client's physiologic response during and after conscious sedation	1.60	1.67	1.27	0.4	1.93	0.06			
136	Participate in educating staff	1.50	1.5	1.11	0.39	1.93	0.05			
80	Prepare client for surgery	1.57	1.59	1.21	0.38	2.08	0.03			
96	Identify barriers to learning	2.25	2.38	2.01	0.37	2.05	0.04			

Table	3 12, continued						
#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency	ADN- BSN	t value	p
135	Serve as a resource person to other staff	2.22	2.36	1.99	0.37	2.1	0.03
111	Prepare/implement emergency response plans (i.e., internal/external disaster)	0.87	0.86	0.5	0.36	2.2	0.028
148	Obtain specimens, other than blood or urine, for diagnostic testing (i.e., PKU testing, wound cultures, stool specimens, etc.)	1.91	1.95	1.59	0.36	1.83	0.06
1	Evaluate client's weight	2.34	2.36	2.01	0.35	1.96	0.05
131	Assure that client has given informed consent for treatment	2.37	2.39	2.04	0.35	1.75	0.08
73	Provide intraoperative care (positioning, maintain sterile field, operative assessment, etc.)	2.21	2.32	1.98	0.34	1.94	0.05
92	Educate client/family on home safety issues	1.27	1.24	0.91	0.33	1.92	0.05
100	Participate in group sessions (i.e., therapy, support groups, etc.)	1.24	1.17	0.84	0.33	1.56	0.11
149	Use measures to maintain client's skin integrity (e.g., skin care, turn client, alternating pressure mattress, etc.)	3.67	3.65	3.34	0.31	1.75	0.08
141	Provide care that meets the special needs of the elderly client	3.14	3.09	2.78	0.31	1.48	0.13
38	Adjust/titrate dosage of medication based on assessment of physiologic parameters (i.e., giving insulin according to blood sugar levels, titrating medication to maintain a specified blood pressure, etc.)	2.99	3.03	2.72	0.31	1.59	0.11
127	Report unsafe practice of health care provider	0.64	0.65	0.35	0.3	2.24	0.02
67	Provide therapies for comfort and treatment of inflammation, swelling (apply heat and cold treatments, elevate limb, etc.)	2.28	2.25	1.95	0.3	1.68	0.09
93	Perform pre- and/or postoperative education	1.94	2	1.7	0.3	1.38	0.16
60	Care for devices and equipment used for drainage (i.e., surgical wound drains, chest tube suction or drainage devices, urethral catheter care, etc.)	2.58	2.67	2.37	0.3	1.61	0.1
65	Maintain desired temperature of client using external devices (e.g., hypothermia blankets, ice packs, etc.)	1.48	1.52	1.23	0.29	1.54	0.12
143	Provide care to client/family at end of life	1.22	1.21	0.92	0.29	1.58	0.11
106	Provide care and/or support for client with non-substance-related dependencies (i.e., gambling, pornography, pedophilia, etc.)	0.53	0.55	0.27	0.28	1.46	0.14
95	Provide information about health maintenance recommendations (i.e., physician visits, immunizations, screening exams, etc.)	1.85	1.89	1.61	0.28	1.36	0.17

Table	e 12, continued						
#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency	ADN- BSN	t value	р
22	Prepare medication for administration (i.e., crush medications as needed and appropriate, place in appropriate administration device, assemble equipment, etc.)	3.46	3.48	3.21	0.27	1.53	0.12
54	Discontinue or remove IV, NG, urethral catheter, or other lines and tubes	2.60	2.67	2.4	0.27	1.36	0.17
99	Plan and/or participate in education to individuals in the community (health fairs, school education, drug education, STD, etc.)	1.25	1.3	1.03	0.27	1.31	0.19
98	Document teaching performed and level of understanding: client, family, or staff	3.30	3.45	3.19	0.26	1.48	0.13
48	Intervene with client who has an alteration in bowel elimination (e.g., give enema, remove fecal impaction)	1.74	1.69	1.43	0.26	1.36	0.17
142	Assist client/family to identify/participate in activities fitting his/her age, preference, physical capacity and psychosocial/behavioral/physical development	1.81	1.78	1.53	0.25	1.39	0.16
49	Perform tracheostomy care	1.20	1.21	0.96	0.25	1.28	0.2
113	Follow institution's policy regarding the use of client restraints or safety devices	1.85	1.78	1.53	0.25	1.25	0.21
91	Teach clients and families about the safe use of equipment needed for care	1.76	1.76	1.52	0.24	1.28	0.2
51	Insert urethral catheter	1.47	1.5	1.26	0.24	1.25	0.21
72	Use precautions to prevent further injury when moving client with cervical or spinal injury (i.e., log-rolling, abduction pillow)	1.84	1.79	1.55	0.24	1.14	0.25
82	Remove wound sutures or staples	0.99	0.98	0.75	0.23	1.26	0.2
52	Provide client nutrition through continuous or intermittent tube feedings	2.03	1.98	1.76	0.22	1.04	0.29
130	Report error/event/occurrence per protocol (i.e., medication error, client fall, etc.)	1.04	1.01	0.8	0.21	1.3	0.19
89	Provide information necessary for prevention of high risk health behaviors (i.e., smoking cessation, safe sexual practices, etc.)	1.51	1.52	1.31	0.21	1.13	0.25
40	Administer blood products	1.50	1.5	1.29	0.21	1.15	0.25
61	Assure appropriate and safe use of equipment in performing client care procedures and treatments	3.57	3.61	3.41	0.2	1.26	0.2
121	Supervise care provided by others (i.e., LPN/VN, assistive personnel, other RNs, etc.)	3.17	3.18	2.99	0.19	1.35	0.17
108	Assess psychosocial, spiritual, cultural, and occupational factors affecting care	2.84	2.95	2.77	0.18	1.53	0.12

Table	e 12, continued						
#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency	ADN- BSN	t value	р
76	Implement measures to manage/prevent possible complications of client's condition and/or procedure (i.e., circulatory complications, seizures, aspiration, potential neurological complications, etc.)	3.58	3.57	3.4	0.17	0.96	0.33
8	Identify client's risk for abuse/neglect	1.49	1.43	1.26	0.17	0.97	0.33
144	Assist client to compensate for a sensory impairment (e.g., hearing, sight, etc.)	1.65	1.66	1.49	0.17	0.9	0.36
97	Educate client and family about rights and responsibilities	2.38	2.41	2.24	0.17	0.82	0.41
133	Comply with regulations for reporting (e.g., abuse/ neglect, communicable disease, gunshot wounds, dog bites, etc.)	0.91	0.86	0.7	0.16	0.98	0.32
146	Intervene with client who has an alteration in nutritional intake (e.g., institute diet, change method or time of meals, arrange for more ethnically appropriate foods, etc.)	1.62	1.52	1.38	0.14	0.83	0.4
122	Initiate/update multidisciplinary care plan, care map, clinical pathway used to guide or evaluate client care	2.84	2.9	2.76	0.14	0.73	0.46
15	Perform age-specific screening examinations (i.e., Denver Developmental, scoliosis assessment, breast examinations, testicular examinations, etc.)	1.02	0.96	0.82	0.14	0.56	0.57
84	Incorporate alternative/complementary therapies into client's plan of care (i.e., acupuncture, dance therapy, music therapy, play therapy, etc.)	1.02	0.94	0.81	0.13	0.66	0.5
94	Educate client and family about pain management	2.89	2.92	2.8	0.12	0.67	0.5
5	Assess/triage clients to prioritize the order of care delivery	3.48	3.6	3.48	0.12	0.63	0.52
37	Administer medication by less common routes (i.e., vaginally, rectally, bladder instillation, continuous abdominal peritoneal dialysis, endotracheal tube, by epidural catheter or intraosseous)	1.22	1.23	1.11	0.12	0.69	0.48
69	Perform irrigations (i.e., of bladder, ear, eye, etc.)	1.05	0.99	0.89	0.1	0.63	0.52
103	Actively listen to client/family concerns	3.83	3.87	3.78	0.09	0.64	0.52
9	Identify the need for, institute and maintain suicide precautions	1.04	0.92	0.83	0.09	0.53	0.59
88	Provide client and family with information about condition/illness, expected progression and/or possible outcomes	3.35	3.4	3.31	0.09	0.85	0.39
20	Check/verify accuracy of order	4.18	4.24	4.15	0.09	0.7	0.48
101	Facilitate client and/or family coping (i.e., end-of-life care, loss, grief, new diagnosis, lifestyle changes, body image, role change, stress management, crisis situations, etc.)	1.91	1.9	1.82	0.08	0.45	0.64

Table	12, continued						
#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency	ADN- BSN	t value	р
42	Document medication administration and client response	4.46	4.5	4.43	0.07	0.55	0.57
119	Provide and receive report on assigned clients	3.24	3.29	3.22	0.07	0.64	0.51
104	Assist client with emotional and spiritual needs	2.28	2.23	2.16	0.07	0.41	0.67
105	Provide support/respect for client's cultural practices/beliefs	2.20	2.21	2.14	0.07	0.33	0.73
6	Assess client's vital signs (i.e., temperature, pulse, respiratory rate and blood pressure)	4.45	4.49	4.43	0.06	0.84	0.39
21	Evaluate appropriateness of medication order for client (i.e., is the medication appropriate to treat the client's condition, given by appropriate route, in appropriate dosage, etc.)	4.08	4.12	4.06	0.06	0.57	0.56
50	Assist with invasive procedures (i.e., central line placements, biopsies, debridements, etc.)	1.32	1.27	1.21	0.06	0.32	0.74
28	Administer medication by intravenous route (i.e., IVP, IVPB, PCA pump, continuous infusion – fluids, parenteral nutrition)	4.13	4.27	4.21	0.06	0.52	0.59
43	Perform diagnostic testing (i.e., O_2 saturation, glucose monitoring, testing for occult blood, gastric Ph, urine specific gravity, etc.)	3.69	3.7	3.65	0.05	0.27	0.78
53	Perform an electrocardiology test (EKG)	1.68	1.7	1.65	0.05	0.17	0.86
13	Perform and utilize health history	2.77	2.78	2.73	0.05	0.28	0.77
114	Protect client from injury (e.g., falls, electrical hazards, malfunctioning equipment, rugs, clutter, etc.)	3.53	3.4	3.36	0.04	0.25	0.8
145	Utilize therapeutic communication techniques to provide support to client or family and/or increase client understanding of his/her behavior	3.09	3.14	3.1	0.04	0.2	0.83
85	Connect and maintain external pacing devices	0.91	0.89	0.85	0.04	0.18	0.85
56	Perform necessary postmortem procedures	0.72	0.7	0.66	0.04	0.24	8.0
75	Document procedures and treatments performed and response to treatment	4.53	4.59	4.56	0.03	0.46	0.64
109	Apply principles of infection control (e.g., handwashing, appropriate room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	4.65	4.91	4.89	0.02	0.54	0.58
126	Maintain client confidentiality/privacy	4.55	4.58	4.56	0.02	0.15	0.87
27	Administer medication by the oral route or gastric tube (PO, sublingual, buccal, nasogastric tube, G-tube, etc.)	3.83	3.79	3.77	0.02	0.21	0.82
63	Assist client in the performance of activities of daily living (i.e., ambulation, reposition, hygiene, transfer to chair, eating, toileting, etc.)	3.65	3.6	3.58	0.02	0.19	0.84

Table	e 12, continued						
#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency	ADN- BSN	t value	р
55	Perform procedures necessary for admitting, transferring or discharging a client	2.67	2.67	2.65	0.02	0.2	0.84
112	Participate in maintaining institution's security plan (i.e., newborn nursery security, bomb threats, fire emergency plan, etc.)	1.40	1.29	1.27	0.02	0.13	0.89
78	Perform prenatal care	1.38	1.5	1.49	0.01	0.04	0.96
86	Educate client and/or family about medication, treatments and procedures	3.20	3.23	3.22	0.01	0.07	0.94
87	Provide education on growth and development	1.16	1.12	1.13	-0.01	-0.02	0.98
107	Promote healthy family, client, community interactions	1.92	1.84	1.85	-0.01	-0.037	0.97
18	Evaluate client's response to medications	4.42	4.43	4.44	-0.01	-0.14	0.88
24	Review pertinent data prior to medication administration (i.e., VS, lab results, allergies, etc.)	3.96	3.99	4.01	-0.02	-0.17	0.86
25	Perform calculations needed for medication administration	2.79	2.71	2.73	-0.02	-0.12	0.9
64	Access implanted venous access devices (i.e., porta-cath, P.A.S. port, shunt, etc.)	1.32	1.24	1.26	-0.02	-0.11	0.91
134	Comply with regulations governing controlled substances (e.g., counting narcotics, wasting narcotics, etc.)	3.41	3.37	3.39	-0.02	-0.09	0.92
26	Implement the five rights of medication administration	4.67	4.65	4.68	-0.03	-0.48	0.62
46	Insert nasogastric tube	0.97	0.88	0.91	-0.03	-0.17	0.85
41	Administer drugs to induce conscious sedation	1.00	1.01	1.04	-0.03	-0.14	0.88
132	Act as a client advocate	3.46	3.47	3.52	-0.05	-0.32	0.74
57	Administer oxygen therapy	3.09	3.04	3.13	-0.09	-0.5	0.61
11	Assess family dynamics (i.e., structure, bonding, communication, boundaries, coping mechanisms, etc.)	1.63	1.58	1.67	-0.09	-0.51	0.61
44	Obtain specimens by drawing blood peripherally or through central line	2.22	2.21	2.31	-0.1	-0.45	0.65
7	Monitor client's hydration status (e.g., I&O, edema, signs and symptoms of dehydration, etc.)	4.11	4.13	4.24	-0.11	-1.23	0.21
62	Perform emergency care procedures (e.g., cardio- pulmonary resuscitation, Heimlich maneuver, respiratory support, etc.)	1.12	1.03	1.15	-0.12	-0.95	0.34
39	Monitor and maintain infusion sites, and equipment (i.e, flushing infusion devices, checking rates, fluids and sites, etc.)	4.13	4.2	4.32	-0.12	-0.95	0.34
14	Perform system-specific assessment or reassessment (i.e., GI, respiratory, cardiac, etc.)	4.10	4.19	4.32	-0.13	-1.49	0.13
16	Evaluate the results of diagnostic testing (e.g., lab, radiology, EKG, etc.)	3.28	3.24	3.37	-0.13	-0.75	0.44

2002 RN PRACTICE ANALYSIS UPDATE

Table	a 12, continued						
#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency	ADN- BSN	t value	р
68	Apply, maintain or remove orthopedic devices (e.g., traction, splints, braces, casts, ace wraps, etc.)	1.34	1.3	1.43	-0.13	-0.64	0.52
71	Perform gastric lavage	0.91	0.8	0.93	-0.13	-0.6	0.54
138	Perform intranatal care (care provided during labor and birth)	1.71	1.8	1.94	-0.14	-0.41	0.67
12	Perform head-to-toe physical assessment	3.98	4.01	4.15	-0.14	-0.94	0.34
120	Collaborate with other disciplines in providing client care (i.e., physician, RT, PT, radiology, dietary, lab, etc.)	3.47	3.4	3.58	-0.18	-1.14	0.25
129	Recognize tasks/assignments you are not prepared to perform and seek assistance	2.01	1.91	2.1	-0.19	-1.23	0.21
123	Receive and/or transcribe health care provider orders	3.47	3.47	3.67	-0.2	-1.19	0.26
139	Perform postnatal care	1.98	1.93	2.14	-0.21	-0.71	0.47
4	Assess invasive monitoring data	1.65	1.6	1.82	-0.22	-0.87	0.38
77	Perform phototherapy	1.02	0.77	1.02	-0.25	-0.79	0.42
19	Initiate, maintain and/or evaluate telemetry monitoring	2.93	3.01	3.3	-0.29	-1.24	0.21
140	Perform fetal heart monitoring	1.37	1.3	1.63	-0.33	-0.83	0.4
58	Perform oral or pulmonary suctioning	1.95	1.73	2.06	-0.33	-1.64	0.1
3	Monitor and maintain client on a ventilator	1.53	1.44	1.85	-0.41	-1.49	0.13
90	Provide perinatal education	1.36	1.36	1.89	-0.53	-1.34	0.18
79	Provide newborn care	1.97	1.74	2.7	-0.96	-2.48	0.01

Table	13. Comparison of Frequencies of Prior LPN/VNs and	Those Who Ha	d Not Been	LPN/VNs			
#	Activity	Overall Average Frequency 0-5	2002 Prior PN Ave. Frequency	2002 Not Prior PN Ave. Frequency	Prior - Not	- t value	р
10	Assess client for drug/alcohol-related dependencies, withdrawal or toxicities	1.87	2.41	1.64	0.77	3.44	0.001
93	Perform pre- and/or postoperative education	1.94	2.46	1.72	0.74	3.19	0.001
102	Provide a therapeutic or controlled environment for clients with emotional/behavioral issues	1.71	2.1	1.4	0.7	3.63	0.0001
31	Administer medication in the form of eye, ear or nose drops, sprays, ointments or by inhalation (including nebulizer or metered dose inhaler)	2.16	2.48	1.85	0.63	3.32	0.001
106	Provide care and/or support for client with non-substance-related dependencies (i.e., gambling, pornography, pedophilia, etc.)	0.53	0.97	0.36	0.61	2.85	0.005
15	Perform age-specific screening examinations (i.e., Denver Developmental, scoliosis assessment, breast examinations, testicular examinations, etc.)	1.02	1.36	0.76	0.6	2.31	0.02
98	Document teaching performed and level of understanding: client, family, or staff	3.30	3.77	3.18	0.59	3.15	0.002
144	Assist client to compensate for a sensory impairment (e.g., hearing, sight, etc.)	1.65	2.03	1.44	0.59	3.02	0.003
66	Provide wound/ostomy care other than dressing change (i.e., wound irrigation, wound debridement, ostomy/fistula care, etc.)	1.65	1.95	1.37	0.58	2.94	0.003
135	Serve as a resource person to other staff	2.22	2.67	2.11	0.56	2.89	0.004
97	Educate client and family about rights and responsibilities	2.38	2.76	2.21	0.55	2.55	0.01
95	Provide information about health maintenance recommendations (i.e., physician visits, immunizations, screening exams, etc.)	1.85	2.19	1.65	0.54	2.53	0.01
116	Participate in performance improvement/quality assurance process (formally collect data or participate on a team)	1.48	1.84	1.3	0.54	2.39	0.01
146	Intervene with client who has an alteration in nutritional intake (e.g., institute diet, change method or time of meals, arrange for more ethnically appropriate foods, etc.)	1.62	1.9	1.36	0.54	2.98	0.003
82	Remove wound sutures or staples	0.99	1.31	0.79	0.52	2.89	0.004
131	Assure that client has given informed consent for treatment	2.37	2.64	2.15	0.49	2.18	0.03
81	Provide care to client in the postoperative period	2.31	2.64	2.15	0.49	1.97	0.04
87	Provide education on growth and development	1.16	1.48	0.99	0.49	2.28	0.02
124	Maintain continuity of care between/among care agencies	1.79	1.99	1.5	0.49	2.28	0.02
86	Educate client and/or family about medication regimen, treatments and procedures	3.20	3.56	3.08	0.48	2.5	0.01

Table	a 13, continued						
#	Activity	Overall Average Frequency 0-5	2002 Prior PN Ave. Frequency	2002 Not Prior PN Ave. Frequency	Prior – Not	t value	р
141	Provide care that meets the special needs of the elderly client	3.14	3.37	2.9	0.47	2.16	0.03
125	Provide client or family information about, and/or comply with, advanced directives	1.65	1.94	1.48	0.46	2.29	0.02
45	Perform or assist with dressing change (i.e., wound, central line dressing, etc.)	2.31	2.5	2.05	0.45	2.24	0.02
94	Educate client and family about pain management	2.89	3.22	2.78	0.44	2.23	0.02
100	Participate in group sessions (i.e., therapy, support groups, etc.)	1.24	1.38	0.94	0.44	2.23	0.02
143	Provide care to client/family at end of life	1.22	1.49	1.06	0.43	1.64	0.1
64	Access implanted venous access devices (i.e., porta-cath, P.A.S. port, shunt, etc.)	1.32	1.56	1.14	0.42	2.04	0.04
130	Report error/event/occurrence per protocol (i.e., medication error, client fall, etc.)	1.04	1.28	0.86	0.42	2.4	0.01
117	Make appropriate referrals to community resources	1.18	1.44	1.02	0.42	2.3	0.02
67	Provide therapies for comfort and treatment of inflammation and swelling (apply heat and cold treatments, elevate limb, etc.)	2.28	2.5	2.08	0.42	2.16	0.03
113	Follow institution's policy regarding the use of client restraints or safety devices	1.85	2.04	1.65	0.39	1.68	0.09
69	Perform irrigations (i.e., of bladder, ear, eye, etc.)	1.05	1.23	0.84	0.39	2.3	0.02
72	Use precautions to prevent further injury when moving client with cervical or spinal injury (i.e., log-rolling, abduction pillow)	1.84	2	1.61	0.39	1.67	0.09
133	Comply with regulations for reporting (e.g., abuse/neglect, communicable disease, gunshot wounds, dog bites, etc.)	0.91	1.08	0.7	0.38	2.08	0.03
80	Prepare client for surgery	1.57	1.76	1.39	0.37	1.77	0.07
91	Teach clients and families about the safe use of equipment needed for care	1.76	1.95	1.58	0.37	1.82	0.06
105	Provide support/respect for client's cultural practices/beliefs	2.20	2.43	2.07	0.36	1.63	0.1
147	Obtain urine specimens for diagnostic testing	2.00	2.17	1.81	0.36	1.75	0.08
107	Promote healthy family, client, community interactions	1.92	2.12	1.78	0.34	1.57	0.11
77	Perform phototherapy	1.02	1.09	0.75	0.34	1	0.31
22	Prepare medication for administration (i.e., crush medications as needed and appropriate, place in appropriate administration device, assemble equipment, etc.)	3.46	3.65	3.32	0.33	1.69	0.09
23	Check for potential interactions of medications with food, fluids and other drugs	3.06	3.22	2.92	0.3	1.4	0.15

#	Activity	Overall Average Frequency 0-5	2002 Prior PN Ave. Frequency	2002 Not Prior PN Ave. Frequency	Prior - Not	- t value	р
104	Assist client with emotional and spiritual needs	2.28	2.44	2.15	0.29	1.48	0.13
48	Intervene with client who has an alteration in bowel elimination (e.g., give enema, remove fecal impaction)	1.74	1.84	1.55	0.29	1.4	0.15
71	Perform gastric lavage	0.91	1.08	0.79	0.29	1.32	0.18
1	Evaluate client's weight	2.34	2.46	2.18	0.28	1.49	0.13
73	Provide intraoperative care (positioning, maintain sterile field, operative assessment, etc.)	2.21	2.41	2.14	0.27	1.4	0.15
17	Monitor client's physiologic response during and after conscious sedation	1.60	1.73	1.46	0.27	1.07	0.28
111	Prepare/implement emergency response plans (i.e., internal/external disaster)	0.87	0.95	0.68	0.27	1.56	0.11
108	Assess psychosocial, spiritual, cultural and occupational factors affecting care	2.84	3.09	2.84	0.25	1.92	0.05
29	Administer medication by SQ, IM, intradermal or topical route	3.53	3.67	3.42	0.25	1.85	0.06
40	Administer blood products	1.50	1.6	1.35	0.25	1.21	0.22
55	Perform procedures necessary for admitting, transferring or discharging a client	2.67	2.85	2.62	0.23	1.68	0.09
13	Perform and utilize health history	2.77	2.9	2.68	0.22	1.06	0.28
68	Apply, maintain or remove orthopedic devices (e.g., traction, splints, braces, casts, ace wraps, etc.)	1.34	1.48	1.28	0.2	0.98	0.32
96	Identify barriers to learning	2.25	2.44	2.24	0.2	1.04	0.29
51	Insert urethral catheter	1.47	1.54	1.35	0.19	0.93	0.35
59	Start an intravenous line (IV)	2.18	2.31	2.12	0.19	0.88	0.37
89	Provide information necessary for prevention of high risk health behaviors (i.e., smoking cessation, safe sexual practices, etc.)	1.51	1.59	1.41	0.18	0.9	0.36
8	Identify client's risk for abuse/neglect	1.49	1.54	1.36	0.18	0.91	0.36
41	Administer drugs to induce conscious sedation	1.00	1.16	0.98	0.18	0.76	0.44
52	Provide client nutrition through continuous or intermittent tube feedings	2.03	2.04	1.86	0.18	0.76	0.44
65	Maintain desired temperature of client using external devices (e.g., hypothermia blankets, ice packs, etc.)	1.48	1.54	1.37	0.17	0.79	0.42
99	Plan and/or participate in education to individuals in the community (health fairs, school education, drug education, STD, etc.)	1.25	1.3	1.14	0.16	0.81	0.41
137	Perform a risk assessment (i.e., sensory impairment, potential for falls, level of mobility, etc.)	2.92	2.91	2.75	0.16	0.82	0.41
110	Follow procedures for handling biohazardous materials	2.94	2.96	2.8	0.16	0.75	0.44

Table	13, continued						
#	Activity	Overall Average Frequency 0-5	2002 Prior PN Ave. Frequency	2002 Not Prior PN Ave. Frequency	Prior - Not	t value	р
121	Supervise care provided by others (i.e., LPN/VN, assistive personnel, other RNs, etc.)	3.17	3.26	3.1	0.16	1.1	0.27
50	Assist with invasive procedures (i.e., central line placements, biopsies, debridements, etc.)	1.32	1.34	1.19	0.15	0.78	0.43
127	Report unsafe practice of health care provider	0.64	0.66	0.51	0.15	1.07	0.28
142	Assist client/family to identify/participate in activities fitting his/her age, preference, physical capacity, and psychosocial/behavioral/physical development	1.81	1.83	1.69	0.14	0.71	0.47
134	Comply with regulations governing controlled substances (e.g., counting narcotics, wasting narcotics, etc.)	3.41	3.47	3.33	0.14	0.7	0.48
54	Discontinue or remove IV, NG, urethral catheter, or other lines and tubes	2.60	2.66	2.53	0.13	0.57	0.56
92	Educate client/family on home safety issues	1.27	1.25	1.12	0.13	0.67	0.5
49	Perform tracheostomy care	1.20	1.24	1.11	0.13	0.63	0.52
126	Maintain client confidentiality/privacy	4.55	4.67	4.55	0.12	1.11	0.26
103	Actively listen to client/family concerns	3.83	3.93	3.82	0.11	0.67	0.49
101	Facilitate client and/or family coping (i.e., end-of-life care, loss, grief, new diagnosis, lifestyle changes, body image, role change, stress management, crisis situations, etc.)	1.91	1.95	1.84	0.11	0.55	0.58
148	Obtain specimens, other than blood or urine, for diagnostic testing (i.e., PKU testing, wound cultures, stool specimens, etc.)	1.91	1.89	1.78	0.11	0.49	0.62
76	Implement measures to manage/prevent possible complications of client's condition and/or procedure (i.e., circulatory complications, seizures, aspiration, potential neurological complications, etc.)	3.58	3.55	3.45	0.1	0.51	0.6
122	Initiate and update multidisciplinary care plan, care map and clinical pathway used to guide or evaluate client care	2.84	2.92	2.83	0.09	0.41	0.67
9	Identify the need for, institute and maintain suicide precautions	1.04	0.96	0.88	0.08	0.41	0.67
24	Review pertinent data prior to medication administration (i.e., VS, lab results, allergies, etc.)	3.96	4	3.94	0.06	0.3	0.75
56	Perform necessary postmortem procedures	0.72	0.72	0.66	0.06	0.37	0.7
11	Assess family dynamics (i.e., structure, bonding, communication, boundaries, coping mechanisms, etc.)	1.63	1.63	1.59	0.04	0.18	0.85
21	Evaluate appropriateness of medication order for client (i.e., is the medication appropriate to treat the client's condition, given by appropriate route, in appropriate dosage, etc.)	4.08	4.12	4.09	0.03	0.2	0.83

Table	e 13, continued						
#	Activity	Overall Average Frequency 0-5	2002 Prior PN Ave. Frequency	2002 Not Prior PN Ave. Frequency	Prior – Not	t value	р
46	Insert nasogastric tube	0.97	0.89	0.86	0.03	0.16	0.86
37	Administer medication by less common routes (i.e., vaginally, rectally, bladder instillation, continuous abdominal peritoneal dialysis, endotracheal tube, by epidural catheter or intraosseous)	1.22	1.19	1.18	0.01	0.01	0.98
78	Perform prenatal care	1.38	1.48	1.47	0.01	0.02	0.98
16	Evaluate the results of diagnostic testing (e.g., lab, radiology, EKG, etc.)	3.28	3.26	3.25	0.01	0.05	0.95
83	Perform peritoneal dialysis	1.18	1.01	1.01	0	-0.003	0.99
112	Participate in maintaining institution's security plan (i.e., newborn nursery security, bomb threats, fire emergency plan, etc.)	1.40	1.27	1.27	0	-0.009	0.99
149	Use measures to maintain client's skin integrity (e.g., skin care, turn client, alternating pressure mattress, etc.)	3.67	3.57	3.57	0	0.01	0.99
70	Apply and maintain devices used to promote venous return (TED hose, sequential compression devices, etc.)	2.40	2.37	2.38	-0.01	-0.04	0.96
132	Act as a client advocate	3.46	3.45	3.46	-0.01	-0.028	0.97
58	Perform oral or pulmonary suctioning	1.95	1.79	1.8	-0.01	-0.04	0.96
85	Connect and maintain external pacing devices	0.91	0.85	0.86	-0.01	-0.02	0.98
88	Provide client and family with information about condition/illness, expected progression and/or possible outcomes	3.35	3.36	3.37	-0.01	-0.14	0.88
109	Apply principles of infection control (e.g., handwashing, appropriate room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	4.65	4.89	4.9	-0.01	-0.299	0.76
114	Protect client from injury (e.g., falls, electrical hazards, malfunctioning equipment, rugs, clutter, etc.)	3.53	3.4	3.42	-0.02	-0.09	0.92
84	Incorporate alternative/complementary therapies into client's plan of care (i.e., acupuncture, dance therapy, music therapy, play therapy, etc.)	1.02	0.91	0.93	-0.02	-0.08	0.93
6	Assess client's vital signs (i.e., temperature, pulse, respiratory rate and blood pressure)	4.45	4.44	4.47	-0.03	-0.3	0.76
145	Utilize therapeutic communication techniques to provide support to client or family and/or increase client understanding of his/her behavior	3.09	3.06	3.09	-0.03	-0.17	0.86
63	Assist client in the performance of activities of daily living (i.e., ambulation, reposition, hygiene, transfer to chair, eating, toileting, etc.)	3.65	3.57	3.61	-0.04	-0.37	0.7
20	Check/verify accuracy of order	4.18	4.15	4.19	-0.04	-0.31	0.75

Table	13, continued						
#	Activity	Overall Average Frequency 0-5	2002 Prior PN Ave. Frequency	2002 Not Prior PN Ave. Frequency	Prior - Not	- t value	p
123	Receive and/or transcribe health care provider orders	3.47	3.47	3.53	-0.06	-0.32	0.74
43	Perform diagnostic testing (i.e., O_2 saturation, glucose monitoring, testing for occult blood, gastric Ph, urine specific gravity, etc.)	3.69	3.62	3.68	-0.06	-0.339	0.73
60	Care for devices and equipment used for drainage (i.e., surgical wound drains, chest tube suction or drainage devices, urethral catheter care, etc.)	2.58	2.53	2.59	-0.06	-0.27	0.78
75	Document procedures and treatments performed and response to treatment	4.53	4.53	4.6	-0.07	-0.977	0.32
119	Provide and receive report on assigned clients	3.24	3.19	3.27	-0.08	-0.721	0.47
62	Perform emergency care procedures (e.g., cardiopulmonary resuscitation, Heimlich maneuver, respiratory support, etc.)	1.12	1.03	1.12	-0.09	0.76	0.44
27	Administer medication by the oral route or gastric tube (PO, sublingual, buccal, nasogastric tube, G-tube, etc.)	3.83	3.69	3.79	-0.1	-0.76	0.44
5	Assess/triage clients to prioritize the order of care delivery	3.48	3.48	3.58	-0.1	-0.48	0.63
53	Perform an electrocardiology test (EKG)	1.68	1.61	1.72	-0.11	-0.43	0.66
3	Monitor and maintain client on a ventilator	1.53	1.47	1.58	-0.11	-0.39	0.69
14	Perform system-specific assessment or reassessment (i.e., GI , respiratory, cardiac, etc.)	4.10	4.13	4.24	-0.11	-1.13	0.25
18	Evaluate client's response to medications	4.42	4.33	4.46	-0.13	-1.56	0.11
42	Document medication administration and client response	4.46	4.39	4.52	-0.13	-99	0.32
4	Assess invasive monitoring data	1.65	1.61	1.74	-0.13	-0.43	0.66
7	Monitor client's hydration status (e.g., I&O, edema, signs and symptoms of dehydration, etc.)	4.11	4.03	4.18	-0.15	-1.46	0.14
25	Perform calculations needed for medication administration	2.79	2.64	2.79	-0.15	-0.73	0.46
44	Obtain specimens by drawing blood peripherally or through central line	2.22	2.14	2.29	-0.15	-0.64	0.52
38	Adjust/titrate dosage of medication based on assessment of physiologic parameters (i.e., giving insulin according to blood sugar levels, titrating medication to maintain a specified blood pressure, etc.)	2.99	2.79	2.95	-0.16	-0.72	0.47
26	Implement the five rights of medication administration	4.67	4.53	4.7	-0.17	-2.23	0.02
90	Provide perinatal education	1.36	1.37	1.54	-0.17	-0.4	0.68
129	Recognize tasks/assignments you are not prepared to perform and seek assistance	2.01	1.83	2.01	-0.18	-1.02	0.3

Table	a 13, continued						
#	Activity	Overall Average Frequency 0-5	2002 Prior PN Ave. Frequency	2002 Not Prior PN Ave. Frequency	Prior - Not	- t value	р
139	Perform postnatal care	1.98	1.88	2.08	-0.2	-0.65	0.51
61	Assure appropriate and safe use of equipment in performing client care procedures and treatments	3.57	3.41	3.62	-0.21	-1.2	0.22
57	Administer oxygen therapy	3.09	2.9	3.12	-0.22	-1.13	0.25
120	Collaborate with other disciplines in providing client care (i.e., physician, RT, PT, radiology, dietary, lab, etc.)	3.47	3.26	3.5	-0.24	-1.41	0.15
138	Perform intranatal care (care provided during labor and birth)	1.71	1.64	1.89	-0.25	-0.71	0.47
39	Monitor and maintain infusion sites, and equipment (i.e, flushing infusion devices, checking rates, fluids and sites, etc.)	4.13	4.02	4.28	-0.26	-1.8	0.07
12	Perform head-to-toe physical assessment	3.98	3.8	4.12	-0.32	-2.04	0.04
136	Participate in educating staff	1.50	1.86	2.21	-0.35	3.07	0.002
28	Administer medication by intravenous route (i.e., IVP, IVPB, PCA pump, continuous infusion – fluids, parenteral nutrition)	4.13	3.89	4.32	-0.43	-3.89	0.0001
79	Provide newborn care	1.97	1.71	2.17	-0.46	-1	0.31
140	Perform fetal heart monitoring	1.37	0.96	1.57	-0.61	-1.44	0.15
19	Initiate, maintain and/or evaluate telemetry monitoring	2.93	2.55	3.2	-0.65	-2.55	0.01

Findings Related to Knowledge Categories

The Subject Matter Expert Panel for the 2002 RN Practice Analysis developed a list of 18 categories of knowledge necessary for the performance of entry-level nursing practice. Those knowledge categories were included on the survey form with their definitions. This section presents information comparing ADN and BSN respondent ratings related to the 18 categories of knowledge.

Knowledge Category Importance Ratings

The 2002 RN Practice Analysis Survey contained a section asking respondents to rate the importance and usage of each of 18 categories of knowledge (see Table 14 for the knowledge categories and their definitions). They rated the importance of each knowledge category to their current work on a scale of 0 to 3 with 3 equaling the greatest importance. There were statistically significant differences found between the average ratings provided by the ADN and BSN respondents for eight of the categories: mathematics (ADN 2.81 vs. BSN 2.72), nutrition (ADN 2.31 vs. BSN 2.21), physical sciences (ADN 2.21 vs. BSN 2.09), care management/leadership (ADN 2.40 vs. BSN 2.25), ethics (ADN 2.75 vs. BSN 2.65), nursing diagnosis (ADN 2.45 vs. BSN 2.22), nursing research (ADN 1.91 vs. BSN 1.70), and scope of practice/professional roles (ADN 2.81 vs. BSN 2.69). See Table 14.

Usage of Knowledge Categories

Respondents were also asked to rate how they used each of the categories of knowledge within their current positions. The ratings were "I do not use the knowledge," "I recognize/ recall the knowledge" and "I apply/ interpret/analyze the knowledge." Chi-square analyses were performed to find differences between the ratings provided by the ADN and BSN graduates. For 8 of the categories the ADN graduates provided significantly "apply/interpret/analyze" more ratings than the BSN graduates: economics (ADN 13.3% vs. BSN 5.7%), mathematics (ADN 87.3% vs. BSN 82.9%), quality management/infection control (ADN 78.8% vs. BSN 70.3%), care management/leadership (ADN 57.3% vs. BSN 48.1%), ethics (ADN 79.2% vs. BSN 71.9%), nursing diagnosis (ADN 64.8% vs. BSN 52.8%), nursing research (ADN 29.1% vs. 16.8%) and scope of practice/professional roles (ADN 77.9% vs. 70.5%). See Table 14.

Summary

The 18 categories of knowledge included on the 2002 RN Practice Analysis were rated for importance to practice and type of usage. The ADN respondents provided significantly higher average importance ratings for 8 of the knowledge categories and significantly larger percentages of ADNs reported that their usage of these 8 categories rose to the application/analysis level.

Conclusion

The results of this study support the findings of the 2001 RN Practice Analysis Update, i.e., the differences in practice between the graduates of ADN and BSN educational programs can be largely attributed to some differences in work settings and past experience.

References

Smith, J. E. & Crawford, L. H. (2002). Report of Findings from the 2001 RN Practice Analysis Update, NCSBN Research Brief, (1). Chicago: National Council of State Boards of Nursing.

Table 14. Knowledge Category Importance and Usage Ratings								
	Impor	tance		Us	age			
	Scale~		Do no		Reca Reca			rpret/ lyze
Category/Definition	ADN	BSN	ADN	BSN	ADN	BSN	ADN	BSN
Biologic sciences (anatomy & physiology, biology, microbiology): The study of life and living things including the structure and function of the human body and the organisms which invade it.	2.74	2.66	0.8	1.3	28.2	27.0	71.0	71.8
Communication skills: Knowledge and use of oral, nonverbal, written and information technology communication skills necessary for safe, effective client care. These skills are utilized to accurately deliver and receive information between and among the nurse, the health care team, clients, families, and the community. Also included is the ability to recognize and appropriately address barriers to communication.	2.86	2.83	0.2	0.6	12.3	11.9	87.5	87.5
Economics:* The study of the management of fiscal resources. This includes a beginning knowledge of access-to-care regulations.	1.40	1.35	40.9	42.9	45.8	51.4	13.3	5.7
Mathematics:^* Ability to perform the calculations needed to plan and deliver care. Calculations would include, at a minimum, those needed to safely prepare and administer medications to clients and evaluate client fluid balance and nutritional intake.	2.81	2.72	1.4	3.4	11.3	13.7	87.3	82.9
Nutrition:^ Knowledge of the processes involved in ingesting and utilizing food substances. These processes include ingestion of proper amounts of needed nutrients, digestion, absorption, metabolism and storage.	2.31	2.21	5.1	7.2	49.2	49.2	45.7	43.6
Pathophysiology: Knowledge of how normal physiologic processes are altered by disease.	2.78	2.79	0.9	1.6	20.7	18.3	78.4	80.1
Pharmacology: Knowledge of how drugs interact with body systems to create both desired and unwanted effects.	2.89	2.84	0.5	0.9	18.8	18.4	80.7	80.7
Physical sciences (chemistry and physics):^ Knowledge of substances (such as electrolytes and hydrogen ions) and the laws governing matter and their influence on normal human functions.	2.21	2.09	13.3	16.9	44.2	46.6	42.5	36.6
Principles of teaching and learning: Knowledge needed to assess learning situations and to identify optimal methods of teaching clients of all ages.	2.43	2.36	2.1	3.4	36.7	35.8	61.2	60.7
Quality management/infection control:* Knowledge needed to institute/utilize infection control measures, recognize and report incidents/errors/occurrences, and actively promote the improvement of client care processes. Also included is a working knowledge of standards set by various regulatory bodies such as JCAHO, OSHA, etc.	2.79	2.73	0.9	0.3	20.3	29.4	78.8	70.3

Table 14, continued								
	Impor	tance		Us	age			
Category/Definition	Scale~ Avera		Do no	5	Reca Reca %	,		rpret/ lyze
	2.32	2.26	3.0	3.1	44.3	50.3	52.8	46.5
Social sciences (psychology, sociology, growth & development): Knowledge of the emotional, psychological, spiritual and social functioning of human beings throughout their life span, individually and in families or other societal groups.	2.32	2.20	3.0	3.1	44.3	50.5	32.0	40.3
Care management/leadership:^* Knowledge needed to organize and coordinate the care required by one client, a group of clients or a community. This knowledge includes basic management principles such as motivational strategies, group process, interpersonal relations, and delegation techniques. Included is the ability to collaborate with and coordinate the care provided by members of other health care disciplines.	2.40	2.25	7.0	8.1	35.7	43.8	57.3	48.1
Clinical decision making/critical thinking: The ability to synthesize, organize and prioritize the multiple variables governing a situation and devise a workable plan for solving problems.	2.80	2.77	1.5	2.8	15.1	13.1	83.4	84.1
Ethics:^* Knowledge of the principles governing the conduct of a nurse. These principles deal with the relationship of a nurse to the client, families, health care team, nursing profession and society.	2.75	2.65	1.0	1.2	19.8	26.9	79.2	71.9
Knowledge needed to perform nursing procedures and psychomotor skills: Nursing-specific knowledge about performance of procedures and skills such as insertion of a urethral catheter, starting an IV, changing a wound dressing, inserting a nasogastric tube, collecting lab specimens, reading telemetry strips, monitoring fetal heart tones, etc.	2.92	2.90	0.7	0.6	4.3	7.9	94.9	91.5
Nursing diagnosis: ^{A*} Knowledge needed to recognize assessment data necessitating the assignment of one or more identified nursing diagnoses.	2.45	2.22	5.4	10.3	29.8	36.9	64.8	52.8
Nursing research: ^{A*} Knowledge of how to appropriately evaluate the results of nursing research for use in client care.	1.91	1.70	26.2	27.1	44.7	56.1	29.1	16.8
Scope of practice/professional roles:^* Knowledge of one's own legal scope of practice and the scopes of practice of those to whom activities are assigned or delegated.	2.81	2.69	0.6	2.2	21.5	27.3	77.9	70.5

 $[\]sim$ 0 = not important to 3 = very important.

[^]Importance ratings significantly different by t-test, p<.05. *Usage ratings significantly different by chi-square test, p<.05.

Appendix A

Activity Statements with 2002 RN Practice Analysis Form Assignment

Master #	PAS Form	# 2002 Survey	Activity	
119	вотн	1	Provide and receive report on assigned clients	
109	ВОТН	2	Apply principles of infection control (e.g., handwashing, appropriate room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	
75	BOTH	3	Document procedures and treatments performed and response to treatment	
55	BOTH	4	Perform procedures necessary for admitting, transferring or discharging a patient	
62	ВОТН	5	Perform emergency care procedures (e.g., cardiopulmonary resuscitation, Heimlich maneuver, respiratory support, etc.)	
14	BOTH	6	Perform system-specific assessment or reassessment (i.e., GI , respiratory, cardiac, etc.)	
29	BOTH	7	Administer medication by SQ, IM, intradermal or topical route	
6	вотн	8	Assess clients vital signs (i.e., temperature, pulse, respiratory rate and blood pressure)	
108	BOTH	9	Assess psychosocial, spiritual, cultural and occupational factors affecting care	
138	BOTH	10	Perform intranatal care (care provided during labor and birth)	
21	ВОТН	11	Evaluate appropriateness of medication order for client (i.e., is the medication appropriate to treat the client's condition, given by appropriate route, in appropriate dosage, etc.)	
121	BOTH	12	Supervise care provided by others (i.e., LPN/VN, assistive personnel, other RNs, etc.)	
73	BOTH	13	Provide intraoperative care (positioning, maintain sterile field, operative assessment, etc.)	
63	ВОТН	14	Assist client in the performance of activities of daily living (i.e., ambulation, reposition, hygiene, transfer to chair, eating, toileting, etc.)	
100	BOTH	15	Participate in group sessions (i.e., therapy, support groups, etc.)	
28	ВОТН	16	Administer medication by intravenous route (i.e., IVP, IVPB, PCA pump, continuous infusion – fluids, parenteral nutrition)	
78	BOTH	17	Perform prenatal care	
139	BOTH	18	Perform postnatal care	
27	ВОТН	19	Administer medication by the oral route or gastric tube (PO, sublingual, buccal, nasogastric tube, G-tube, etc.)	
88	ВОТН	20	Provide client and family with information about condition/illness, expected progression and/or possible outcomes	
7	ВОТН	21	Monitor client's hydration status (e.g., I&O, edema, signs and symptoms of dehydration, etc.)	
83	вотн	22	Perform peritoneal dialysis	
26	вотн	23	Implement the five rights of medication administration	
99	ВОТН	24	Plan and/or participate in education to individuals in the community (health fairs, school education, drug education, STD, etc.)	
18	BOTH	25	Evaluate client's response to medications	
98	В	26	Document teaching performed and level of understanding: for client, family or staff	
132	В	27	Act as a client advocate	

Master #	PAS Form	# 2002 Survey	Activity		
76	В	28	Implement measures to manage/prevent possible complications of client's condition and/or procedure (i.e., circulatory complications, seizures, aspiration, potential neurological complications, etc.)		
48	В	29	Intervene with client who has an alteration in bowel elimination (e.g., give enema, remove fecal impaction)		
38	В	30	Adjust/titrate dosage of medication based on assessment of physiologic parameters (i.e., giving insulin according to blood sugar levels, titrating medication to maintain a specified blood pressure, etc.)		
16	В	31	Evaluate the results of diagnostic testing (e.g., lab, radiology, EKG, etc.)		
81	В	32	Provide care to the patient in the postoperative period		
131	В	33	Assure that client has given informed consent for treatment		
13	В	34	Perform and utilize health history		
52	В	35	Provide client nutrition through continuous or intermittent tube feedings		
37	В	36	Administer medication by less common routes (i.e., vaginally, rectally, bladder instillation, continuous abdominal peritoneal dialysis, endotracheal tube, by epidural catheter or intraosseous)		
93	В	37	Perform pre- and/or postoperative education		
77	В	38	Perform phototherapy		
126	В	39	Maintain client confidentiality/privacy		
20	В	40	Check/verify accuracy of order		
10	В	41	Assess client for drug/alcohol-related dependencies, withdrawal or toxicities		
23	В	42	Check for potential interactions of medications with food, fluids and other drugs		
86	В	43	Educate patient and family about medication regimen, treatments and procedures		
71	В	44	Perform gastric lavage		
136	В	45	Participate in educating staff		
140	В	46	Perform fetal heart monitoring		
9	В	47	Identify the need for, institute and maintain suicide precautions		
17	В	48	Monitor client's physiologic response during and after conscious sedation		
148	В	49	Obtain specimens, other than blood or urine, for diagnostic testing (i.e., PKU testing, wound cultures, stool specimens, etc.)		
65	В	50	Maintain desired temperature of client using external devices (e.g., hypothermia blankets, ice packs, etc.)		
123	В	51	Receive and/or transcribe health care provider orders		
15	В	52	Perform age-specific screening examinations (i.e., Denver Developmental, scoliosis assessment, breast examinations, testicular examinations, etc.)		
145	В	53	Utilize therapeutic communication techniques to provide support to client or family and/or increase client understanding of his/her behavior		

2002 RN PRACTICE ANALYSIS UPDATE

Master #	PAS Form	# 2002 Survey	Activity
149	В	54	Use measures to maintain client's skin integrity (e.g., skin care, turn client, alternating pressure mattress, etc.)
44	В	55	Obtain specimens by drawing blood peripherally or through central line
60	В	56	Care for devices and equipment used for drainage (i.e., surgical wound drains, chest tube suction or drainage devices, urethral catheter care, etc.)
122	В	57	Initiate and update multidisciplinary care plan, care map and clinical pathway used to guide and evaluate client care
143	В	58	Provide care to client/family at end of life
144	В	59	Assist client to compensate for a sensory impairment (e.g., hearing, sight, etc.)
84	В	60	Incorporate alternative/complementary therapies into client's plan of care (i.e., acupuncture, dance therapy, music therapy, play therapy, etc.)
24	В	61	Review pertinent data prior to medication administration (i.e., VS, lab results, allergies, etc.)
57	В	62	Administer oxygen therapy
116	В	63	Participate in performance improvement/quality assurance process (formally collect data or participate on a team)
130	В	64	Report error/event/occurrence per protocol (i.e., medication error, client fall, etc.)
105	В	65	Provide support/respect for client's cultural practices/beliefs
70	В	66	Apply and maintain devices used to promote venous return (TED hose, sequential compression devices, etc.)
134	В	67	Comply with regulations governing controlled substances (e.g., counting narcotics, wasting narcotics, etc.)
49	В	68	Perform tracheostomy care
113	В	69	Follow institution's policy regarding the use of client restraints or safety devices
101	В	70	Facilitate client and/or family coping (i.e., end-of-life care, loss, grief, new diagnosis, lifestyle changes, body image, role change, stress management, crisis situations, etc.)
68	В	71	Apply, maintain or remove orthopedic devices (e.g., traction, splints, braces, casts, ace wraps, etc.)
41	В	72	Administer drugs to induce conscious sedation
4	В	73	Assess invasive monitoring data
111	В	74	Prepare/implement emergency response plans (I.e., internal/external disaster)
91	В	75	Teach clients and families about the safe use of equipment needed for care
95	В	76	Provide information about health maintenance recommendations (I.e., physician visits, immunizations, screening exams, etc.)
54	В	77	Discontinue or remove IV, NG, urethral catheter, or other lines and tubes
42	В	78	Document medication administration and client response
97	В	79	Educate client and family about rights and responsibilities
141	В	80	Provide care that meets the special needs of the elderly client
51	В	81	Insert urethral catheter
5	Α	26	Assess/triage clients to prioritize the order of care delivery
40	Α	27	Administer blood products
12	Α	28	Perform head-to-toe physical assessment

Master #	PAS Form	# 2002 Survey	Activity		
1	Α	29	Evaluate client's weight		
39	Α	30	Monitor and maintain infusion sites, and equipment (i.e, flushing infusion devices, checking rates, fluids and sites, etc.)		
147	Α	31	Obtain urine specimens for diagnostic testing		
96	Α	32	Identify barriers to learning		
129	Α	33	Recognize tasks/assignments you are not prepared to perform and seek assistance		
90	Α	34	Provide perinatal education		
125	Α	35	Provide client or family information about and/or comply with advanced directives		
31	Α	36	Administer medication in the form of eye, ear or nose drops, sprays, ointments, or by inhalation (including nebulizer or metered dose inhaler)		
80	Α	37	Prepare patient for surgery		
67	Α	38	Provide therapies for comfort and treatment of, inflammation and swelling (apply heat and cold treatments, elevate limb, etc.)		
127	Α	39	Report unsafe practice of health care provider		
87	Α	40	Provide education on growth and development		
106	Α	41	Provide care and/or support for client with non-substance-related dependencies (i.e., gambling, pornography, pedophilia, etc.)		
25	Α	42	Perform calculations needed for medication administration		
53	Α	43	Perform an electrocardiology test (EKG)		
66	Α	44	Provide wound/ostomy care other than dressing change (i.e., wound irrigation, wound debridement, ostomy/fistula care, etc.)		
135	Α	45	Serve as a resource to other staff		
142	Α	46	Assist client/family to identify/participate in activities fitting his/her age, preference, physical capacity and psychosocial/behavioral/physical development		
102	Α	47	Provide a therapeutic or controlled environment for clients with emotional/behavioral issues		
22	Α	48	Prepare medication for administration (i.e., crush medications as needed and appropriate, place in appropriate administration device, assemble equipment, etc.)		
43	Α	49	Perform diagnostic testing (i.e., $\rm O_2$ saturation, glucose monitoring, testing for occult blood, gastric Ph, urine specific gravity, etc.)		
58	Α	50	Perform oral or pulmonary suctioning		
124	Α	51	Maintain continuity of care between/among care agencies		
79	Α	52	Provide newborn care		
107	Α	53	Promote healthy family, client and community interactions		
146	Α	54	Intervene with client who has an alteration in nutritional intake (e.g., institute diet, change method or time of meals, arrange for more ethnically appropriate foods, etc.)		
137	A	55	Perform a risk assessment (i.e., sensory impairment, potential for falls, level of mobility, etc.)		
50	Α	56	Assist with invasive procedures (i.e., central line placements, biopsies, debridements, etc.)		
120	А	57	Collaborate with other disciplines in providing client care (i.e., physician, RT, PT, radiology, dietary, lab, etc.)		

Master #	PAS Form	# 2002 Survey	Activity
114	A	58	Protect client from injury (e.g., falls, electrical hazards, malfunctioning equipment, rugs, clutter, etc.)
103	Α	59	Actively listen to client/family concerns
72	А	60	Use precautions to prevent further injury when moving client with cervical or spinal injury (i.e., log-rolling, abduction pillow)
94	Α	61	Educate client and family about pain management
45	Α	62	Perform or assist with dressing change (i.e., wound, central line dressing, etc.)
117	Α	63	Make appropriate referrals to community resources
110	Α	64	Follow procedures for handling biohazardous materials
104	Α	65	Assist client with emotional and spiritual needs
69	Α	66	Perform irrigations (i.e., of bladder, ear, eye, etc.)
64	Α	67	Access implanted venous access devices (i.e., porta-cath, P.A.S. port, shunt, etc.)
19	Α	68	Initiate, maintain and/or evaluate telemetry monitoring
112	Α	69	Participate in maintaining institution's security plan (i.e., newborn nursery security, bomb threats, fire emergency plan, etc.)
92	Α	70	Educate client/family on home safety issues
11	Α	71	Assess family dynamics (i.e., structure, bonding, communication, boundaries, coping mechanisms, etc.)
56	Α	72	Perform necessary postmortem procedures
59	Α	73	Start an intravenous line (IV)
3	Α	74	Monitor and maintain client on a ventilator
85	Α	75	Connect and maintain external pacing devices
8	Α	76	Identify client's risk for abuse/neglect
61	Α	77	Assure appropriate and safe use of equipment in performing client care procedures and treatments
89	Α	78	Provide information necessary for prevention of high risk health behaviors (i.e., smoking cessation, safe sexual practices, etc.)
46	Α	79	Insert nasogastric tube
133	Α	80	Comply with regulations for reporting (e.g., abuse/neglect, communicable disease, gunshot wounds, dog bites, etc.)
82	Α	81	Remove wound sutures or staples

Appendix B

Survey Tool

	TATE BOARDS OF NURSING
This questionnaire is part of a comprehensive study United States. The study is being performed by the	of the practice of newly licensed nurses in the National Council of State Boards of Nursing.
	y <u>filling in the oval</u> of the response that most closely all alternative answers. Choose the answer that best val(s). A few questions ask you to write in provided following the question.
You will notice that many questions ask you to repoint important that we obtain information from nurses explease answer questions according to what you did typical.	ort what you did on your <u>last day of work.</u> It is operiencing both typical and unusually workdays, so on your <u>last</u> day of work even if that day was not
As used in this questionnaire, the "client" can be an aggregate/group, or community/population. "Clients	n individual, individual plus family/significant other, an " are the same as "residents" or "patients".
Your answers will be kept confidential. Your individu	al responses to the questions will not be released.
MARKING INSTRUC	TIONS
Use a No. 2 pencil or blue or black ink pen on Do not use pens with ink that soaks through the Make heavy dark marks that fill the oval comp. If you want to change an answer and used a p. If you want to change an answer and used a p. the first mark, and fill in the oval for your preference.	ly. RIGHT MARK letaly. encil, erase cleanly. WRONG MARKS en, place an "X" over erred answer.
If we need additional information in order to clarify the results of this study, we may call some participants. If you would be willing to answer a few additional questions by phone, please provide a number where you can be reached during the day or early exercise.	Are you currently working as a Registered Nurse in the United States? Yes No → Skip to Section 5: Demographic Information
this study, we may call some participants if you would be willing to answer a few additional questions by phone, please provide a number where you can be reached during the day or early evening.	3. Are you currently working as a Registered Nurse in the United States? Yes. No → Skip to Section 5: Demographic Information 1. In your current position, do you give nursing care directly 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: Experience and Orientation Yes, less than 20 hours per week, on average → Skip to Section 5: Demographic Information No → Skip to Section 5: Demographic Information
this study, we may call some participants if you would be willing to answer a few additional questions by phone, please provide a number where you can be reached during the day or early evening.	States? Yes No ⇒ Skip to Section 5: Demographic information 1. In your current position, do you give nursing care directly to clients? Note: Faculty supervision of student clinical experiences is not considered "direct eare". Yes, 20 or more hours per week, on average ⇒Continue to Section 1: Experience and Orientation Yes, less than 20 hours per week, on average ⇒ Skip to Section 5: Demographic information

2002 RN PRACTICE ANALYSIS UPDATE

	SECTION 1: EXPERIENCE AND ORIENTATION	Do you routinely have administrative responsibilities within your nursing position (e.g., Unit Manager, Team Leader, Charge
1.	What is the total number of months you have worked in the U.S. as a licensed Registered Nurse?	Nurse, Coordinator, etc.)?
	Example: 0 8 Months Months	If yes, is this your primary position?
	Months Months Mo	Yes No No SECTION 2: WORK ENVIRONMENT
2	Have you ever worked outside the U.S. as a Registered Nurse?	Which of the following <u>best</u> describes <u>most</u> of your clients on the
۷.	Yes	last day you worked? (Select all that apply)
	○ No ⇒ Sklp to question 3 If yes, what is the total number of months you worked outside the U.S. as a Registered Nurse?	Well clients, possibly with minor illnesses OB (Maternity) clients Clients with stabilized chronic conditions Clients with unstabilized chronic conditions
	Months (0) (0) (1) (2) (2) (3) (3) (4) (4) (4)	Clients with acute conditions, including clients with medical, surgical or critical conditions Clients at end of life (e.g., terminally ill, seriously ill, etc.) Clients with behavioral/emotional conditions (e.g., psychiatric conditions, substance abuse, etc.) Other, please specify:
	(3) (3)	
	(6) (7) (7) (7) (8) (9) (9) (9)	Which of the following <u>best</u> describes the ages of <u>most</u> 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)
3.	Which of the following <u>best describes</u> the orientation you received for your current position? (Select only one)	Young Adult (ages 19-30) Adult (ages 31-64)
	No formal orientation ⇒ Sklp to question 5 Classroom instruction/skills lab work only Classroom and/or skills lab plus supervised work with patients Work with an assigned preceptor or mentor with or without	Elderly (65-85)
	additional classroom or skills lab work A formal internship with or without additional classroom or skills	3a. Which of the following choices <u>best</u> describes your employment
	lab work	setting/specialty area on the last day you worked? If you worked mainly in one setting, fill in the appropriate oval for that one
4.	Other, please specify: If you had an orientation period, how long was it?	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)
	Number of weeks in orientation	 Critical care (e.g., ICU, CCU, step-down units, pediatric/ neonatal intensive care, emergency department,
		post-anesthesia recovery unit, etc.) () Medical-surgical unit or any of its sub-specialties (e.g.,
	夕 の (8) (8)	oncology, orthopedics, neurology, etc.) () Pediatrics or nursery
	(a) (b) (c) (c) (c) (d)	☐ Labor and delivery () Postpartum unit
	(D)	Psychiatry or any of its sub-specialties (e.g., detox, etc.) Operating room, including outpatient surgery and
	(3) (3)	surgicenters
	(0)(3)	 Nursing home, skilled or intermediate care Other long term care (e.g., residential care, developmental disability/mental retardation care, etc.)
5.	Which of the following types of certificates have you earned or courses have you completed since graduation? (Select all that apply)	Rehabilitation
	Advanced Cardiac Life Support	Subacute unit Transitional care unit
	Basic Life Support Chemotherapy	Physician's/dentist's office Occupational health
	Conscious Sedation	Outpatient clinic
	Coronary Care Critical Care	 Home health, including visiting nurses associations Public health
	 ☐ Intravenous Therapy ☐ Peritoneal Dialysis 	Student/school health Hospice care
	Rehabilitation	○ Prison
	○ None ○ Other, please specify:	Other, please specify:
	P	2
_	Pag	ge 2

SECTION 2: WORK ENVIRONMENT (continued) 6. Which of the following best describes the hours you work? (Select only one) 3b. Which of the following best describes the type of facility/ Days (8, 10, or 12 hour shift) Evenings (8, 10, or 12 hour shift) organization in which the previously identified employment Nights (8, 10, or 12 hour shift) Rotating shifts setting/specialty area is located? (Select only one) Hospital Long-term care facility Other, please specify; Community-based or ambulatory care facility/organization (including public health department, visiting nurses association, home health, physician's office, clinic, school, prison, etc.) Other, please specify: 7. Which of the following best describes the location and size of your employment setting? a. Location Urben/Metropolitan area. 4. Alternative/complementary therapies are activities designed to Suburban augment the effects of drugs, surgery and technology. Some of the C Rural better known alternative/complementary therapies are listed below. Mark those therapies that you personally routinely use in your current nursing position. (Select ALT that apply) b. Population C Less than 20,000 C 20,000 to 49,999 C 50,000 to 99,999 C 100,000 to 500,000 I do not use alternative therapy Acupressure or therapeutic touch Aromatherapy Art therapy Greater than 500,000 Biofeedback Don't know Dance therapy Imagery Massage therapy Music therapy Naturopathy Pet therapy Relaxation therapy Other, please specify: 5. If you work in a hospital or nursing home, how large is it? (Select only one) Under 100 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 SECTION 3 PART A: NURSING ACTIVITIES This section contains a list of activities descriptive of nursing practice in a variety of settings. Do not be surprised if some activities do not apply to your selling. For each activity, two questions are asked. QUESTION A-FREQUENCY: If the activity is performed in your work setting, how often did you personally perform the activity on the last day you worked? If the activity is never performed in your work setting its not applicable to your type of nursing) then mark the oval in the column with the heading. "NEVER performed in work setting," and go to the next activity. If the scivity is applicable to your work setting, mark the oval indicating the approximate total number of times you performed the activity on the last day you work." I Times "if performed once, "2 Times" if performed twice, "3 Times" if performed three times, "4 Times" if you performed the activity four times, and "5+ Times" if you performed the activity five or more times on the last day you worked. QUESTION B-PRIORITY: What is the priority of performing this nursing activity compared to the performance of other nursing activities? All activities are designed to help clients, but some activities are more important than others in regard to client safety. Consider the priority of each activity relative to other nursing activities you perform when considering risk of unnecessary complications, impairment of function, or serious distress to clients. For each activity that is performed in your work setting, mark the box corresponding to a priority rating, from a 1 (lowest priority) to a 4 (highest priority). l'Icase mark a priority rating for all activities performed in your work setting even if you did not perform the activity on your last day of work. NOTE: Inclusion of an activity on this practice analysis questionnaire does not imply that the activity is or would be included in the registered nurse scope of practice defined by any specific state. You must refer to your local board of nursing for information about your scope of practice. continued → Page 3

SECTION 3 PART A: NURSING ACTIVITIES (continued)

A-Frequency B-Priority Question A – If an activity does not apply to your work setting, mark "Never Performed in work setting" then move to next activity. If activity is performed in State of the state 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 - Rate the overall priority of this activity considering client safety, and/or threat of complications or distress with 1 = lowest, 2 = low, 3 = high, and 4 = highest. Provide and receive report on assigned clients Apply principles of infection control (e.g., handwashing, appropriate room assignment, isolation, aseptic/sterile technique, universal/standard precautions) 3. Document procedures and treatments performed and response to treatment Perform procedures necessary for admitting, transferring, or discharging a client
 Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, Heimlich maneuver, respiratory support, etc.) Perform system-specific assessment or re-assessment (i.e., GI, respiratory, cardiac, etc.) Administer medication by SQ, IM, intra-dermal, or topical route Assess clients vital signs (i.e., temperature, pulse, respiratory rate, and blood pressure) 9. Assess psycho-social, spiritual, cultural, and occupational factors affecting care Perform intra-natal care (care provided during labor and birth) Evaluate appropriateness of medication order for client (i.e., is the medication appropriate to treat the client's condition, given by appropriate route, in appropriate dosage, etc.) Supervise care provided by others (i.e., LPN/VN, assistive personnel, other RNs, etc.) 13. Provide intraoperative care (positioning, maintain sterile field, operative assessment, etc.) 14. Assist client in the performance of activities of daily living (i.e., ambulation, reposition, hygiene, transfer to chair, eating, toileting, etc.) Participate in group sessions (i.e., therapy, support groups, etc.)
 Administer medication by intravenous route (i.e., IVP, IVPB, PCA pump, continuous infusion of fluids, parenteral nutrition) 17. Perform pre-natal care Perform post-natal care 19. Administer medication by the oral route or gastric tube (PO, sublingual, buccal, naso-gastric tube, G-tube, etc.) 20. Provide client and family with information about condition/illness, expected progression and/or possible outcomes 21. Monitor client's hydration status (e.g., I&O, edema, signs and symptoms of dehydration, etc.) Perform peritoneal dialysis
 Implement the 5 rights of medication administration 24. Plan and/or participate in education to individuals in the community (health fairs, school education, drug education, STD, etc.) 25. Evaluate client's response to medications Assess/triage clients to prioritize the order of care delivery Administer blood products Perform head to toe physical assessment 29. Evaluate client's weight Monitor and maintain infusion sites, and equipment (i.e., flushing infusion devices, checking rates, fluids and sites, etc.) 31. Obtain urine specimens for diagnostic testing Identify barriers to learning 32. 33. Recognize tasks/assignments you are not prepared to perform and seek assistance Provide peri-natal education 35. Provide client or family information about, and/or comply with advanced directives Administer medication in the form of eye, ear or nose drops, sprays, ointments or by inhalation (including nebulizer or metered dose inhaler) Prepare client for surgery Provide therapies for comfort and treatment of, inflammation, swelling (apply heat and cold treatments, elevate limb, etc.) മത Report unsafe practice of health care provider Provide education on growth and development 41. Provide care and/or support for client with non-substance related dependencies (i.e., gambling, pornography, pedophilia, etc.)

Page 4

ധയയയയ നതതതത

Perform calculations needed for medication administration

 Provide wound/ostomy care other than dressing change (i.e., wound irrigation, wound debridement, ostomy/fistula care, etc.)

43. Perform an electrocardiology test (EKG)

45. Serve as a resource person to other staff

	63 8 63 6 69	(D) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	0.00	Œ(
000 000 000 000		(D) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	D (E)	Œ(
000 000 000 000		(D) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	D (E)	Œ(
000 000 000	m m	000		59	1176	23/1/2
(10) (10) (10) (10)				1-1		
ಹಾದ	olcol	(2) G				
		leste	3000	leak	aole	vala:
	pΨ					
	D (D					
0000	000	200	20(3)	9	99	200
000		020	200	57	0	200
000	nim)	000	20(20)	(50)	co (c	200
ಹುದ	D (T)	(Z) (Z	മത	(57)	m c	2) G
000						-
0.0 0	n (co)	200	ചവ	60	ωl	20 0
0.00	000	000	3)(4)	60	00	2) 0
OD CO	DOD	000	DA	9	m	200
000						
000	糾뭐		웨일		믜	겙
	2 36 36363693 33636969 636 0 30 30 3656969	2 95 369263693 326369363 636 3 5 95 369263693 3263696963 636 3 5 35 369263693 326369363 636 3			C	



SECTION 3 PART B: KNOWLEDGE

This section contains categories of knowledge that may be used in nursing practice. Rate each of the knowledge categories by marking the ovals corresponding with the following two scales:

Importance	Usage
How important is this knowledge to the work you perform in your current nurse practice setting?	How do you most often use this type of knowledge in providing safe care to clients within your nurse practice setting?
0 – Not important 1 – Minimally important 2 – Moderately important 3 – Very important	0 – I do not use the knowledge 1 – I recognize/recall the knowledge 2 – I apply/interpret/analyze the knowledge

Knowledge Categories	Importance	Usage
Biologic sciences (anatomy & physiology, biology, microbiology): The study of life and living things including the structure and function of the human body and the organisms which invade it.	യവയയ	യവയ
Communication skills: Knowledge and use of oral, non-verbal, written and information technology communication skills necessary for safe, effective client care. These skills are utilized to accurately deliver and receive information between and among the nurse, the health care team, clients, families, and the community. Also included is the ability to recognize and appropriately address barriers to communication.	തനതത	തനത
Economics: The study of the management of fiscal resources. This includes a beginning knowledge of access-to-care regulations.	യവയയ	യനമ
Mathematics: Ability to perform the calculations needed to plan and deliver care. Calculations would include, at a minimum, those needed to safely prepare and administer medications to clients and evaluate client fluid balance and nutritional intake.	യവമത	തനന
Nutrition: Knowledge of the processes involved in ingesting and utilizing food substances. These processes include ingestion of proper amounts of needed nutrients, digestion, absorption, metabolism and storage.	തനതത	തനത
Pathophysiology; Knowledge of how normal physiologic processes are altered by disease.	തനതത	തനത
Pharmacology: Knowledge of how drugs interact with body systems to create both desired and unwanted effects. Physical sciences (chemistry and physics):	തനതത	തനത
Knowledge of substances (such as electrolytes and hydrogen ions) and the laws governing matter and their influence on normal human functions. Principles of teaching and learning:	യധയയ	യഥയ
Finite of reaching and realising. Knowledge needed to assess learning situations and identify optimal methods of teaching clients of all ages. Quality management/infection Control:	യനമര	യവയ
Knowledge needed to institute/utilize infection control measures, recognize and report incidents/errors/occurrences, and actively promote the improvement of client care processes. Also included is a working knowledge of standards set by various regulatory bodies such as JCAHO, OSHA, etc.	യവരു	യനമ
Social sciences (psychology, sociology, growth & development): Knowledge of the emotional, psychological, spiritual, and social functioning of human beings throughout their life span, individually and in families or other societal groups.	തനതത	തനത
Care management/leadership: Knowledge needed to organize and coordinate the care needed by one client, a group of clients, or a community. This knowledge includes basic management principles such as motivational strategies, group process, interpersonal relations, and delegation techniques. Included is the ability to collaborate with and coordinate the care provided by members of other health care disciplines.	യവമര	യനമ
Clinical decision-making/critical thinking: The ability to synthesize, organize and prioritize the multiple variables governing a situation and devise a workable plan for solving problems.	തനതത	തനത
Ethlcs: Knowledge of the principles governing the conduct of a nurse. These principles deal with the relationship of a nurse to the client, families, the health care team, the nursing profession and society.	യവരു	തനന
Knowledge needed to perform nursing procedures and psycho-motor skills: Nursing-specific knowledge about performance of procedures and skills such as insertion of a urethral catheter, starting an IV, changing a wound dressing, inserting a naso-gastric tube, collecting lab specimens, reading telemetry strips, monitoring fetal heart tones, etc.	യവമര	യയയ
Nursing diagnosis: Knowledge needed to recognize assessment data necessitating assignment of one or more identified nursing diagnoses.	തനതത	തനത
Nursing research: Knowledge of how to appropriately evaluate the results of nursing research for use in client care.	തനതത	തനത
Scope of practice/professional roles: Knowledge of one's own legal scope of practice and the scopes of practice of those to whom activities are assigned or delegated.	യനമര	യധയ

Page 6

S	ECTION 4: DESCRIPTION O		3.	(continued) Sets of Activities A	pproximate Amount of Time (Hours) Spent on Set of Activities
1	How many hours did you work on you		6	Provide educational support to clients and families (e.g., assess- level of knowledge, teach about condition and interventions, provide information about caring for others, etc.)	
2	For how many patients/clients were	vers mesmonolible on orac bed	7	Work effectively within a health care team (e.g., supervise or guide care provided to clients by other staff; communicate with physician, dieticlan, physical therapy, respiratory therapy, and/or other health team members about clients; take verbal or phone orders; perform discharge planning; teach staff	
-	day of work? This includes clients of assigned to provided direct care, inductions such as licensed practical nut any performance of tasks or other nor any part of your time in the work. Number of patients/clients	r patients to whom you were direct care (provided through rises or nursing assistants), or esponsibility for care during all setting.	8	members, etc.) Perform administration/ menagement activities (e.g., schedule staff hours, hire, fire, of discipline staff members; make staff assignments; plan staff education activities; order supplies, etc.)	©©UQQQQQQQ
	0000 0000 0000 0000 0000	,	9	Perform activities related to the ethical or legal aspects of care (e.g., enquire about clients' advanced directives, provide for client privacy, act as a client advocate, etc.)	พลกลพลพลพก
	777 363 363		10	Other activities not covered by above - write in below	©©0000000
	How much of your time was spent p lypes of activities on your lest day or activities please rate the approximal that type of activity on your last day hour. For example, if you spent above activities mark the oval of the "2." If another set of activities, mark the or activities.	of work? For each of the sets of the amount of time you spent on of work rounded to the nearest at 2 and 1/4 hours on a set of you spent 3 and 1/4 hours on	sumn	narized to describe the group that	background information that will be
	Sets of Activities App	proximate Amount of Time (Hours) Spent on Set of Activities		dual responses will be reported. Did vou work as a nursing assistan	t/aide, etc. prior to becoming a RN?
1	Perform activities necessary for safe medication administration (e.g., check for incompatibilities, give medications by appropriate routes, check for side effects and/or desired effects, etc.)	พลกดลลลลอ		Yes No → Skip to question 2 "yes", for how many years and r	
2	Per form activities related to the psychological needs of clients (e.g., assess for client and family psychological needs; provide support and interventions to assist with coping, and maintenance or improvement of psychological functioning; etc.)	wanaaaaan		CC	
3	Perform activities related to assessment and/or evaluation of clients (e.g., assess physical status, evaluate lab results, monitor treatment effects.			⊙⊙ L⊡ Oid you work as a LPN/VN prior to ○ Yes	becoming a RN?
4	re-assessment rounds, etc.) Perform routine client care activities (e.g., provide routine cares such as baths, V9s, ambulation, etc., perform procedures such as wound care, placing urinary catheters, starting	0000000000		00 mm mm 00 mm mm	nonths? onths
5	IVs, etc.) Ivs, etc.) Perform activities related to the care environment (e.g., assess clients' home environments, provide a safe care environment, assess for safe functioning of client care equipment, etc.)			99 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	continued ⇒
		Pag			continued⇒

SECTION 5: DEMOGRAF	PHIC INFORMATION (continued)
3. Gender Male Female	Is English the first language you learned to speak? Yes No
4. Age in years years U U U U U U U U U U U U U U U U U U	7. Type of <u>basic</u> nursing education program most recently completed. RN - Diploma in U.S. RN - Associate Degree in U.S. RN - Baccalaureate Degree in U.S. RN - Generic Master's Degree in U.S. RN - Generic Master's Degree in U.S. RN - Generic Doctorate in U.S. (e.g., ND) Any nursing program NOT located in the U.S. Other program (please specify):
	How many months has it been since you graduated from the above nursing education program?
5. Select below the answer <u>most descriptive</u> of your racial/ethnic background (<i>Select ONE answer</i>) American Indian/Alaska Native Asian (e.g., Filipino, Japanese, Chinese, etc.) Black/African American White Hispanic or Latino Non-white Hispanic or Latino Native Hawaiian/Other Pacific Islander White Multi-ethnic or racial background	Months since graduation O O O O O O O O O O O O O O O O O O O
SECTION	6: COMMENTS
-	
Thank you for participat	ing in this important work!
DO NOT MARK IN THIS AREA	12345

Appendix C

Activities Rank Ordered by Overall Average Frequency

#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency
106	Provide care and/or support for client with non-substance-related dependencies (i.e., gambling, pornography, pedophilia, etc.)	0.53	0.55	0.27
127	Report unsafe practice of health care provider	0.64	0.65	0.35
56	Perform necessary postmortem procedures	0.72	0.7	0.66
111	Prepare/implement emergency response plans (i.e., internal/external disaster)	0.87	0.86	0.5
85	Connect and maintain external pacing devices	0.91	0.89	0.85
71	Perform gastric lavage	0.91	0.8	0.93
133	Comply with regulations for reporting (e.g., abuse/neglect, communicable disease, gunshot wounds, dog bites, etc.)	0.91	0.86	0.7
46	Insert nasogastric tube	0.97	0.88	0.91
82	Remove wound sutures or staples	0.99	0.98	0.75
41	Administer drugs to induce conscious sedation	1.00	1.01	1.04
84	Incorporate alternative/complementary therapies into client's plan of care (i.e., acupuncture, dance therapy, music therapy, play therapy, etc.)	1.02	0.94	0.81
15	Perform age-specific screening examinations (i.e., Denver Developmental, scoliosis assessment, breast examinations, testicular examinations, etc.)	1.02	0.96	0.82
77	Perform phototherapy	1.02	0.77	1.02
9	Identify the need for, institute and maintain suicide precautions	1.04	0.92	0.83
130	Report error/event/occurrence per protocol (i.e., medication error, client fall, etc.)	1.04	1.01	0.8
69	Perform irrigations (i.e., of bladder, ear, eye, etc.)	1.05	0.99	0.89
62	Perform emergency care procedures (e.g., cardiopulmonary resuscitation, Heimlich maneuver, respiratory support, etc.)	1.12	1.03	1.15
87	Provide education on growth and development	1.16	1.12	1.13
83	Perform peritoneal dialysis	1.18	1.13	0.69
117	Make appropriate referrals to community resources	1.18	1.25	0.85
49	Perform tracheostomy care	1.20	1.21	0.96
37	Administer medication by less common routes (i.e., vaginally, rectally, bladder instillation, continuous abdominal peritoneal dialysis, endotracheal tube, by epidural catheter or intraosseous)	1.22	1.23	1.11
143	Provide care to client/family at end of life	1.22	1.21	0.92
100	Participate in group sessions (i.e., therapy, support groups, etc.)	1.24	1.17	0.84
99	Plan and/or participate in education to individuals in the community (health fairs, school education, drug education, STD, etc.)	1.25	1.3	1.03

#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency
92	Educate client/family on home safety issues	1.27	1.24	0.91
50	Assist with invasive procedures (i.e., central line placements, biopsies, debridements, etc.)	1.32	1.27	1.21
64	Access implanted venous access devices (i.e., porta-cath, P.A.S. port, shunt, etc.)	1.32	1.24	1.26
68	Apply, maintain or remove orthopedic devices (e.g., traction, splints, braces, casts, ace wraps, etc.)	1.34	1.3	1.43
90	Provide perinatal education	1.36	1.36	1.89
140	Perform fetal heart monitoring	1.37	1.3	1.63
78	Perform prenatal care	1.38	1.5	1.49
112	Participate in maintaining institution's security plan (i.e., newborn nursery security, bomb threats, fire emergency plan, etc.)	1.40	1.29	1.27
51	Insert urethral catheter	1.47	1.5	1.26
116	Participate in performance improvement/quality assurance process (formally collect data or participate on a team)	1.48	1.55	1.15
65	Maintain desired temperature of client using external devices (e.g., hypothermia blankets, ice packs, etc.)	1.48	1.52	1.23
8	Identify client's risk for abuse/neglect	1.49	1.43	1.26
40	Administer blood products	1.50	1.5	1.29
136	Participate in educating staff	1.50	1.5	1.11
89	Provide information necessary for prevention of high risk health behaviors (i.e., smoking cessation, safe sexual practices, etc.)	1.51	1.52	1.31
3	Monitor and maintain client on a ventilator	1.53	1.44	1.85
80	Prepare client for surgery	1.57	1.59	1.21
17	Monitor client's physiologic response during and after conscious sedation	1.60	1.67	1.27
146	Intervene with client who has an alteration in nutritional intake (e.g., institute diet, change method or time of meals, arrange for more ethnically appropriate foods, etc.)	1.62	1.52	1.38
11	Assess family dynamics (i.e., structure, bonding, communication, boundaries, coping mechanisms, etc.)	1.63	1.58	1.67
4	Assess invasive monitoring data	1.65	1.6	1.82
66	Provide wound/ostomy care other than dressing change (i.e., wound irrigation, wound debridement, ostomy/fistula care, etc.)	1.65	1.66	1.14
144	Assist client to compensate for a sensory impairment (e.g., hearing, sight, etc.)	1.65	1.66	1.49
125	Provide client or family information about and/or comply with advanced directives	1.65	1.73	1.27
53	Perform an electrocardiology test (EKG)	1.68	1.7	1.65
102	Provide a therapeutic or controlled environment for clients with emotional/behavioral issues	1.71	1.67	1.23
138	Perform intranatal care (care provided during labor and birth)	1.71	1.8	1.94

#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency
48	Intervene with client who has an alteration in bowel elimination (e.g., give enema, remove fecal impaction)	1.74	1.69	1.43
91	Teach clients and families about the safe use of equipment needed for care	1.76	1.76	1.52
124	Maintain continuity of care between/among care agencies	1.79	1.8	1.16
142	Assist client/family to identify/participate in activities fitting his/her age, preference, physical capacity and psychosocial/behavioral/physical development	1.81	1.78	1.53
72	Use precautions to prevent further injury when moving client with cervical or spinal injury (i.e., log-rolling, abduction pillow)	1.84	1.79	1.55
113	Follow institution's policy regarding the use of client restraints or safety devices	1.85	1.78	1.53
95	Provide information about health maintenance recommendations (i.e., physician visits, immunizations, screening exams, etc.)	1.85	1.89	1.61
10	Assess client for drug/alcohol-related dependencies, withdrawal or toxicities	1.87	1.97	1.5
148	Obtain specimens, other than blood or urine, for diagnostic testing (i.e., PKU testing, wound cultures, stool specimens, etc.)	1.91	1.95	1.59
101	Facilitate client and/or family coping (i.e., end-of-life care, loss, grief, new diagnosis, lifestyle changes, body image, role change, stress management, crisis situations, etc.)	1.91	1.9	1.82
107	Promote healthy family, client and community interactions	1.92	1.84	1.85
93	Perform pre- and/or postoperative education	1.94	2	1.7
58	Perform oral or pulmonary suctioning	1.95	1.73	2.06
79	Provide newborn care	1.97	1.74	2.7
139	Perform postnatal care	1.98	1.93	2.14
147	Obtain urine specimens for diagnostic testing	2.00	2.07	1.46
129	Recognize tasks/assignments you are not prepared to perform and seek assistance	2.01	1.91	2.1
52	Provide client nutrition through continuous or intermittent tube feedings	2.03	1.98	1.76
31	Administer medication in the form of eye, ear or nose drops, sprays, ointments or by inhalation (including nebulizer or metered dose inhaler)	2.16	2.16	1.6
59	Start an intravenous line (IV)	2.18	2.29	1.89
105	Provide support/respect for client's cultural practices/beliefs	2.20	2.21	2.14
73	Provide intraoperative care (positioning, maintain sterile field, operative assessment, etc.)	2.21	2.32	1.98
44	Obtain specimens by drawing blood peripherally or through central line	2.22	2.21	2.31
135	Serve as a resource person to other staff	2.22	2.36	1.99
96	Identify barriers to learning	2.25	2.38	2.01
67	Provide therapies for comfort and treatment of, inflammation, swelling (apply heat and cold treatments, elevate limb, etc.)	2.28	2.25	1.95

#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency
104	Assist client with emotional and spiritual needs	2.28	2.23	2.16
45	Perform or assist with dressing change (i.e., wound, central line dressing, etc.)	2.31	2.26	1.77
81	Provide care to client in the post-operative period	2.31	2.4	1.99
1	Evaluate client's weight	2.34	2.36	2.01
131	Assure that client has given informed consent for treatment	2.37	2.39	2.04
97	Educate client and family about rights and responsibilities	2.38	2.41	2.24
70	Apply and maintain devices used to promote venous return (TED hose, sequential compression devices, etc.)	2.40	2.51	2.11
60	Care for devices and equipment used for drainage (i.e., surgical wound drains, chest tube suction or drainage devices, urethral catheter care, etc.	2.58	2.67	2.37
54	Discontinue or remove IV, NG, urethral catheter, or other lines and tubes	2.60	2.67	2.4
55	Perform procedures necessary for admitting, transferring, or discharging a client	2.67	2.67	2.65
13	Perform and utilize health history	2.77	2.78	2.73
25	Perform calculations needed for medication administration	2.79	2.71	2.73
122	Initiate, update multidisciplinary care plan, care map, clinical pathway used to guide or evaluate client care	2.84	2.9	2.76
108	Assess psychosocial, spiritual, cultural, and occupational factors affecting care	2.84	2.95	2.77
94	Educate client and family about pain management	2.89	2.92	2.8
137	Perform a risk assessment (i.e., sensory impairment, potential for falls, level of mobility, etc.)	2.92	2.9	2.44
19	Initiate, maintain and/or evaluate telemetry monitoring	2.93	3.01	3.3
110	Follow procedures for handling biohazardous materials	2.94	2.97	2.47
38	Adjust/titrate dosage of medication based on assessment of physiologic parameters (i.e., giving insulin according to blood sugar levels, titrating medication to maintain a specified blood pressure, etc.)	2.99	3.03	2.72
23	Check for potential interactions of medications with food, fluids and other drugs	3.06	3.26	2.57
145	Utilize therapeutic communication techniques to provide support to client or family and/or increase client understanding of his/her behavior	3.09	3.14	3.1
57	Administer oxygen therapy	3.09	3.04	3.13
141	Provide care that meets the special needs of the elderly client	3.14	3.09	2.78
121	Supervise care provided by others (i.e., LPN/VN, assistive personnel, other RNs, etc.)	3.17	3.18	2.99
86	Educate client and/or family about medication regimen, treatments and procedures	3.20	3.23	3.22
119	Provide and receive report on assigned clients	3.24	3.29	3.22
16	Evaluate the results of diagnostic testing (e.g., lab, radiology, EKG, etc.)	3.28	3.24	3.37

#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency
98	Document teaching performed and level of understanding: client, family, or staff	3.30	3.45	3.19
88	Provide client and family with information about condition/illness, expected progression and/or possible outcomes	3.35	3.4	3.31
134	Comply with regulations governing controlled substances (e.g., counting narcotics, wasting narcotics, etc.)	3.41	3.37	3.39
22	Prepare medication for administration (i.e., crush medications as needed and appropriate, place in appropriate administration device, assemble equipment, etc.)	3.46	3.48	3.21
132	Act as a client advocate	3.46	3.47	3.52
123	Receive and/or transcribe health care provider orders	3.47	3.47	3.67
120	Collaborate with other disciplines in providing client care (i.e., physician, RT, PT, radiology, dietary, lab, etc.)	3.47	3.4	3.58
5	Assess/triage clients to prioritize the order of care delivery	3.48	3.6	3.48
114	Protect client from injury (e.g., falls, electrical hazards, malfunctioning equipment, rugs, clutter, etc.)	3.53	3.4	3.36
29	Administer medication by SQ, IM, intradermal, or topical route	3.53	3.66	3.18
61	Assure appropriate and safe use of equipment in performing client care procedures and treatments	3.57	3.61	3.41
76	Implement measures to manage/prevent possible complications of client's condition and/or procedure (i.e., circulatory complications, seizures, aspiration, potential neurological complications, etc.)	3.58	3.57	3.4
63	Assist client in the performance of activities of daily living (i.e., ambulation, reposition, hygiene, transfer to chair, eating, toileting, etc.)	3.65	3.6	3.58
149	Use measures to maintain client's skin integrity (e.g., skin care, turn client, alternating pressure mattress, etc.)	3.67	3.65	3.34
43	Perform diagnostic testing (i.e., $\rm O_2$ saturation, glucose monitoring, testing for occult blood, gastric Ph, urine specific gravity, etc.)	3.69	3.7	3.65
27	Administer medication by the oral route or gastric tube (PO, sublingual, buccal, nasogastric tube, G-tube, etc.)	3.83	3.79	3.77
103	Actively listen to client/family concerns	3.83	3.87	3.78
24	Review pertinent data prior to medication administration (i.e., VS, lab results, allergies, etc.)	3.96	3.99	4.01
12	Perform head-to-toe physical assessment	3.98	4.01	4.15
21	Evaluate appropriateness of medication order for client (i.e., is the medication appropriate to treat the client's condition, given by appropriate route, in appropriate dosage, etc.)	4.08	4.12	4.06
14	Perform system-specific assessment or reassessment (i.e., GI , respiratory, cardiac, etc.)	4.10	4.19	4.32
7	Monitor client's hydration status (e.g., $1\&0$, edema, signs and symptoms of dehydration, etc.)	4.11	4.13	4.24
39	Monitor and maintain infusion sites, and equipment (i.e, flushing infusion devices, checking rates, fluids and sites, etc.)	4.13	4.2	4.32

#	Activity	Overall Average Frequency 0-5	2002 ADN Average Frequency	2002 BSN Average Frequency
28	Administer medication by intravenous route (i.e., IVP, IVPB, PCA pump, continuous infusion – fluids, parenteral nutrition)	4.13	4.27	4.21
20	Check/verify accuracy of order	4.18	4.24	4.15
18	Evaluate client's response to medications	4.42	4.43	4.44
6	Assess client's vital signs (i.e., temperature, pulse, respiratory rate, and blood pressure)	4.45	4.49	4.43
42	Document medication administration and client response	4.46	4.5	4.43
75	Document procedures and treatments performed and response to treatment	4.53	4.59	4.56
126	Maintain client confidentiality/privacy	4.55	4.58	4.56
109	Apply principles of infection control (e.g., handwashing, appropriate room assignment, isolation, aseptic/sterile technique, universal/standard precautions)	4.65	4.91	4.89
26	Implement the five rights of medication administration	4.67	4.65	4.68



III E. Wacker Drive, Suite 2900 Chicago, IL 60601-4277 312.525.3600 312.279.1032 fax www.ncsbn.org