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Report of Findings from the 2018 LPN/VN Nursing Knowledge Survey



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

Mission Statement

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TABLE OF CONTENTS

List of Tables ii
List of Figures ii
Executive Summary
Background of Study
Methodology
Methodology Reviewers
Panel of Subject Matter Experts (SMEs)
Survey Development
Survey Process 9
Sample Selection
Representativeness
Mailing Procedure.
Confidentiality11
Return Rates
Knowledge Survey Nonresponder Study
Summary
Demographics, Experiences and Practice Environments of Participants
Demographics/Past Experiences
Nursing Licenses Held
Gender13
Age
Race/Ethnicity13
Educational Background
Primary Language14
Years of Experience
Facilities14
Client Health Conditions
Client Ages
Employment Setting/Specialty17
Summary
Knowledge Statement Findings
Overview of Methods
SME Panel Validation of Survey Findings
Representativeness of Knowledge Statements
Reliability of Instrument
Knowledge Statements
Importance of Knowledge Statements
Knowledge Statement Subgroup Analysis
Primary Job Title
Facility
Summary

Conclusions	35
References	
Appendix A: 2018 LPN/VN Nursing Knowledge Survey Methodology Reviewers	37
Appendix B: SME Panel for the 2018 LPN/VN Nursing Knowledge Survey	38
Appendix C: 2018 LPN/VN Nursing Knowledge Survey	40
Appendix D: SME Knowledge Statement Ratings Rank Ordered By Average Importance	54
Appendix E: Newly Licensed LPN/VN And SME Knowledge Statement Ratings Rank Ordered By Newly Licensed LPN/VN Average Importance	61
Appendix F: LPN/VN Educator and SME Knowledge Statement Ratings Rank Ordered By LPN/VN Educator Average Importance	68
Appendix G: LPN/VN Supervisor and SME Knowledge Statement Ratings Rank Ordered By LPN/VN Supervisor Average Importance	75
Appendix H: Knowledge Statements Subgroup Analysis: Primary Job Title	82
Appendix I: Knowledge Statements Subgroup Analysis: Facility	93
Appendix J: Knowledge Survey Nonresponder Study	101
Appendix K: Linking of Knowledge Statements and Activity Statements	104

LIST OF TABLES

Table 1. Representativeness of Responders by NCSBN Jurisdiction	10
Table 2. Return Rates	12
Table 3. Analyzable Return Rates	12
Table 4. Educational Background by Primary Job Title	16
Table 5. Employment Setting/Specialty	20
Table 6. Most Important and Least Important Knowledge Statements with Ratings	23
Table 7. Most Important Knowledge Statements from 2018 and 2015 Surveys	23
Table 8. Least Important Knowledge Statements from 2018 and 2015 Surveys	24
Table 9. Knowledge Statement Importance Ratings	25
Table J.1. Employment Setting/Specialty for Responders and Nonresponders	103
Table J.2. Knowledge Statements Importance Ratings for Responders and Nonresponders	103
LIST OF FIGURES	
Figure 1. Licenses by Primary Job Title	
Figure 2. Gender by Primary Job Title	
Figure 3. Race/Ethnicity by Primary Job Title	
Figure 4. Primary Language by Primary Job Title	
Figure 5. Facility by Primary Job Title.	
Figure 6. Client Health Conditions by Primary Job Title	19
Figure 7. Client Ages by Primary Job Title	20
Figure 8. Survey Adequacy by Primary Job Title	24
Figure J.1. Reason for Not Responding	102
Figure 12 Months at Position by Job Title	102

EXECUTIVE SUMMARY

The National Council of State Boards of Nursing (NCSBN®) is responsible to its members, the boards of nursing in the U.S. and its member board territories, for the preparation of psychometrically sound and legally defensible licensure examinations (American Educational Research Association, American Psychological Association and National Council on Measurement in Education, 2014). Practice analysis (i.e., job analysis) studies assist NCSBN in evaluating the validity of the test plan that guides content distribution of the licensure examinations. Because the U.S. health care industry is rapidly changing, NCSBN conducts practice analysis studies every three years.

The primary purpose of this study is to identify the knowledge needed by newly licensed LPN/VNs. The results of this study will be used to inform item development.

Methodology

A number of steps are necessary to perform an analysis of the knowledge needed by newly licensed LPN/VNs. This section provides a description of the methodology used to conduct the 2018 LPN/VN Nursing Knowledge Survey. A panel of subject matter experts (SMEs) was assembled; a list of knowledge statements was created and incorporated into a survey that was sent to a representative sample of Newly Licensed LPN/VNs, LPN/VN Educators, and LPN/VN Supervisors; and the data was collected and analyzed. Descriptions of the SME panel processes, survey development, and sample selection and data collection procedures are provided; as well as information about the confidentiality, response rates, and the degree to which participants were representative of the sample of Newly Licensed LPN/ VNs, LPN/VN Educators, and LPN/VN Supervisors. This report provides detailed descriptions of these processes.

Methodology Reviewers

Three methodology reviewers, chosen for their expertise in practice/job analysis and certification exam development, reviewed the methodology and procedures utilized in this study. All three reviewers indicated this methodology was psychometrically

sound, legally defensible and in compliance with professional testing standards.

Panel of Subject Matter Experts (SMEs)

A panel of seven SMEs was assembled to assist with the creation of the knowledge statements and survey. Panel members taught LPN/VN students or supervised LPN/VNs who were within their first twelve months of practice; one panel member was a newly licensed LPN/VN. The panelists also represented various NCSBN geographic areas of the U.S., as well as the major nursing specialties and varied practice settings.

Survey Development

A number of processes were used to create, evaluate, and refine the survey instrument used for the 2018 LPN/VN Nursing Knowledge Survey. The initial meetings for the triennial practice analysis preceded the development of the 2018 LPN/VN Nursing Knowledge Survey. For the practice analysis, an initial panel of nurses (SMEs), representing various geographic regions of the U.S., nursing specialties and practice settings, developed nursing activity statements intended to represent entry-level LPN/VN practice. These activity statements and related categories provided a structure for the creation of the knowledge statements. Following the work of the first panel, a second group of SMEs was convened with one panelist bridging the two groups.

This second panel reviewed the activity statements and then developed knowledge statements for each activity statement. The knowledge statements are intended to provide detailed information regarding the knowledge needed by newly licensed LPN/VNs in order to perform nursing activities. The resulting 282 knowledge statements were incorporated into a survey format.

The final version of the survey contained several initial questions to identify responder characteristics, followed by four sections. The first section focused on the knowledge necessary for entry-level LPN/VN practice, asking responders to rate the importance of each knowledge statement by using a five-point (1-5) scale. The second section identified the participant's work environment including area of practice,

type of client and employment setting/specialty. The third section focused on demographic information such as race/ethnicity, highest obtained education degree, and gender. The final section provided space for responders to write comments or suggestions about the survey.

Survey Process

Sample Selection

Newly Licensed LPN/VNs: A random sample of 2,150 LPN/VNs was selected from a list of candidates who passed the NCLEX-PN® examination between April 15, 2017 and March 15, 2018 and did not participate in the LPN/VN Practice Analysis Survey. Only those with a U.S. mailing address within the jurisdiction in which they were seeking licensure were included in the sample in order to minimize the number of incorrect recipient addresses.

Educators of LPN/VNs (LPN/VN Educators): In addition, surveys were sent to 2,100 LPN/VN Educators at 700 different nursing programs using the following methodology. Three surveys were sent to each dean/director of 700 nursing programs, with instructions for them to distribute one survey to (1) a Medical/Surgical Nursing instructor; (2) an Obstetrics-Gynecology/Pediatric or Maternal Child Nursing instructor; and (3) a Psychiatric (Mental Health) or Community Health Nursing instructor. Each of the programs in the sample had a minimum of nine NCLEX candidates in the 2017 calendar year. In the event that there were faculty members unable to complete the survey, the dean/directors were asked to give the survey to additional Medical/Surgical faculty members.

Supervisors of Newly Licensed LPN/VNs (LPN/VN Supervisors): Finally, 2,100 employers (700 in nursing homes; 700 in hospitals; and 700 in home health agencies) of newly licensed LPN/VNs were surveyed. The selection of employers to be included in the survey was also based upon the number of LPN/VNs employed (at least nine LPN/VN employees). This criterion was applied in order to maximize the likelihood that the employer would have newly licensed LPN/VNs and supervisors of newly licensed LPN/VNs. Surveys were mailed to the directors of nursing (DONs) or equivalent, who

were asked to complete the survey if they directly supervised newly licensed LPN/VNs. If they did not supervise newly licensed LPN/VNs, the DONs were asked to give the survey to a nurse who did.

Representativeness

Since multiple surveys were sent to LPN/VN Educators of the same institution, all responders from an institution were counted as one in the representativeness calculation. The percentage of responders from the various NCSBN jurisdictions is similar to the sample composition.

Mailing Procedure

The survey forms were mailed to a total of 6,350 potential responders: 2,150 Newly Licensed LPN/VNs, 2,100 LPN/VN Educators and 2,100 potential supervisors of newly licensed LPN/VNs. To acquire the LPN/VN Educator responders, three surveys were sent to the dean/director of the program to distribute amongst their staff. It was requested that a survey be distributed to an educator in each of the following general areas: (1) Medical/Surgical Nursing; (2) Obstetrics-Gynecology/Pediatric or Maternal Child Nursing; and (3) Psychiatric (Mental Health) or Community Health Nursing. If the school did not have specialty faculty who could complete the survey, it was asked that additional faculty in the clinical setting who teach Medical/Surgical Nursing participate.

A five-stage mailing process was used to engage the participants in the study. A pre-survey letter was mailed to each person or facility, followed by the survey(s), with a cover letter and a postage-paid return envelope, one week later. A series of three reminder postcards were sent to nonresponders reiterating the importance of the study and urging participation. The survey was conducted from April through June 2018.

Confidentiality

All potential participants were promised confidentiality with regard to their participation and responses. Pre-assigned code numbers were used to facilitate follow-up mailings. Files containing mailing information were kept separate from the data files. The study protocol was approved by NCSBN's Chief Executive

Officer for compliance with organizational guidelines used in research studies involving human subjects.

Return Rates

There were 2,150 Newly Licensed LPN/VNs invited to complete the survey; 305 surveys were returned by this group for a return rate of 14.5%. A total of 2,100 LPN/VN Educators were invited to complete the survey; 686 were returned by this group for a 34.8% return rate. There were 2,100 LPN/VN Supervisors invited to complete the survey; 127 surveys were returned by this group for a return rate of 6.4%. The total number of surveys distributed was 6,350, with an overall return rate of 18.5%. Of the 1,118 total surveys received, 14 responders did not report holding either an LPN/VN or RN license, so their responses were excluded from analysis. There were 1,104 total analyzable surveys with a return rate of 18.2% for the overall group. The analyzable return rates were 14.4%, 34.2%, and 6.3% for Newly Licensed LPN/VNs, LPN/VN Educators, and LPN/VN Supervisors, respectively.

Knowledge Survey Nonresponder Study

In order to ensure the validity of the results, NCSBN conducted a telephone survey of nonresponders to determine if the LPN/VNs not responding would have rated the knowledge statements differently than the survey responders. If there were no systematic differences in responders versus nonresponders, it would be concluded that the results are not biased and it would provide evidence to support the validity of the survey results. A stratified random sample of nonresponders was contacted via telephone. A telephone interview was obtained from 90 participants: 30 Newly Licensed LPN/VNs, 30 LPN/ VN Educators, and 30 LPN/VN Supervisors. The study found that the nonresponder knowledge statement ratings were similar to the responder ratings; this similarity supports the validity of the results of this study.

Summary

A panel of nurses experienced in the practice of newly licensed LPN/VNs met and created a list of 282 knowledge statements that are important for a newly licensed LPN/VN to possess. A data collection instrument was developed. The surveyed LPN/VNs were divided into the following categories: 2,150 Newly Licensed LPN/VNs, 2,100 LPN/VN Educators (obtained by sending three surveys to 700 nursing programs) and 2,100 LPN/VN Supervisors (obtained by sending a survey to 700 nursing homes, 700 home health agencies, and 700 hospitals). An 18.2% response rate of analyzable surveys was obtained for the total group. This analysis contains the responses of 303 Newly Licensed LPN/VNs, 676 LPN/VN Educators, and 125 LPN/VN Supervisors.

Demographics, Experiences and Practice Environments of Participants

Demographics/Past Experiences

Demographic information, including race and ethnicity, educational preparation and gender, are presented next, followed by descriptions of responders' work environments, including settings and client characteristics.

Nursing Licenses Held

Responders were asked what type of nursing license they held, with the option of choosing LPN/VN and/or RN licenses. All Newly Licensed LPN/VNs (100.0%) responded that they held an LPN/VN license. Only 4.0% of LPN/VN Educators and 5.6% of LPN/VN Supervisors held an LPN/VN license. The remainder of the responders held an RN license.

Gender

Of the total responders who indicated their gender on the survey, 94.2% reported their gender as female. The percentage of females by primary job title is as follows: Newly Licensed LPN/VNs (91.3%), LPN/VN Educators (95.7%) and LPN/VN Supervisors (93.5%).

Age

Newly Licensed LPN/VNs had an average age of 34.4 years (SD = 10.1); LPN/VN Educators had an average age of 50.8 years (SD = 10.8); and LPN/VN Supervisors had an average age of 52.1 years (SD = 9.1).

Race/Ethnicity

White - Not of Hispanic Origin was the race/ethnicity identified most frequently by Newly Licensed LPN/VNs (45.8%), LPN/VN Educators (82.5%), and LPN/VN Supervisors (94.1%).

Educational Background

The majority of Newly Licensed LPN/VNs (77.3%) reported having an LPN/VN diploma/certificate. LPN/VN Educators listed an RN generic master's degree earned within the U.S. (31.6%) or an RN baccalaureate degree earned within the U.S. (28.2%) as their highest degree. LPN/VN Supervisors reported their highest degree as an RN baccalaureate degree earned within the U.S. (31.6%), an RN associate degree earned within the U.S. (27.2%), or an RN generic master's degree earned within the U.S. (23.7%).

Primary Language

The majority of Newly Licensed LPN/VNs (71.5%), LPN/VN Educators (95.7%), and LPN/VN Supervisors (98.3%) reported English as their primary language.

Years of Experience

There were large variations in months and years LPN/VN Educators and LPN/VN Supervisors worked in their jobs. LPN/VN Supervisors reported an average of 12.4 years in their jobs, which was the longest time, compared to LPN/VN Educators, who spent an average of 9.3 years in their jobs. Newly Licensed LPN/VNs were asked how long it had been since they completed course requirements for their nursing programs, and reported an average of 1.4 years.

Facilities

Newly Licensed LPN/VNs (44.7%) worked primarily in long-term care. LPN/VN Educators (54.2%) worked primarily in hospitals. LPN/VN Supervisors most frequently reported working in long-term care (44.6%) and hospitals (35.5%).

Client Health Conditions

The majority of Newly Licensed LPN/VNs (67.7%) worked with clients having stabilized chronic conditions. More than half of LPN/VN Educators reported working with clients exhibiting acute conditions

(59.6%) and with clients having stabilized chronic conditions (52.5%). LPN/VN Supervisors also worked with clients exhibiting stabalized chronic conditions (65.6%), acute conditions (64.8%), and with clients having unstabilized chronic conditions (60.8%).

Client Ages

Newly Licensed LPN/VNs (73.3%) and LPN/VN Supervisors (87.2%) reported that they cared for older adult clients aged 65 to 85. LPN/VN Educators reported that they cared for both adult clients aged 18 to 64 (61.2%) and older adult clients aged 65 to 85 (65.4%).

Employment Setting/Specialty

The employment setting most frequently reported by Newly Licensed LPN/VNs (46.9%) and LPN/VN Supervisors (47.2%) was nursing homes. LPN/VN Educators (46.2%) most frequently reported medical-surgical unit. On average for all job titles, the least reported employment settings were occupational health (0.4%), prison/correctional facility/jail (1.0%), and short stay/observational (0.9%).

Summary

The average Newly Licensed LPN/VN responder was an English-speaking white female with an average age of 34.4 years. She held an LPN/VN diploma/certificate and worked primarily in a long-term care facility caring for older adult clients (aged 65 to 85) having stabilized chronic health conditions. She had been an LPN/VN for over one year.

The average LPN/VN Educator responder was an English-speaking white female with an average age of 50.8 years. She held an RN generic master's degree or RN baccalaureate degree from a college/university within the U.S. She worked primarily in hospitals caring for adult clients (aged 18 to 85) exhibiting acute conditions and clients having stabilized chronic conditions. On average, she had been an LPN/VN Educator for 9.3 years.

The average LPN/VN Supervisor responder was an English-speaking white female with an average age of 52.1 years. She held an RN associate degree, RN baccalaureate degree, or RN generic master's degree from a college/university within the U.S. She worked in long-term care facilities and hospitals

caring for older adult clients aged 65 to 85 having stabilized chronic conditions, clients exhibiting acute conditions, and clients having unstabilized chronic conditions. On average, she worked as an LPN/VN Supervisor for 12.4 years.

Knowledge Statements

Overview of Methods

The 2018 LPN/VN Nursing Knowledge Survey asked responders to rate the importance of knowledge statements necessary for a newly licensed LPN/VN to practice safely and effectively. Responders were asked to rate the overall importance of each knowledge statement considering safe and effective professional practice, regardless of specific practice setting. Importance was rated by using a five-point (1-5) scale.

SME Validation of Survey Findings

The SME panel for the 2018 LPN/VN Nursing Knowledge Survey was asked to provide independent ratings of the 282 knowledge statements. In order to validate the results of the survey, the average importance ratings estimated by the SMEs were compared to the ratings from the knowledge survey. There was consistency between both the highest and lowest importance knowledge statements across the ratings of Newly Licensed LPN/VNs, LPN/VN Educators, LPN/ VN Supervisors and SMEs. The importance ratings of SMEs compared to the ratings of each subgroup were similar. There were nine knowledge statements with average ratings that had more than a one point difference between SMEs and Newly Licensed LPN/ VNs. The knowledge statement with the largest difference in importance ratings was herbal supplements (SME ratings averaged 2.00 and Newly Licensed LPN/VN ratings averaged 3.36). There were also nine knowledge statements with average ratings that had more than a one point difference between the SMEs and LPN/VN Educators. The knowledge statement with the largest difference in importance ratings was also herbal supplements (SME ratings averaged 2.00 and LPN/VN Educator ratings averaged 3.52). Five knowledge statement ratings had more than a one point difference between the SMEs and LPN/ VN Supervisors. The knowledge statement with the

largest difference in importance ratings was electronic medical records (SME ratings averaged 3.00 and LPN/VN Supervisors ratings averaged 4.42). The information on knowledge needed by newly licensed LPN/VNs from multiple sources provides a more accurate description than a single source.

Representativeness of Knowledge Statements

The responders were asked to rate how well the knowledge statements listed on the survey represented knowledge areas a newly licensed LPN/VN should possess. They were asked to select one of four options: "Poorly," "Adequately," "Well" or "Very Well." The vast majority of responders reported that the knowledge statements covered the knowledge areas of a newly licensed LPN/VN "Well" or "Very Well" (96.0% of Newly Licensed LPN/VNS, 97.6% of LPN/VN Educators and 95.2% of LPN/VN Supervisors).

Reliability of Instrument

A reliability index (coefficient alpha) was calculated to evaluate the measurement error associated with the survey and the internal consistency of the survey instrument. Alpha coefficients range from 0 to 1; a value of 0.7 or greater is considered adequate (Cronbach, 1951). The resulting value of 0.98 for this survey instrument suggests this survey is reliably measuring the knowledge a newly licensed LPN/VN needs for safe and effective practice.

Knowledge Statements

Importance of Knowledge Statements

The knowledge needed for safe and effective practice of newly licensed LPN/VNs was determined by participants' responses based on an importance rating scale. Responders were asked, "How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice, regardless of specific practice setting?" Importance ratings were recorded using a five-point scale: 1="Not Important," 2="Marginally Important," 3="Moderately Important," 4="Important" and 5="Critically Important". Average importance ratings were calculated by including all importance ratings regardless of practice setting. The SME panel ratings and survey responder ratings of the 282 knowledge

statements yielded similar results. At least two of all the groups (Newly Licensed LPN/VNs, LPN/VN Educators, LPN/VN Supervisors and SMEs) rated "aseptic technique", "cardiopulmonary resuscitation", "client identification", "client safety", "HIPAA", and "infection control" among the five most important knowledge statements. At least three of all the groups rated "epidurals" and "group therapy sessions" among the five least important knowledge statements.

Knowledge Statements Subgroup Analysis

Primary Job Title

The average knowledge statement importance ratings of Newly Licensed LPN/VNs, LPN/VN Educators, and LPN/VN Supervisors were cross-analyzed for meaningful differences between these job titles. The least important knowledge statements for Newly Licensed LPN/VNs and LPN/VN Educators were "group therapy sessions" (3.26) and "ultrasounds" (2.94), respectively. LPN/VN Supervisors rated "care for clients in labor" the lowest with an average value of 2.62. The most important knowledge statement for Newly Licensed LPN/VNs was "client safety" with an average value of 4.83. LPN/VN Educators and Supervisors rated "client identification" and "universal/standard precautions" the highest with average values of 4.90 and 4.84, respectively. In general, there were few differences in importance ratings based on job title.

Facility

The average importance ratings of the knowledge statements of responders from hospitals, long-term care facilities, community-based facilities and other facilities were cross-analyzed for meaningful differences. "Nose irrigation" was rated as the least important knowledge statement by responders from hospitals and long-term care facilities (average values of 2.86 and 3.08, respectively). "Epidurals" and "ultrasounds" were rated as the least important knowledge statements by responders from community-based and other facilities (average values of 3.08 and 3.10, respectively). The most important knowledge statement for responders working in hospitals and other facilities was "medication administration

rights," (average ratings of 4.84 and 4.90, respectively). Individuals working in long-term care and community-based facilities rated "client identification" and "aseptic technique" as the most important (average values of 4.85 and 4.89, respectively).

Summary

Responders to the 2018 LPN/VN Nursing Knowledge Survey found the statements listed in the survey to be representative of the knowledge necessary for safe and effective professional practice of newly licensed LPN/VNs. There were similar average importance ratings of the knowledge statements for Newly Licensed LPN/VNs, LPN/VN Educators, LPN/VN Supervisors and SMEs.

CONCLUSION

Based on the reliability of the knowledge statement instrument; the survey of the nonresponders; the validation of the knowledge statement importance ratings by SMEs; and the similarity of knowledge statement importance ratings by Newly Licensed LPN/VNs, LPN/VN Educators and LPN/VN Supervisors, the results of this survey can be used to inform item development.

BACKGROUND OF STUDY

The National Council of State Boards of Nursing (NCSBN®) is responsible to its members, the boards of nursing in the U.S. and its member board territories, for the preparation of psychometrically sound and legally defensible licensure examinations (American Educational Research Association. American Psychological Association and National Council on Measurement in Education, 2014). Practice analysis (i.e., job analysis) studies assists NCSBN in evaluating the validity of the test plan that guides content distribution of the licensure examinations. Because the U.S. health care industry is rapidly changing, NCSBN conducts practice analysis studies every three years.

The primary purpose of this study is to identify the knowledge needed by newly licensed LPN/VNs. The results of this study will be used to inform item development. As with other new NCSBN research projects, there is a possibility that the knowledge statements may become an integral part of other processes (e.g., test specifications).

Methodology

A number of steps are necessary to perform an analysis of the knowledge needed by newly licensed LPN/VNs. This section provides a description of the methodology used to conduct the 2018 LPN/VN Nursing Knowledge Survey. A panel of subject matter experts (SMEs) was assembled; a list of knowledge statements was created and incorporated into a survey that was sent to a representative sample of Newly Licensed LPN/VNs, LPN/VN Educators, and LPN/VN Supervisors; and the data was collected and analyzed. Descriptions of the SME panel processes, survey development, and sample selection and data collection procedures are provided; as well as information about the confidentiality, response rates, and the degree to which participants were representative of the sample of Newly Licensed LPN/ VNs, LPN/VN Educators, and LPN/VN Supervisors. This report provides detailed descriptions of these processes.

Methodology Reviewers

Three methodology reviewers, chosen for their expertise in practice/job analysis and certification exam development, reviewed the methodology and procedures utilized in this study. All three reviewers indicated this methodology was psychometrically sound, legally defensible and in compliance with professional testing standards. See Appendix A for a listing of methodology reviewers.

Panel of Subject Matter Experts (SMEs)

A panel of seven SMEs was assembled to assist with the creation of the knowledge statements and survey. Panel members taught LPN/VN students or supervised LPN/VNs who were within their first twelve months of practice; one panel member was a newly licensed LPN/VN. The panelists also represented various NCSBN geographic areas of the U.S., as well as the major nursing specialties and varied practice settings. See Appendix B for a listing of panel members.

Survey Development

A number of processes were used to create, evaluate, and refine the survey instrument used for the 2018 LPN/VN Nursing Knowledge Survey. The initial meetings for the triennial practice analysis preceded the development of the 2018 LPN/VN Nursing Knowledge Survey. For the practice analysis, an initial panel of nurses (SMEs), representing various geographic regions of the U.S., nursing specialties and practice settings, developed nursing activity statements intended to represent entry-level LPN/VN practice. These activity statements and related categories provided a structure for the creation of the knowledge statements. Following the work of the first panel, a second group of SMEs was convened with one panelist bridging the two groups.

This second panel reviewed the activity statements and then developed knowledge statements for each activity statement. The link between knowledge statements and activity statements can be seen in Appendix K, which reflects the statements developed by the SME panelists during the meeting. The resulting 282 knowledge statements were incorporated into a survey format.

The final version of the survey contained several initial questions to identify responder characteristics, followed by four sections. The first section focused on the knowledge necessary for entry-level LPN/VN practice, asking responders to rate the importance of each knowledge statement by using a five-point (1-5) scale. The second section identified the participant's work environment including area of practice, type of client and employment setting/specialty. The third section focused on demographic information such as race/ethnicity, highest obtained education degree, and gender. The final section provided space for responders to write comments or suggestions about the survey. The survey used in the 2018 LPN/VN Nursing Knowledge Survey is shown in Appendix C.

Survey Process

Sample Selection

Newly Licensed LPN/VNs: A random sample of 2,150 LPN/VNs was selected from a list of candidates who passed the NCLEX-PN® examination between April 15, 2017 and March 15, 2018 and did not participate in the LPN/VN Practice Analysis Survey. Only those with a U.S. mailing address within the jurisdiction in which they were seeking licensure were included in the sample in order to minimize the number of incorrect recipient addresses.

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Supervisors of Newly Licensed LPN/VNs (LPN/VN Supervisors): Finally, 2,100 employers (700 in nursing homes; 700 in hospitals; and 700 in home

health agencies) of newly licensed LPN/VNs were surveyed. This list came from a substantially larger mailing list, but the selection of employers to be included in the survey was based upon the number of LPN/VNs employed (at least nine LPN/VN employees from hospitals and nursing homes and at least four from home health agencies). This criterion was applied in order to maximize the likelihood that the employer would have newly licensed LPN/VNs and supervisors of newly licensed LPN/VNs. Surveys were mailed to the directors of nursing (DONs) or an equivalent title at the 2,100 health care facilities mentioned previously. The DONs were asked to complete the survey if they directly supervised newly licensed LPN/VNs. If they did not supervise newly licensed LPN/VNs, the DONs were asked to give the survey to a nurse who did supervise newly licensed LPN/VNs.

Representativeness

Table 1 presents the correspondence of sample size and responders within each primary job title (Newly Licensed LPN/VN, LPN/VN Educator and LPN/VN Supervisor) by NCSBN jurisdiction. Because multiple surveys were mailed to LPN/VN Educators, all responders from an institution were counted only as one. As shown in Table 1, the percentage of responders from different jurisdictions is similar to the sample composition.

Mailing Procedure

The survey forms were mailed to a total of 6,350 potential responders: 2,150 Newly Licensed LPN/ VNs; 2,100 LPN/VN Educators (700 nursing programs were sent three surveys each); and 2,100 potential supervisors of newly licensed LPN/VNs (700 nursing homes, 700 hospitals, and 700 home health agencies were sent the survey). To acquire the LPN/VN Educator responders, three surveys were sent to the dean/ director of the program to distribute amongst their faculty. It was requested that a survey be distributed to an educator in each of the following general areas: (1) Medical/Surgical Nursing; (2) Obstetrics-Gynecology/Pediatric or Maternal Child Nursing; and (3) Psychiatric (Mental Health) or Community Health Nursing. If the school did not have specialty faculty who could complete the survey, it was asked that additional faculty in the clinical setting who teach Medical/Surgical Nursing participate.

Table 1. Representat	iveness o	eness of Responders by NCSBN Jurisdiction											
	Newly Licensed LPN/VN LPN/VN Educator LPN/VN Super									uperviso	r		
	San	ıple	Respo	nders	San	nple	Respo	onders	Sample		Responders		
Jurisdiction	N	%	N	%	N	%	N	%	N	%	N	%	
Alabama	39	1.8	6	2.0	10	1.4	18	2.7	42	2.0	6	4.8	
Alaska	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	
American Samoa	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Arizona	22	1.0	2	0.7	6	0.9	7	1.0	19	0.9	0	0.0	
Arkansas	48	2.2	3	1.0	14	2.0	17	2.5	39	1.9	1	0.8	
California	281	13.1	54	17.8	71	10.1	32	4.7	184	8.8	7	5.6	
Colorado	14	0.7	2	0.7	4	0.6	4	0.6	21	1.0	0	0.0	
Connecticut	23	1.1	1	0.3	13	1.9	6	0.9	24	1.1	1	0.8	
Delaware	6	0.3	1	0.3	2	0.3	0	0.0	6	0.3	0	0.0	
District of Columbia	1	0.0	0	0.0	1	0.1	0	0.0	6	0.3	1	0.8	
Florida	132	6.1	16	5.3	48	6.9	27	4.0	118	5.6	8	6.4	
Georgia	43	2.0	6	2.0	16	2.3	14	2.1	63	3.0	4	3.2	
Guam	1	0.0	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	
Hawaii	4	0.2	0	0.0	3	0.4	1	0.1	3	0.1	0	0.0	
Idaho	8	0.4	2	0.7	3	0.4	3	0.4	10	0.5	2	1.6	
Illinois	64	3.0	11	3.6	29	4.1	20	3.0	51	2.4	3	2.4	
Indiana	28	1.3	7	2.3	17	2.4	20	3.0	64	3.1	3	2.4	
Iowa	34	1.6	9	3.0	9	1.3	6	0.9	26	1.2	3	2.4	
Kansas	38	1.8	8	2.6	12	1.7	16	2.4	21	1.0	0	0.0	
Kentucky	22	1.0	2	0.7	9	1.3	5	0.7	52	2.5	3	2.4	
Louisiana	42	2.0	6	2.0	20	2.9	23	3.4	71	3.4	5	4.0	
Maine	44	2.0	0	0.0	1	0.1	0	0.0	7	0.3	0	0.0	
Maryland	14	0.7	2	0.7	3	0.4	1	0.1	25	1.2	0	0.0	
Massachusetts	1	0.0	9	3.0	17	2.4	25	3.7	46	2.2	2	1.6	
Michigan	48	2.2	10	3.3	12	1.7	19	2.8	44	2.1	4	3.2	
Minnesota	48	2.2	7	2.3	8	1.1	6	0.9	47	2.2	7	5.6	
Mississippi	36	1.7	7	2.3	16	2.3	17	2.5	28	1.3	4	3.2	
Missouri	58	2.7	6	2.0	23	3.3	26	3.8	35	1.7	4	3.2	
Montana	4	0.2	0	0.0	2	0.3	3	0.4	4	0.2	1	0.8	
Nebraska	12	0.6	2	0.7	2	0.3	6	0.9	21	1.0	0	0.0	
Nevada	3	0.1	1	0.3	1	0.1	0	0.0	7	0.3	0	0.0	
New Hampshire	5	0.2	1	0.3	2	0.3	3	0.4	7	0.3	1	0.8	
New Jersey	49	2.3	8	2.6	23	3.3	12	1.8	46	2.2	2	1.6	
New Mexico	5	0.2	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	
New York	126	5.9	19	6.3	39	5.6	31	4.6	101	4.8	8	6.4	
North Carolina	42	2.0	3	1.0	21	3.0	29	4.3	37	1.8	2	1.6	
North Dakota	15	0.7	3	1.0	4	0.6	2	0.3	6	0.3	1	0.8	
Northern Mariana Islands	1	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	
Ohio	131	6.1	13	4.3	40	5.7	53	7.8	130	6.2	6	4.8	
Oklahoma	52	2.4	10	3.3	32	4.6	22	3.3	66	3.1	2	1.6	

Table 1. Representati	able 1. Representativeness of Responders by NCSBN Jurisdiction												
	Ne	wly Licen	sed LPN	/VN		LPN/VN Educator				LPN/VN Supervisor			
	San	nple	Respo	onders San		nple	Respo	nders	San	Sample		nders	
Jurisdiction	N	%	N	%	N	%	N	%	N	%	N	%	
Oregon	16	0.7	3	1.0	4	0.6	3	0.4	41	2.0	0	0.0	
Pennsylvania	100	4.7	9	3.0	28	4.0	42	6.2	75	3.6	9	7.2	
Rhode Island	3	0.1	0	0.0	2	0.3	0	0.0	8	0.4	0	0.0	
South Carolina	24	1.1	4	1.3	10	1.4	11	1.6	25	1.2	6	4.8	
South Dakota	10	0.5	1	0.3	1	0.1	0	0.0	1	0.0	1	0.8	
Tennessee	63	2.9	3	1.0	9	1.3	14	2.1	64	3.0	1	0.8	
Texas	213	9.9	22	7.3	40	5.7	44	6.5	276	13.1	9	7.2	
U.S. Virgin Islands	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Utah	25	1.2	0	0.0	4	0.6	8	1.2	8	0.4	0	0.0	
Vermont	6	0.3	0	0.0	1	0.1	1	0.1	5	0.2	0	0.0	
Virginia	48	2.2	4	1.3	30	4.3	29	4.3	37	1.8	4	3.2	
Washington	24	1.1	6	2.0	7	1.0	7	1.0	20	1.0	0	0.0	
West Virginia	21	1.0	5	1.7	14	2.0	20	3.0	21	1.0	0	0.0	
Wisconsin	46	2.1	7	2.3	14	2.0	16	2.4	35	1.7	3	2.4	
Wyoming	7	0.3	1	0.3	2	0.3	6	0.9	3	0.1	1	0.8	
Total	2111	100.0	297	98.0	690	100.0	658	97.3	2058	98.0	119	95.2	

A five-stage mailing process was used to engage the participants in the study. A pre-survey letter was sent to each person or facility selected for the sample. One week later, the survey(s), with a cover letter and a postage-paid return envelope, were mailed. Eleven days later, a postcard was sent to all participants or facilities reiterating the importance of the study and urging participation. Approximately one week after the first postcard, a second reminder postcard was sent. A final reminder was sent to nonresponders approximately one week after the second reminder. The survey was conducted from April through June 2018.

Confidentiality

All potential participants were promised confidentiality with regard to their participation and responses. Pre-assigned code numbers were used to facilitate follow-up mailings. Files containing mailing information were kept separate from the data files. The study protocol was approved by NCSBN's Chief Executive Officer for compliance with organizational guidelines used in research studies involving human subjects.

Return Rates

There were 2,150 Newly Licensed LPN/VNs invited to complete the survey, and of those, 305 surveys were returned by this group for a return rate of 14.5%. A total of 2,100 LPN/VN Educators were invited to complete the survey, and of those, 686 surveys were returned by this group for a 34.8% return rate. There were 2,100 LPN/VN Supervisors invited to complete the survey, and of those, 127 surveys were returned by this group for a return rate of 6.4%. The total number of surveys distributed was 6,350, with an overall return rate of 18.5% (as shown in Table 2).

Of the 1,118 surveys received, 14 responders did not report holding either an LPN/VN or RN license, so their responses were excluded from analysis. With the implementation of quality control procedures, there were 1,104 analyzable surveys for a return rate of 18.2% for the total group. The analyzable return rates were 14.4%, 34.2% and 6.3% for Newly Licensed LPN/VNs, LPN/VN Educators, and LPN/VN Supervisors, respectively (as shown in Table 3).

Table 2. Return Rates									
Job Title	Sample	Adjusted Return Rate %							
Newly Licensed LPN/ VNs	2,150	14.5							
LPN/VN Educators	2,100	34.8							
LPN/VN Supervisors	2,100	6.4							
Total	6,350	18.5							

Table 3. Analyzable Return Rates											
Job Title	Surveys Delivered	Invalid Responses	Analyzable Responses	Analyzable Return Rate %							
Newly Licensed LPN/VNs	2,108	2	303	14.4							
LPN/VN Educators	1,974	10	676	34.2							
LPN/VN Supervisors	1,977	2	125	6.3							
Total	6,059	14	1,104	18.2							

Knowledge Survey Nonresponder Study

In order to ensure the validity of the results, NCSBN conducted a telephone survey of nonresponders to determine if those LPN/VNs not responding would have rated the knowledge statements differently. If there were no systematic differences in responders versus nonresponders, it would be concluded that the results are not biased and it would provide evidence to support the validity of the results. A stratified random sample of nonresponders (Newly Licensed LPN/VNs, LPN/VN Educators and LPN/ VN Supervisors) were contacted via telephone. Of the potential contacts, a telephone interview was conducted with 90 participants: 30 Newly Licensed LPN/VNs, 30 LPN/VN Educators and 30 LPN/VN Supervisors. The study found that the majority of the nonresponders did not receive the initial survey invitation, were too busy to complete the survey or did not respond for other reasons. More importantly, the study found that the nonresponder knowledge statement ratings were similar to responder ratings; this similarity supports the validity of the results of this study. A full report of the nonresponder study can be found in Appendix J.

Summary

A panel of LPN/VNs experienced in the practice of newly licensed LPN/VNs met and created a list of 282 knowledge statements that are important for a newly licensed LPN/VN to possess. A data collection instrument was developed, piloted, and revised prior to being mailed. The surveyed LPN/VNs were divided into the following categories: 2,150 Newly Licensed LPN/VNs, 2,100 LPN/VN Educators (obtained by sending three surveys to 700 nursing programs), and 2,100 LPN/VN Supervisors (obtained by sending a survey to 700 nursing homes, 700 home health agencies, and 700 hospitals). An 18.2% response rate of analyzable surveys was obtained for the total group. This analysis contains the responses of 303 Newly Licensed LPN/VNs, 676 LPN/VN Educators, and 125 LPN/VN Supervisors.

DEMOGRAPHICS, EXPERIENCES AND PRACTICE ENVIRONMENTS OF PARTICIPANTS

Demographics/Past Experiences

Demographic information, including race and ethnicity, educational preparation and gender, are presented next, followed by descriptions of responders' work environments, including settings and client characteristics.

Nursing Licenses Held

Responders were asked what type of nursing licenses they held, with the option of choosing LPN/VN and/ or RN licenses. All Newly Licensed LPN/VNs (100.0%) responded that they held an LPN/VN license. Only 4.0% of the LPN/VN Educators and 5.6% of LPN/VN Supervisors held an LPN/VN license. The remainder of the responders held an RN license. Figure 1 shows the percentage of responders that held an RN or LPN/ VN license among the three job titles for 2018 and 2015. In comparison with the results from the 2015 survey, the reported figures for holding an LPN/VN license were very similar (99.1% of Newly Licensed LPN/VNs, 4.2% of LPN/VN Educators, and 4.0% of LPN/VN Supervisors, respectively). Responders were able to select both licenses allowing percentages to total more than 100%.

Gender

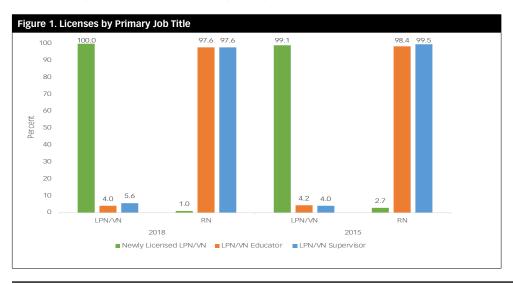
Of the total responders who indicated their gender on the survey, 94.2% reported their gender as female. The percentage of responders indicating their gender as female by primary job title was 91.3% of Newly Licensed LPN/VNs, 95.7% of LPN/VN Educators, and 93.5% of LPN/VN Supervisors. In 2015, 91.6% of the total responders reported their gender as female. See Figure 2 for the percentages of gender by primary job title in 2018 and 2015.

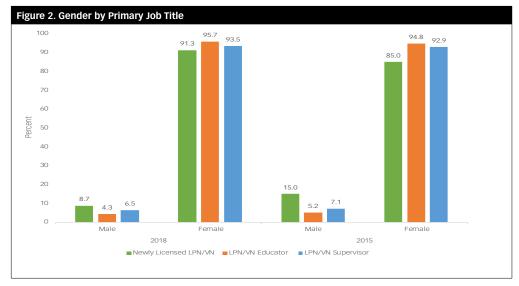
Age

Newly Licensed LPN/VNs had an average age of 34.4 years (SD = 10.1); LPN/VN Educators' average age was 50.8 years (SD = 10.8); LPN/VN Supervisors' average age was 52.1 years (SD = 9.1). In 2015, the average ages for the three groups were 35.0 years, 51.0 years and 50.9 years, respectively.

Race/Ethnicity

White - Not of Hispanic Origin was the race/ethnicity identified most frequently by Newly Licensed LPN/VNs (45.8%), LPN/VN Educators (82.5%) and LPN/VN Supervisors (94.1%). See Figure 3 for the percentages of race/ethnicity by primary job title in 2018 and 2015. The percentages of those identifying as White - Not of Hispanic Origin decreased from 2015 to 2018 for Newly Licensed LPN/VNs and LPN/VN Educators (by 11.4% and 2.7%) and increased for LPN/VN Supervisors (by 10.1%) respectively.





Educational Background

The majority of Newly Licensed LPN/VNs (77.3%) reported having an LPN/VN diploma/certificate, an increase of 1.6% from 2015. Collectively, 31.6% of LPN/VN Educators listed an RN generic master's degree within the U.S. and 28.2% listed an RN baccalaureate degree within the U.S. as their highest degree earned; a 0.2% decrease and a 4.2% increase, respectively, from 2015. LPN/VN Supervisors listed an RN baccalaureate degree within the U.S. (31.6%), an RN associate degree within the U.S. (27.2%), or an RN generic master's degree within the U.S. (23.7%) as their highest degree earned; an increase of 0.5%, a decrease of 8.6%, and an increase of 13.9%, respectively, from 2015. See Table 4 for the educational background of responders sorted by primary job title in 2018 and 2015.

Primary Language

The majority of Newly Licensed LPN/VNs (71.5%), LPN/VN Educators (95.7%) and LPN/VN Supervisors (98.3%) reported English as their primary language. In comparison to 2015, 81.0% of Newly Licensed LPN/VNs reported English as their primary language. See Figure 4 for primary language sorted by primary job title.

Years of Experience

There were large variations in months and years LPN/VN Educators and LPN/VN Supervisors reported working in their job. LPN/VN Supervisors spent an average of 12.4 years in their jobs, which is more than LPN/VN Educators, who spent an average of 9.3 years in their jobs. Newly Licensed LPN/VNs were asked how long it had been since they completed course requirements for their nursing programs, and they reported an average of 1.4 years. In 2015, Newly Licensed LPN/VNs reported an average of 16.6 months since course completion; LPN/VN Educators reported an average of 9.7 years in their jobs while LPN/VN Supervisors had spent an average of 11.4 years in their jobs.

Facilities

Newly Licensed LPN/VNs (44.7%) worked primarily in long-term care. LPN/VN Educators (54.2%) worked primarily in hospitals. LPN/VN Supervisors worked most frequently in long-term care (44.6%) and hospitals (35.5%). See Figure 5 for facility by primary job title in 2018 and 2015.

Client Health Conditions

The majority of Newly Licensed LPN/VNs (67.7%) and LPN/VN Supervisors (65.6%) worked with clients having stabilized chronic conditions. More than half of LPN/VN Educators reported working with clients exhibiting acute conditions (59.6%) and with clients

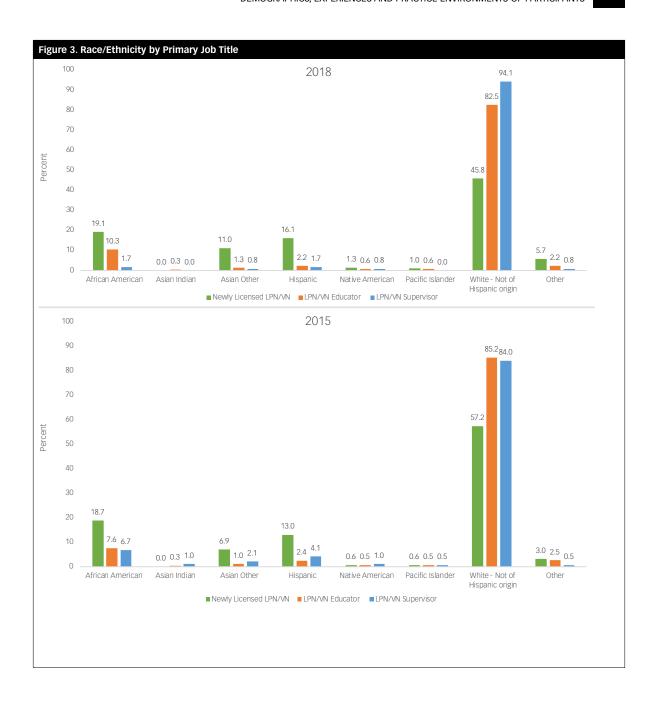
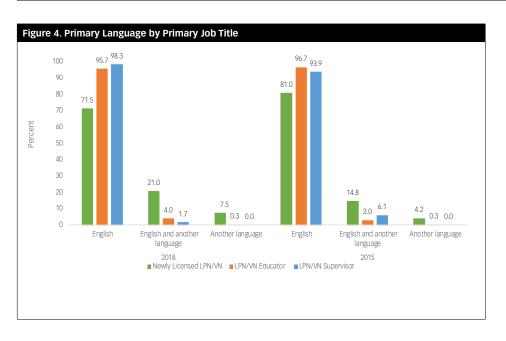


Table 4. Educational Backgr	ound by Primar	y Job Title				
	Newly Licer	ised LPN/VN	LPN/VN	Educator	LPN/VN S	Supervisor
Degree	2018	2015	2018	2015	2018	2015
LPN/VN - Diploma/ Certificate U.S.	77.3%	75.7%	1.2%	0.3%	0.9%	0.5%
LPN/VN - Associate Degree U.S.	16.7%	14.3%	0.0%	0.3%	0.9%	0.0%
RN - Diploma U.S.	0.0%	0.3%	0.8%	0.3%	3.5%	7.3%
RN - Associate Degree U.S.	1.4%	3.0%	7.4%	6.3%	27.2%	35.8%
RN - Baccalaureate Degree U.S.	0.4%	0.6%	28.2%	24.0%	31.6%	31.1%
RN - Generic Master's Degree U.S.	0.0%	0.0%	31.6%	31.8%	23.7%	9.8%
RN - Masters (Nurse Practitioner)	0.0%	0.0%	5.4%	3.3%	3.5%	1.6%
RN - Masters (Clinical Nurse Specialist)	0.0%	0.0%	4.1%	6.3%	0.9%	1.6%
RN - Masters (Nurse Midwife)	0.0%	0.0%	0.7%	0.3%	0.0%	0.0%
RN - Masters (CRNA)	0.0%	0.0%	0.2%	1.5%	0.0%	1.0%
RN - Generic Doctorate U.S.	0.0%	0.0%	1.5%	1.0%	0.0%	0.5%
RN - Nursing Doctorate in U.S.	0.0%	2.1%	3.1%	0.5%	1.8%	1.0%
Nursing Program Outside the U.S.	2.5%	0.0%	0.0%	1.0%	0.9%	0.5%
In progress to complete Generic Master's	0.0%	N/A	0.5%	N/A	0.9%	N/A
Other	1.8%	4.0%	15.4%	22.8%	4.4%	9.3%



having stabilized chronic conditions (52.5%). A large percentage of LPN/VN Supervisors also worked with clients exhibiting acute conditions (64.8%) and with clients having unstabilized chronic conditions (60.8%). As nurses often work with clients with varying conditions, responders were allowed to give multiple answers, resulting in percentages within each primary job title to total more than 100%. See Figure 6 for client health conditions sorted by primary job title in 2018 and 2015.

Client Ages

Newly Licensed LPN/VNs (73.3%) and LPN/VN Supervisors (87.2%) reported that they primarily cared for older adult clients aged 65 to 85. The majority of LPN/VN Educators (91.7%) reported that they cared for adult clients aged 18 to 64 (61.2%) and older adult clients aged 65 to 85 (65.4%). Responders were allowed to give multiple answers, resulting in percentages within each primary job title to total more than 100%. See Figure 7 for client ages sorted by primary job title in 2018 and 2015.

Employment Setting/Specialty

The employment setting most frequently reported by Newly Licensed LPN/VNs (46.9%) and LPN/VN Supervisors (47.2%) was nursing homes. LPN/VN Educators (46.2%) most frequently answered medical-surgical unit. On average, for all primary job titles, the least reported employment settings were occupational health (0.4%), prison/correctional facility/jail (1.0%), and short stay/observational (0.9%). Responders were able to answer up to two

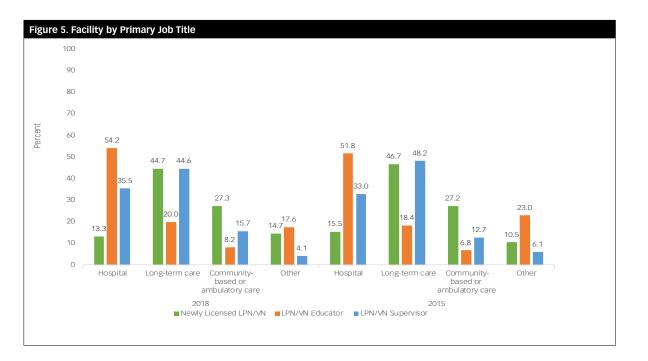
employment settings allowing percentages to total more than 100%. See Table 5 for employment settings and specialties in both 2018 and 2015.

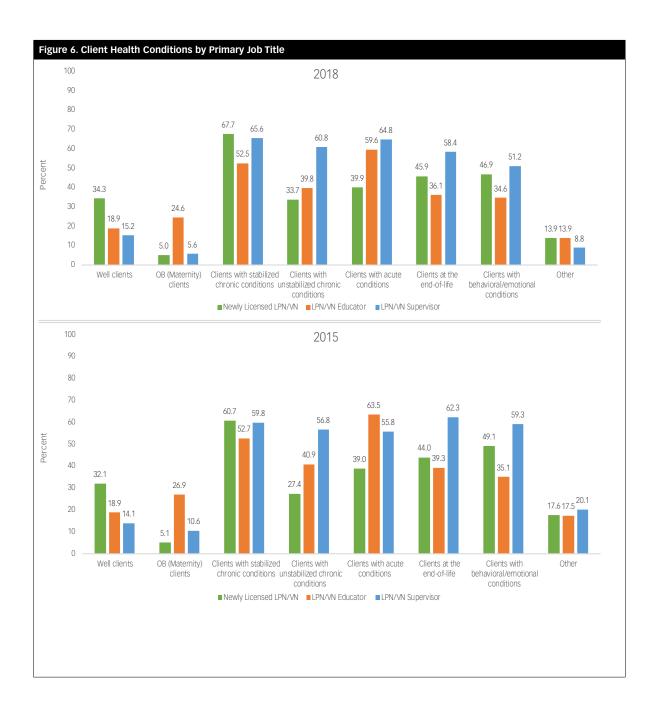
Summary

The average Newly Licensed LPN/VN responder was an English-speaking white female with an average age of 34.4 years. She held an LPN/VN diploma/certificate and worked primarily in a long-term care facility caring for older adult clients (aged 65 to 85) having stabilized chronic health conditions. On average, she had been an LPN/VN for over one year.

The average LPN/VN Educator responder was an English-speaking white female with an average age of 50.8 years. She held an RN generic master's degree or RN baccalaureate degree from a college/university within the U.S. She worked primarily in a hospital caring for adult clients aged 18 to 85 exhibiting acute conditions and clients having stabilized chronic conditions. On average, she had been an LPN/VN Educator for 9.3 years.

The average LPN/VN Supervisor responder was an English-speaking white female with an average age of 52.1 years. She held an RN associate degree, RN baccalaureate degree, or RN generic master's degree from a college/university within the U.S. She worked in long-term care facilities and hospitals caring for older clients aged 65 to 85 with stabilized chronic conditions, clients exhibiting acute conditions, and clients having unstabilized chronic conditions. On average, she worked as an LPN/VN Supervisor for 12.4 years.





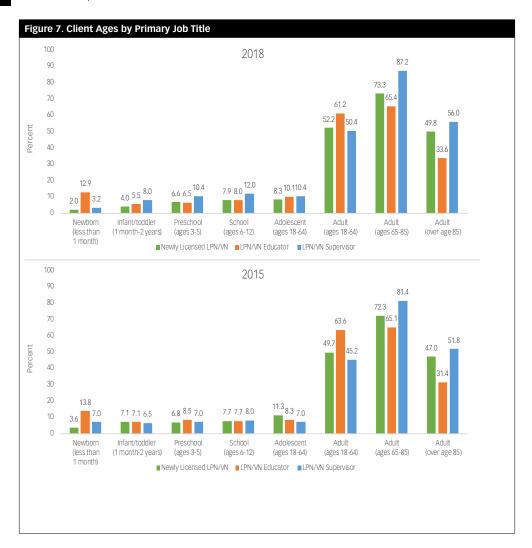


Table 5. Employment Sett	ing/Specialty								
		Newly Licensed LPN/VN		LPN/VN Educator		LPN/VN Supervisor		Total	
Employment Setting	Year	N	%	N	%	N	%	N	%
Critical care	2018	4	1.3	79	11.7	8	6.4	91	8.2
	2015	16	4.8	82	13.1	20	10.1	118	10.2
Medical-surgical unit	2018	28	9.2	312	46.2	32	25.6	372	33.7
	2015	31	9.2	297	47.6	40	20.1	368	31.8
Pediatrics	2018	12	4.0	40	5.9	5	4.0	57	5.2
	2015	19	5.7	52	8.3	2	1.0	73	6.3
Nursery	2018	0	0.0	37	5.5	2	1.6	39	3.5
	2015	3	0.9	42	6.7	4	2.0	49	4.2
Labor and delivery	2018	1	0.3	74	10.9	1	0.8	76	6.9
	2015	3	0.9	58	9.3	5	2.5	66	5.7
Postpartum unit	2018	0	0.0	71	10.5	1	0.8	72	6.5
	2015	3	0.9	59	9.5	3	1.5	65	5.6

Table 5. Employment Setting	/Specialty								
			icensed I/VN	1	/VN cator		I/VN rvisor	То	tal
Employment Setting	Year	N	%	N	%	N	%	N	%
Psychiatric	2018	16	5.3	82	12.1	2	1.6	100	9.1
	2015	22	6.5	59	9.5	13	6.5	94	8.1
Assisted Living	2018	43	14.2	9	1.3	3	2.4	55	5.0
	2015	42	12.5	14	2.2	4	2.0	60	5.2
Operating room	2018	5	1.7	13	1.9	3	2.4	21	1.9
	2015	2	0.6	13	2.1	5	2.5	20	1.7
Nursing home	2018	142	46.9	229	33.9	59	47.2	430	38.9
	2015	145	43.2	221	35.4	106	53.3	472	40.7
Other long-term care	2018	40	13.2	38	5.6	10	8.0	88	8.0
	2015	49	14.6	32	5.1	10	5.0	91	7.9
Rehabilitation	2018	57	18.8	60	8.9	31	24.8	148	13.4
	2015	53	15.8	53	8.5	30	15.1	136	11.7
Subacute unit	2018	13	4.3	28	4.1	14	11.2	55	5.0
	2015	14	4.2	31	5.0	13	6.5	58	5.0
Transitional care unit	2018	9	3.0	18	2.7	6	4.8	33	3.0
	2015	8	2.4	19	3.0	10	5.0	37	3.2
Physician/Dentist office	2018	18	5.9	8	1.2	1	0.8	27	2.4
	2015	21	6.3	9	1.4	0	0.0	30	2.6
Occupational health	2018	0	0.0	3	0.4	1	0.8	4	0.4
	2015	3	0.9	1	0.2	0	0.0	4	0.3
Outpatient clinic	2018	27	8.9	13	1.9	5	4.0	45	4.1
	2015	27	8.0	15	2.4	3	1.5	45	3.9
Home health	2018	33	10.9	18	2.7	18	14.4	69	6.3
	2015	44	13.1	24	3.8	26	13.1	94	8.1
Public health	2018	3	1.0	13	1.9	0	0.0	16	1.4
	2015	3	0.9	10	1.6	7	3.5	20	1.7
Student/school health	2018	13	4.3	18	2.7	0	0.0	31	2.8
	2015	9	2.7	24	3.8	0	0.0	33	2.8
Hospice care	2018	23	7.6	21	3.1	10	8.0	54	4.9
	2015	31	9.2	19	3.0	16	8.0	66	5.7
Prison/Correctional Facility/Jail	2018	7	2.3	4	0.6	0	0.0	11	1.0
	2015	5	1.5	5	0.8	1	0.5	11	0.9
Short Stay/Observational	2018	1	0.3	8	1.2	1	0.8	10	0.9
	2015	6	1.8	0	0.0	5	2.5	11	0.9
Step-down/Progressive Care	2018	3	1.0	11	1.6	4	3.2	18	1.6
	2015	2	0.6	17	2.7	1	0.5	20	1.7
Other	2018	18	5.9	91	13.5	11	8.8	120	10.9
	2015	33	9.8	119	19.1	23	11.6	175	15.1

KNOWLEDGE STATEMENT FINDINGS

Overview of Methods

The 2018 LPN/VN Nursing Knowledge Survey asked responders to rate the importance of knowledge statements necessary for a newly licensed LPN/VN to practice safely and effectively. Responders were asked to rate the overall importance of each knowledge statement considering safe and effective professional LPN/VN practice, regardless of practice setting. Importance was rated by using a five-point (1-5) scale.

SME Panel Validation of Survey Findings

The SME panel for the 2018 LPN/VN Nursing Knowledge Survey was asked to provide independent ratings of the 282 knowledge statements. See Appendix D for average importance ratings of the SMEs.

In order to validate the results of the survey, the average importance ratings estimated by the SMEs were compared to the average importance ratings from the knowledge survey. As shown in Table 6, there was, in general, consistency among the most important knowledge statements across the ratings of the Newly Licensed LPN/VNs, LPN/VN Educators, LPN/VN Supervisors and SMEs. Additionally, there was consistency among the lowest importance knowledge statements across the ratings of the Newly Licensed LPN/VNs, LPN/VN Educators, LPN/VN Supervisors and SMEs. There seems to be evidence from several sources that provide convergent validity on the knowledge needed by newly licensed LPN/ VNs in order to practice safely and effectively. The ratings of SMEs compared to survey responder ratings, categorized by job titles, are presented in Appendices E, F and G.

The importance ratings of SMEs compared to the ratings of each subgroup were similar. There were nine knowledge statements with average ratings that had more than a one point difference between SMEs and Newly Licensed LPN/VNs. The knowledge statement with the largest difference in importance ratings was herbal supplements (SME ratings

averaged 2.00 while Newly Licensed LPN/VN ratings averaged 3.36). There were also nine knowledge statements with average ratings that had more than a one point difference between the SMEs and LPN/VN Educators. The knowledge statement with the largest difference in importance ratings was also herbal supplements (SME ratings averaged 2.00 and LPN/ VN Educator ratings averaged 3.52). Five knowledge statement ratings had a difference greater than one point between the SMEs and LPN/VN Supervisors. The knowledge statement with the largest difference in importance ratings was electronic medical records (SME ratings averaged 3.00 and LPN/VN Supervisor ratings averaged 4.42). The information on knowledge needed by newly licensed LPN/VNs from multiple sources provides a more accurate description than a single source.

Representativeness of Knowledge Statements

The responders were asked to rate how well the knowledge statements represented the knowledge areas a newly licensed LPN/VN should possess by choosing one of four options: "Poorly," "Adequately," "Well" or "Very Well." The vast majority of survey responders within each job title reported the survey covered the important knowledge areas of a newly licensed LPN/VN "Well" or "Very Well" (96.0% of Newly Licensed LPN/VNs, 97.6% of LPN/VN Educators and 95.2% of LPN/VN Supervisors). A large percentage of Newly Licensed LPN/VNs (83.0%), LPN/VN Educators (87.1%) and LPN/VN Supervisors (76.0%) responded that the survey represented the necessary knowledge areas "Very Well." See Figure 8 for responses of survey adequacy by primary job title in 2018 and 2015.

Reliability of Instrument

A reliability index (coefficient alpha) was calculated to evaluate the measurement error associated with the survey and the internal consistency of the survey instrument. Alpha coefficients range from 0 to 1; a value of 0.7 or greater is considered adequate (Cronbach, 1951).

Most Important Kr	nowledge Sta	atements						
Newly Licensed	I LPN/VN	LPN/VN Edu	cator	LPN/VN Supe	rvisor	SME		
Knowledge Statement	Avg. (1-5 scale)	Knowledge Statement	Avg. (1-5 scale)	Knowledge Statement	Avg. (1-5 scale)	Knowledge Statement	Avg. (1-5 scale)	
Client Safety	4.83	Client Identification	4.90	Universal/Standard Precautions	4.84	Cardiopulmonary Resuscitation	5.00	
Aseptic Technique	4.80	Client Safety	4.87	HIPAA	4.82	Client Identification	5.00	
Infection Control	4.80	Medication Administration Rights	4.86	Infection Control	4.80	Infection Control	5.00	
HIPAA	4.79	Aseptic Technique	4.84	Vital Signs	4.80	Practice Errors	5.00	
Cardiopulmonary Resuscitation	4.78	Medication Safety Practices	4.83	Scope of Practice	4.78	Advance Directives	4.83	
Least Important Ki	nowledge St	atements						
Newly Licensed	I LPN/VN	LPN/VN Edu	cator	LPN/VN Supe	rvisor	SME		
Knowledge Statement	Avg. (1-5 scale)	Knowledge Statement	Avg. (1-5 scale)	Knowledge Statement	Avg. (1-5 scale)	Knowledge Statement	Avg. (1-5 scale)	
Group Therapy Sessions	3.26	Ultrasounds	2.94	Care for Clients in Labor	2.62	Herbal Supplements	2.00	
Nose Irrigation	3.29	Nose Irrigation	2.97	Group Therapy Sessions	2.65	Group Therapy Sessions	2.17	
Herbal Supplements	3.36	Epidurals	3.01	Antepartum Client Care	2.82	Blood Transfusions	2.67	
Reminiscence Therapy	3.39	Peripheral Nerve Catheters	3.16	Labor Process	2.82	Epidurals	2.67	
Social Media Usage	3.40	Fetal Heart Monitoring	3.18	Epidurals	2.86	Complementary Therapies	2.67	

Table 7. Most Important Knowledge Statements from 2018 and 2015 Surveys									
Newly Licen	ised LPN/VN	LPN/VN	Educator	LPN/VN Supervisor					
2018	2015	2018	2015	2018	2015				
Client Safety	Cardiopulmonary Resuscitation	Client Identification	Medication Safety Measures	Universal/Standard Precautions	Medication Safety Measures				
Aseptic Technique	Medication Administration Safety	Client Safety	Medication Safety	HIPAA	Cardiopulmonary Resuscitation				
Infection Control	Medication	Medication Administration Rights	Medication Administration Rights	Infection Control	Client Safety				
HIPAA	Medication Safety Measures	Aseptic Technique	Medication Administration Safety	Vital Signs	Infection Control				
Cardiopulmonary Resuscitation	Medication Safety	Medication Safety Practices	Vital Signs	Scope of Practice	Medication				

Table 8. Least Import	tant Knowledge State	ments from 2018 and	2015 Surveys		
Newly Licen	sed LPN/VN	LPN/VN	Educator	LPN/VN S	upervisor
2018	2015	2018	2015	2018	2015
Group Therapy Sessions	Group Session	Ultrasounds	Group Session	Care for Clients in Labor	Care of Toddler Client through Two Years
Nose Irrigation	Referral	Nose Irrigation	Fetal Heart Monitoring	Group Therapy Sessions	Preschool Client Care
Herbal Supplements	Ear Irrigation	Epidurals	Ear Irrigation	Antepartum Client Care	Group Session
Reminiscence Therapy	Alternative/ Complementary Therapy	Peripheral Nerve Catheters	Newborn Education	Labor Process	Newborn Education
Social Media Usage	Nose Irrigation	Fetal Heart Monitoring	Ventilator	Epidurals	Fetal Heart Monitoring

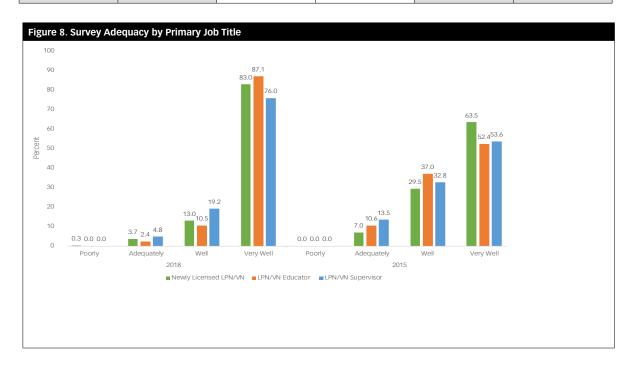


Table 9. K	nowledge Statement Imp	ortance R	atings								
Survey		Newly	Newly Licensed LPN/VN LPN/VN Educator				ator	LPN/VN Supervisor			
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	
1	Abuse Prevention	142	4.44	0.07	353	4.33	0.04	59	4.44	0.10	
2	Active Listening	159	4.71	0.04	316	4.74	0.03	62	4.74	0.06	
3	Activities of Daily Living	142	4.35	0.06	353	4.43	0.03	60	4.37	0.09	
4	Acute Illnesses	158	4.45	0.06	313	4.48	0.04	61	4.43	0.09	
5	Adaptive Equipment	142	3.96	0.07	352	3.97	0.05	57	3.89	0.11	
6	Adolescent Client Care	159	3.89	0.09	312	3.71	0.05	61	3.23	0.17	
7	Adult Client Care	139	4.32	0.07	345	4.52	0.04	60	4.17	0.11	
8	Advance Directives	158	4.30	0.07	311	4.22	0.05	58	3.93	0.12	
9	Alternative Therapies	139	3.63	0.09	351	3.41	0.05	58	3.31	0.12	
10	Antepartum Client Care	157	3.75	0.09	313	3.41	0.06	61	2.82	0.18	
11	Approved Medical Abbreviations	141	4.18	0.08	350	4.41	0.04	59	4.32	0.11	
12	Aseptic Technique	159	4.80	0.04	313	4.84	0.02	61	4.69	0.09	
13	Aspiration Precautions	142	4.63	0.06	349	4.71	0.03	60	4.52	0.10	
14	Assistive Devices	159	4.20	0.07	313	4.18	0.04	62	4.00	0.11	
15	Assistive Personnel	142	3.93	0.08	352	3.92	0.04	60	3.80	0.12	
16	Available Resources	158	4.15	0.07	308	4.15	0.05	60	3.98	0.10	
17	Barriers to Communication	142	4.05	0.08	351	4.17	0.04	60	4.20	0.09	
18	Barriers to Learning	157	4.03	0.08	314	4.10	0.05	61	3.95	0.11	
19	Barriers to Treatment	140	4.13	0.07	353	4.07	0.04	60	4.13	0.10	
20	Behavioral Disorders	159	4.19	0.06	316	3.98	0.05	62	4.15	0.11	
21	Behavioral Management	140	3.99	0.07	351	3.95	0.04	59	3.97	0.11	
22	Biohazard Disposal	159	4.38	0.07	314	4.39	0.04	61	4.11	0.12	
23	Bladder Irrigation	142	3.86	0.09	353	3.49	0.06	59	3.47	0.16	
24	Bladder Scans	158	3.62	0.10	314	3.45	0.06	61	3.21	0.15	
25	Blood Glucose Monitoring	142	4.54	0.07	353	4.59	0.04	60	4.55	0.10	
26	Blood Products	158	4.16	0.09	314	3.82	0.06	62	3.48	0.16	
27	Blood Transfusions	140	3.88	0.11	350	3.61	0.06	60	3.32	0.18	
28	Body Mechanics	159	4.35	0.07	315	4.58	0.03	62	4.55	0.08	
29	Bowel Management	141	4.12	0.07	353	4.12	0.05	60	4.13	0.11	
30	Cardiac Abnormalities	158	4.46	0.07	315	4.14	0.05	61	4.16	0.10	
31	Cardiopulmonary Resuscitation	142	4.78	0.05	348	4.75	0.03	60	4.75	0.07	
32	Care for Clients in Labor	157	3.85	0.10	311	3.23	0.06	61	2.62	0.16	
33	Central Venous Catheter Maintenance	142	4.13	0.10	352	3.37	0.07	60	3.33	0.16	
34	Central Venous Catheter Types	157	4.01	0.09	312	3.40	0.06	61	3.56	0.16	
35	Chain of Command	141	4.11	0.07	351	4.20	0.04	60	4.42	0.09	

Table 9. K	nowledge Statement Imp	ortance R	atings								
Survey		Newly	Licensed I	LPN/VN	LPN/VN Educator			LPN	LPN/VN Supervisor		
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	
36	Chemical Dependency	158	3.99	0.09	315	3.97	0.05	62	3.55	0.14	
37	Chest Tubes	140	3.98	0.10	351	3.52	0.06	60	3.50	0.15	
38	Chronic Illnesses	158	4.42	0.05	314	4.57	0.03	61	4.57	0.06	
39	Circulatory Checks	141	4.37	0.07	353	4.55	0.04	60	4.43	0.09	
40	Client Advocacy	159	4.50	0.05	314	4.57	0.04	62	4.26	0.09	
41	Client Allergies	140	4.73	0.05	352	4.73	0.03	60	4.57	0.09	
42	Client Autonomy	159	4.31	0.07	315	4.39	0.04	62	4.34	0.09	
43	Client Baseline Oxygen Saturation	140	4.59	0.06	353	4.58	0.03	60	4.50	0.09	
44	Client Baseline Vital Signs	159	4.70	0.04	314	4.82	0.03	62	4.71	0.06	
45	Client Care Assignments	141	4.02	0.08	353	4.01	0.05	59	3.95	0.12	
46	Client Care Equipment	159	4.27	0.06	314	4.18	0.04	62	4.06	0.10	
47	Client Cognitive Ability	138	4.14	0.07	353	4.20	0.04	60	4.13	0.09	
48	Client Comfort Level	159	4.44	0.05	314	4.59	0.03	61	4.52	0.08	
49	Client Compliance Issues	138	3.96	0.08	352	3.97	0.04	60	3.92	0.11	
50	Client Consent	159	4.60	0.05	316	4.65	0.04	62	4.61	0.07	
51	Client Disease Processes and Conditions	141	4.47	0.06	351	4.50	0.03	59	4.46	0.09	
52	Client Education	159	4.44	0.05	315	4.49	0.04	62	4.52	0.08	
53	Client History	140	4.27	0.06	351	4.28	0.04	60	4.23	0.09	
54	Client Identification	159	4.76	0.04	316	4.90	0.02	62	4.76	0.06	
55	Client Intake/Output	141	4.26	0.08	354	4.37	0.04	60	4.18	0.09	
56	Client Medical History	159	4.55	0.05	316	4.46	0.04	61	4.52	0.08	
57	Client Mental Status	142	4.31	0.06	353	4.44	0.03	60	4.35	0.09	
58	Client Mobility Needs	159	4.25	0.06	316	4.29	0.04	62	4.35	0.10	
59	Client Needs	142	4.30	0.06	352	4.36	0.03	59	4.27	0.09	
60	Client Non-compliance	159	4.09	0.07	314	4.09	0.04	62	4.16	0.10	
61	Client Nutrition	142	4.36	0.06	354	4.24	0.04	60	4.13	0.09	
62	Client Physical Limitations	158	4.16	0.06	316	4.29	0.04	62	4.21	0.10	
63	Client Plan of Care	142	4.36	0.06	352	4.20	0.04	60	4.27	0.11	
64	Client Preferences	159	4.06	0.07	314	4.18	0.04	62	4.23	0.10	
65	Client Privacy	142	4.44	0.06	353	4.37	0.04	60	4.47	0.09	
66	Client Psychosocial Functioning	159	4.17	0.07	316	4.22	0.04	62	4.11	0.11	
67	Client Referrals	140	3.74	0.09	351	3.53	0.05	60	3.37	0.15	
68	Client Repositioning	159	4.42	0.07	316	4.49	0.04	61	4.28	0.09	
69	Client Rights	141	4.54	0.05	353	4.60	0.03	60	4.65	0.09	

Table 9. K	nowledge Statement Imp	ortance Ratings								
Survey		Newly	Licensed	LPN/VN	LPN/VN Educator			LPN/VN Supervisor		
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
70	Client Safety	158	4.83	0.03	314	4.87	0.02	61	4.66	0.07
71	Client Safety Checks	141	4.61	0.06	348	4.70	0.03	60	4.50	0.10
72	Client Self-advocacy	158	4.33	0.06	316	4.26	0.04	61	4.00	0.10
73	Client Spiritual and Cultural Beliefs	141	4.10	0.08	352	4.08	0.04	60	4.03	0.11
74	Client-centered Care	159	4.48	0.05	312	4.48	0.04	62	4.42	0.08
75	Code of Ethics	141	4.34	0.07	349	4.49	0.04	60	4.48	0.09
76	Cognitive Behavioral Therapy	158	3.97	0.07	313	3.60	0.06	61	3.66	0.13
77	Colostomies	142	3.87	0.09	350	3.94	0.05	60	3.95	0.12
78	Community Resources	159	3.83	0.08	315	3.86	0.05	61	3.61	0.12
79	Complementary Therapies	140	3.51	0.08	349	3.31	0.05	60	3.20	0.13
80	Compression Stockings	159	3.90	0.08	315	4.01	0.05	62	3.81	0.11
81	Confidentiality	141	4.66	0.05	351	4.72	0.03	59	4.73	0.07
82	Conflict Resolution	157	4.11	0.07	315	4.14	0.04	62	4.16	0.10
83	Continuity of Care	142	4.35	0.06	353	4.25	0.04	60	4.37	0.10
84	Controlled Substances	158	4.41	0.06	315	4.40	0.04	62	4.15	0.10
85	Coping Mechanisms	142	3.91	0.07	354	3.94	0.04	60	3.85	0.11
86	Cost Effective Care	159	3.64	0.09	314	3.75	0.05	62	3.69	0.11
87	Crisis Intervention	141	4.24	0.08	353	4.08	0.04	60	4.02	0.12
88	Cultural Diversity	159	4.09	0.08	313	4.29	0.04	62	4.29	0.09
89	Data Collection	140	4.28	0.07	354	4.36	0.04	60	3.73	0.14
90	De-escalation Techniques	159	4.08	0.08	313	4.11	0.05	62	4.21	0.10
91	Developmental Milestones	142	3.80	0.07	352	3.75	0.05	60	3.38	0.13
92	Diagnostic Procedures	159	4.18	0.07	313	3.92	0.05	62	3.82	0.11
93	Discharge Process	142	3.74	0.08	351	3.78	0.05	60	3.88	0.10
94	Drainage Devices	159	4.01	0.08	314	3.98	0.05	61	3.92	0.08
95	Dressing Changes	139	4.40	0.07	353	4.26	0.04	59	4.29	0.09
96	Ear Irrigation	157	3.61	0.10	316	3.55	0.06	62	3.15	0.14
97	Electrocardiogram Equipment	142	4.01	0.08	353	3.51	0.05	60	3.30	0.15
98	Electrocardiograms (EKG/ECG)	158	4.16	0.09	315	3.69	0.05	61	3.52	0.14
99	Electrolyte Imbalances	141	4.39	0.07	353	4.44	0.04	60	4.08	0.10
100	Electronic Medical Records	158	4.28	0.06	316	4.36	0.04	62	4.42	0.09
101	Emergency Preparedness	142	4.52	0.07	354	4.25	0.05	58	4.14	0.11
102	End-of-life Care	159	4.36	0.06	313	4.28	0.04	62	4.29	0.09

Table 9. K	nowledge Statement Imp	ortance R	atings								
Survey		Newly	Licensed	LPN/VN	LPN	N/VN Educ	ator	LPN	N/VN Supervisor		
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	
103	Enteral Feedings	141	4.13	0.09	354	4.18	0.05	59	3.97	0.13	
104	Enteral Tube Management	158	4.20	0.07	312	4.21	0.05	62	4.19	0.09	
105	Epidurals	142	3.41	0.10	351	3.01	0.06	59	2.86	0.16	
106	Evidence-based Care	158	4.09	0.07	314	4.04	0.06	62	4.10	0.10	
107	Evidence-based Research	140	3.74	0.09	353	3.85	0.05	60	3.50	0.12	
108	Eye Irrigation	159	3.62	0.09	315	3.50	0.06	61	3.31	0.12	
109	Family Dynamics	142	3.63	0.08	353	3.71	0.05	60	3.72	0.11	
110	Family Medical History	159	3.77	0.08	314	3.89	0.05	62	3.55	0.12	
111	Fetal Heart Monitoring	140	3.94	0.11	351	3.18	0.07	60	2.88	0.17	
112	Fluid Imbalances	159	4.43	0.07	312	4.15	0.05	62	4.19	0.10	
113	Gastrointestinal Checks	142	4.04	0.08	354	4.16	0.04	60	4.07	0.11	
114	Genitourinary Checks	158	3.98	0.08	313	4.10	0.05	62	3.82	0.12	
115	Grieving Process	141	3.98	0.07	354	4.02	0.04	60	3.92	0.10	
116	Group Therapy Sessions	159	3.26	0.10	315	3.30	0.06	62	2.65	0.14	
117	G-tubes	141	4.11	0.08	354	4.10	0.05	60	4.10	0.11	
118	Health Care Provider Orders	159	4.59	0.05	315	4.56	0.04	61	4.49	0.09	
119	Health Promotion Programs	141	3.69	0.08	352	3.76	0.05	60	3.27	0.13	
120	Health Screening Programs	156	3.88	0.09	309	3.80	0.05	61	3.13	0.14	
121	Hearing Impairments	142	3.84	0.08	354	3.84	0.05	60	3.63	0.11	
122	Herbal Supplements	159	3.36	0.10	315	3.52	0.05	62	3.10	0.14	
123	High Risk Behaviors	141	4.16	0.08	353	4.07	0.04	60	4.05	0.12	
124	HIPAA	159	4.79	0.04	314	4.71	0.03	62	4.82	0.05	
125	Hospice Care	138	4.05	0.08	353	3.90	0.05	59	3.68	0.13	
126	Нурохіа	159	4.58	0.06	314	4.59	0.04	62	4.61	0.08	
127	Ileostomies	141	3.85	0.09	353	3.85	0.05	60	3.78	0.14	
128	Immobilized Client Care	159	4.29	0.07	315	4.28	0.04	62	4.23	0.09	
129	Immunizations	141	4.08	0.08	353	3.98	0.05	60	3.90	0.12	
130	Incident Reporting	159	4.43	0.06	315	4.30	0.04	62	4.32	0.09	
131	Infection Control	142	4.80	0.04	354	4.77	0.03	59	4.80	0.05	
132	Information Technology	157	3.84	0.08	314	4.18	0.04	62	3.97	0.11	
133	Injury Prevention	141	4.61	0.05	353	4.53	0.04	58	4.36	0.10	
134	Integumentary Checks	157	4.34	0.07	315	4.49	0.04	62	4.40	0.09	
135	Interdisciplinary Roles and Responsibilities	141	4.04	0.08	352	3.96	0.04	60	3.88	0.10	
136	Interdisciplinary Team Collaboration	158	4.11	0.08	316	4.17	0.04	60	4.37	0.09	

Table 9. Knowledge Statement Importance Ratings										
Survey		Newly	Licensed I	LPN/VN	LPN	N/VN Educa	ator	LPN	/VN Super	visor
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
137	Invasive Procedures	141	4.07	0.09	353	3.86	0.05	60	3.42	0.14
138	Isolation Techniques	159	4.47	0.06	316	4.35	0.05	62	4.45	0.09
139	IV Flow Rates	141	4.19	0.09	352	4.06	0.05	59	4.03	0.14
140	IV Site Maintenance	159	4.31	0.08	315	4.32	0.05	62	4.29	0.10
141	IV Solutions	142	4.19	0.09	353	4.04	0.05	60	4.03	0.14
142	J-tubes	158	4.07	0.09	315	4.01	0.05	61	4.05	0.10
143	Labor Complications	140	3.94	0.10	353	3.35	0.06	60	2.92	0.17
144	Labor Process	158	3.61	0.11	314	3.19	0.06	62	2.82	0.15
145	Laboratory Tests	141	4.30	0.07	354	4.41	0.04	60	4.10	0.10
146	Lead Placement	159	4.01	0.09	315	3.86	0.06	61	3.43	0.16
147	Life Stressors	142	3.77	0.08	352	3.74	0.05	60	3.52	0.12
148	Maslow's Hierarchy of Needs	159	4.13	0.08	316	4.24	0.05	62	3.66	0.14
149	Medical Procedures	142	4.26	0.06	353	3.95	0.04	60	3.77	0.11
150	Medical Treatments	158	4.45	0.05	313	4.23	0.04	62	4.18	0.09
151	Medication Administration Calculations	140	4.59	0.07	354	4.79	0.03	59	4.51	0.09
152	Medication Administration Records	158	4.56	0.06	316	4.73	0.03	62	4.60	0.08
153	Medication Administration Rights	141	4.72	0.05	354	4.86	0.02	60	4.73	0.07
154	Medication Administration Sites	158	4.61	0.05	316	4.79	0.03	62	4.63	0.08
155	Medication Adverse Reactions	142	4.68	0.05	354	4.80	0.02	59	4.69	0.07
156	Medication Compatibility	159	4.58	0.06	316	4.69	0.03	62	4.58	0.09
157	Medication Contraindications	141	4.60	0.06	354	4.76	0.03	59	4.58	0.08
158	Medication Conversions	159	4.43	0.07	316	4.74	0.03	62	4.29	0.12
159	Medication Disposal	139	4.35	0.07	353	4.48	0.04	60	4.32	0.10
160	Medication Reconciliation	159	4.36	0.07	316	4.53	0.04	62	4.47	0.09
161	Medication Safety Practices	141	4.65	0.05	352	4.83	0.02	60	4.60	0.08
162	Medication Storage	157	4.32	0.07	315	4.46	0.04	62	4.27	0.10
163	Medication Therapeutic Effects	140	4.51	0.06	352	4.69	0.03	60	4.48	0.08
164	Musculoskeletal Checks	159	4.08	0.07	316	4.38	0.04	62	4.15	0.09
165	Narcotic/Controlled Substance Counting Procedures	140	4.55	0.06	353	4.54	0.04	60	4.47	0.10
166	Narcotics/Controlled Substances	159	4.58	0.05	315	4.61	0.03	62	4.52	0.08

Table 9. Knowledge Statement Importance Ratings											
Survey		Newly	Licensed	LPN/VN LPN/VN Educator			ator	LPN	LPN/VN Supervisor		
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	
167	Nasogastric Tube Insertion	141	4.06	0.09	349	3.83	0.05	60	3.55	0.15	
168	Nasogastric Tube Maintenance	159	4.14	0.08	316	4.10	0.05	62	3.92	0.12	
169	Nasogastric Tube Removal	141	3.90	0.09	354	3.83	0.05	60	3.58	0.15	
170	Nasogastric Tubes	159	4.12	0.08	315	4.07	0.05	61	3.90	0.12	
171	Nephrostomies	142	3.78	0.09	353	3.49	0.05	60	3.33	0.15	
172	Neurological Checks	159	4.44	0.07	316	4.36	0.04	62	4.40	0.10	
173	Newborn Client Care	142	3.82	0.10	354	3.49	0.06	60	3.03	0.18	
174	Non-pharmacological Interventions	159	4.08	0.08	316	4.08	0.05	62	4.29	0.09	
175	Nose Irrigation	143	3.29	0.09	354	2.97	0.06	59	2.88	0.13	
176	Nutritional Guidelines	158	3.87	0.08	317	3.75	0.05	63	3.76	0.11	
177	Older Adult Care	144	4.24	0.06	355	4.48	0.04	62	4.31	0.09	
178	OSHA	158	4.09	0.08	318	4.13	0.05	63	3.78	0.12	
179	Ostomies	144	3.94	0.07	356	3.94	0.05	62	3.92	0.12	
180	Ostomy Equipment	158	4.04	0.07	316	4.04	0.05	63	3.97	0.09	
181	Over-the-counter Medications	144	4.06	0.07	355	4.28	0.04	62	4.05	0.12	
182	Oxygen Administration	158	4.56	0.06	316	4.60	0.04	63	4.46	0.08	
183	Oxygen Saturation Monitoring	143	4.55	0.05	356	4.58	0.03	62	4.44	0.09	
184	Pacing Device Care	158	3.91	0.09	318	3.69	0.06	62	3.55	0.14	
185	Pacing Devices	143	3.87	0.08	355	3.32	0.06	62	3.27	0.14	
186	Pain Control Devices	158	4.12	0.08	317	3.98	0.06	63	4.03	0.11	
187	Pain Management	140	4.47	0.05	353	4.59	0.03	62	4.47	0.08	
188	Palpation	158	4.08	0.08	318	4.19	0.05	63	4.06	0.10	
189	Patient Controlled Analgesia	142	4.03	0.09	357	3.80	0.06	61	3.74	0.15	
190	Peripheral Intravenous Catheter Maintenance	158	4.21	0.09	318	4.03	0.06	63	3.95	0.13	
191	Peripheral Intravenous Catheter Removal	143	3.99	0.09	353	3.88	0.06	62	3.65	0.16	
192	Peripheral Nerve Catheters	157	3.83	0.10	316	3.16	0.07	62	3.06	0.17	
193	Personal Biases	143	3.64	0.09	355	4.01	0.05	62	3.82	0.14	
194	Personal Limitations	158	4.08	0.07	316	4.22	0.05	63	4.16	0.12	
195	Personal Protective Equipment (PPE)	143	4.53	0.06	355	4.70	0.03	61	4.62	0.09	
196	Pharmacological Interventions	158	4.41	0.06	318	4.64	0.03	63	4.27	0.09	
197	Physical Data Guidelines	142	3.73	0.08	354	3.98	0.05	62	3.60	0.13	

Table 9. K	Table 9. Knowledge Statement Importance Ratings									
Survey		Newly	Licensed I	PN/VN	LPN	N/VN Educ	ator	LPN	/VN Super	visor
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
198	Polypharmacy	157	4.11	0.09	317	4.38	0.04	63	4.17	0.10
199	Postmortem Care	141	3.79	0.09	354	3.73	0.05	62	3.77	0.14
200	Postpartum Client Care	157	3.75	0.10	318	3.58	0.06	63	2.95	0.16
201	Post-surgical Care	143	4.34	0.08	356	4.13	0.05	62	4.05	0.09
202	Practice Errors	157	4.40	0.07	317	4.49	0.04	61	4.23	0.10
203	Prenatal Care	142	3.73	0.10	352	3.58	0.06	62	3.08	0.18
204	Prenatal Complications	157	3.85	0.10	316	3.46	0.06	63	2.95	0.17
205	Preschool-age Client Care	143	3.65	0.09	355	3.58	0.05	61	3.16	0.15
206	Prescribed Medications	158	4.54	0.05	318	4.39	0.05	63	4.38	0.10
207	Pre-surgical Care	141	4.09	0.08	351	3.84	0.05	62	3.48	0.13
208	Preventative Care	157	4.32	0.06	318	4.33	0.04	63	4.06	0.10
209	Prioritization of Client Care	143	4.48	0.06	355	4.55	0.03	62	4.29	0.09
210	Privacy and Security	158	4.54	0.06	318	4.64	0.03	63	4.46	0.09
211	Professional Accountability	142	4.35	0.07	354	4.64	0.03	62	4.61	0.08
212	Professional Boundaries	157	4.36	0.06	317	4.60	0.04	63	4.54	0.08
213	Professional Development	144	4.06	0.07	356	4.21	0.04	62	4.24	0.10
214	Quality Improvement	158	4.17	0.07	318	4.11	0.05	63	4.22	0.09
215	Reality Orientation	144	3.90	0.08	355	3.97	0.05	62	3.92	0.13
216	Referrals	157	3.80	0.08	313	3.60	0.05	63	3.40	0.11
217	Regulations	144	4.07	0.07	356	4.23	0.04	62	4.27	0.11
218	Reminiscence Therapy	157	3.39	0.10	317	3.44	0.07	63	2.90	0.15
219	Reporting	141	4.31	0.07	352	4.41	0.04	62	4.40	0.10
220	Respiratory Checks	158	4.51	0.06	318	4.64	0.03	63	4.52	0.08
221	Respiratory Equipment	143	4.45	0.07	355	4.23	0.04	62	4.10	0.10
222	Restraint Alternatives	158	3.94	0.09	317	4.28	0.05	63	4.27	0.12
223	Restraints	141	3.91	0.09	353	4.04	0.05	62	3.87	0.14
224	Risk Management	158	4.13	0.07	315	4.04	0.05	63	3.98	0.10
225	Risk Tools	143	3.71	0.09	354	3.76	0.05	61	3.49	0.14
226	Safety Precautions	158	4.61	0.05	317	4.62	0.04	63	4.56	0.08
227	School-age Client Care	144	3.57	0.09	355	3.63	0.05	61	3.11	0.16
228	Scope of Practice	158	4.71	0.05	316	4.56	0.05	63	4.78	0.06
229	Seclusion	141	3.48	0.10	355	3.50	0.06	61	3.33	0.15
230	Self-awareness	158	4.21	0.07	318	4.08	0.05	62	4.31	0.10
231	Sensory Checks	142	4.08	0.08	353	4.22	0.04	62	3.92	0.12
232	Sensory/Perceptual Alterations	158	3.99	0.08	315	4.16	0.04	63	3.86	0.11

Table 9. K	nowledge Statement Imp	ortance R	atings							
Survey		Newly	Licensed	LPN/VN	LPN	N/VN Educ	ator	LPN	/VN Super	visor
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
233	Sequential Compression Devices (SCDs)	143	3.90	0.08	355	4.08	0.05	62	3.71	0.14
234	Sexual Practices	157	3.56	0.10	317	3.67	0.05	63	3.44	0.12
235	Shift Report/Hand-off	144	4.32	0.07	355	4.51	0.04	62	4.40	0.11
236	Skin Integrity	158	4.42	0.07	318	4.56	0.04	62	4.48	0.08
237	Sleep Cycles	143	3.55	0.09	356	3.39	0.05	62	3.27	0.12
238	Sleep/Rest	158	4.11	0.08	317	4.04	0.04	63	4.08	0.10
239	Smoking Cessation	144	3.67	0.09	355	3.72	0.05	60	3.38	0.14
240	Social Media Usage	158	3.40	0.11	316	3.92	0.06	62	3.76	0.15
241	Specialty Diets	142	3.94	0.08	354	3.90	0.04	62	3.73	0.13
242	Specimen Collection	157	4.27	0.07	318	4.28	0.04	63	4.37	0.09
243	Specimen Storage	141	4.05	0.08	354	3.92	0.05	62	3.81	0.13
244	Staff Competency	158	4.39	0.07	317	4.18	0.05	63	4.37	0.10
245	Staff Education	144	4.08	0.08	355	3.80	0.05	61	3.92	0.11
246	Staff Safety	157	4.54	0.06	317	4.41	0.04	63	4.52	0.08
247	Standardized Pain Rating Scales	142	4.23	0.07	356	4.30	0.04	62	4.18	0.10
248	Sterile Technique	158	4.71	0.05	317	4.67	0.04	63	4.52	0.10
249	Substance Abuse	143	4.13	0.08	355	4.17	0.04	62	3.90	0.13
250	Suctioning	158	4.27	0.08	318	4.29	0.05	63	4.24	0.10
251	Surgical Complications	143	4.40	0.07	351	4.26	0.04	62	4.05	0.12
252	Surgical Procedures	156	3.88	0.10	318	3.89	0.06	63	3.46	0.13
253	Task Assignments	144	3.98	0.07	353	3.90	0.05	62	3.94	0.12
254	Therapeutic Communication	157	4.31	0.08	318	4.50	0.04	63	4.14	0.11
255	Therapeutic Effects	142	4.05	0.07	351	4.10	0.04	62	3.84	0.10
256	Therapeutic Environment	157	4.18	0.08	314	4.30	0.05	63	4.03	0.11
257	Toddler Client Care	143	3.62	0.09	356	3.48	0.06	62	3.15	0.17
258	Toxicity	157	4.27	0.09	316	4.13	0.05	63	3.81	0.11
259	Tracheostomy	140	4.22	0.08	353	3.94	0.05	62	3.90	0.14
260	Tracheostomy Care	157	4.17	0.08	316	4.16	0.05	63	4.00	0.12
261	Transfer Assistive Devices	143	4.03	0.08	355	4.17	0.05	62	4.23	0.11
262	Transfer Process	156	4.03	0.08	318	4.19	0.05	63	3.97	0.10
263	Ultrasounds	144	3.40	0.09	354	2.94	0.06	61	2.87	0.14
264	Universal/Standard Precautions	158	4.71	0.05	318	4.47	0.05	63	4.84	0.05
265	Urinary Catheter Insertion	143	4.49	0.08	357	4.54	0.04	62	4.56	0.09

Survey		Newly	Licensed	LPN/VN	LPN	I/VN Educ	ator	LPN	/VN Super	visor
Position #	Knowledge of:	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
266	Urinary Catheter Maintenance	158	4.45	0.07	317	4.60	0.03	63	4.51	0.08
267	Urinary Catheter Removal	143	4.33	0.08	357	4.36	0.04	62	4.39	0.11
268	Urinary Catheters	158	4.39	0.07	318	4.54	0.04	63	4.49	0.08
269	Urinary Retention	143	4.32	0.07	355	4.33	0.04	61	4.39	0.09
270	Urostomies	157	3.99	0.09	318	4.01	0.05	63	4.19	0.11
271	Validation Therapy	140	3.49	0.09	354	3.32	0.05	61	3.13	0.14
272	Venipuncture	157	4.01	0.10	318	3.86	0.06	63	4.21	0.10
273	Ventilator Care	142	4.12	0.10	354	3.24	0.07	62	3.02	0.17
274	Ventilator Equipment	158	3.99	0.10	317	3.27	0.07	63	3.41	0.15
275	Visual Impairments	142	3.90	0.08	356	3.89	0.05	62	3.76	0.11
276	Vital Sign Monitoring Devices	158	4.56	0.06	318	4.51	0.04	63	4.59	0.07
277	Vital Signs	143	4.77	0.04	356	4.83	0.02	61	4.80	0.06
278	Warming/Cooling Equipment	158	3.80	0.09	318	3.95	0.06	63	3.60	0.11
279	Withdrawal	142	4.07	0.08	355	3.98	0.05	62	3.68	0.13
280	Wound Care	158	4.52	0.06	318	4.44	0.04	63	4.41	0.09
281	Wound Care Equipment	142	4.34	0.07	354	4.17	0.05	62	4.23	0.10
282	Wound Types	158	4.44	0.06	318	4.36	0.04	63	4.51	0.08

The resulting value of 0.98 for this survey instrument suggests this survey is reliably measuring the knowledge that a newly licensed LPN/VN needs for safe and effective practice.

Knowledge Statements

Importance of Knowledge Statements

The knowledge needed for safe and effective practice of newly licensed LPN/VNs was determined by participants' responses based on an importance rating scale. Responders were asked, "How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice, regardless of specific practice setting?" Importance ratings were recorded using a five-point scale: 1="Not Important," 2="Marginally Important," 3="Moderately Important," 4="Important", and 5="Critically Important." Average importance ratings were calculated by including all importance ratings regardless of practice setting. The SME panel ratings and survey responder ratings of the 282 knowledge statements yielded similar results.

The five least important and the five most important knowledge statements for all groups are shown in Table 6 along with their average ratings. At least two of all the groups (Newly Licensed LPN/ VNs, LPN/VN Educators, LPN/VN Supervisors and SMEs) rated "aseptic technique", "cardiopulmonary resuscitation", "client identification", "client safety", "HIPAA", and "infection control" among the five most important knowledge statements. In terms of the least important knowledge statements, three of the groups rated "epidurals" and "group therapy sessions" among the five least important. The highest and lowest ranked statements by primary job title (Newly Licensed LPN/VN, LPN/VN Educator and LPN/ VN Supervisor) are shown in Tables 7 and 8 for the 2018 and 2015 surveys.

The average importance of ratings by primary job title (Newly Licensed LPN/VN, LPN/VN Educator and LPN/VN Supervisor) for all of the knowledge statements are presented in Table 9. Additionally, Appendices E, F and G present the information in rank order of importance for each of the primary job titles as

compared to ratings of SMEs. Since a different set of statements was used in 2015, it would not be possible to make individual comparisons between the two years.

Knowledge Statement Subgroup Analysis

Primary Job Title

The average knowledge statement importance ratings of Newly Licensed LPN/VNs, LPN/VN Educators, and LPN/VN Supervisors were cross-analyzed for meaningful differences between these job titles. Appendix H presents a table with each knowledge statement's average rating for each primary job title. The least important knowledge statements for Newly Licensed LPN/VNs and LPN/VN Educators were "group therapy sessions" (3.26) and "ultrasounds" (2.94), respectively. LPN/VN Supervisors rated "care for clients in labor" the lowest with an average value of 2.62. The most important knowledge statement for Newly Licensed LPN/VNs was "client safety" with an average rating of 4.83. LPN/VN Educators and Supervisors rated "client identification" and "universal/standard precautions" the highest with average values of 4.90 and 4.84, respectively. In general, there were few differences in importance ratings based on job title.

Facility

The average importance ratings of the knowledge statements of responders from hospitals, long-term care facilities, community-based facilities and other facilities were cross-analyzed for meaningful differences. "Nose irrigation" was rated as the least important knowledge statements by responders from hospitals and long-term care facilities, with average vales of 2.86 and 3.08, respectively. "Epidurals" and "ultrasounds" were rated as the least important knowledge statement by responders from community-based and other facilities (average values of 3.08 and 3.10, respectively). The most important knowledge statement for responders working in hospitals and other facilities was "medication administration rights," with average values of 4.84

and 4.90, respectively. Individuals working in long-term care and community-based facilities rated "client identification" and "aseptic technique" as the most important (average values of 4.85 and 4.89, respectively). Average importance values for all knowledge statements by facilities are listed in Appendix I.

Summary

Responders to the 2018 LPN/VN Nursing Knowledge Survey found the statements listed in the survey to be representative of the knowledge necessary for safe and effective professional practice of newly licensed LPN/VNs. There were similar importance ratings of the knowledge statements for Newly Licensed LPN/VNs, LPN/VN Educators, LPN/VN Supervisors and SMEs.

CONCLUSIONS

Based on the reliability of the knowledge statement instrument; the survey of the nonresponders; the validation of the knowledge statement importance ratings by SMEs; and the similarity of knowledge statement importance ratings by Newly Licensed LPN/VNs, LPN/VN Educators and LPN/VN Supervisors, the results of this survey can be used to inform item development.

36 REFERENCES

REFERENCES

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APPENDIX A: 2018 LPN/VN NURSING KNOWLEDGE SURVEY METHODOLOGY REVIEWERS

Michael C. Edwards, PhD, is an associate professor at Arizona State University, department of psychology. In his role as professor, Edwards teaches courses in quantitative psychology, measurement and statistics. In addition, he consults on grants researching self-reporting methods of data collection and validation of assessments. Edwards has authored numerous articles related to measurement models and analysis of inventories. He has served as a manuscript reviewer for journals in psychology, statistics and assessment, including *Applied Psychological Measurement, Educational Assessment and Psychological Assessment*. He has served on advisory committees for the College Board and the American Institute of Certified Public Accountants.

Jerome V. D'Agostino, PhD, is a professor at The Ohio State University, department of educational studies. In his role as professor, D'Agostino teaches courses in statistics, research design and tests and measurement. In addition, he works as principal investigator on grants researching program evaluation and assessment development. D'Agostino has authored numerous articles related to assessment validation, item response analysis and reading recovery. He has also written numerous book chapters on formative assessment, achievement testing, and reliability and validity issues. He has served as an editor for Journal of Education for Students Placed at Risk and a reviewer for *Educational Evaluation and Policy Analysis, American Educational Research Journal, Applied Measurement in Education, and Educational Measurement: Issues & Practice.*

Ying (Alison) Cheng, PhD, is an associate professor at University of Notre Dame, department of psychology. In her role as professor, Dr. Cheng teaches courses in psychological measurement and statistics. In addition, she works as principal investigator on grants researching computerized adaptive testing and assessment development. Cheng has authored numerous articles related to item response theory and computerized adaptive testing. She has also written a book and numerous book chapters on formative assessment and cognitive diagnostic assessment. She has served as an associate editor for *American Educational Research Journal and British Journal of Mathematical and Statistical Psychology*. She has served on advisory committees for American Institute of Certified Public Accountants and GRE.

APPENDIX B: SME PANEL FOR THE 2018 LPN/VN NURSING KNOWLEDGE SURVEY

Area I

Member: Adam Canary, LPN, NHA, BA

Regulatory Board: Washington State Nursing Care Quality Assurance Commission (Area I)

Nursing Specialty: Gerontology

Canary has over seven years of nursing experience and currently serves as a Nursing Home Administrator for Prestige Care. In addition to assisting with client treatments and procedures, he mentors and supervises incoming nurses at his facility; including entry-level LPNs. Canary also ensures that all nurses receive appropriate staff education.

Member: Gera Johnson, LPN

Regulatory Board: New Mexico Board of Nursing (Area I)

Nursing Specialty: Geriatric Nursing

Johnson has 27 years of nursing experience and is currently a Staff Nurse at Mimbres Memorial Nursing Home. She precepts and mentors entry-level LPNs, and works alongside entry-level nurses providing direct client care.

Area II

Member: Cari Kosiba, MSN, BS, RN

Regulatory Board: Illinois Board of Nursing (Area II)

Nursing Specialty: Medical-Surgical, Oncology, Hospice

Kosiba has three years of nursing experience and currently serves as an LPN Lab Instructor and Clinical Supervisor at William Rainey Harper College. She educates PN students in the clinical setting in both long-term care facilities and hospitals. Kosiba has previous experience working as a staff nurse.

Member: Jill Waletich, RN, MA, PHN, CCM

Regulatory Board: Minnesota Board of Nursing (Area II)

Nursing Specialty: Medical-Surgical Nursing, Geriatrics, Home Care, Public Health

Waletich has 36 years of nursing experience and currently serves as a Practical Nursing Instructor at Hennepin Technical College. She educates PN students in the long-term care and sub-acute care settings.

Area III

Member: Mary Jones, LPN

Regulatory Board: North Carolina Board of Nursing (Area III)

Nursing Specialty: Psychiatry

Jones has over eight years of nursing experience and currently serves as a LPN for the North Carolina Department of Public Safety. She orients entry-level LPNs to the work environment and provides training in several areas, including the health electronic records used in the correctional environment, medication administration and wound care.

Member: Callie Rinehart, BSN, RN, CPN

Regulatory Board: Oklahoma Board of Nursing (Area III)

Nursing Specialty: Pediatrics

Rinehart has over seven years of nursing experience and is currently a Nurse Educator at The Children's Center Rehabilitation Hospital. She oversees the training program for all new nursing employees, including entry-level LPNs. She revises the curriculum and provides oversight to all mandatory in-services that must be completed by hospital staff. Rinehart also oversees the nurse technician program at her facility, which includes monitoring students' progress through school and their role within the hospital.

Area IV

Member: Dilleth Campbell-Turner, LPN

Regulatory Board: Connecticut Board of Examiners for Nursing (Area IV)

Nursing Specialty: Long-term Care, Sub-acute Care

Campbell-Turner is an entry-level LPN who obtained her license in April 2017. She currently works for Vernon Manor Health Care Center where she provides direct client care and works alongside other entry-level LPNs.

APPENDIX C: 2018 LPN/VN NURSING KNOWLEDGE SURVEY (VERSION 1)



National Council of State Boards of Nursing

National Council of State Boards of Nursing (NCSBN)

LICENSED PRACTICAL/VOCATIONAL NURSE (LPN/VN) NURSING KNOWLEDGE SURVEY

This survey is being performed by the National Council of State Boards of Nursing (NCSBN®) on behalf of your board of nursing. The survey is part of a comprehensive study of the practice of newly licensed practical/vocational nurses (LPN/VNs) in the NCSBN areas using the NCLEX® examination for primary licensure decisions. Please complete and return this form as soon as possible. This is your opportunity to contribute to the development of the NCLEX examination that future candidates will take.

INSTRUCTIONS

Please read each question carefully and respond by <u>filling in the oval</u> of the response that most closely represents your answer. Choose the answer that <u>best</u> applies to your practice and fill in the appropriate oval(s). When asked to write in information, print your answer legibly in the space provided.

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

· Use a No. 2 pencil.



Correct marks Inco

- Make heavy d
- Make heavy dark marks that fill the oval completely.
 - · If you want to change an answer, erase completely.
- **1. What type(s) of nursing license do you hold?** (Select <u>ALL</u> that apply)
 - Licensed Practical/Vocational Nurse (LPN/VN)
 - Registered Nurse (RN)
 - Advanced Practice Registered Nurse (APRN)
- 2. I am primarily: (Select only ONE)
 - Newly Licensed LPN/VN
 - Nurse Educator
 - Nurse Supervisor/Director

 How long have you been in the position you selected in question 2? (For newly licensed LPN/VNs – how long since you completed course requirements in your nursing program?)

•		•			٠. ٠	
		YEARS			MONTHS	
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2	2		2	2		
3	3		3	3		
4	4		4	4		
(5)	(5)		(5)	(5)		
6	6		6	6		
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SECTION 1: KNOWLEDGE STATEMENTS

This section contains a list of knowledge statements applicable to nursing practice in a variety of settings. For each knowledge statement, please mark the degree of importance, whether or not it applies to your practice setting. For each knowledge statement, one question is asked:

Question - Importance:		IMP	ORTA	NCI	E
How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice, regardless of specific practice setting? (Select only ONE). 1 = Not Important 2 = Minimally Important 3 = Moderately Important 4 = Important 5 = Critically Important	1 Not Important	Minimally Important	Moderately Important	4 Important	
NOWLEDGE OF:	-	2	3	4	
1. Abuse prevention	1	2	3	4	
2. Activities of daily living	1	2	3	4	
3. Adaptive equipment	1	2	3	4	
4. Adult client care	1	2	3	4	
5. Alternative therapies	1	2	3	4	
6. Approved medical abbreviations	1	2	3	4	
7. Aspiration precautions	1	2	3	4	
8. Assistive personnel	1	2	3	4	
9. Barriers to communication	1	2	3	4	
10. Barriers to treatment	1	2	3	4	
11. Behavioral management	1	2	3	4	
12. Bladder irrigation	1	2	3	4	
13. Blood glucose monitoring	1	2	3	4	
14. Blood transfusions	1	2	3	4	
15. Bowel management	1	2	3	4	
16. Cardiopulmonary resuscitation	1	2	3	4	
17. Central venous catheter maintenance	1	2	3	4	
18. Chain of command	1	2	3	4	
19. Chest tubes	1	2	3	4	
20. Circulatory checks	1	2	3	4	
21. Client allergies	1	2	3	4	
22. Client baseline oxygen saturation	1	2	3	4	
23. Client care assignments	1	2	3	4	
24. Client cognitive ability	1	2	3	4	
25. Client compliance issues	1	2	3	4	Т
26. Client disease processes and conditions	1	2	3	4	
27. Client history	1	2	3	4	
28. Client intake/output	1	2	3	4	
29. Client mental status	1	2	3	4	Т
30. Client needs	1	2	3	4	
31. Client nutrition	1	2	3	4	
32. Client plan of care	1	2	3	4	
33. Client privacy	1	2	3	4	
34. Client referrals	1	2	3	4	
35. Client rights	1	2	3	4	
36. Client safety checks	1	2	3	4	
37. Client spiritual and cultural beliefs	1	2	3	4	
38. Code of ethics	1	2	3	4	
39. Colostomies	1	2	3	4	
40. Complementary therapies	1	2	3	4	
41. Confidentiality	1	2	3	4	
	0	2	3	4	

SECTION 1: KNOWLEDGE STATEMENTS (continued

Question - Importance:		MPC	ORT/	NCE	
How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice, regardless of specific practice setting? (Select only ONE). 1 = Not Important 2 = Minimally Important 3 = Moderately Important 4 = Important 5 = Critically Important	1 Not Important	2 Minimally Important	3 Moderately Important	4 Important	5 Critically Important
KNOWLEDGE OF:	-	2	3	4	r.
43. Coping mechanisms	1	2	3	4	<u>5</u>
44. Crisis intervention	1	2	3	4	5
45. Data collection	1	2	3	4	(5) I
46. Developmental milestones	1	2	3	4	5
47. Discharge process	1	2	3	4	5
48. Dressing changes	1	2	3	4	5
49. Electrocardiogram equipment	1	2	3	4	5
50. Electrolyte imbalances	1	2	3	4	5
51. Emergency preparedness	1	2	3	4	5
52. Enteral feedings 53. Epidurals	1	2	3	4	5
54. Evidence-based research	1	2	3	4	5 I
55. Family dynamics	1	2	3	4	5 I
56. Fetal heart monitoring	1	2	3	4	5
57. Gastrointestinal checks	1	2	3	4	5
58. Grieving process	1	2	3	4	5
59. G-tubes	1	2	3	4	5 I
60. Health promotion programs	1	2	3	4	5
61. Hearing impairments	1	2	3	4	<u>5</u>
62. High risk behaviors	1	2	3	4	5 1
63. Hospice care	1	2	3	4	<u>5</u>
64. Ileostomies	1	2	3	4	5
65. Immunizations	1	2	3	4	<u> </u>
66. Infection control	1	2	3	4	5
67. Injury prevention	1	2	3	4	<u> </u>
68. Interdisciplinary roles and responsibilities	1	2	3	4	5
69. Invasive procedures	1	2	3	4	5
70. IV flow rates	1	2	3	4	5
71. IV solutions	1	2	3	4	<u>5</u>
72. Labor complications	1	2	3	4	5
73. Laboratory tests	1	2	3	4	5
74. Life stressors	1	2	3	4	5
75. Medical procedures 76. Medication administration calculations	1	2	3	4	5
76. Medication administration calculations 77. Medication administration rights	1	2	3	4	5
78. Medication adverse reactions	1	2	3	4	5 I
79. Medication contraindications	1	2	3	4	<u> </u>
80. Medication disposal	1	2	3	4	5
81. Medication safety practices	1	2	3	4	5
82. Medication therapeutic effects	1	2	3	4	5
83. Narcotic/controlled substance counting procedures	1	2	3	4	<u> </u>
84. Nasogastric tube insertion	1	2	3	4	5
85. Nasogastric tube removal	1	2	3	4	<u>5</u> I
86. Nephrostomies	1	2	3	4	5
87. Newborn client care	1	2	3	4	<u> </u>

Question - Importance:		IN	1PC)RTA	NCE	Ε
How important is the possession of this knowledge by a newly licensed LPN/ for safe and effective professional practice, regardless of specific practice setti (Select only ONE). 1 = Not Important 2 = Minimally Important 3 = Moderately Important 4 = Important 5 = Critically Important KNOWLEDGE OF:			2 Minimally Important	3 Moderately Important	4 Important	
88. Nose irrigation			2	3	4	
89. Older adult care	<u> </u>		2	3	4	
90. Ostomies	1		2	3	4	
91. Over-the-counter medications			2	3	4	
92. Oxygen saturation monitoring			2	3	4	
93. Pacing devices			2	3	4	
94. Pain management 95. Patient controlled analgesia			2	3	4	
96. Peripheral intravenous catheter removal			2	3	4	L
			2	3	4	
97. Personal biases 98. Personal Protective Equipment (PPE)	<u> </u>		2	3	4	L
			2	3	4	ŀ
99. Physical data guidelines 100. Postmortem care			2	3	4	L
			2	3	4	L
101. Post-surgical care 102. Prenatal care			2	3	4	
	1		2	3	4	H
103. Preschool-age client care			2	3	4	L
104. Pre-surgical care	1		2	3	4	
105. Prioritization of client care	1		2	3	4	L
106. Professional accountability			2	3	4	ŀ
107. Professional development			2	3	4	L
108. Reality orientation 109. Regulations			2	3	4	
			2	3	4	ŀ
110. Reporting 111. Respiratory equipment			2	3	4	L
111. Respiratory equipment			2	3	4	
			2	3	4	ŀ
113. Risk tools			2	3	4	L
114. School-age client care 115. Seclusion			2	3	4	
116. Sensory checks			2	3	4	L
•			2	3	4	
117. Sequential compression devices (SCDs) 118. Shift report/hand-off			2	3	4	L
119. Sleep cycles			2	3	4	ſ
120. Smoking cessation			2	3	4	ŀ
121. Specialty diets						
121. Specially diets 122. Specimen storage			2	3	4	L
123. Staff education			_		4	
123. Stall education 124. Standardized pain rating scales			2 2	3	4	L
125. Substance abuse			2		4)	
126. Surgical complications			2	3		ŀ
127. Task assignments				3	4	F
127. Task assignments 128. Therapeutic effects			2	3	4	ŀ
				3	4	ſ
170 Inddler client care		ノー(2	3	4	1
129. Toddler client care			2	0	0	
129. Toddler client care 130. Tracheostomy 131. Transfer assistive devices) (2	3	4	

(C. L. A. L. ONE)		e by a newly licensed LPN/VN					
2 = 3 3 = 4 4 = 3	Not Important Minimally Importan Moderately Importa Important Critically Importan	less of specific practice setting? nt ant	Not Important	Minimally Important	Moderately Important	4 Important	
NOWLEDGE OF:			=	2 /	3.	4	1
33. Urinary catheter insertion			1	2	3	4	
34. Urinary catheter removal			0	2	3	4	
35. Urinary retention			1	2	3	4	(
36. Validation therapy			1	2	3	4	(
37. Ventilator care			1	2	3	4	(
38. Visual impairments			1	2	3	4	(
39. Vital signs			1	2	3	4	
40. Withdrawal			1	2	3	4	(
41. Wound care equipment			1	2	3	4	(
42. How well did the survey cov the practice setting? • Very well • Well	er the important kno	wledge areas a newly licensed LP!	N/VN shou	ld poss	sess, r	egard	lles

SECTION 2: WORK ENVIRONMEN	Т
INSTRUCTIONS FOR NEWLY LICENSED LPN/VNs: Choose describes where you work.	e the following clinical setting or practice area that most accurately
INSTRUCTIONS FOR <i>NURSE EDUCATORS</i> : Choose the f describes where you supervise your students.	ollowing clinical setting or practice area that most accurately
INSTRUCTIONS FOR NURSE SUPERVISORS/DIRECTORS: describes the general population you supervise and/or the u	
OB (Maternity) clients	ctice? (Select <u>ALL</u> that apply) Clients at the end of life Clients with behavioral/emotional conditions Other, please specify:
2. Which of the following best describes the ages of most	of your clients on the last day you worked? (Select ALL that apply)
Newborn (less than 1 month) Infant/toddler (1 month-2 years) Preschool (ages 3-5) School age Adolescen	e (ages 6-12) Adult (ages 65-85) t (ages 13-17) Adult (over age 85)
	ployment setting/specialty area? If you work mainly in one If you work in more than one setting, fill in the appropriate alf of your time. (Select no more than TWO answers) Rehabilitation Subacute unit Transitional care unit Physician/Advanced Practice RN/Nurse Practitioner (NP Dentist office Occupational health Outpatient clinic Home health, including visiting nurse associations Public health Student/school health Hospice care Prison/Correctional facility/Jail Short stay/Observational Step-down/Progressive care Other, please specify:
is located? (Select only <u>ONE</u>) Hospital Long-term care facility Community-based or ambulatory care facility/organiza	ty/organization where your employment setting/specialty area tion (including public health department, visiting nurses association Practioner (NP)/Dentist Office, clinic, school, prison, etc.)
	6

1. What is your gender?	4. What is your primary language?
O Male Female 2. What is your YEARS	EnglishEnglish and another languageAnother language
age in years? OOO OOO OOO OOO OOO OOO OOO OOO OOO	5. What is the highest degree completed that led to your current position? LPN/VN - Diploma/Certificate in U.S. LPN/VN - Associate degree in U.S. RN - Diploma in U.S. RN - Associate degree in U.S. RN - Baccalaureate degree in U.S. RN - Baccalaureate degree in U.S. RN - Generic Master's degree in U.S. RN - Master's (Nurse Practitioner) RN - Master's (Clinical Nurse Specialist) RN - Master's (Nurse Midwife) RN - Master's (CRNA) RN - Generic Doctorate in U.S. (e.g., ND or PhD) RN - Nursing Doctorate in U.S. (e.g., DNP) Any nursing program NOT located in the U.S. In progress to complete generic Master's Other program, please specify:
SECTION 4: COMMENTS	
ECTION 4: COMMENTS we need additional information in order to clarify the rearticipants. If you would be willing to answer a few add number where you can be reached during the day or eached. lame: -mail Address:	itional questions by phone or e-mail, please provide arly evening. Daytime or Early Evening Phone Number with Area Code

After you complete this form, please return it in the enclosed postage-paid envelope.

Thank you for participating in this important work!

7

APPENDIX C: 2018 LPN/VN NURSING KNOWLEDGE SURVEY (VERSION 2)



National Council of State Boards of Nursing

National Council of State Boards of Nursing (NCSBN)

LICENSED PRACTICAL/VOCATIONAL NURSE (LPN/VN) NURSING KNOWLEDGE SURVEY

This survey is being performed by the National Council of State Boards of Nursing (NCSBN®) on behalf of your board of nursing. The survey is part of a comprehensive study of the practice of newly licensed practical/vocational nurses (LPN/VNs) in the NCSBN areas using the NCLEX® examination for primary licensure decisions. Please complete and return this form as soon as possible. This is your opportunity to contribute to the development of the NCLEX examination that future candidates will take.

INSTRUCTIONS

Please read each question carefully and respond by <u>filling in the oval</u> of the response that most closely represents your answer. Choose the answer that <u>best</u> applies to your practice and fill in the appropriate oval(s). When asked to write in information, print your answer legibly in the space provided.

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





Incorrect marks

- · Use a No. 2 pencil.
- Make heavy dark marks that fill the oval completely.
- · If you want to change an answer, erase completely.
- 1. What type(s) of nursing license do you hold? (Select <u>ALL</u> that apply)
 - Licensed Practical/Vocational Nurse (LPN/VN)
 - Registered Nurse (RN)
 - Advanced Practice Registered Nurse (APRN)
- 2. I am primarily: (Select only ONE)
 - Newly Licensed LPN/VN
 - Nurse Educator
 - Nurse Supervisor/Director

 How long have you been in the position you selected in question 2? (For newly licensed LPN/VNs – how long since you completed course requirements in your nursing program?)

•	cqu	C	incines in ye	,u.	···u	ising prog
			YEARS			MONTH
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	1	1		1	1	
	2	2		2	2	
	3	3		3	3	
	4	4		4	4	
	(5)	(5)		(5)	(5)	
	6	6		6	6	

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1

SECTION 1: KNOWLEDGE STATEMENTS

This section contains a list of knowledge statements applicable to nursing practice in a variety of settings. For each knowledge statement, please mark the degree of importance, whether or not it applies to your practice setting. For each knowledge statement, one question is asked:

• Q	uestion - Importance:		MPC	ORTA	NCE	E
fo	ow important is the possession of this knowledge by a newly licensed LPN/VN or safe and effective professional practice, regardless of specific practice setting? 1 = Not Important 2 = Minimally Important 3 = Moderately Important 4 = Important 5 = Critically Important	Not Important	Minimally Important	Moderately Important	4 Important	Critically Important
KN	NOWLEDGE OF:	_	2	3	4	ī
1.	Active listening	1	2	3	4	5
	Acute illnesses	1	2	3	4	5
3.	Adolescent client care	1	2	3	4	5
4.	Advance directives	1	2	3	4	5
5.	Antepartum client care	1	2	3	4	(5)
6.	Aseptic technique	1	2	3	4	5
7.	Assistive devices	1	2	3	4	5
8.	Available resources	1	2	3	4	5
9.	Barriers to learning	1	2	3	4	(5)
	Behavioral disorders	1	2	3	4	5
	Biohazard disposal	1	2	3	4	5
	Bladder scans	1	2	3	4	5
	Blood products	1	2	3	4	(5)
	Body mechanics	1	2	3	4	5
	Cardiac abnormalities	1	2	3	4	(5)
	Care for clients in labor	1	2	3	4	5
	Central venous catheter types	1	2	3	4	5
	Chemical dependency	1	2	3	4	5
	Chronic illnesses	1	2	3	4	5
	Client advocacy	1	2	3	4	5
	Client autonomy	1	2	3	4	5
	Client baseline vital signs	1	2	3	4	5
	Client care equipment	1	2	3	4	5
	Client comfort level	1	2	3	4	5
	Client consent	1	2	3	4	<u>5</u>
	Client education Client identification	1	2	3	4	(5)
	Client medical history	1	2	3	4	5
	Client mobility needs	1	2	3	4	(5)
	Client non-compliance	1	2	3	4	5
	Client physical limitations	1	2	3	4	5
	Client preferences	1	2	3	4	5
	Client psychosocial functioning	1	2	3	4	(5)
	Client repositioning	1	2	3	4	5
	Client safety	1	2	3	4	5
	Client self-advocacy	1	2	3	4	5
	Client-centered care	1	2	3	4	(5)
	Cognitive behavioral therapy	1	2	3	4	5
	Community resources	1	2	3	4	(5)
	Compression stockings	1	2	3	4	5
41.	Conflict resolution	1	2	3	4	(5)
	Controlled substances	1	2	3	4	5

2

SECTION 1: KNOWLEDGE STATEMENTS (continued)

IMPORTANCE Question - Importance: How important is the possession of this knowledge by a newly licensed LPN/VN 3 Moderately Importan 2 Minimally Important 5 Critically Important for safe and effective professional practice, regardless of specific practice setting? (Select only ONE). 1 = Not Important Not Important 2 = Minimally Important 4 Important 3 = Moderately Important 4 = Important 5 = Critically Important **KNOWLEDGE OF:** 43. Cost effective care 44. Cultural diversity 45. De-escalation techniques 46. Diagnostic procedures 47. Drainage devices 48. Ear irrigation 49. Electrocardiograms (EKG/ECG) 50. Electronic medical records 51. End of life care 52. Enteral tube management 53. Evidence-based care 54. Eye irrigation 55. Family medical history 56. Fluid imbalances 57. Genitourinary checks 58. Group therapy sessions 59. Health care provider orders 60. Health screening programs 61. Herbal supplements 62. HIPAA 63. Hypoxia 64. Immobilized client care 65. Incident reporting 66. Information technology 67. Integumentary checks 68. Interdisciplinary team collaboration 69. Isolation techniques 70. IV site maintenance 71. I-tubes 72. Labor process 73. Lead placement 74. Maslow's hierarchy of needs Medical treatments 76. Medication administration records 77. Medication administration sites 78. Medication compatibility 79. Medication conversions 80. Medication reconciliation 81. Medication storage 82. Musculoskeletal checks 83. Narcotics/controlled substances 84. Nasogastric tube maintenance 85. Nasogastric tubes 86. Neurological checks 87. Non-pharmacological interventions

Ou	estion - Importance:		IMPO	ORT/	NCI	E
How for s	w important is the possession of this knowledge by a newly licensed LPN/VN safe and effective professional practice, regardless of specific practice setting? 1 = Not Important 2 = Minimally Important 3 = Moderately Important 4 = Important 5 = Critically Important	1 Not Important	2 Minimally Important	3 Moderately Important	4 Important	
KINO	WLEDGE OF:				Ţ	
	Nutritional guidelines	1	2	3	4	t
	OSHA	1	2	3	4	
	Ostomy equipment	1	2	3	4	
	Oxygen administration	1	2	3	4	L
	Pacing device care	1	2	3	4	1
	Pain control devices	1	2	3	4	L
	Palpation	1	2	3	4	1
	Peripheral intravenous catheter maintenance	1	2	3	4	l
	Peripheral nerve catheters	1	2	3	4	1
	Personal limitations	1	2	3	4	l
	Pharmacological interventions	1	2	3	4	1
	Polypharmacy	1	2	3	4	l
	Postpartum client care	0	2	3	4	1
	Practice errors Prenatal complications	1	2	3	4	ł
	Prescribed medications	1	2	3	4	1
	Preventative care	1	2	3	4	ł
	Privacy and security	1	2	3	4	1
	Professional boundaries	1	2	3	4	ł
	Quality improvement	1	2	3	4	t
	Referrals	1	2	3	4	ł
	Reminiscence therapy	1	2	3	4	t
	Respiratory checks	1	2	3	4	ł
	Restraint alternatives	1	2	3	4	t
	Risk management	1	2	3	4	t
	Safety precautions	1	2	3	4	Ī
	Scope of practice	1	2	3	4	ı
	Self awareness	1	2	3	4	Ī
	Sensory/perceptual alterations	1	2	3	4	I
	Sexual practices	1	2	3	4	ſ
118.	Skin integrity	1	2	3	4	١
119.	Sleep/rest	1	2	3	4	ſ
	Social media usage	1	2	3	4	1
	Specimen collection	1	2	3	4	Ī
122.	Staff competency	1	2	3	4	1
	Staff safety	1	2	3	4	I
	Sterile technique	1	2	3	4	1
	Suctioning	1	2	3	4	l
	Surgical procedures	1	2	3	4	1
	Therapeutic communication	1	2	3	4	I
	Therapeutic environment	1	2	3	4	1
	Toxicity	1	2	3	4	I
	Tracheostomy care	1	2	3	4	1
	Transfer process	1	2	3	4	ļ
	Universal/standard precautions	1	2	3	4	

Question - Importance:		IMP (ORT/	NCI	
How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice, regardless of specific practice setting? (Select only ONE). 1 = Not Important 2 = Minimally Important 3 = Moderately Important 4 = Important 5 = Critically Important	Not Important	Minimally Important	3 Moderately Important	4 Important	Critically Important
(NOWLEDGE OF:	-	2	3	4	
133. Urinary catheter maintenance	1	2	3	4	(5)
134. Urinary catheters	1	2	3	4	5
135. Urostomies	1	2	3	4	5
136. Venipuncture	1	2	3	4	(5)
137. Ventilator equipment	1	2	3	4	5
138. Vital sign monitoring devices	1	2	3	4	5
139. Warming/cooling equipment	1	2	3	4	(5)
140. Wound care	1	2	3	4	5
141. Wound types	1	2	3	4	(5)
142. How well did the survey cover the important knowledge areas a newly licensed LPN/the practice setting?	VN should	l poss	ess, r	egard	less (
Very wellWellAdequatelyPoorly					
Please list any important knowledge areas you believe that a newly licensed LPN/VN should from the survey.	l possess	that a	re mis	ssing	_

	wing clinical setting or practice area that most accurately
escribes where you supervise your students.	
NSTRUCTIONS FOR NURSE SUPERVISORS/DIRECTORS: Clescribes the general population you supervise and/or the unit	
. Which of the following best describes your area of practice	? (Select ALL that apply)
	ents at the end of life
·	ents with behavioral/emotional conditions
 Clients with stabilized chronic conditions Clients with unstabilized chronic conditions 	ner, please specify:
Clients with acute conditions, including clients	
with medical, surgical or critical conditions	
 Which of the following <u>best</u> describes the ages of <u>most</u> of you Newborn (less than 1 month) School age (age) 	
○ Infant/toddler (1 month-2 years)	
Preschool (ages 3-5) Adult (ages 18	64)
 Critical care (e.g., ICU, CCU, step-down units, pediatric/neonatal intensive care, emergency 	f your time. (Select <u>no more than TWO</u> answers) Rehabilitation Subacute unit
Critical care (e.g., ICU, CCU, step-down units,	Rehabilitation

Asian Indian Asian Other White-not of Hispanic origin Other program, please specify: Description Description Any nursing program NOT located in the U.S. In progress to complete generic Master's Other program, please specify: Description Description Description Description Daytime or Early Evening Phone Number with Area Code: Description Description	1. What is your gender? Male Female 2. What is your age in years? TEARS TEA	4. What is your primary language? English English and another language Another language Another language 5. What is the highest degree completed that led to your current position? LPN/VN - Diploma/Certificate in U.S. LPN/VN - Associate degree in U.S. RN - Diploma in U.S. RN - Diploma in U.S. RN - Associate degree in U.S. RN - Baccalaureate degree in U.S. RN - Generic Masters degree in U.S. RN - Master's (Nurse Practitioner) RN - Master's (Clinical Nurse Specialist) RN - Master's (CRNA) RN - Generic Doctorate in U.S. (e.g., ND or PhD) RN - Nursing Doctorate in U.S. (e.g., DNP)
Phone Number with Area Code:	Asian IndianAsian OtherPacific IslanderWhite-not of Hispanic origin	 Any nursing program NOT located in the U.S. In progress to complete generic Master's Other program,
-mail Address: (participants. If you would be willing to answer a few addi a number where you can be reached during the day or ea	itional questions by phone or e-mail, please provide arly evening. Daytime or Early Evening
You may write any comments or suggestions that you have in the space below.		
888 888 888	E-mail Address:	
		the space below. 100 000

After you complete this form, please return it in the enclosed postage-paid envelope.

*Thank you for participating in this important work!

National Council of State Boards of Nursing, Inc. (NCSBN) | 2019

APPENDIX D: SME KNOWLEDGE STATEMENT RATINGS RANK ORDERED BY AVERAGE IMPORTANCE

Preface: How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice regardless of specific practice setting?

Survey			SME	
Position #	Knowledge Statements	N	Avg.	Std. Err.
122	Herbal Supplements	6	2.00	0.26
116	Group Therapy Sessions	6	2.17	0.48
27	Blood Transfusions	6	2.67	0.49
105	Epidurals	6	2.67	0.42
79	Complementary Therapies	6	2.67	0.21
93	Discharge Process	6	2.83	0.40
108	Eye Irrigation	6	2.83	0.40
274	Ventilator Equipment	6	2.83	0.40
10	Antepartum Client Care	6	2.83	0.31
67	Client Referrals	6	2.83	0.31
78	Community Resources	6	2.83	0.31
110	Family Medical History	6	2.83	0.31
271	Validation Therapy	6	2.83	0.31
34	Central Venous Catheter Types	6	3.00	0.63
171	Nephrostomies	6	3.00	0.52
100	Electronic Medical Records	6	3.00	0.45
76	Cognitive Behavioral Therapy	6	3.00	0.37
109	Family Dynamics	6	3.00	0.37
119	Health Promotion Programs	6	3.00	0.37
120	Health Screening Programs	6	3.00	0.37
175	Nose Irrigation	6	3.00	0.37
237	Sleep Cycles	6	3.00	0.37
9	Alternative Therapies	6	3.00	0.26
263	Ultrasounds	6	3.17	0.60
37	Chest Tubes	6	3.17	0.54
32	Care for Clients in Labor	6	3.17	0.40
86	Cost Effective Care	6	3.17	0.40
121	Hearing Impairments	6	3.17	0.40
147	Life Stressors	6	3.17	0.40
176	Nutritional Guidelines	6	3.17	0.40
178	OSHA	6	3.17	0.40
192	Peripheral Nerve Catheters	6	3.17	0.40
197	Physical Data Guidelines	6	3.17	0.40
273	Ventilator Care	6	3.17	0.40
24	Bladder Scans	6	3.17	0.31

Survey	wledge Statement Ratings Rank Ordered by Average Importance		SME	
Position #	Knowledge Statements	N	Avg.	Std. Err.
<u>"</u> 46	Client Care Equipment	6	3.17	0.31
90	De-escalation Techniques	6	3.17	0.31
91	Developmental Milestones	6	3.17	0.31
96	Ear Irrigation	6	3.17	0.31
132	Information Technology	6	3.17	0.31
173	Newborn Client Care	6	3.33	0.61
60	Client Non-compliance	6	3.33	0.49
97	Electrocardiogram Equipment	6	3.33	0.49
98	Electrocardiograms (EKG/ECG)	6	3.33	0.49
107	Evidence-based Research	6	3.33	0.49
188	Palpation	6	3.33	0.49
33	Central Venous Catheter Maintenance	6	3.33	0.49
52	Client Education		3.33	0.42
		6		
184	Pacing Device Care	6	3.33	0.42
185	Pacing Devices	6	3.33	0.42
16	Available Resources	6	3.33	0.33
80	Compression Stockings	6	3.33	0.33
129	Immunizations	6	3.33	0.33
146	Lead Placement	6	3.33	0.33
216	Referrals	6	3.33	0.33
257	Toddler Client Care	6	3.33	0.33
275	Visual Impairments	6	3.33	0.33
278	Warming/Cooling Equipment	6	3.33	0.33
229	Seclusion	6	3.33	0.21
238	Sleep/Rest	6	3.33	0.21
66	Client Psychosocial Functioning	6	3.50	0.50
111	Fetal Heart Monitoring	6	3.50	0.50
6	Adolescent Client Care	6	3.50	0.43
26	Blood Products	6	3.50	0.43
35	Chain of Command	6	3.50	0.43
36	Chemical Dependency	6	3.50	0.43
106	Evidence-based Care	6	3.50	0.43
117	G-tubes	6	3.50	0.43
191	Peripheral Intravenous Catheter Removal	6	3.50	0.43
224	Risk Management	6	3.50	0.43
234	Sexual Practices	6	3.50	0.43
19	Barriers to Treatment	6	3.50	0.34
23	Bladder Irrigation	6	3.50	0.34
94	Drainage Devices	6	3.50	0.34
167	Nasogastric Tube Insertion	6	3.50	0.34
205	Preschool-age Client Care	6	3.50	0.34

SME Knov	vledge Statement Ratings Rank Ordered by Average Importance			
Survey			SME	
Position #	Knowledge Statements	N	Avg.	Std. Err.
218	Reminiscence Therapy	6	3.50	0.34
227	School-age Client Care	6	3.50	0.34
239	Smoking Cessation	6	3.50	0.34
115	Grieving Process	6	3.50	0.22
128	Immobilized Client Care	6	3.50	0.22
133	Injury Prevention	6	3.50	0.22
137	Invasive Procedures	6	3.50	0.22
225	Risk Tools	6	3.50	0.22
92	Diagnostic Procedures	6	3.67	0.49
270	Urostomies	6	3.67	0.49
7	Adult Client Care	6	3.67	0.42
53	Client History	6	3.67	0.42
72	Client Self-advocacy	6	3.67	0.42
114	Genitourinary Checks	6	3.67	0.42
123	High Risk Behaviors	6	3.67	0.42
136	Interdisciplinary Team Collaboration	6	3.67	0.42
141	IV Solutions	6	3.67	0.42
142	J-tubes	6	3.67	0.42
169	Nasogastric Tube Removal	6	3.67	0.42
189	Patient Controlled Analgesia	6	3.67	0.42
200	Postpartum Client Care	6	3.67	0.42
207	Pre-surgical Care	6	3.67	0.42
252	Surgical Procedures	6	3.67	0.42
258	Toxicity	6	3.67	0.42
272	Venipuncture	6	3.67	0.42
45	Client Care Assignments	6	3.67	0.33
85	Coping Mechanisms	6	3.67	0.33
144	Labor Process	6	3.67	0.33
241	Specialty Diets	6	3.67	0.33
244	Staff Competency	6	3.67	0.33
245	Staff Education	6	3.67	0.33
249	Substance Abuse	6	3.67	0.33
14	Assistive Devices	6	3.67	0.21
18	Barriers to Learning	6	3.67	0.21
77	Colostomies	6	3.67	0.21
11	Approved Medical Abbreviations	6	3.83	0.48
22	Biohazard Disposal	6	3.83	0.48
83	Continuity of Care	6	3.83	0.48
164	Musculoskeletal Checks	6	3.83	0.48
3	Activities of Daily Living	6	3.83	0.40
58	Client Mobility Needs	6	3.83	0.40

SME Knov	vledge Statement Ratings Rank Ordered by Average Importanc	e		
Survey Position			SME N Avg	
#	Knowledge Statements	N	Avg.	Std. Err.
59	Client Needs	6	3.83	0.40
87	Crisis Intervention	6	3.83	0.40
135	Interdisciplinary Roles and Responsibilities	6	3.83	0.40
139	IV Flow Rates	6	3.83	0.40
149	Medical Procedures	6	3.83	0.40
214	Quality Improvement	6	3.83	0.40
232	Sensory/Perceptual Alterations	6	3.83	0.40
240	Social Media Usage	6	3.83	0.40
253	Task Assignments	6	3.83	0.40
15	Assistive Personnel	6	3.83	0.31
20	Behavioral Disorders	6	3.83	0.31
57	Client Mental Status	6	3.83	0.31
82	Conflict Resolution	6	3.83	0.31
88	Cultural Diversity	6	3.83	0.31
103	Enteral Feedings	6	3.83	0.31
104	Enteral Tube Management	6	3.83	0.31
113	Gastrointestinal Checks	6	3.83	0.31
125	Hospice Care	6	3.83	0.31
162	Medication Storage	6	3.83	0.31
168	Nasogastric Tube Maintenance	6	3.83	0.31
231	Sensory Checks	6	3.83	0.31
233	Sequential Compression Devices (SCDs)	6	3.83	0.31
243	Specimen Storage	6	3.83	0.31
279	Withdrawal	6	3.83	0.31
280	Wound Care	6	3.83	0.31
281	Wound Care Equipment	6	3.83	0.31
282	Wound Types	6	3.83	0.31
61	Client Nutrition	6	3.83	0.17
73	Client Spiritual and Cultural Beliefs	6	3.83	0.17
198	Polypharmacy	6	3.83	0.17
199	Postmortem Care	6	3.83	0.17
203	Prenatal Care	6	3.83	0.17
256	Therapeutic Environment	6	3.83	0.17
261	Transfer Assistive Devices	6	3.83	0.17
262	Transfer Process	6	3.83	0.17
166	Narcotics/Controlled Substances	6	4.00	0.63
101	Emergency Preparedness	6	4.00	0.52
63	Client Plan of Care	6	4.00	0.45
165	Narcotic/Controlled Substance Counting Procedures	6	4.00	0.45
250	Suctioning	6	4.00	0.45
251	Surgical Complications	6	4.00	0.45
259	Tracheostomy	6	4.00	0.45

Survey			SME	
Position #	Knowledge Statements	N	Avg.	Std. Err.
28	Body Mechanics	6	4.00	0.37
29	Bowel Management	6	4.00	0.37
47	Client Cognitive Ability	6	4.00	0.37
134	Integumentary Checks	6	4.00	0.37
145	Laboratory Tests	6	4.00	0.37
5	Adaptive Equipment	6	4.00	0.26
21	Behavioral Management	6	4.00	0.26
40	Client Advocacy	6	4.00	0.26
56	Client Medical History	6	4.00	0.26
64	Client Preferences	6	4.00	0.26
99	Electrolyte Imbalances	6	4.00	0.26
127	Ileostomies	6	4.00	0.26
170	Nasogastric Tubes	6	4.00	0.26
174	Non-pharmacological Interventions	6	4.00	0.26
177	Older Adult Care	6	4.00	0.26
181	Over-the-counter Medications	6	4.00	0.26
186	Pain Control Devices	6	4.00	0.26
190	Peripheral Intravenous Catheter Maintenance	6	4.00	0.26
193	Personal Biases	6	4.00	0.26
204	Prenatal Complications	6	4.00	0.26
208	Preventative Care	6	4.00	0.26
215	Reality Orientation	6	4.00	0.26
221	Respiratory Equipment	6	4.00	0.26
230	Self Awareness	6	4.00	0.26
255	Therapeutic Effects	6	4.00	0.26
260	Tracheostomy Care	6	4.00	0.26
265	Urinary Catheter Insertion	6	4.00	0.26
266	Urinary Catheter Maintenance	6	4.00	0.26
267	Urinary Catheter Removal	6	4.00	0.26
268	Urinary Catheters	6	4.00	0.26
180	Ostomy Equipment	6	4.00	0.00
219	Reporting	6	4.00	0.00
247	Standardized Pain Rating Scales	6	4.00	0.00
143	Labor Complications	6	4.17	0.48
201	Post-surgical Care	6	4.17	0.48
17	Barriers to Communication	6	4.17	0.31
30	Cardiac Abnormalities	6	4.17	0.31
42	Client Autonomy	6	4.17	0.31
49	Client Compliance Issues	6	4.17	0.31
74	Client-centered Care	6	4.17	0.31
34	Controlled Substances	6	4.17	0.31
102	End-of-life Care	6	4.17	0.31

	vledge Statement Ratings Rank Ordered by Average Importance		Char	,
Survey Position			SME	_
#	Knowledge Statements	N	Avg.	Std. Err.
130	Incident Reporting	6	4.17	0.31
150	Medical Treatments	6	4.17	0.31
172	Neurological Checks	6	4.17	0.31
217	Regulations	6	4.17	0.31
236	Skin Integrity	6	4.17	0.31
38	Chronic Illnesses	6	4.17	0.17
55	Client Intake/Output	6	4.17	0.17
62	Client Physical Limitations	6	4.17	0.17
95	Dressing Changes	6	4.17	0.17
148	Maslow's Hierarchy of Needs	6	4.17	0.17
159	Medication Disposal	6	4.17	0.17
160	Medication Reconciliation	6	4.17	0.17
163	Medication Therapeutic Effects	6	4.17	0.17
179	Ostomies	6	4.17	0.17
222	Restraint Alternatives	6	4.17	0.17
242	Specimen Collection	6	4.17	0.17
89	Data Collection	6	4.33	0.49
13	Aspiration Precautions	6	4.33	0.33
25	Blood Glucose Monitoring	6	4.33	0.33
51	Client Disease Processes and Conditions	6	4.33	0.33
75	Code of Ethics	6	4.33	0.33
81	Confidentiality	6	4.33	0.33
206	Prescribed Medications	6	4.33	0.33
248	Sterile Technique	6	4.33	0.33
48	Client Comfort Level	6	4.33	0.21
65	Client Privacy	6	4.33	0.21
68	Client Repositioning	6	4.33	0.21
138	Isolation Techniques	6	4.33	0.21
140	IV Site Maintenance	6	4.33	0.21
187	Pain Management	6	4.33	0.21
194	Personal Limitations	6	4.33	0.21
196	Pharmacological Interventions	6	4.33	0.21
209	Prioritization of Client Care	6	4.33	0.21
210	Privacy and Security	6	4.33	0.21
213	Professional Development	6	4.33	0.21
223	Restraints	6	4.33	0.21
228	Scope of Practice	6	4.33	0.21
246	Staff Safety	6	4.33	0.21
269	Urinary Retention	6	4.33	0.21
156	Medication Compatibility	6	4.50	0.21
1	Abuse Prevention	6	4.50	0.34
2	Active Listening	6	4.50	0.22

SME Know	wledge Statement Ratings Rank Ordered by Average Importance			
Survey			SME	
Position #	Knowledge Statements	N	Avg.	Std. Err.
41	Client Allergies	6	4.50	0.22
43	Client Baseline Oxygen Saturation	6	4.50	0.22
44	Client Baseline Vital Signs	6	4.50	0.22
69	Client Rights	6	4.50	0.22
112	Fluid Imbalances	6	4.50	0.22
126	Нурохіа	6	4.50	0.22
152	Medication Administration Records	6	4.50	0.22
154	Medication Administration Sites	6	4.50	0.22
158	Medication Conversions	6	4.50	0.22
195	Personal Protective Equipment (PPE)	6	4.50	0.22
211	Professional Accountability	6	4.50	0.22
212	Professional Boundaries	6	4.50	0.22
220	Respiratory Checks	6	4.50	0.22
226	Safety Precautions	6	4.50	0.22
235	Shift Report/Hand-off	6	4.50	0.22
254	Therapeutic Communication	6	4.50	0.22
264	Universal/Standard Precautions	6	4.50	0.22
276	Vital Sign Monitoring Devices	6	4.50	0.22
4	Acute Illnesses	6	4.67	0.33
39	Circulatory Checks	6	4.67	0.21
50	Client Consent	6	4.67	0.21
71	Client Safety Checks	6	4.67	0.21
124	HIPAA	6	4.67	0.21
155	Medication Adverse Reactions	6	4.67	0.21
157	Medication Contraindications	6	4.67	0.21
161	Medication Safety Practices	6	4.67	0.21
183	Oxygen Saturation Monitoring	6	4.67	0.21
277	Vital Signs	6	4.67	0.21
8	Advance Directives	6	4.83	0.17
12	Aseptic Technique	6	4.83	0.17
70	Client Safety	6	4.83	0.17
118	Health Care Provider Orders	6	4.83	0.17
151	Medication Administration Calculations	6	4.83	0.17
153	Medication Administration Rights	6	4.83	0.17
182	Oxygen Administration	6	4.83	0.17
31	Cardiopulmonary Resuscitation	6	5.00	0.00
54	Client Identification	6	5.00	0.00
131	Infection Control	6	5.00	0.00
202	Practice Errors	6	5.00	0.00

APPENDIX E: NEWLY LICENSED LPN/VN AND SME KNOWLEDGE STATEMENT RATINGS RANK ORDERED BY NEWLY LICENSED LPN/VN AVERAGE IMPORTANCE

Preface: How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice regardless of specific practice setting?

Survey Position #	Knowledge Statement	Newly	Newly Licensed LPN/VN			SME			
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference	
116	Group Therapy Sessions	159	3.26	0.10	6	2.17	0.48	1.09	
175	Nose Irrigation	143	3.29	0.09	6	3.00	0.37	0.29	
122	Herbal Supplements	159	3.36	0.10	6	2.00	0.26	1.36	
218	Reminiscence Therapy	157	3.39	0.10	6	3.50	0.34	-0.11	
240	Social Media Usage	158	3.40	0.11	6	3.83	0.40	-0.43	
263	Ultrasounds	144	3.40	0.09	6	3.17	0.60	0.23	
105	Epidurals	142	3.41	0.10	6	2.67	0.42	0.74	
229	Seclusion	141	3.48	0.10	6	3.33	0.21	0.15	
271	Validation Therapy	140	3.49	0.09	6	2.83	0.31	0.66	
79	Complementary Therapies	140	3.51	0.08	6	2.67	0.21	0.84	
237	Sleep Cycles	143	3.55	0.09	6	3.00	0.37	0.55	
234	Sexual Practices	157	3.56	0.10	6	3.50	0.43	0.06	
227	School-age Client Care	144	3.57	0.09	6	3.50	0.34	0.07	
144	Labor Process	158	3.61	0.11	6	3.67	0.33	-0.06	
96	Ear Irrigation	157	3.61	0.10	6	3.17	0.31	0.44	
24	Bladder Scans	158	3.62	0.10	6	3.17	0.31	0.45	
108	Eye Irrigation	159	3.62	0.09	6	2.83	0.40	0.79	
257	Toddler Client Care	143	3.62	0.09	6	3.33	0.33	0.29	
9	Alternative Therapies	139	3.63	0.09	6	3.00	0.26	0.63	
109	Family Dynamics	142	3.63	0.08	6	3.00	0.37	0.63	
86	Cost Effective Care	159	3.64	0.09	6	3.17	0.40	0.47	
193	Personal Biases	143	3.64	0.09	6	4.00	0.26	-0.36	
205	Preschool-age Client Care	143	3.65	0.09	6	3.50	0.34	0.15	
239	Smoking Cessation	144	3.67	0.09	6	3.50	0.34	0.17	
119	Health Promotion Programs	141	3.69	0.08	6	3.00	0.37	0.69	
225	Risk Tools	143	3.71	0.09	6	3.50	0.22	0.21	
203	Prenatal Care	142	3.73	0.10	6	3.83	0.17	-0.10	
197	Physical Data Guidelines	142	3.73	0.08	6	3.17	0.40	0.56	
67	Client Referrals	140	3.74	0.09	6	2.83	0.31	0.91	
107	Evidence-based Research	140	3.74	0.09	6	3.33	0.49	0.41	
93	Discharge Process	142	3.74	0.08	6	2.83	0.40	0.91	
200	Postpartum Client Care	157	3.75	0.10	6	3.67	0.42	0.08	
10	Antepartum Client Care	157	3.75	0.09	6	2.83	0.31	0.92	
110	Family Medical History	159	3.77	0.08	6	2.83	0.31	0.94	
147	Life Stressors	142	3.77	0.08	6	3.17	0.40	0.60	
171	Nephrostomies	142	3.78	0.09	6	3.00	0.52	0.78	

Newly Licensed LPN/VN and SME Knowledge		e Statement Ratings Rank Ordered by			Newly Lice	mportance		
Survey	Knowledge Statement	Newly Licensed LPN/VN						
Position #		N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
199	Postmortem Care	141	3.79	0.09	6	3.83	0.17	-0.04
278	Warming/Cooling Equipment	158	3.80	0.09	6	3.33	0.33	0.47
216	Referrals	157	3.80	0.08	6	3.33	0.33	0.47
91	Developmental Milestones	142	3.80	0.07	6	3.17	0.31	0.63
173	Newborn Client Care	142	3.82	0.10	6	3.33	0.61	0.49
192	Peripheral Nerve Catheters	157	3.83	0.10	6	3.17	0.40	0.66
78	Community Resources	159	3.83	0.08	6	2.83	0.31	1.00
121	Hearing Impairments	142	3.84	0.08	6	3.17	0.40	0.67
132	Information Technology	157	3.84	0.08	6	3.17	0.31	0.67
32	Care for Clients in Labor	157	3.85	0.10	6	3.17	0.40	0.68
204	Prenatal Complications	157	3.85	0.10	6	4.00	0.26	-0.15
127	Ileostomies	141	3.85	0.09	6	4.00	0.26	-0.15
23	Bladder Irrigation	142	3.86	0.09	6	3.50	0.34	0.36
77	Colostomies	142	3.87	0.09	6	3.67	0.21	0.20
176	Nutritional Guidelines	158	3.87	0.08	6	3.17	0.40	0.70
185	Pacing Devices	143	3.87	0.08	6	3.33	0.42	0.54
27	Blood Transfusions	140	3.88	0.11	6	2.67	0.49	1.21
252	Surgical Procedures	156	3.88	0.10	6	3.67	0.42	0.21
120	Health Screening Programs	156	3.88	0.09	6	3.00	0.37	0.88
6	Adolescent Client Care	159	3.89	0.09	6	3.50	0.43	0.39
169	Nasogastric Tube Removal	141	3.90	0.09	6	3.67	0.42	0.23
80	Compression Stockings	159	3.90	0.08	6	3.33	0.33	0.57
215	Reality Orientation	144	3.90	0.08	6	4.00	0.26	-0.10
233	Sequential Compression Devices (SCDs)	143	3.90	0.08	6	3.83	0.31	0.07
275	Visual Impairments	142	3.90	0.08	6	3.33	0.33	0.57
184	Pacing Device Care	158	3.91	0.09	6	3.33	0.42	0.58
223	Restraints	141	3.91	0.09	6	4.33	0.21	-0.42
85	Coping Mechanisms	142	3.91	0.07	6	3.67	0.33	0.24
15	Assistive Personnel	142	3.93	0.08	6	3.83	0.31	0.10
111	Fetal Heart Monitoring	140	3.94	0.11	6	3.50	0.50	0.44
143	Labor Complications	140	3.94	0.10	6	4.17	0.48	-0.23
222	Restraint Alternatives	158	3.94	0.09	6	4.17	0.17	-0.23
241	Specialty Diets	142	3.94	0.08	6	3.67	0.33	0.27
179	Ostomies	144	3.94	0.07	6	4.17	0.17	-0.23
49	Client Compliance Issues	138	3.96	0.08	6	4.17	0.31	-0.21
5	Adaptive Equipment	142	3.96	0.07	6	4.00	0.26	-0.04
76	Cognitive Behavioral Therapy	158	3.97	0.07	6	3.00	0.37	0.97
37	Chest Tubes	140	3.98	0.10	6	3.17	0.54	0.81
114	Genitourinary Checks	158	3.98	0.08	6	3.67	0.42	0.31
115	Grieving Process	141	3.98	0.07	6	3.50	0.22	0.48
253	Task Assignments	144	3.98	0.07	6	3.83	0.40	0.15

Newly Lic	censed LPN/VN and SME Knowledge	Statement Ratings Rank Ordered by			Newly Lice	mportance		
Survey	Knowledge Statement	Newly Licensed LPN/VN						
Position #		N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
274	Ventilator Equipment	158	3.99	0.10	6	2.83	0.40	1.16
36	Chemical Dependency	158	3.99	0.09	6	3.50	0.43	0.49
191	Peripheral Intravenous Catheter Removal	143	3.99	0.09	6	3.50	0.43	0.49
270	Urostomies	157	3.99	0.09	6	3.67	0.49	0.32
232	Sensory/Perceptual Alterations	158	3.99	0.08	6	3.83	0.40	0.16
21	Behavioral Management	140	3.99	0.07	6	4.00	0.26	-0.01
272	Venipuncture	157	4.01	0.10	6	3.67	0.42	0.34
34	Central Venous Catheter Types	157	4.01	0.09	6	3.00	0.63	1.01
146	Lead Placement	159	4.01	0.09	6	3.33	0.33	0.68
94	Drainage Devices	159	4.01	0.08	6	3.50	0.34	0.51
97	Electrocardiogram Equipment	142	4.01	0.08	6	3.33	0.49	0.68
45	Client Care Assignments	141	4.02	0.08	6	3.67	0.33	0.35
189	Patient Controlled Analgesia	142	4.03	0.09	6	3.67	0.42	0.36
18	Barriers to Learning	157	4.03	0.08	6	3.67	0.21	0.36
261	Transfer Assistive Devices	143	4.03	0.08	6	3.83	0.17	0.20
262	Transfer Process	156	4.03	0.08	6	3.83	0.17	0.20
113	Gastrointestinal Checks	142	4.04	0.08	6	3.83	0.31	0.21
135	Interdisciplinary Roles and Responsibilities	141	4.04	0.08	6	3.83	0.40	0.21
180	Ostomy Equipment	158	4.04	0.07	6	4.00	0.00	0.04
17	Barriers to Communication	142	4.05	0.08	6	4.17	0.31	-0.12
125	Hospice Care	138	4.05	0.08	6	3.83	0.31	0.22
243	Specimen Storage	141	4.05	0.08	6	3.83	0.31	0.22
255	Therapeutic Effects	142	4.05	0.07	6	4.00	0.26	0.05
167	Nasogastric Tube Insertion	141	4.06	0.09	6	3.50	0.34	0.56
64	Client Preferences	159	4.06	0.07	6	4.00	0.26	0.06
181	Over-the-counter Medications	144	4.06	0.07	6	4.00	0.26	0.06
213	Professional Development	144	4.06	0.07	6	4.33	0.21	-0.27
137	Invasive Procedures	141	4.07	0.09	6	3.50	0.22	0.57
142	J-tubes	158	4.07	0.09	6	3.67	0.42	0.40
279	Withdrawal	142	4.07	0.08	6	3.83	0.31	0.24
217	Regulations	144	4.07	0.07	6	4.17	0.31	-0.10
90	De-escalation Techniques	159	4.08	0.08	6	3.17	0.31	0.91
129	Immunizations	141	4.08	0.08	6	3.33	0.33	0.75
174	Non-pharmacological Interventions	159	4.08	0.08	6	4.00	0.26	0.08
188	Palpation	158	4.08	0.08	6	3.33	0.49	0.75
231	Sensory Checks	142	4.08	0.08	6	3.83	0.31	0.25
245	Staff Education	144	4.08	0.08	6	3.67	0.33	0.41
164	Musculoskeletal Checks	159	4.08	0.07	6	3.83	0.48	0.25
194	Personal Limitations	158	4.08	0.07	6	4.33	0.21	-0.25
88	Cultural Diversity	159	4.09	0.08	6	3.83	0.31	0.26
178	OSHA	158	4.09	0.08	6	3.17	0.40	0.92

Newly Lic	ensed LPN/VN and SME Knowledge s	Statement F	Ratings Ranl	COrdered by	Newly Lice	nportance		
Survey		Newly Licensed LPN/VN				:-		
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
207	Pre-surgical Care	141	4.09	0.08	6	3.67	0.42	0.42
60	Client Non-compliance	159	4.09	0.07	6	3.33	0.49	0.76
106	Evidence-based Care	158	4.09	0.07	6	3.50	0.43	0.59
73	Client Spiritual and Cultural Beliefs	141	4.10	0.08	6	3.83	0.17	0.27
198	Polypharmacy	157	4.11	0.09	6	3.83	0.17	0.28
117	G-tubes	141	4.11	0.08	6	3.50	0.43	0.61
136	Interdisciplinary Team Collaboration	158	4.11	0.08	6	3.67	0.42	0.44
238	Sleep/Rest	158	4.11	0.08	6	3.33	0.21	0.78
35	Chain of Command	141	4.11	0.07	6	3.50	0.43	0.61
82	Conflict Resolution	157	4.11	0.07	6	3.83	0.31	0.28
273	Ventilator Care	142	4.12	0.10	6	3.17	0.40	0.95
170	Nasogastric Tubes	159	4.12	0.08	6	4.00	0.26	0.12
186	Pain Control Devices	158	4.12	0.08	6	4.00	0.26	0.12
29	Bowel Management	141	4.12	0.07	6	4.00	0.37	0.12
33	Central Venous Catheter Maintenance	142	4.13	0.10	6	3.33	0.42	0.80
103	Enteral Feedings	141	4.13	0.09	6	3.83	0.31	0.30
148	Maslow's Hierarchy of Needs	159	4.13	0.08	6	4.17	0.17	-0.04
249	Substance Abuse	143	4.13	0.08	6	3.67	0.33	0.46
19	Barriers to Treatment	140	4.13	0.07	6	3.50	0.34	0.63
224	Risk Management	158	4.13	0.07	6	3.50	0.43	0.63
168	Nasogastric Tube Maintenance	159	4.14	0.08	6	3.83	0.31	0.31
47	Client Cognitive Ability	138	4.14	0.07	6	4.00	0.37	0.14
16	Available Resources	158	4.15	0.07	6	3.33	0.33	0.82
26	Blood Products	158	4.16	0.09	6	3.50	0.43	0.66
98	Electrocardiograms (EKG/ECG)	158	4.16	0.09	6	3.33	0.49	0.83
123	High Risk Behaviors	141	4.16	0.08	6	3.67	0.42	0.49
62	Client Physical Limitations	158	4.16	0.06	6	4.17	0.17	-0.01
260	Tracheostomy Care	157	4.17	0.08	6	4.00	0.26	0.17
66	Client Psychosocial Functioning	159	4.17	0.07	6	3.50	0.50	0.67
214	Quality Improvement	158	4.17	0.07	6	3.83	0.40	0.34
11	Approved Medical Abbreviations	141	4.18	0.08	6	3.83	0.48	0.35
256	Therapeutic Environment	157	4.18	0.08	6	3.83	0.17	0.35
92	Diagnostic Procedures	159	4.18	0.07	6	3.67	0.49	0.51
139	IV Flow Rates	141	4.19	0.09	6	3.83	0.40	0.36
141	IV Solutions	142	4.19	0.09	6	3.67	0.42	0.52
20	Behavioral Disorders	159	4.19	0.06	6	3.83	0.31	0.36
14	Assistive Devices	159	4.20	0.07	6	3.67	0.21	0.53
104	Enteral Tube Management	158	4.20	0.07	6	3.83	0.31	0.37
190	Peripheral Intravenous Catheter Maintenance	158	4.21	0.09	6	4.00	0.26	0.21
230	Self Awareness	158	4.21	0.07	6	4.00	0.26	0.21
259	Tracheostomy	140	4.22	0.08	6	4.00	0.45	0.22

Newly Lic	ensed LPN/VN and SME Knowledg	e Statement Ratings Rank Ordered by			Newly Licensed LPN/VN Average II			mportance
Survey Position #	Knowledge Statement	Newly Licensed LPN/VN				Ava Dif		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
247	Standardized Pain Rating Scales	142	4.23	0.07	6	4.00	0.00	0.23
87	Crisis Intervention	141	4.24	0.08	6	3.83	0.40	0.41
177	Older Adult Care	144	4.24	0.06	6	4.00	0.26	0.24
58	Client Mobility Needs	159	4.25	0.06	6	3.83	0.40	0.42
55	Client Intake/Output	141	4.26	0.08	6	4.17	0.17	0.09
149	Medical Procedures	142	4.26	0.06	6	3.83	0.40	0.43
258	Toxicity	157	4.27	0.09	6	3.67	0.42	0.60
250	Suctioning	158	4.27	0.08	6	4.00	0.45	0.27
242	Specimen Collection	157	4.27	0.07	6	4.17	0.17	0.10
46	Client Care Equipment	159	4.27	0.06	6	3.17	0.31	1.10
53	Client History	140	4.27	0.06	6	3.67	0.42	0.60
89	Data Collection	140	4.28	0.07	6	4.33	0.49	-0.05
100	Electronic Medical Records	158	4.28	0.06	6	3.00	0.45	1.28
128	Immobilized Client Care	159	4.29	0.07	6	3.50	0.22	0.79
8	Advance Directives	158	4.30	0.07	6	4.83	0.17	-0.53
145	Laboratory Tests	141	4.30	0.07	6	4.00	0.37	0.30
59	Client Needs	142	4.30	0.06	6	3.83	0.40	0.47
140	IV Site Maintenance	159	4.31	0.08	6	4.33	0.21	-0.02
254	Therapeutic Communication	157	4.31	0.08	6	4.50	0.22	-0.19
42	Client Autonomy	159	4.31	0.07	6	4.17	0.31	0.14
219	Reporting	141	4.31	0.07	6	4.00	0.00	0.31
57	Client Mental Status	142	4.31	0.06	6	3.83	0.31	0.48
7	Adult Client Care	139	4.32	0.07	6	3.67	0.42	0.65
162	Medication Storage	157	4.32	0.07	6	3.83	0.31	0.49
235	Shift Report/Hand-off	144	4.32	0.07	6	4.50	0.22	-0.18
269	Urinary Retention	143	4.32	0.07	6	4.33	0.21	-0.01
208	Preventative Care	157	4.32	0.06	6	4.00	0.26	0.32
267	Urinary Catheter Removal	143	4.33	0.08	6	4.00	0.26	0.33
72	Client Self-advocacy	158	4.33	0.06	6	3.67	0.42	0.66
201	Post-surgical Care	143	4.34	0.08	6	4.17	0.48	0.17
75	Code of Ethics	141	4.34	0.07	6	4.33	0.33	0.01
134	Integumentary Checks	157	4.34	0.07	6	4.00	0.37	0.34
281	Wound Care Equipment	142	4.34	0.07	6	3.83	0.31	0.51
28	Body Mechanics	159	4.35	0.07	6	4.00	0.37	0.35
159	Medication Disposal	139	4.35	0.07	6	4.17	0.17	0.18
211	Professional Accountability	142	4.35	0.07	6	4.50	0.22	-0.15
3	Activities of Daily Living	142	4.35	0.06	6	3.83	0.40	0.52
83	Continuity of Care	142	4.35	0.06	6	3.83	0.48	0.52
160	Medication Reconciliation	159	4.36	0.07	6	4.17	0.17	0.19
61	Client Nutrition	142	4.36	0.06	6	3.83	0.17	0.17
63	Client Plan of Care	142	4.36	0.06	6	4.00	0.45	0.36
102	End-of-life Care	159	4.36	0.06	6	4.00	0.43	0.30

Newly Licensed LPN/VN and SME Knowledge Statement Ratings Rank Ordered by Newly Licensed LPN/VN Average Importa								
Survey		Newly	/ Licensed L	PN/VN		SME		:
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
210	Privacy and Security	158	4.54	0.06	6	4.33	0.21	0.21
246	Staff Safety	157	4.54	0.06	6	4.33	0.21	0.21
69	Client Rights	141	4.54	0.05	6	4.50	0.22	0.04
206	Prescribed Medications	158	4.54	0.05	6	4.33	0.33	0.21
165	Narcotic/Controlled Substance Counting Procedures	140	4.55	0.06	6	4.00	0.45	0.55
56	Client Medical History	159	4.55	0.05	6	4.00	0.26	0.55
183	Oxygen Saturation Monitoring	143	4.55	0.05	6	4.67	0.21	-0.12
152	Medication Administration Records	158	4.56	0.06	6	4.50	0.22	0.06
182	Oxygen Administration	158	4.56	0.06	6	4.83	0.17	-0.27
276	Vital Sign Monitoring Devices	158	4.56	0.06	6	4.50	0.22	0.06
126	Нурохіа	159	4.58	0.06	6	4.50	0.22	0.08
156	Medication Compatibility	159	4.58	0.06	6	4.50	0.34	0.08
166	Narcotics/Controlled Substances	159	4.58	0.05	6	4.00	0.63	0.58
151	Medication Administration Calculations	140	4.59	0.07	6	4.83	0.17	-0.24
43	Client Baseline Oxygen Saturation	140	4.59	0.06	6	4.50	0.22	0.09
118	Health Care Provider Orders	159	4.59	0.05	6	4.83	0.17	-0.24
157	Medication Contraindications	141	4.60	0.06	6	4.67	0.21	-0.07
50	Client Consent	159	4.60	0.05	6	4.67	0.21	-0.07
71	Client Safety Checks	141	4.61	0.06	6	4.67	0.21	-0.06
133	Injury Prevention	141	4.61	0.05	6	3.50	0.22	1.11
154	Medication Administration Sites	158	4.61	0.05	6	4.50	0.22	0.11
226	Safety Precautions	158	4.61	0.05	6	4.50	0.22	0.11
13	Aspiration Precautions	142	4.63	0.06	6	4.33	0.33	0.30
161	Medication Safety Practices	141	4.65	0.05	6	4.67	0.21	-0.02
81	Confidentiality	141	4.66	0.05	6	4.33	0.33	0.33
155	Medication Adverse Reactions	142	4.68	0.05	6	4.67	0.21	0.01
44	Client Baseline Vital Signs	159	4.70	0.04	6	4.50	0.22	0.20
228	Scope of Practice	158	4.71	0.05	6	4.33	0.21	0.38
248	Sterile Technique	158	4.71	0.05	6	4.33	0.33	0.38
264	Universal/Standard Precautions	158	4.71	0.05	6	4.50	0.22	0.21
2	Active Listening	159	4.71	0.04	6	4.50	0.22	0.21
153	Medication Administration Rights	141	4.72	0.05	6	4.83	0.17	-0.11
41	Client Allergies	140	4.73	0.05	6	4.50	0.22	0.23
54	Client Identification	159	4.76	0.04	6	5.00	0.00	-0.24
277	Vital Signs	143	4.77	0.04	6	4.67	0.21	0.10
31	Cardiopulmonary Resuscitation	142	4.78	0.05	6	5.00	0.00	-0.22
124	HIPAA	159	4.79	0.04	6	4.67	0.21	0.12
12	Aseptic Technique	159	4.80	0.04	6	4.83	0.17	-0.03
131	Infection Control	142	4.80	0.04	6	5.00	0.00	-0.20
70	Client Safety	158	4.83	0.03	6	4.83	0.17	0.00

APPENDIX F: LPN/VN EDUCATOR AND SME KNOWLEDGE STATEMENT RATINGS RANK ORDERED BY LPN/VN EDUCATOR AVERAGE IMPORTANCE

Preface: How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice regardless of specific practice setting?

Survey	ducator and SME Knowledge Stateme	LPN/VN Educator			N Educator			
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
263	Ultrasounds	354	2.94	0.06	6	3.17	0.60	-0.23
175	Nose Irrigation	354	2.97	0.06	6	3.00	0.37	-0.03
105	Epidurals	351	3.01	0.06	6	2.67	0.42	0.34
192	Peripheral Nerve Catheters	316	3.16	0.07	6	3.17	0.40	-0.01
111	Fetal Heart Monitoring	351	3.18	0.07	6	3.50	0.50	-0.32
144	Labor Process	314	3.19	0.06	6	3.67	0.33	-0.48
32	Care for Clients in Labor	311	3.23	0.06	6	3.17	0.40	0.06
273	Ventilator Care	354	3.24	0.07	6	3.17	0.40	0.07
274	Ventilator Equipment	317	3.27	0.07	6	2.83	0.40	0.44
116	Group Therapy Sessions	315	3.30	0.06	6	2.17	0.48	1.13
79	Complementary Therapies	349	3.31	0.05	6	2.67	0.21	0.64
185	Pacing Devices	355	3.32	0.06	6	3.33	0.42	-0.01
271	Validation Therapy	354	3.32	0.05	6	2.83	0.31	0.49
143	Labor Complications	353	3.35	0.06	6	4.17	0.48	-0.82
33	Central Venous Catheter Maintenance	352	3.37	0.07	6	3.33	0.42	0.04
237	Sleep Cycles	356	3.39	0.05	6	3.00	0.37	0.39
34	Central Venous Catheter Types	312	3.40	0.06	6	3.00	0.63	0.40
10	Antepartum Client Care	313	3.41	0.06	6	2.83	0.31	0.58
9	Alternative Therapies	351	3.41	0.05	6	3.00	0.26	0.41
218	Reminiscence Therapy	317	3.44	0.07	6	3.50	0.34	-0.06
24	Bladder Scans	314	3.45	0.06	6	3.17	0.31	0.28
204	Prenatal Complications	316	3.46	0.06	6	4.00	0.26	-0.54
257	Toddler Client Care	356	3.48	0.06	6	3.33	0.33	0.15
23	Bladder Irrigation	353	3.49	0.06	6	3.50	0.34	-0.01
173	Newborn Client Care	354	3.49	0.06	6	3.33	0.61	0.16
171	Nephrostomies	353	3.49	0.05	6	3.00	0.52	0.49
108	Eye Irrigation	315	3.50	0.06	6	2.83	0.40	0.67
229	Seclusion	355	3.50	0.06	6	3.33	0.21	0.17
97	Electrocardiogram Equipment	353	3.51	0.05	6	3.33	0.49	0.18
37	Chest Tubes	351	3.52	0.06	6	3.17	0.54	0.35
122	Herbal Supplements	315	3.52	0.05	6	2.00	0.26	1.52
67	Client Referrals	351	3.53	0.05	6	2.83	0.31	0.70
96	Ear Irrigation	316	3.55	0.06	6	3.17	0.31	0.38
200	Postpartum Client Care	318	3.58	0.06	6	3.67	0.42	-0.09
203	Prenatal Care	352	3.58	0.06	6	3.83	0.17	-0.25
205	Preschool-age Client Care	355	3.58	0.05	6	3.50	0.34	0.08
76	Cognitive Behavioral Therapy	313	3.60	0.06	6	3.00	0.37	0.60

LPN/VN E	ducator and SME Knowledge State	ement Ratings	Rank Orde	red by LPN/V	'N Educator	Average Im	portance	
Survey		LP	N/VN Educa	ator		SME		4 Dif
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
216	Referrals	313	3.60	0.05	6	3.33	0.33	0.27
27	Blood Transfusions	350	3.61	0.06	6	2.67	0.49	0.94
227	School-age Client Care	355	3.63	0.05	6	3.50	0.34	0.13
234	Sexual Practices	317	3.67	0.05	6	3.50	0.43	0.17
184	Pacing Device Care	318	3.69	0.06	6	3.33	0.42	0.36
98	Electrocardiograms (EKG/ECG)	315	3.69	0.05	6	3.33	0.49	0.36
6	Adolescent Client Care	312	3.71	0.05	6	3.50	0.43	0.21
109	Family Dynamics	353	3.71	0.05	6	3.00	0.37	0.71
239	Smoking Cessation	355	3.72	0.05	6	3.50	0.34	0.22
199	Postmortem Care	354	3.73	0.05	6	3.83	0.17	-0.10
147	Life Stressors	352	3.74	0.05	6	3.17	0.40	0.57
86	Cost Effective Care	314	3.75	0.05	6	3.17	0.40	0.58
91	Developmental Milestones	352	3.75	0.05	6	3.17	0.31	0.58
176	Nutritional Guidelines	317	3.75	0.05	6	3.17	0.40	0.58
119	Health Promotion Programs	352	3.76	0.05	6	3.00	0.37	0.76
225	Risk Tools	354	3.76	0.05	6	3.50	0.22	0.26
93	Discharge Process	351	3.78	0.05	6	2.83	0.40	0.95
189	Patient Controlled Analgesia	357	3.80	0.06	6	3.67	0.42	0.13
120	Health Screening Programs	309	3.80	0.05	6	3.00	0.37	0.80
245	Staff Education	355	3.80	0.05	6	3.67	0.33	0.13
26	Blood Products	314	3.82	0.06	6	3.50	0.43	0.32
167	Nasogastric Tube Insertion	349	3.83	0.05	6	3.50	0.34	0.33
169	Nasogastric Tube Removal	354	3.83	0.05	6	3.67	0.42	0.16
121	Hearing Impairments	354	3.84	0.05	6	3.17	0.40	0.67
207	Pre-surgical Care	351	3.84	0.05	6	3.67	0.42	0.17
107	Evidence-based Research	353	3.85	0.05	6	3.33	0.49	0.52
127	Ileostomies	353	3.85	0.05	6	4.00	0.26	-0.15
146	Lead Placement	315	3.86	0.06	6	3.33	0.33	0.53
272	Venipuncture	318	3.86	0.06	6	3.67	0.42	0.19
78	Community Resources	315	3.86	0.05	6	2.83	0.31	1.03
137	Invasive Procedures	353	3.86	0.05	6	3.50	0.22	0.36
191	Peripheral Intravenous Catheter Removal	353	3.88	0.06	6	3.50	0.43	0.38
252	Surgical Procedures	318	3.89	0.06	6	3.67	0.42	0.22
110	Family Medical History	314	3.89	0.05	6	2.83	0.31	1.06
275	Visual Impairments	356	3.89	0.05	6	3.33	0.33	0.56
125	Hospice Care	353	3.90	0.05	6	3.83	0.31	0.07
253	Task Assignments	353	3.90	0.05	6	3.83	0.40	0.07
241	Specialty Diets	354	3.90	0.04	6	3.67	0.33	0.23
240	Social Media Usage	316	3.92	0.06	6	3.83	0.40	0.09
92	Diagnostic Procedures	313	3.92	0.05	6	3.67	0.49	0.25
243	Specimen Storage	354	3.92	0.05	6	3.83	0.31	0.09

LPN/VN E	ducator and SME Knowledge Staten	ent Ratings Rank Ordered by LPN/VN Educator Average Importance						
Survey		LPN/VN Educator SME						Avg. Difference 0.25 0.76 0.43 0.43 0.60 0.27 0.10 0.94 0.28 0.12 0.96 -0.04 0.46 -0.03 0.31 0.82 -0.35 0.16 0.33 0.34 0.34 0.00 0.50 0.50
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	
87	Crisis Intervention	353	4.08	0.04	6	3.83	0.40	0.25
60	Client Non-compliance	314	4.09	0.04	6	3.33	0.49	0.76
18	Barriers to Learning	314	4.10	0.05	6	3.67	0.21	0.43
114	Genitourinary Checks	313	4.10	0.05	6	3.67	0.42	0.43
117	G-tubes	354	4.10	0.05	6	3.50	0.43	0.60
168	Nasogastric Tube Maintenance	316	4.10	0.05	6	3.83	0.31	0.27
255	Therapeutic Effects	351	4.10	0.04	6	4.00	0.26	0.10
90	De-escalation Techniques	313	4.11	0.05	6	3.17	0.31	0.94
214	Quality Improvement	318	4.11	0.05	6	3.83	0.40	0.28
29	Bowel Management	353	4.12	0.05	6	4.00	0.37	0.12
178	OSHA	318	4.13	0.05	6	3.17	0.40	0.96
201	Post-surgical Care	356	4.13	0.05	6	4.17	0.48	-0.04
258	Toxicity	316	4.13	0.05	6	3.67	0.42	0.46
30	Cardiac Abnormalities	315	4.14	0.05	6	4.17	0.31	-0.03
82	Conflict Resolution	315	4.14	0.04	6	3.83	0.31	0.31
16	Available Resources	308	4.15	0.05	6	3.33	0.33	0.82
112	Fluid Imbalances	312	4.15	0.05	6	4.50	0.22	-0.35
260	Tracheostomy Care	316	4.16	0.05	6	4.00	0.26	0.16
113	Gastrointestinal Checks	354	4.16	0.04	6	3.83	0.31	0.33
232	Sensory/Perceptual Alterations	315	4.16	0.04	6	3.83	0.40	0.33
261	Transfer Assistive Devices	355	4.17	0.05	6	3.83	0.17	0.34
281	Wound Care Equipment	354	4.17	0.05	6	3.83	0.31	0.34
17	Barriers to Communication	351	4.17	0.04	6	4.17	0.31	0.00
136	Interdisciplinary Team Collaboration	316	4.17	0.04	6	3.67	0.42	0.50
249	Substance Abuse	355	4.17	0.04	6	3.67	0.33	0.50
103	Enteral Feedings	354	4.18	0.05	6	3.83	0.31	0.35
244	Staff Competency	317	4.18	0.05	6	3.67	0.33	0.51
14	Assistive Devices	313	4.18	0.04	6	3.67	0.21	0.51
46	Client Care Equipment	314	4.18	0.04	6	3.17	0.31	1.01
64	Client Preferences	314	4.18	0.04	6	4.00	0.26	0.18
132	Information Technology	314	4.18	0.04	6	3.17	0.31	1.01
188	Palpation	318	4.19	0.05	6	3.33	0.49	0.86
262	Transfer Process	318	4.19	0.05	6	3.83	0.17	0.36
35	Chain of Command	351	4.20	0.04	6	3.50	0.43	0.70
47	Client Cognitive Ability	353	4.20	0.04	6	4.00	0.37	0.20
63	Client Plan of Care	352	4.20	0.04	6	4.00	0.45	0.20
104	Enteral Tube Management	312	4.21	0.05	6	3.83	0.31	0.38
213	Professional Development	356	4.21	0.04	6	4.33	0.21	-0.12
8	Advance Directives	311	4.22	0.05	6	4.83	0.17	-0.61
194	Personal Limitations	316	4.22	0.05	6	4.33	0.21	-0.11
66	Client Psychosocial Functioning	316	4.22	0.04	6	3.50	0.50	0.72
231	Sensory Checks	353	4.22	0.04	6	3.83	0.31	0.39

LPN/VN Educator and SME Knowledge Statement Ratings Rank Ordered by LPN/VN Educator Average Importance										
Survey		LPN/VN Educator SME					Avg Dif			
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference		
11	Approved Medical Abbreviations	350	4.41	0.04	6	3.83	0.48	0.58		
145	Laboratory Tests	354	4.41	0.04	6	4.00	0.37	0.41		
219	Reporting	352	4.41	0.04	6	4.00	0.00	0.41		
246	Staff Safety	317	4.41	0.04	6	4.33	0.21	0.08		
3	Activities of Daily Living	353	4.43	0.03	6	3.83	0.40	0.60		
99	Electrolyte Imbalances	353	4.44	0.04	6	4.00	0.26	0.44		
280	Wound Care	318	4.44	0.04	6	3.83	0.31	0.61		
57	Client Mental Status	353	4.44	0.03	6	3.83	0.31	0.61		
56	Client Medical History	316	4.46	0.04	6	4.00	0.26	0.46		
162	Medication Storage	315	4.46	0.04	6	3.83	0.31	0.63		
264	Universal/Standard Precautions	318	4.47	0.05	6	4.50	0.22	-0.03		
4	Acute Illnesses	313	4.48	0.04	6	4.67	0.33	-0.19		
74	Client-centered Care	312	4.48	0.04	6	4.17	0.31	0.31		
159	Medication Disposal	353	4.48	0.04	6	4.17	0.17	0.31		
177	Older Adult Care	355	4.48	0.04	6	4.00	0.26	0.48		
52	Client Education	315	4.49	0.04	6	3.33	0.42	1.16		
68	Client Repositioning	316	4.49	0.04	6	4.33	0.21	0.16		
75	Code of Ethics	349	4.49	0.04	6	4.33	0.33	0.16		
134	Integumentary Checks	315	4.49	0.04	6	4.00	0.37	0.49		
202	Practice Errors	317	4.49	0.04	6	5.00	0.00	-0.51		
254	Therapeutic Communication	318	4.50	0.04	6	4.50	0.22	0.00		
51	Client Disease Processes and Conditions	351	4.50	0.03	6	4.33	0.33	0.17		
235	Shift Report/Hand-off	355	4.51	0.04	6	4.50	0.22	0.01		
276	Vital Sign Monitoring Devices	318	4.51	0.04	6	4.50	0.22	0.01		
7	Adult Client Care	345	4.52	0.04	6	3.67	0.42	0.85		
133	Injury Prevention	353	4.53	0.04	6	3.50	0.22	1.03		
160	Medication Reconciliation	316	4.53	0.04	6	4.17	0.17	0.36		
165	Narcotic/Controlled Substance Counting Procedures	353	4.54	0.04	6	4.00	0.45	0.54		
265	Urinary Catheter Insertion	357	4.54	0.04	6	4.00	0.26	0.54		
268	Urinary Catheters	318	4.54	0.04	6	4.00	0.26	0.54		
39	Circulatory Checks	353	4.55	0.04	6	4.67	0.21	-0.12		
209	Prioritization of Client Care	355	4.55	0.03	6	4.33	0.21	0.22		
228	Scope of Practice	316	4.56	0.05	6	4.33	0.21	0.23		
118	Health Care Provider Orders	315	4.56	0.04	6	4.83	0.17	-0.27		
236	Skin Integrity	318	4.56	0.04	6	4.17	0.31	0.39		
40	Client Advocacy	314	4.57	0.04	6	4.00	0.26	0.57		
38	Chronic Illnesses	314	4.57	0.03	6	4.17	0.17	0.40		
28	Body Mechanics	315	4.58	0.03	6	4.00	0.37	0.58		
43	Client Baseline Oxygen Saturation	353	4.58	0.03	6	4.50	0.22	0.08		
183	Oxygen Saturation Monitoring	356	4.58	0.03	6	4.67	0.21	-0.09		

LPN/VN Educator and SME Knowledge Statement Ratings Rank Ordered by LPN/VN Educator Average Importance									
Survey		LPN/VN Educator				SME			
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference	
25	Blood Glucose Monitoring	353	4.59	0.04	6	4.33	0.33	0.26	
126	Нурохіа	314	4.59	0.04	6	4.50	0.22	0.09	
48	Client Comfort Level	314	4.59	0.03	6	4.33	0.21	0.26	
187	Pain Management	353	4.59	0.03	6	4.33	0.21	0.26	
182	Oxygen Administration	316	4.60	0.04	6	4.83	0.17	-0.23	
212	Professional Boundaries	317	4.60	0.04	6	4.50	0.22	0.10	
69	Client Rights	353	4.60	0.03	6	4.50	0.22	0.10	
266	Urinary Catheter Maintenance	317	4.60	0.03	6	4.00	0.26	0.60	
166	Narcotics/Controlled Substances	315	4.61	0.03	6	4.00	0.63	0.61	
226	Safety Precautions	317	4.62	0.04	6	4.50	0.22	0.12	
196	Pharmacological Interventions	318	4.64	0.03	6	4.33	0.21	0.31	
210	Privacy and Security	318	4.64	0.03	6	4.33	0.21	0.31	
211	Professional Accountability	354	4.64	0.03	6	4.50	0.22	0.14	
220	Respiratory Checks	318	4.64	0.03	6	4.50	0.22	0.14	
50	Client Consent	316	4.65	0.04	6	4.67	0.21	-0.02	
248	Sterile Technique	317	4.67	0.04	6	4.33	0.33	0.34	
156	Medication Compatibility	316	4.69	0.03	6	4.50	0.34	0.19	
163	Medication Therapeutic Effects	352	4.69	0.03	6	4.17	0.17	0.52	
71	Client Safety Checks	348	4.70	0.03	6	4.67	0.21	0.03	
195	Personal Protective Equipment (PPE)	355	4.70	0.03	6	4.50	0.22	0.20	
13	Aspiration Precautions	349	4.71	0.03	6	4.33	0.33	0.38	
124	HIPAA	314	4.71	0.03	6	4.67	0.21	0.04	
81	Confidentiality	351	4.72	0.03	6	4.33	0.33	0.39	
41	Client Allergies	352	4.73	0.03	6	4.50	0.22	0.23	
152	Medication Administration Records	316	4.73	0.03	6	4.50	0.22	0.23	
2	Active Listening	316	4.74	0.03	6	4.50	0.22	0.24	
158	Medication Conversions	316	4.74	0.03	6	4.50	0.22	0.24	
31	Cardiopulmonary Resuscitation	348	4.75	0.03	6	5.00	0.00	-0.25	
157	Medication Contraindications	354	4.76	0.03	6	4.67	0.21	0.09	
131	Infection Control	354	4.77	0.03	6	5.00	0.00	-0.23	
151	Medication Administration Calculations	354	4.79	0.03	6	4.83	0.17	-0.04	
154	Medication Administration Sites	316	4.79	0.03	6	4.50	0.22	0.29	
155	Medication Adverse Reactions	354	4.80	0.02	6	4.67	0.21	0.13	
44	Client Baseline Vital Signs	314	4.82	0.03	6	4.50	0.22	0.32	
161	Medication Safety Practices	352	4.83	0.02	6	4.67	0.21	0.16	
277	Vital Signs	356	4.83	0.02	6	4.67	0.21	0.16	
12	Aseptic Technique	313	4.84	0.02	6	4.83	0.17	0.01	
153	Medication Administration Rights	354	4.86	0.02	6	4.83	0.17	0.03	
70	Client Safety	314	4.87	0.02	6	4.83	0.17	0.04	
54	Client Identification	316	4.90	0.02	6	5.00	0.00	-0.10	

APPENDIX G: LPN/VN SUPERVISOR AND SME KNOWLEDGE STATEMENT RATINGS RANK ORDERED BY LPN/VN SUPERVISOR AVERAGE IMPORTANCE

Preface: How important is the possession of this knowledge by a newly licensed LPN/VN for safe and effective professional practice regardless of specific practice setting?

LPN/VN Supervisor and SME Knowledge Statement Ratings Rank Ordered by LPN/VN Supervisor Average Importance										
Survey		LPN	I/VN Superv	risor		SME		A Dif		
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference		
32	Care for Clients in Labor	61	2.62	0.16	6.00	3.17	0.40	-0.55		
116	Group Therapy Sessions	62	2.65	0.14	6.00	2.17	0.48	0.48		
10	Antepartum Client Care	61	2.82	0.18	6.00	2.83	0.31	-0.01		
144	Labor Process	62	2.82	0.15	6.00	3.67	0.33	-0.85		
105	Epidurals	59	2.86	0.16	6.00	2.67	0.42	0.19		
263	Ultrasounds	61	2.87	0.14	6.00	3.17	0.60	-0.30		
111	Fetal Heart Monitoring	60	2.88	0.17	6.00	3.50	0.50	-0.62		
175	Nose Irrigation	59	2.88	0.13	6.00	3.00	0.37	-0.12		
218	Reminiscence Therapy	63	2.90	0.15	6.00	3.50	0.34	-0.60		
143	Labor Complications	60	2.92	0.17	6.00	4.17	0.48	-1.25		
204	Prenatal Complications	63	2.95	0.17	6.00	4.00	0.26	-1.05		
200	Postpartum Client Care	63	2.95	0.16	6.00	3.67	0.42	-0.72		
273	Ventilator Care	62	3.02	0.17	6.00	3.17	0.40	-0.15		
173	Newborn Client Care	60	3.03	0.18	6.00	3.33	0.61	-0.30		
192	Peripheral Nerve Catheters	62	3.06	0.17	6.00	3.17	0.40	-0.11		
203	Prenatal Care	62	3.08	0.18	6.00	3.83	0.17	-0.75		
122	Herbal Supplements	62	3.10	0.14	6.00	2.00	0.26	1.10		
227	School-age Client Care	61	3.11	0.16	6.00	3.50	0.34	-0.39		
120	Health Screening Programs	61	3.13	0.14	6.00	3.00	0.37	0.13		
271	Validation Therapy	61	3.13	0.14	6.00	2.83	0.31	0.30		
257	Toddler Client Care	62	3.15	0.17	6.00	3.33	0.33	-0.18		
96	Ear Irrigation	62	3.15	0.14	6.00	3.17	0.31	-0.02		
205	Preschool-age Client Care	61	3.16	0.15	6.00	3.50	0.34	-0.34		
79	Complementary Therapies	60	3.20	0.13	6.00	2.67	0.21	0.53		
24	Bladder Scans	61	3.21	0.15	6.00	3.17	0.31	0.04		
6	Adolescent Client Care	61	3.23	0.17	6.00	3.50	0.43	-0.27		
185	Pacing Devices	62	3.27	0.14	6.00	3.33	0.42	-0.06		
119	Health Promotion Programs	60	3.27	0.13	6.00	3.00	0.37	0.27		
237	Sleep Cycles	62	3.27	0.12	6.00	3.00	0.37	0.27		
97	Electrocardiogram Equipment	60	3.30	0.15	6.00	3.33	0.49	-0.03		
9	Alternative Therapies	58	3.31	0.12	6.00	3.00	0.26	0.31		
108	Eye Irrigation	61	3.31	0.12	6.00	2.83	0.40	0.48		
27	Blood Transfusions	60	3.32	0.18	6.00	2.67	0.49	0.65		
33	Central Venous Catheter Maintenance	60	3.33	0.16	6.00	3.33	0.42	0.00		
171	Nephrostomies	60	3.33	0.15	6.00	3.00	0.52	0.33		
229	Seclusion	61	3.33	0.15	6.00	3.33	0.21	0.00		
67	Client Referrals	60	3.37	0.15	6.00	2.83	0.31	0.54		

LPN/VN S	upervisor and SME Knowledge State	ment Rating	s Rank Ord	ered by LPN	/VN Supervi	sor Average	Importance	
Survey		LPN/VN Supervisor						
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
199	Postmortem Care	62	3.77	0.14	6.00	3.83	0.17	-0.06
149	Medical Procedures	60	3.77	0.11	6.00	3.83	0.40	-0.06
127	Ileostomies	60	3.78	0.14	6.00	4.00	0.26	-0.22
178	OSHA	63	3.78	0.12	6.00	3.17	0.40	0.61
15	Assistive Personnel	60	3.80	0.12	6.00	3.83	0.31	-0.03
243	Specimen Storage	62	3.81	0.13	6.00	3.83	0.31	-0.02
80	Compression Stockings	62	3.81	0.11	6.00	3.33	0.33	0.48
258	Toxicity	63	3.81	0.11	6.00	3.67	0.42	0.14
193	Personal Biases	62	3.82	0.14	6.00	4.00	0.26	-0.18
114	Genitourinary Checks	62	3.82	0.12	6.00	3.67	0.42	0.15
92	Diagnostic Procedures	62	3.82	0.11	6.00	3.67	0.49	0.15
255	Therapeutic Effects	62	3.84	0.10	6.00	4.00	0.26	-0.16
85	Coping Mechanisms	60	3.85	0.11	6.00	3.67	0.33	0.18
232	Sensory/Perceptual Alterations	63	3.86	0.11	6.00	3.83	0.40	0.03
223	Restraints	62	3.87	0.14	6.00	4.33	0.21	-0.46
93	Discharge Process	60	3.88	0.10	6.00	2.83	0.40	1.05
135	Interdisciplinary Roles and Responsibilities	60	3.88	0.10	6.00	3.83	0.40	0.05
5	Adaptive Equipment	57	3.89	0.11	6.00	4.00	0.26	-0.11
259	Tracheostomy	62	3.90	0.14	6.00	4.00	0.45	-0.10
249	Substance Abuse	62	3.90	0.13	6.00	3.67	0.33	0.23
129	Immunizations	60	3.90	0.12	6.00	3.33	0.33	0.57
170	Nasogastric Tubes	61	3.90	0.12	6.00	4.00	0.26	-0.10
215	Reality Orientation	62	3.92	0.13	6.00	4.00	0.26	-0.08
168	Nasogastric Tube Maintenance	62	3.92	0.12	6.00	3.83	0.31	0.09
179	Ostomies	62	3.92	0.12	6.00	4.17	0.17	-0.25
231	Sensory Checks	62	3.92	0.12	6.00	3.83	0.31	0.09
49	Client Compliance Issues	60	3.92	0.11	6.00	4.17	0.31	-0.25
245	Staff Education	61	3.92	0.11	6.00	3.67	0.33	0.25
115	Grieving Process	60	3.92	0.10	6.00	3.50	0.22	0.42
94	Drainage Devices	61	3.92	0.08	6.00	3.50	0.34	0.42
8	Advance Directives	58	3.93	0.12	6.00	4.83	0.17	-0.90
253	Task Assignments	62	3.94	0.12	6.00	3.83	0.40	0.11
190	Peripheral Intravenous Catheter Maintenance	63	3.95	0.13	6.00	4.00	0.26	-0.05
45	Client Care Assignments	59	3.95	0.12	6.00	3.67	0.33	0.28
77	Colostomies	60	3.95	0.12	6.00	3.67	0.21	0.28
18	Barriers To Learning	61	3.95	0.11	6.00	3.67	0.21	0.28
103	Enteral Feedings	59	3.97	0.13	6.00	3.83	0.31	0.14
21	Behavioral Management	59	3.97	0.11	6.00	4.00	0.26	-0.03
132	Information Technology	62	3.97	0.11	6.00	3.17	0.31	0.80
262	Transfer Process	63	3.97	0.10	6.00	3.83	0.17	0.14

Survey	upervisor and SME Knowledge State		N/VN Superv			SME		
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
180	Ostomy Equipment	63	3.97	0.09	6.00	4.00	0.00	-0.03
16	Available Resources	60	3.98	0.10	6.00	3.33	0.33	0.65
224	Risk Management	63	3.98	0.10	6.00	3.50	0.43	0.48
260	Tracheostomy Care	63	4.00	0.12	6.00	4.00	0.26	0.00
14	Assistive Devices	62	4.00	0.11	6.00	3.67	0.21	0.33
72	Client Self-advocacy	61	4.00	0.10	6.00	3.67	0.42	0.33
87	Crisis Intervention	60	4.02	0.12	6.00	3.83	0.40	0.19
139	IV Flow Rates	59	4.03	0.14	6.00	3.83	0.40	0.20
141	IV Solutions	60	4.03	0.14	6.00	3.67	0.42	0.36
73	Client Spiritual and Cultural Beliefs	60	4.03	0.11	6.00	3.83	0.17	0.20
186	Pain Control Devices	63	4.03	0.11	6.00	4.00	0.26	0.03
256	Therapeutic Environment	63	4.03	0.11	6.00	3.83	0.17	0.20
123	High Risk Behaviors	60	4.05	0.12	6.00	3.67	0.42	0.38
181	Over-the-counter Medications	62	4.05	0.12	6.00	4.00	0.26	0.05
251	Surgical Complications	62	4.05	0.12	6.00	4.00	0.45	0.05
142	J-tubes	61	4.05	0.10	6.00	3.67	0.42	0.38
201	Post-surgical Care	62	4.05	0.09	6.00	4.17	0.48	-0.12
46	Client Care Equipment	62	4.06	0.10	6.00	3.17	0.31	0.89
188	Palpation	63	4.06	0.10	6.00	3.33	0.49	0.73
208	Preventative Care	63	4.06	0.10	6.00	4.00	0.26	0.06
113	Gastrointestinal Checks	60	4.07	0.11	6.00	3.83	0.31	0.24
99	Electrolyte Imbalances	60	4.08	0.10	6.00	4.00	0.26	0.08
238	Sleep/Rest	63	4.08	0.10	6.00	3.33	0.21	0.75
117	G-tubes	60	4.10	0.11	6.00	3.50	0.43	0.60
106	Evidence-based Care	62	4.10	0.10	6.00	3.50	0.43	0.60
145	Laboratory Tests	60	4.10	0.10	6.00	4.00	0.37	0.10
221	Respiratory Equipment	62	4.10	0.10	6.00	4.00	0.26	0.10
22	Biohazard Disposal	61	4.11	0.12	6.00	3.83	0.48	0.28
66	Client Psychosocial Functioning	62	4.11	0.11	6.00	3.50	0.50	0.61
29	Bowel Management	60	4.13	0.11	6.00	4.00	0.37	0.13
19	Barriers to Treatment	60	4.13	0.10	6.00	3.50	0.34	0.63
47	Client Cognitive Ability	60	4.13	0.09	6.00	4.00	0.37	0.13
61	Client Nutrition	60	4.13	0.09	6.00	3.83	0.17	0.30
101	Emergency Preparedness	58	4.14	0.11	6.00	4.00	0.52	0.14
254	Therapeutic Communication	63	4.14	0.11	6.00	4.50	0.22	-0.36
20	Behavioral Disorders	62	4.15	0.11	6.00	3.83	0.31	0.32
84	Controlled Substances	62	4.15	0.10	6.00	4.17	0.31	-0.02
164	Musculoskeletal Checks	62	4.15	0.09	6.00	3.83	0.48	0.32
194	Personal Limitations	63	4.16	0.12	6.00	4.33	0.21	-0.17
30	Cardiac Abnormalities	61	4.16	0.10	6.00	4.17	0.31	-0.01
60	Client Non-compliance	62	4.16	0.10	6.00	3.33	0.49	0.83
82	Conflict Resolution	62	4.16	0.10	6.00	3.83	0.31	0.33

LPN/VN S	upervisor and SME Knowledge State	tement Ratings Rank Ordered by LPN/VN Supervisor Average Importance						
Survey		LPI	N/VN Superv	/isor		SME		:
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
7	Adult Client Care	60	4.17	0.11	6.00	3.67	0.42	0.50
198	Polypharmacy	63	4.17	0.10	6.00	3.83	0.17	0.34
247	Standardized Pain Rating Scales	62	4.18	0.10	6.00	4.00	0.00	0.18
55	Client Intake/Output	60	4.18	0.09	6.00	4.17	0.17	0.01
150	Medical Treatments	62	4.18	0.09	6.00	4.17	0.31	0.01
270	Urostomies	63	4.19	0.11	6.00	3.67	0.49	0.52
112	Fluid Imbalances	62	4.19	0.10	6.00	4.50	0.22	-0.31
104	Enteral Tube Management	62	4.19	0.09	6.00	3.83	0.31	0.36
17	Barriers to Communication	60	4.20	0.09	6.00	4.17	0.31	0.03
62	Client Physical Limitations	62	4.21	0.10	6.00	4.17	0.17	0.04
90	De-escalation Techniques	62	4.21	0.10	6.00	3.17	0.31	1.04
272	Venipuncture	63	4.21	0.10	6.00	3.67	0.42	0.54
214	Quality Improvement	63	4.22	0.09	6.00	3.83	0.40	0.39
261	Transfer Assistive Devices	62	4.23	0.11	6.00	3.83	0.17	0.40
64	Client Preferences	62	4.23	0.10	6.00	4.00	0.26	0.23
202	Practice Errors	61	4.23	0.10	6.00	5.00	0.00	-0.77
281	Wound Care Equipment	62	4.23	0.10	6.00	3.83	0.31	0.40
53	Client History	60	4.23	0.09	6.00	3.67	0.42	0.56
128	Immobilized Client Care	62	4.23	0.09	6.00	3.50	0.22	0.73
213	Professional Development	62	4.24	0.10	6.00	4.33	0.21	-0.09
250	Suctioning	63	4.24	0.10	6.00	4.00	0.45	0.24
40	Client Advocacy	62	4.26	0.09	6.00	4.00	0.26	0.26
222	Restraint Alternatives	63	4.27	0.12	6.00	4.17	0.17	0.10
63	Client Plan of Care	60	4.27	0.11	6.00	4.00	0.45	0.27
217	Regulations	62	4.27	0.11	6.00	4.17	0.31	0.10
162	Medication Storage	62	4.27	0.10	6.00	3.83	0.31	0.44
59	Client Needs	59	4.27	0.09	6.00	3.83	0.40	0.44
196	Pharmacological Interventions	63	4.27	0.09	6.00	4.33	0.21	-0.06
68	Client Repositioning	61	4.28	0.09	6.00	4.33	0.21	-0.05
158	Medication Conversions	62	4.29	0.12	6.00	4.50	0.22	-0.21
140	IV Site Maintenance	62	4.29	0.10	6.00	4.33	0.21	-0.04
88	Cultural Diversity	62	4.29	0.09	6.00	3.83	0.31	0.46
95	Dressing Changes	59	4.29	0.09	6.00	4.17	0.17	0.12
102	End-of-life Care	62	4.29	0.09	6.00	4.17	0.31	0.12
174	Non-pharmacological Interventions	62	4.29	0.09	6.00	4.00	0.26	0.29
209	Prioritization of Client Care	62	4.29	0.09	6.00	4.33	0.21	-0.04
230	Self Awareness	62	4.31	0.10	6.00	4.00	0.26	0.31
177	Older Adult Care	62	4.31	0.09	6.00	4.00	0.26	0.31
11	Approved Medical Abbreviations	59	4.32	0.11	6.00	3.83	0.48	0.49
159	Medication Disposal	60	4.32	0.10	6.00	4.17	0.17	0.15
130	Incident Reporting	62	4.32	0.09	6.00	4.17	0.31	0.15
42	Client Autonomy	62	4.34	0.09	6.00	4.17	0.31	0.17

LPN/VN S	upervisor and SME Knowledge State	ement Ratin	gs Rank Ord	ered by LPN	/VN Supervi	sor Average	ge Importance					
Survey		LPI	N/VN Superv	visor		SME		Avg. Difference 0.52 0.52 0.86 0.54 0.70 0.54 0.70 0.20 0.05 0.39 0.06 -0.10 0.23 0.40 0.40 0.58 0.92 1.42 0.25 -0.24 -0.24 -0.24 -0.23 0.12 0.13 0.13 -0.37 0.47 0.14 0.30				
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.					
58	Client Mobility Needs	62	4.35	0.10	6.00	3.83	0.40	0.52				
57	Client Mental Status	60	4.35	0.09	6.00	3.83	0.31	0.52				
133	Injury Prevention	58	4.36	0.10	6.00	3.50	0.22	0.86				
83	Continuity of Care	60	4.37	0.10	6.00	3.83	0.48	0.54				
244	Staff Competency	63	4.37	0.10	6.00	3.67	0.33	0.70				
3	Activities of Daily Living	60	4.37	0.09	6.00	3.83	0.40	0.54				
136	Interdisciplinary Team Collaboration	60	4.37	0.09	6.00	3.67	0.42	0.70				
242	Specimen Collection	63	4.37	0.09	6.00	4.17	0.17	0.20				
206	Prescribed Medications	63	4.38	0.10	6.00	4.33	0.33	0.05				
267	Urinary Catheter Removal	62	4.39	0.11	6.00	4.00	0.26	0.39				
269	Urinary Retention	61	4.39	0.09	6.00	4.33	0.21	0.06				
235	Shift Report/Hand-off	62	4.40	0.11	6.00	4.50	0.22	-0.10				
172	Neurological Checks	62	4.40	0.10	6.00	4.17	0.31	0.23				
219	Reporting	62	4.40	0.10	6.00	4.00	0.00	0.40				
134	Integumentary Checks	62	4.40	0.09	6.00	4.00	0.37	0.40				
280	Wound Care	63	4.41	0.09	6.00	3.83	0.31	0.58				
35	Chain of Command	60	4.42	0.09	6.00	3.50	0.43	0.92				
100	Electronic Medical Records	62	4.42	0.09	6.00	3.00	0.45	1.42				
74	Client-centered Care	62	4.42	0.08	6.00	4.17	0.31	0.25				
4	Acute Illnesses	61	4.43	0.09	6.00	4.67	0.33	-0.24				
39	Circulatory Checks	60	4.43	0.09	6.00	4.67	0.21	-0.24				
1	Abuse Prevention	59	4.44	0.10	6.00	4.50	0.22	-0.06				
183	Oxygen Saturation Monitoring	62	4.44	0.09	6.00	4.67	0.21	-0.23				
138	Isolation Techniques	62	4.45	0.09	6.00	4.33	0.21	0.12				
51	Client Disease Processes and Conditions	59	4.46	0.09	6.00	4.33	0.33	0.13				
210	Privacy and Security	63	4.46	0.09	6.00	4.33	0.21	0.13				
182	Oxygen Administration	63	4.46	0.08	6.00	4.83	0.17	-0.37				
165	Narcotic/Controlled Substance Counting Procedures	60	4.47	0.10	6.00	4.00	0.45	0.47				
65	Client Privacy	60	4.47	0.09	6.00	4.33	0.21	0.14				
160	Medication Reconciliation	62	4.47	0.09	6.00	4.17	0.17	0.30				
187	Pain Management	62	4.47	0.08	6.00	4.33	0.21	0.14				
75	Code of Ethics	60	4.48	0.09	6.00	4.33	0.33	0.15				
163	Medication Therapeutic Effects	60	4.48	0.08	6.00	4.17	0.17	0.31				
236	Skin Integrity	62	4.48	0.08	6.00	4.17	0.31	0.31				
118	Health Care Provider Orders	61	4.49	0.09	6.00	4.83	0.17	-0.34				
268	Urinary Catheters	63	4.49	0.08	6.00	4.00	0.26	0.49				
71	Client Safety Checks	60	4.50	0.10	6.00	4.67	0.21	-0.17				
43	Client Baseline Oxygen Saturation	60	4.50	0.09	6.00	4.50	0.22	0.00				
151	Medication Administration Calculations	59	4.51	0.09	6.00	4.83	0.17	-0.32				
266	Urinary Catheter Maintenance	63	4.51	0.08	6.00	4.00	0.26	0.51				

LPN/VN S	upervisor and SME Knowledge State	ement Rating	gs Rank Ordo	ered by LPN	/VN Supervi	sor Average	Importance	
Survey		LPN	I/VN Superv	isor		SME		
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Avg. Dif- ference
282	Wound Types	63	4.51	0.08	6.00	3.83	0.31	0.68
13	Aspiration Precautions	60	4.52	0.10	6.00	4.33	0.33	0.19
248	Sterile Technique	63	4.52	0.10	6.00	4.33	0.33	0.19
48	Client Comfort Level	61	4.52	0.08	6.00	4.33	0.21	0.19
52	Client Education	62	4.52	0.08	6.00	3.33	0.42	1.19
56	Client Medical History	61	4.52	0.08	6.00	4.00	0.26	0.52
166	Narcotics/Controlled Substances	62	4.52	0.08	6.00	4.00	0.63	0.52
220	Respiratory Checks	63	4.52	0.08	6.00	4.50	0.22	0.02
246	Staff Safety	63	4.52	0.08	6.00	4.33	0.21	0.19
212	Professional Boundaries	63	4.54	0.08	6.00	4.50	0.22	0.04
25	Blood Glucose Monitoring	60	4.55	0.10	6.00	4.33	0.33	0.22
28	Body Mechanics	62	4.55	0.08	6.00	4.00	0.37	0.55
265	Urinary Catheter Insertion	62	4.56	0.09	6.00	4.00	0.26	0.56
226	Safety Precautions	63	4.56	0.08	6.00	4.50	0.22	0.06
41	Client Allergies	60	4.57	0.09	6.00	4.50	0.22	0.07
38	Chronic Illnesses	61	4.57	0.06	6.00	4.17	0.17	0.40
156	Medication Compatibility	62	4.58	0.09	6.00	4.50	0.34	0.08
157	Medication Contraindications	59	4.58	0.08	6.00	4.67	0.21	-0.09
276	Vital Sign Monitoring Devices	63	4.59	0.07	6.00	4.50	0.22	0.09
152	Medication Administration Records	62	4.60	0.08	6.00	4.50	0.22	0.10
161	Medication Safety Practices	60	4.60	0.08	6.00	4.67	0.21	-0.07
126	Нурохіа	62	4.61	0.08	6.00	4.50	0.22	0.11
211	Professional Accountability	62	4.61	0.08	6.00	4.50	0.22	0.11
50	Client Consent	62	4.61	0.07	6.00	4.67	0.21	-0.06
195	Personal Protective Equipment (PPE)	61	4.62	0.09	6.00	4.50	0.22	0.12
154	Medication Administration Sites	62	4.63	0.08	6.00	4.50	0.22	0.13
69	Client Rights	60	4.65	0.09	6.00	4.50	0.22	0.15
70	Client Safety	61	4.66	0.07	6.00	4.83	0.17	-0.17
12	Aseptic Technique	61	4.69	0.09	6.00	4.83	0.17	-0.14
155	Medication Adverse Reactions	59	4.69	0.07	6.00	4.67	0.21	0.02
44	Client Baseline Vital Signs	62	4.71	0.06	6.00	4.50	0.22	0.21
81	Confidentiality	59	4.73	0.07	6.00	4.33	0.33	0.40
153	Medication Administration Rights	60	4.73	0.07	6.00	4.83	0.17	-0.10
2	Active Listening	62	4.74	0.06	6.00	4.50	0.22	0.24
31	Cardiopulmonary Resuscitation	60	4.75	0.07	6.00	5.00	0.00	-0.25
54	Client Identification	62	4.76	0.06	6.00	5.00	0.00	-0.24
228	Scope of Practice	63	4.78	0.06	6.00	4.33	0.21	0.45
277	Vital Signs	61	4.80	0.06	6.00	4.67	0.21	0.13
131	Infection Control	59	4.80	0.05	6.00	5.00	0.00	-0.20
124	HIPAA	62	4.82	0.05	6.00	4.67	0.21	0.15
264	Universal/Standard Precautions	63	4.84	0.05	6.00	4.50	0.22	0.34

APPENDIX H: KNOWLEDGE STATEMENTS SUBGROUP ANALYSIS: PRIMARY JOB TITLE

Knowledg	ge Statements Subgroup Analysis: Primary Job Title												
Survey		Newly	Licensed	LPN/VN	LPN	/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
1	Abuse Prevention	142	4.44	0.07	353	4.33	0.04	59	4.44	0.10	0.11	0.00	-0.11
2	Active Listening	159	4.71	0.04	316	4.74	0.03	62	4.74	0.06	-0.03	-0.03	0.00
3	Activities of Daily Living	142	4.35	0.06	353	4.43	0.03	60	4.37	0.09	-0.08	-0.02	0.06
4	Acute Illnesses	158	4.45	0.06	313	4.48	0.04	61	4.43	0.09	-0.03	0.02	0.05
5	Adaptive Equipment	142	3.96	0.07	352	3.97	0.05	57	3.89	0.11	-0.01	0.07	0.08
6	Adolescent Client Care	159	3.89	0.09	312	3.71	0.05	61	3.23	0.17	0.18	0.66	0.48
7	Adult Client Care	139	4.32	0.07	345	4.52	0.04	60	4.17	0.11	-0.20	0.15	0.35
8	Advance Directives	158	4.30	0.07	311	4.22	0.05	58	3.93	0.12	0.08	0.37	0.29
9	Alternative Therapies	139	3.63	0.09	351	3.41	0.05	58	3.31	0.12	0.22	0.32	0.10
10	Antepartum Client Care	157	3.75	0.09	313	3.41	0.06	61	2.82	0.18	0.34	0.93	0.59
11	Approved Medical Abbreviations	141	4.18	0.08	350	4.41	0.04	59	4.32	0.11	-0.23	-0.14	0.09
12	Aseptic Technique	159	4.80	0.04	313	4.84	0.02	61	4.69	0.09	-0.04	0.11	0.15
13	Aspiration Precautions	142	4.63	0.06	349	4.71	0.03	60	4.52	0.10	-0.08	0.11	0.19
14	Assistive Devices	159	4.20	0.07	313	4.18	0.04	62	4.00	0.11	0.02	0.20	0.18
15	Assistive Personnel	142	3.93	0.08	352	3.92	0.04	60	3.80	0.12	0.01	0.13	0.12
16	Available Resources	158	4.15	0.07	308	4.15	0.05	60	3.98	0.10	0.00	0.17	0.17
17	Barriers to Communication	142	4.05	0.08	351	4.17	0.04	60	4.20	0.09	-0.12	-0.15	-0.03
18	Barriers to Learning	157	4.03	0.08	314	4.10	0.05	61	3.95	0.11	-0.07	0.08	0.15
19	Barriers to Treatment	140	4.13	0.07	353	4.07	0.04	60	4.13	0.10	0.06	0.00	-0.06
20	Behavioral Disorders	159	4.19	0.06	316	3.98	0.05	62	4.15	0.11	0.21	0.04	-0.17
21	Behavioral Management	140	3.99	0.07	351	3.95	0.04	59	3.97	0.11	0.04	0.02	-0.02
22	Biohazard Disposal	159	4.38	0.07	314	4.39	0.04	61	4.11	0.12	-0.01	0.27	0.28
23	Bladder Irrigation	142	3.86	0.09	353	3.49	0.06	59	3.47	0.16	0.37	0.39	0.02
24	Bladder Scans	158	3.62	0.10	314	3.45	0.06	61	3.21	0.15	0.17	0.41	0.24
25	Blood Glucose Monitoring	142	4.54	0.07	353	4.59	0.04	60	4.55	0.10	-0.05	-0.01	0.04
26	Blood Products	158	4.16	0.09	314	3.82	0.06	62	3.48	0.16	0.34	0.68	0.34

Knowledg	e Statements Subgroup Analysis: Primary Job Title												
Survey		Newly	Licensed	LPN/VN	LPN	/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
27	Blood Transfusions	140	3.88	0.11	350	3.61	0.06	60	3.32	0.18	0.27	0.56	0.29
28	Body Mechanics	159	4.35	0.07	315	4.58	0.03	62	4.55	0.08	-0.23	-0.20	0.03
29	Bowel Management	141	4.12	0.07	353	4.12	0.05	60	4.13	0.11	0.00	-0.01	-0.01
30	Cardiac Abnormalities	158	4.46	0.07	315	4.14	0.05	61	4.16	0.10	0.32	0.30	-0.02
31	Cardiopulmonary Resuscitation	142	4.78	0.05	348	4.75	0.03	60	4.75	0.07	0.03	0.03	0.00
32	Care for Clients in Labor	157	3.85	0.10	311	3.23	0.06	61	2.62	0.16	0.62	1.23	0.61
33	Central Venous Catheter Maintenance	142	4.13	0.10	352	3.37	0.07	60	3.33	0.16	0.76	0.80	0.04
34	Central Venous Catheter Types	157	4.01	0.09	312	3.40	0.06	61	3.56	0.16	0.61	0.45	-0.16
35	Chain of Command	141	4.11	0.07	351	4.20	0.04	60	4.42	0.09	-0.09	-0.31	-0.22
36	Chemical Dependency	158	3.99	0.09	315	3.97	0.05	62	3.55	0.14	0.02	0.44	0.42
37	Chest Tubes	140	3.98	0.10	351	3.52	0.06	60	3.50	0.15	0.46	0.48	0.02
38	Chronic Illnesses	158	4.42	0.05	314	4.57	0.03	61	4.57	0.06	-0.15	-0.15	0.00
39	Circulatory Checks	141	4.37	0.07	353	4.55	0.04	60	4.43	0.09	-0.18	-0.06	0.12
40	Client Advocacy	159	4.50	0.05	314	4.57	0.04	62	4.26	0.09	-0.07	0.24	0.31
41	Client Allergies	140	4.73	0.05	352	4.73	0.03	60	4.57	0.09	0.00	0.16	0.16
42	Client Autonomy	159	4.31	0.07	315	4.39	0.04	62	4.34	0.09	-0.08	-0.03	0.05
43	Client Baseline Oxygen Saturation	140	4.59	0.06	353	4.58	0.03	60	4.50	0.09	0.01	0.09	0.08
44	Client Baseline Vital Signs	159	4.70	0.04	314	4.82	0.03	62	4.71	0.06	-0.12	-0.01	0.11
45	Client Care Assignments	141	4.02	0.08	353	4.01	0.05	59	3.95	0.12	0.01	0.07	0.06
46	Client Care Equipment	159	4.27	0.06	314	4.18	0.04	62	4.06	0.10	0.09	0.21	0.12
47	Client Cognitive Ability	138	4.14	0.07	353	4.20	0.04	60	4.13	0.09	-0.06	0.01	0.07
48	Client Comfort Level	159	4.44	0.05	314	4.59	0.03	61	4.52	0.08	-0.15	-0.08	0.07
49	Client Compliance Issues	138	3.96	0.08	352	3.97	0.04	60	3.92	0.11	-0.01	0.04	0.05
50	Client Consent	159	4.60	0.05	316	4.65	0.04	62	4.61	0.07	-0.05	-0.01	0.04
51	Client Disease Processes and Conditions	141	4.47	0.06	351	4.50	0.03	59	4.46	0.09	-0.03	0.01	0.04
52	Client Education	159	4.44	0.05	315	4.49	0.04	62	4.52	0.08	-0.05	-0.08	-0.03
53	Client History	140	4.27	0.06	351	4.28	0.04	60	4.23	0.09	-0.01	0.04	0.05

Knowledg	e Statements Subgroup Analysis: Primary Job Title												
Cumian		Newly	Licensed	LPN/VN	LPN	I/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Survey Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
54	Client Identification	159	4.76	0.04	316	4.90	0.02	62	4.76	0.06	-0.14	0.00	0.14
55	Client Intake/Output	141	4.26	0.08	354	4.37	0.04	60	4.18	0.09	-0.11	0.08	0.19
56	Client Medical History	159	4.55	0.05	316	4.46	0.04	61	4.52	0.08	0.09	0.03	-0.06
57	Client Mental Status	142	4.31	0.06	353	4.44	0.03	60	4.35	0.09	-0.13	-0.04	0.09
58	Client Mobility Needs	159	4.25	0.06	316	4.29	0.04	62	4.35	0.10	-0.04	-0.10	-0.06
59	Client Needs	142	4.30	0.06	352	4.36	0.03	59	4.27	0.09	-0.06	0.03	0.09
60	Client Non-compliance	159	4.09	0.07	314	4.09	0.04	62	4.16	0.10	0.00	-0.07	-0.07
61	Client Nutrition	142	4.36	0.06	354	4.24	0.04	60	4.13	0.09	0.12	0.23	0.11
62	Client Physical Limitations	158	4.16	0.06	316	4.29	0.04	62	4.21	0.10	-0.13	-0.05	0.08
63	Client Plan of Care	142	4.36	0.06	352	4.20	0.04	60	4.27	0.11	0.16	0.09	-0.07
64	Client Preferences	159	4.06	0.07	314	4.18	0.04	62	4.23	0.10	-0.12	-0.17	-0.05
65	Client Privacy	142	4.44	0.06	353	4.37	0.04	60	4.47	0.09	0.07	-0.03	-0.10
66	Client Psychosocial Functioning	159	4.17	0.07	316	4.22	0.04	62	4.11	0.11	-0.05	0.06	0.11
67	Client Referrals	140	3.74	0.09	351	3.53	0.05	60	3.37	0.15	0.21	0.37	0.16
68	Client Repositioning	159	4.42	0.07	316	4.49	0.04	61	4.28	0.09	-0.07	0.14	0.21
69	Client Rights	141	4.54	0.05	353	4.60	0.03	60	4.65	0.09	-0.06	-0.11	-0.05
70	Client Safety	158	4.83	0.03	314	4.87	0.02	61	4.66	0.07	-0.04	0.17	0.21
71	Client Safety Checks	141	4.61	0.06	348	4.70	0.03	60	4.50	0.10	-0.09	0.11	0.20
72	Client Self-advocacy	158	4.33	0.06	316	4.26	0.04	61	4.00	0.10	0.07	0.33	0.26
73	Client Spiritual and Cultural Beliefs	141	4.10	0.08	352	4.08	0.04	60	4.03	0.11	0.02	0.07	0.05
74	Client-centered Care	159	4.48	0.05	312	4.48	0.04	62	4.42	0.08	0.00	0.06	0.06
75	Code of Ethics	141	4.34	0.07	349	4.49	0.04	60	4.48	0.09	-0.15	-0.14	0.01
76	Cognitive Behavioral Therapy	158	3.97	0.07	313	3.60	0.06	61	3.66	0.13	0.37	0.31	-0.06
77	Colostomies	142	3.87	0.09	350	3.94	0.05	60	3.95	0.12	-0.07	-0.08	-0.01
78	Community Resources	159	3.83	0.08	315	3.86	0.05	61	3.61	0.12	-0.03	0.22	0.25
79	Complementary Therapies	140	3.51	0.08	349	3.31	0.05	60	3.20	0.13	0.20	0.31	0.11
80	Compression Stockings	159	3.90	0.08	315	4.01	0.05	62	3.81	0.11	-0.11	0.09	0.20

Knowledg	e Statements Subgroup Analysis: Primary Job Title												
Survey		Newly	Licensed	LPN/VN	LPN	I/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
81	Confidentiality	141	4.66	0.05	351	4.72	0.03	59	4.73	0.07	-0.06	-0.07	-0.01
82	Conflict Resolution	157	4.11	0.07	315	4.14	0.04	62	4.16	0.10	-0.03	-0.05	-0.02
83	Continuity of Care	142	4.35	0.06	353	4.25	0.04	60	4.37	0.10	0.10	-0.02	-0.12
84	Controlled Substances	158	4.41	0.06	315	4.40	0.04	62	4.15	0.10	0.01	0.26	0.25
85	Coping Mechanisms	142	3.91	0.07	354	3.94	0.04	60	3.85	0.11	-0.03	0.06	0.09
86	Cost Effective Care	159	3.64	0.09	314	3.75	0.05	62	3.69	0.11	-0.11	-0.05	0.06
87	Crisis Intervention	141	4.24	0.08	353	4.08	0.04	60	4.02	0.12	0.16	0.22	0.06
88	Cultural Diversity	159	4.09	0.08	313	4.29	0.04	62	4.29	0.09	-0.20	-0.20	0.00
89	Data Collection	140	4.28	0.07	354	4.36	0.04	60	3.73	0.14	-0.08	0.55	0.63
90	De-escalation Techniques	159	4.08	0.08	313	4.11	0.05	62	4.21	0.10	-0.03	-0.13	-0.10
91	Developmental Milestones	142	3.80	0.07	352	3.75	0.05	60	3.38	0.13	0.05	0.42	0.37
92	Diagnostic Procedures	159	4.18	0.07	313	3.92	0.05	62	3.82	0.11	0.26	0.36	0.10
93	Discharge Process	142	3.74	0.08	351	3.78	0.05	60	3.88	0.10	-0.04	-0.14	-0.10
94	Drainage Devices	159	4.01	0.08	314	3.98	0.05	61	3.92	0.08	0.03	0.09	0.06
95	Dressing Changes	139	4.40	0.07	353	4.26	0.04	59	4.29	0.09	0.14	0.11	-0.03
96	Ear Irrigation	157	3.61	0.10	316	3.55	0.06	62	3.15	0.14	0.06	0.46	0.40
97	Electrocardiogram Equipment	142	4.01	0.08	353	3.51	0.05	60	3.30	0.15	0.50	0.71	0.21
98	Electrocardiograms (EKG/ECG)	158	4.16	0.09	315	3.69	0.05	61	3.52	0.14	0.47	0.64	0.17
99	Electrolyte Imbalances	141	4.39	0.07	353	4.44	0.04	60	4.08	0.10	-0.05	0.31	0.36
100	Electronic Medical Records	158	4.28	0.06	316	4.36	0.04	62	4.42	0.09	-0.08	-0.14	-0.06
101	Emergency Preparedness	142	4.52	0.07	354	4.25	0.05	58	4.14	0.11	0.27	0.38	0.11
102	End-of-life Care	159	4.36	0.06	313	4.28	0.04	62	4.29	0.09	0.08	0.07	-0.01
103	Enteral Feedings	141	4.13	0.09	354	4.18	0.05	59	3.97	0.13	-0.05	0.16	0.21
104	Enteral Tube Management	158	4.20	0.07	312	4.21	0.05	62	4.19	0.09	-0.01	0.01	0.02
105	Epidurals	142	3.41	0.10	351	3.01	0.06	59	2.86	0.16	0.40	0.55	0.15
106	Evidence-based Care	158	4.09	0.07	314	4.04	0.06	62	4.10	0.10	0.05	-0.01	-0.06
107	Evidence-based Research	140	3.74	0.09	353	3.85	0.05	60	3.50	0.12	-0.11	0.24	0.35

Knowledg	e Statements Subgroup Analysis: Primary Job Title										Newve	Neurvio	Educatory
Survey		Newly	Licensed	LPN/VN	LPN	/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
108	Eye Irrigation	159	3.62	0.09	315	3.50	0.06	61	3.31	0.12	0.12	0.31	0.19
109	Family Dynamics	142	3.63	0.08	353	3.71	0.05	60	3.72	0.11	-0.08	-0.09	-0.01
110	Family Medical History	159	3.77	0.08	314	3.89	0.05	62	3.55	0.12	-0.12	0.22	0.34
111	Fetal Heart Monitoring	140	3.94	0.11	351	3.18	0.07	60	2.88	0.17	0.76	1.06	0.30
112	Fluid Imbalances	159	4.43	0.07	312	4.15	0.05	62	4.19	0.10	0.28	0.24	-0.04
113	Gastrointestinal Checks	142	4.04	0.08	354	4.16	0.04	60	4.07	0.11	-0.12	-0.03	0.09
114	Genitourinary Checks	158	3.98	0.08	313	4.10	0.05	62	3.82	0.12	-0.12	0.16	0.28
115	Grieving Process	141	3.98	0.07	354	4.02	0.04	60	3.92	0.10	-0.04	0.06	0.10
116	Group Therapy Sessions	159	3.26	0.10	315	3.30	0.06	62	2.65	0.14	-0.04	0.61	0.65
117	G-tubes	141	4.11	0.08	354	4.10	0.05	60	4.10	0.11	0.01	0.01	0.00
118	Health Care Provider Orders	159	4.59	0.05	315	4.56	0.04	61	4.49	0.09	0.03	0.10	0.07
119	Health Promotion Programs	141	3.69	0.08	352	3.76	0.05	60	3.27	0.13	-0.07	0.42	0.49
120	Health Screening Programs	156	3.88	0.09	309	3.80	0.05	61	3.13	0.14	0.08	0.75	0.67
121	Hearing Impairments	142	3.84	0.08	354	3.84	0.05	60	3.63	0.11	0.00	0.21	0.21
122	Herbal Supplements	159	3.36	0.10	315	3.52	0.05	62	3.10	0.14	-0.16	0.26	0.42
123	High Risk Behaviors	141	4.16	0.08	353	4.07	0.04	60	4.05	0.12	0.09	0.11	0.02
124	HIPAA	159	4.79	0.04	314	4.71	0.03	62	4.82	0.05	0.08	-0.03	-0.11
125	Hospice Care	138	4.05	0.08	353	3.90	0.05	59	3.68	0.13	0.15	0.37	0.22
126	Нурохіа	159	4.58	0.06	314	4.59	0.04	62	4.61	0.08	-0.01	-0.03	-0.02
127	Ileostomies	141	3.85	0.09	353	3.85	0.05	60	3.78	0.14	0.00	0.07	0.07
128	Immobilized Client Care	159	4.29	0.07	315	4.28	0.04	62	4.23	0.09	0.01	0.06	0.05
129	Immunizations	141	4.08	0.08	353	3.98	0.05	60	3.90	0.12	0.10	0.18	0.08
130	Incident Reporting	159	4.43	0.06	315	4.30	0.04	62	4.32	0.09	0.13	0.11	-0.02
131	Infection Control	142	4.80	0.04	354	4.77	0.03	59	4.80	0.05	0.03	0.00	-0.03
132	Information Technology	157	3.84	0.08	314	4.18	0.04	62	3.97	0.11	-0.34	-0.13	0.21
133	Injury Prevention	141	4.61	0.05	353	4.53	0.04	58	4.36	0.10	0.08	0.25	0.17
134	Integumentary Checks	157	4.34	0.07	315	4.49	0.04	62	4.40	0.09	-0.15	-0.06	0.09

Knowledg	e Statements Subgroup Analysis: Primary Job Title												
Survey		Newly	Licensed	LPN/VN	LPN	/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
135	Interdisciplinary Roles and Responsibilities	141	4.04	0.08	352	3.96	0.04	60	3.88	0.10	0.08	0.16	0.08
136	Interdisciplinary Team Collaboration	158	4.11	0.08	316	4.17	0.04	60	4.37	0.09	-0.06	-0.26	-0.20
137	Invasive Procedures	141	4.07	0.09	353	3.86	0.05	60	3.42	0.14	0.21	0.65	0.44
138	Isolation Techniques	159	4.47	0.06	316	4.35	0.05	62	4.45	0.09	0.12	0.02	-0.10
139	IV Flow Rates	141	4.19	0.09	352	4.06	0.05	59	4.03	0.14	0.13	0.16	0.03
140	IV Site Maintenance	159	4.31	0.08	315	4.32	0.05	62	4.29	0.10	-0.01	0.02	0.03
141	IV Solutions	142	4.19	0.09	353	4.04	0.05	60	4.03	0.14	0.15	0.16	0.01
142	J-tubes	158	4.07	0.09	315	4.01	0.05	61	4.05	0.10	0.06	0.02	-0.04
143	Labor Complications	140	3.94	0.10	353	3.35	0.06	60	2.92	0.17	0.59	1.02	0.43
144	Labor Process	158	3.61	0.11	314	3.19	0.06	62	2.82	0.15	0.42	0.79	0.37
145	Laboratory Tests	141	4.30	0.07	354	4.41	0.04	60	4.10	0.10	-0.11	0.20	0.31
146	Lead Placement	159	4.01	0.09	315	3.86	0.06	61	3.43	0.16	0.15	0.58	0.43
147	Life Stressors	142	3.77	0.08	352	3.74	0.05	60	3.52	0.12	0.03	0.25	0.22
148	Maslow's Hierarchy of Needs	159	4.13	0.08	316	4.24	0.05	62	3.66	0.14	-0.11	0.47	0.58
149	Medical Procedures	142	4.26	0.06	353	3.95	0.04	60	3.77	0.11	0.31	0.49	0.18
150	Medical Treatments	158	4.45	0.05	313	4.23	0.04	62	4.18	0.09	0.22	0.27	0.05
151	Medication Administration Calculations	140	4.59	0.07	354	4.79	0.03	59	4.51	0.09	-0.20	0.08	0.28
152	Medication Administration Records	158	4.56	0.06	316	4.73	0.03	62	4.60	0.08	-0.17	-0.04	0.13
153	Medication Administration Rights	141	4.72	0.05	354	4.86	0.02	60	4.73	0.07	-0.14	-0.01	0.13
154	Medication Administration Sites	158	4.61	0.05	316	4.79	0.03	62	4.63	0.08	-0.18	-0.02	0.16
155	Medication Adverse Reactions	142	4.68	0.05	354	4.80	0.02	59	4.69	0.07	-0.12	-0.01	0.11
156	Medication Compatibility	159	4.58	0.06	316	4.69	0.03	62	4.58	0.09	-0.11	0.00	0.11
157	Medication Contraindications	141	4.60	0.06	354	4.76	0.03	59	4.58	0.08	-0.16	0.02	0.18
158	Medication Conversions	159	4.43	0.07	316	4.74	0.03	62	4.29	0.12	-0.31	0.14	0.45
159	Medication Disposal	139	4.35	0.07	353	4.48	0.04	60	4.32	0.10	-0.13	0.03	0.16
160	Medication Reconciliation	159	4.36	0.07	316	4.53	0.04	62	4.47	0.09	-0.17	-0.11	0.06

Survey		Newly	Licensed	LPN/VN	LPN	/VN Educ	ator	LPN	/VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
161	Medication Safety Practices	141	4.65	0.05	352	4.83	0.02	60	4.60	0.08	-0.18	0.05	0.23
162	Medication Storage	157	4.32	0.07	315	4.46	0.04	62	4.27	0.10	-0.14	0.05	0.19
163	Medication Therapeutic Effects	140	4.51	0.06	352	4.69	0.03	60	4.48	0.08	-0.18	0.03	0.21
164	Musculoskeletal Checks	159	4.08	0.07	316	4.38	0.04	62	4.15	0.09	-0.30	-0.07	0.23
165	Narcotic/Controlled Substance Counting Procedures	140	4.55	0.06	353	4.54	0.04	60	4.47	0.10	0.01	0.08	0.07
166	Narcotics/Controlled Substances	159	4.58	0.05	315	4.61	0.03	62	4.52	0.08	-0.03	0.06	0.09
167	Nasogastric Tube Insertion	141	4.06	0.09	349	3.83	0.05	60	3.55	0.15	0.23	0.51	0.28
168	Nasogastric Tube Maintenance	159	4.14	0.08	316	4.10	0.05	62	3.92	0.12	0.04	0.22	0.18
169	Nasogastric Tube Removal	141	3.90	0.09	354	3.83	0.05	60	3.58	0.15	0.07	0.32	0.25
170	Nasogastric Tubes	159	4.12	0.08	315	4.07	0.05	61	3.90	0.12	0.05	0.22	0.17
171	Nephrostomies	142	3.78	0.09	353	3.49	0.05	60	3.33	0.15	0.29	0.45	0.16
172	Neurological Checks	159	4.44	0.07	316	4.36	0.04	62	4.40	0.10	0.08	0.04	-0.04
173	Newborn Client Care	142	3.82	0.10	354	3.49	0.06	60	3.03	0.18	0.33	0.79	0.46
174	Non-pharmacological Interventions	159	4.08	0.08	316	4.08	0.05	62	4.29	0.09	0.00	-0.21	-0.21
175	Nose Irrigation	143	3.29	0.09	354	2.97	0.06	59	2.88	0.13	0.32	0.41	0.09
176	Nutritional Guidelines	158	3.87	0.08	317	3.75	0.05	63	3.76	0.11	0.12	0.11	-0.01
177	Older Adult Care	144	4.24	0.06	355	4.48	0.04	62	4.31	0.09	-0.24	-0.07	0.17
178	OSHA	158	4.09	0.08	318	4.13	0.05	63	3.78	0.12	-0.04	0.31	0.35
179	Ostomies	144	3.94	0.07	356	3.94	0.05	62	3.92	0.12	0.00	0.02	0.02
180	Ostomy Equipment	158	4.04	0.07	316	4.04	0.05	63	3.97	0.09	0.00	0.07	0.07
181	Over-the-counter Medications	144	4.06	0.07	355	4.28	0.04	62	4.05	0.12	-0.22	0.01	0.23
182	Oxygen Administration	158	4.56	0.06	316	4.60	0.04	63	4.46	0.08	-0.04	0.10	0.14
183	Oxygen Saturation Monitoring	143	4.55	0.05	356	4.58	0.03	62	4.44	0.09	-0.03	0.11	0.14
184	Pacing Device Care	158	3.91	0.09	318	3.69	0.06	62	3.55	0.14	0.22	0.36	0.14
185	Pacing Devices	143	3.87	0.08	355	3.32	0.06	62	3.27	0.14	0.55	0.60	0.05
186	Pain Control Devices	158	4.12	0.08	317	3.98	0.06	63	4.03	0.11	0.14	0.09	-0.05
187	Pain Management	140	4.47	0.05	353	4.59	0.03	62	4.47	0.08	-0.12	0.00	0.12

Knowledg	e Statements Subgroup Analysis: Primary Job Title												
Survey		Newly	Licensed	LPN/VN	LPN	/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
188	Palpation	158	4.08	0.08	318	4.19	0.05	63	4.06	0.10	-0.11	0.02	0.13
189	Patient Controlled Analgesia	142	4.03	0.09	357	3.80	0.06	61	3.74	0.15	0.23	0.29	0.06
190	Peripheral Intravenous Catheter Maintenance	158	4.21	0.09	318	4.03	0.06	63	3.95	0.13	0.18	0.26	0.08
191	Peripheral Intravenous Catheter Removal	143	3.99	0.09	353	3.88	0.06	62	3.65	0.16	0.11	0.34	0.23
192	Peripheral Nerve Catheters	157	3.83	0.10	316	3.16	0.07	62	3.06	0.17	0.67	0.77	0.10
193	Personal Biases	143	3.64	0.09	355	4.01	0.05	62	3.82	0.14	-0.37	-0.18	0.19
194	Personal Limitations	158	4.08	0.07	316	4.22	0.05	63	4.16	0.12	-0.14	-0.08	0.06
195	Personal Protective Equipment (PPE)	143	4.53	0.06	355	4.70	0.03	61	4.62	0.09	-0.17	-0.09	0.08
196	Pharmacological Interventions	158	4.41	0.06	318	4.64	0.03	63	4.27	0.09	-0.23	0.14	0.37
197	Physical Data Guidelines	142	3.73	0.08	354	3.98	0.05	62	3.60	0.13	-0.25	0.13	0.38
198	Polypharmacy	157	4.11	0.09	317	4.38	0.04	63	4.17	0.10	-0.27	-0.06	0.21
199	Postmortem Care	141	3.79	0.09	354	3.73	0.05	62	3.77	0.14	0.06	0.02	-0.04
200	Postpartum Client Care	157	3.75	0.10	318	3.58	0.06	63	2.95	0.16	0.17	0.80	0.63
201	Post-surgical Care	143	4.34	0.08	356	4.13	0.05	62	4.05	0.09	0.21	0.29	0.08
202	Practice Errors	157	4.40	0.07	317	4.49	0.04	61	4.23	0.10	-0.09	0.17	0.26
203	Prenatal Care	142	3.73	0.10	352	3.58	0.06	62	3.08	0.18	0.15	0.65	0.50
204	Prenatal Complications	157	3.85	0.10	316	3.46	0.06	63	2.95	0.17	0.39	0.90	0.51
205	Preschool-age Client Care	143	3.65	0.09	355	3.58	0.05	61	3.16	0.15	0.07	0.49	0.42
206	Prescribed Medications	158	4.54	0.05	318	4.39	0.05	63	4.38	0.10	0.15	0.16	0.01
207	Pre-surgical Care	141	4.09	0.08	351	3.84	0.05	62	3.48	0.13	0.25	0.61	0.36
208	Preventative Care	157	4.32	0.06	318	4.33	0.04	63	4.06	0.10	-0.01	0.26	0.27
209	Prioritization of Client Care	143	4.48	0.06	355	4.55	0.03	62	4.29	0.09	-0.07	0.19	0.26
210	Privacy and Security	158	4.54	0.06	318	4.64	0.03	63	4.46	0.09	-0.10	0.08	0.18
211	Professional Accountability	142	4.35	0.07	354	4.64	0.03	62	4.61	0.08	-0.29	-0.26	0.03
212	Professional Boundaries	157	4.36	0.06	317	4.60	0.04	63	4.54	0.08	-0.24	-0.18	0.06
213	Professional Development	144	4.06	0.07	356	4.21	0.04	62	4.24	0.10	-0.15	-0.18	-0.03
214	Quality Improvement	158	4.17	0.07	318	4.11	0.05	63	4.22	0.09	0.06	-0.05	-0.11

Knowledg	e Statements Subgroup Analysis: Primary Job Title												
Survey		Newly	Licensed	LPN/VN	LPN	I/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
215	Reality Orientation	144	3.90	0.08	355	3.97	0.05	62	3.92	0.13	-0.07	-0.02	0.05
216	Referrals	157	3.80	0.08	313	3.60	0.05	63	3.40	0.11	0.20	0.40	0.20
217	Regulations	144	4.07	0.07	356	4.23	0.04	62	4.27	0.11	-0.16	-0.20	-0.04
218	Reminiscence Therapy	157	3.39	0.10	317	3.44	0.07	63	2.90	0.15	-0.05	0.49	0.54
219	Reporting	141	4.31	0.07	352	4.41	0.04	62	4.40	0.10	-0.10	-0.09	0.01
220	Respiratory Checks	158	4.51	0.06	318	4.64	0.03	63	4.52	0.08	-0.13	-0.01	0.12
221	Respiratory Equipment	143	4.45	0.07	355	4.23	0.04	62	4.10	0.10	0.22	0.35	0.13
222	Restraint Alternatives	158	3.94	0.09	317	4.28	0.05	63	4.27	0.12	-0.34	-0.33	0.01
223	Restraints	141	3.91	0.09	353	4.04	0.05	62	3.87	0.14	-0.13	0.04	0.17
224	Risk Management	158	4.13	0.07	315	4.04	0.05	63	3.98	0.10	0.09	0.15	0.06
225	Risk Tools	143	3.71	0.09	354	3.76	0.05	61	3.49	0.14	-0.05	0.22	0.27
226	Safety Precautions	158	4.61	0.05	317	4.62	0.04	63	4.56	0.08	-0.01	0.05	0.06
227	School-age Client Care	144	3.57	0.09	355	3.63	0.05	61	3.11	0.16	-0.06	0.46	0.52
228	Scope of Practice	158	4.71	0.05	316	4.56	0.05	63	4.78	0.06	0.15	-0.07	-0.22
229	Seclusion	141	3.48	0.10	355	3.50	0.06	61	3.33	0.15	-0.02	0.15	0.17
230	Self Awareness	158	4.21	0.07	318	4.08	0.05	62	4.31	0.10	0.13	-0.10	-0.23
231	Sensory Checks	142	4.08	0.08	353	4.22	0.04	62	3.92	0.12	-0.14	0.16	0.30
232	Sensory/Perceptual Alterations	158	3.99	0.08	315	4.16	0.04	63	3.86	0.11	-0.17	0.13	0.30
233	Sequential Compression Devices (SCDs)	143	3.90	0.08	355	4.08	0.05	62	3.71	0.14	-0.18	0.19	0.37
234	Sexual Practices	157	3.56	0.10	317	3.67	0.05	63	3.44	0.12	-0.11	0.12	0.23
235	Shift Report/Hand-off	144	4.32	0.07	355	4.51	0.04	62	4.40	0.11	-0.19	-0.08	0.11
236	Skin Integrity	158	4.42	0.07	318	4.56	0.04	62	4.48	0.08	-0.14	-0.06	0.08
237	Sleep Cycles	143	3.55	0.09	356	3.39	0.05	62	3.27	0.12	0.16	0.28	0.12
238	Sleep/Rest	158	4.11	0.08	317	4.04	0.04	63	4.08	0.10	0.07	0.03	-0.04
239	Smoking Cessation	144	3.67	0.09	355	3.72	0.05	60	3.38	0.14	-0.05	0.29	0.34
240	Social Media Usage	158	3.40	0.11	316	3.92	0.06	62	3.76	0.15	-0.52	-0.36	0.16
241	Specialty Diets	142	3.94	0.08	354	3.90	0.04	62	3.73	0.13	0.04	0.21	0.17

Knowledg	e Statements Subgroup Analysis: Primary Job Title												
Survey		Newly	Licensed	LPN/VN	LPN	/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
242	Specimen Collection	157	4.27	0.07	318	4.28	0.04	63	4.37	0.09	-0.01	-0.10	-0.09
243	Specimen Storage	141	4.05	0.08	354	3.92	0.05	62	3.81	0.13	0.13	0.24	0.11
244	Staff Competency	158	4.39	0.07	317	4.18	0.05	63	4.37	0.10	0.21	0.02	-0.19
245	Staff Education	144	4.08	0.08	355	3.80	0.05	61	3.92	0.11	0.28	0.16	-0.12
246	Staff Safety	157	4.54	0.06	317	4.41	0.04	63	4.52	0.08	0.13	0.02	-0.11
247	Standardized Pain Rating Scales	142	4.23	0.07	356	4.30	0.04	62	4.18	0.10	-0.07	0.05	0.12
248	Sterile Technique	158	4.71	0.05	317	4.67	0.04	63	4.52	0.10	0.04	0.19	0.15
249	Substance Abuse	143	4.13	0.08	355	4.17	0.04	62	3.90	0.13	-0.04	0.23	0.27
250	Suctioning	158	4.27	0.08	318	4.29	0.05	63	4.24	0.10	-0.02	0.03	0.05
251	Surgical Complications	143	4.40	0.07	351	4.26	0.04	62	4.05	0.12	0.14	0.35	0.21
252	Surgical Procedures	156	3.88	0.10	318	3.89	0.06	63	3.46	0.13	-0.01	0.42	0.43
253	Task Assignments	144	3.98	0.07	353	3.90	0.05	62	3.94	0.12	0.08	0.04	-0.04
254	Therapeutic Communication	157	4.31	0.08	318	4.50	0.04	63	4.14	0.11	-0.19	0.17	0.36
255	Therapeutic Effects	142	4.05	0.07	351	4.10	0.04	62	3.84	0.10	-0.05	0.21	0.26
256	Therapeutic Environment	157	4.18	0.08	314	4.30	0.05	63	4.03	0.11	-0.12	0.15	0.27
257	Toddler Client Care	143	3.62	0.09	356	3.48	0.06	62	3.15	0.17	0.14	0.47	0.33
258	Toxicity	157	4.27	0.09	316	4.13	0.05	63	3.81	0.11	0.14	0.46	0.32
259	Tracheostomy	140	4.22	0.08	353	3.94	0.05	62	3.90	0.14	0.28	0.32	0.04
260	Tracheostomy Care	157	4.17	0.08	316	4.16	0.05	63	4.00	0.12	0.01	0.17	0.16
261	Transfer Assistive Devices	143	4.03	0.08	355	4.17	0.05	62	4.23	0.11	-0.14	-0.20	-0.06
262	Transfer Process	156	4.03	0.08	318	4.19	0.05	63	3.97	0.10	-0.16	0.06	0.22
263	Ultrasounds	144	3.40	0.09	354	2.94	0.06	61	2.87	0.14	0.46	0.53	0.07
264	Universal/Standard Precautions	158	4.71	0.05	318	4.47	0.05	63	4.84	0.05	0.24	-0.13	-0.37
265	Urinary Catheter Insertion	143	4.49	0.08	357	4.54	0.04	62	4.56	0.09	-0.05	-0.07	-0.02
266	Urinary Catheter Maintenance	158	4.45	0.07	317	4.60	0.03	63	4.51	0.08	-0.15	-0.06	0.09
267	Urinary Catheter Removal	143	4.33	0.08	357	4.36	0.04	62	4.39	0.11	-0.03	-0.06	-0.03
268	Urinary Catheters	158	4.39	0.07	318	4.54	0.04	63	4.49	0.08	-0.15	-0.10	0.05

Knowledg	e Statements Subgroup Analysis: Primary Job Title												
Survey		Newly	Licensed	LPN/VN	LPN	/VN Educ	ator	LPN/	VN Super	visor	New vs. Educator	New vs. Supervisor	Educator vs. Supervisor
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	Difference	Difference	Difference
269	Urinary Retention	143	4.32	0.07	355	4.33	0.04	61	4.39	0.09	-0.01	-0.07	-0.06
270	Urostomies	157	3.99	0.09	318	4.01	0.05	63	4.19	0.11	-0.02	-0.20	-0.18
271	Validation Therapy	140	3.49	0.09	354	3.32	0.05	61	3.13	0.14	0.17	0.36	0.19
272	Venipuncture	157	4.01	0.10	318	3.86	0.06	63	4.21	0.10	0.15	-0.20	-0.35
273	Ventilator Care	142	4.12	0.10	354	3.24	0.07	62	3.02	0.17	0.88	1.10	0.22
274	Ventilator Equipment	158	3.99	0.10	317	3.27	0.07	63	3.41	0.15	0.72	0.58	-0.14
275	Visual Impairments	142	3.90	0.08	356	3.89	0.05	62	3.76	0.11	0.01	0.14	0.13
276	Vital Sign Monitoring Devices	158	4.56	0.06	318	4.51	0.04	63	4.59	0.07	0.05	-0.03	-0.08
277	Vital Signs	143	4.77	0.04	356	4.83	0.02	61	4.80	0.06	-0.06	-0.03	0.03
278	Warming/Cooling Equipment	158	3.80	0.09	318	3.95	0.06	63	3.60	0.11	-0.15	0.20	0.35
279	Withdrawal	142	4.07	0.08	355	3.98	0.05	62	3.68	0.13	0.09	0.39	0.30
280	Wound Care	158	4.52	0.06	318	4.44	0.04	63	4.41	0.09	0.08	0.11	0.03
281	Wound Care Equipment	142	4.34	0.07	354	4.17	0.05	62	4.23	0.10	0.17	0.11	-0.06
282	Wound Types	158	4.44	0.06	318	4.36	0.04	63	4.51	0.08	0.08	-0.07	-0.15

APPENDIX I: KNOWLEDGE STATEMENTS SUBGROUP ANALYSIS: FACILITY

Knowledg	ge Statements Subgroup An	alysis: F	acility										
							_	Comi	nunity-l				
Survey			Hospita		Lon	g-term (Facility			Other	Ot 4
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
1	Abuse Prevention	220	4.22	0.06	158	4.53	0.06	73	4.52	0.07	71	4.39	0.09
2	Active Listening	198	4.75	0.03	150	4.73	0.04	75	4.76	0.07	85	4.67	0.06
3	Activities of Daily Living	219	4.42	0.05	160	4.39	0.05	73	4.40	0.08	71	4.34	0.09
4	Acute Illnesses	197	4.50	0.05	150	4.48	0.05	75	4.28	0.08	82	4.50	0.06
5	Adaptive Equipment	218	3.89	0.06	160	3.98	0.07	70	4.03	0.11	71	3.97	0.10
6	Adolescent Client Care	196	3.66	0.07	149	3.63	0.10	74	3.73	0.11	84	3.90	0.08
7	Adult Client Care	214	4.48	0.05	158	4.40	0.06	72	4.35	0.10	70	4.41	0.09
8	Advance Directives	196	4.15	0.06	146	4.39	0.07	74	3.97	0.12	83	4.17	0.10
9	Alternative Therapies	217	3.33	0.06	157	3.51	0.08	72	3.51	0.12	70	3.66	0.12
10	Antepartum Client Care	196	3.36	0.08	149	3.47	0.10	74	3.30	0.14	83	3.61	0.10
11	Approved Medical Abbreviations	218	4.34	0.06	158	4.36	0.07	72	4.22	0.11	70	4.40	0.10
12	Aseptic Technique	196	4.76	0.04	149	4.80	0.04	75	4.89	0.04	85	4.86	0.04
13	Aspiration Precautions	216	4.66	0.04	160	4.73	0.05	72	4.50	0.11	71	4.72	0.07
14	Assistive Devices	196	4.14	0.06	150	4.29	0.06	75	4.15	0.09	84	4.00	0.09
15	Assistive Personnel	220	3.85	0.06	159	3.91	0.07	73	3.96	0.11	70	4.01	0.10
16	Available Resources	193	4.12	0.06	148	4.22	0.07	74	4.01	0.10	82	4.05	0.09
17	Barriers to Communication	218	4.08	0.05	160	4.17	0.06	72	4.14	0.11	71	4.25	0.09
18	Barriers to Learning	196	4.05	0.06	149	4.06	0.08	74	4.07	0.09	84	4.00	0.10
19	Barriers to Treatment	220	4.03	0.05	158	4.07	0.07	73	4.12	0.10	70	4.21	0.10
20	Behavioral Disorders	198	3.95	0.06	150	4.23	0.06	75	4.09	0.09	85	3.95	0.09
21	Behavioral Management	218	3.81	0.06	159	4.04	0.06	71	3.93	0.09	70	4.13	0.10
22	Biohazard Disposal	196	4.28	0.06	150	4.44	0.06	75	4.35	0.11	84	4.36	0.09
23	Bladder Irrigation	218	3.44	0.07	160	3.73	0.08	73	3.66	0.14	71	3.59	0.14
24	Bladder Scans	198	3.45	0.08	149	3.63	0.09	74	3.12	0.14	83	3.53	0.11
25	Blood Glucose Monitoring	220	4.60	0.05	160	4.56	0.06	73	4.42	0.10	70	4.59	0.09
26	Blood Products	196	3.75	0.08	150	3.79	0.10	74	3.89	0.14	85	4.22	0.09
27	Blood Transfusions	218	3.57	0.08	158	3.68	0.10	73	3.63	0.16	70	3.74	0.14
28	Body Mechanics	198	4.60	0.05	150	4.45	0.06	75	4.36	0.11	84	4.46	0.06
29	Bowel Management	220	4.05	0.06	159	4.14	0.07	73	4.05	0.12	71	4.20	0.10
30	Cardiac Abnormalities	197	4.14	0.06	149	4.37	0.07	74	4.16	0.11	85	4.22	0.09
31	Cardiopulmonary Resuscitation	215	4.79	0.04	160	4.72	0.05	72	4.78	0.06	71	4.72	0.09
32	Care for Clients in Labor	195	3.12	0.08	149	3.46	0.11	73	3.30	0.15	84	3.65	0.12
33	Central Venous Catheter Maintenance	219	3.27	0.08	160	3.83	0.10	72	3.69	0.16	71	3.70	0.15
34	Central Venous Catheter Types	197	3.40	0.08	147	3.78	0.10	74	3.62	0.14	84	3.77	0.12
35	Chain of Command	219	4.19	0.06	157	4.13	0.06	73	4.27	0.09	71	4.35	0.09
36	Chemical Dependency	198	3.92	0.07	150	3.93	0.08	73	3.95	0.12	85	3.89	0.10

	Vnoudodga Statomant				Long-term Care			Comi	munity-l					
Survey Position			Hospita	Std.			Std.		Facility	Std.		Other	Std.	
#	Knowledge Statement	N 210	Avg.	Err.	N 150	Avg.	Err.	N 70	Avg.	Err.	N	Avg.	Err.	
37	Chest Tubes	219	3.49	0.08	158	3.75	0.09	72	3.69	0.15	71 84	3.70	0.14	
38 39	Chronic Illnesses	196 220	4.53	0.05	150 159	4.59	0.05	75 73	4.45	0.07	70	4.39	0.07	
40	Circulatory Checks		4.50	0.05	148						85		0.07	
	Client Advocacy	198				4.52	0.05	75	4.59	0.08	71	4.38		
41	Client Autonomy	218	4.71	0.04	158	4.69	0.05	73 75	4.70	0.07	84	4.72	0.06	
42	Client Autonomy Client Baseline Oxygen Saturation	198	4.33	0.06	150 159	4.36	0.06	72	4.48	0.08	71	4.27	0.08	
44	Client Baseline Vital Signs	198	4.78	0.03	149	4.76	0.04	74	4.77	0.06	85	4.76	0.05	
45	Client Care Assignments	219	3.85	0.06	158	4.03	0.04	73	4.25	0.00	71	4.15	0.00	
46	Client Care Equipment	198	4.21	0.06	149	4.22	0.07	75	4.09	0.09	84	4.11	0.09	
47	Client Cognitive Ability	220	4.07	0.06	157	4.18	0.06	71	4.30	0.08	71	4.30	0.08	
48	Client Comfort Level	198	4.57	0.04	149	4.58	0.05	74	4.45	0.09	84	4.42	0.07	
49	Client Compliance Issues	219	3.82	0.06	156	3.95	0.06	73	4.11	0.09	70	4.09	0.09	
50	Client Consent	198	4.56	0.05	150	4.69	0.05	75	4.68	0.06	85	4.62	0.0	
51	Client Disease Processes and Conditions	219	4.46	0.04	158	4.47	0.05	72	4.51	0.08	70	4.50	0.07	
52	Client Education	198	4.42	0.05	149	4.46	0.05	75	4.64	0.06	85	4.45	0.0	
53	Client History	217	4.19	0.05	159	4.25	0.06	72	4.32	0.08	71	4.44	0.00	
54	Client Identification	198	4.82	0.03	150	4.85	0.03	75	4.83	0.05	85	4.87	0.04	
55	Client Intake/Output	220	4.38	0.05	160	4.21	0.06	72	4.19	0.11	71	4.39	0.0	
56	Client Medical History	198	4.42	0.05	149	4.59	0.05	75	4.53	0.07	85	4.44	0.00	
57	Client Mental Status	220	4.39	0.05	160	4.34	0.05	72	4.40	0.08	71	4.42	0.0	
58	Client Mobility Needs	198	4.25	0.05	150	4.33	0.05	75	4.25	0.09	85	4.27	0.0	
59	Client Needs	217	4.29	0.05	159	4.35	0.06	73	4.38	0.07	71	4.34	0.0	
60	Client Non-compliance	196	3.99	0.06	150	4.21	0.06	75	4.15	0.09	85	4.12	0.0	
61	Client Nutrition	220	4.16	0.05	160	4.32	0.05	73	4.33	0.09	71	4.31	0.0	
62	Client Physical Limitations	198	4.19	0.06	150	4.29	0.06	75	4.15	0.09	84	4.32	0.0	
63	Client Plan of Care	219	4.16	0.05	160	4.31	0.06	73	4.34	0.09	70	4.24	0.09	
64	Client Preferences	197	4.09	0.06	149	4.25	0.07	75	4.11	0.09	85	4.11	0.09	
65	Client Privacy	219	4.36	0.05	160	4.41	0.06	73	4.44	0.07	71	4.42	0.08	
66	Client Psychosocial Functioning	198	4.11	0.06	150	4.30	0.06	75	4.15	0.09	85	4.20	0.0	
67	Client Referrals	216	3.48	0.07	160	3.60	0.09	72	3.68	0.11	71	3.59	0.1	
68	Client Repositioning	198	4.41	0.06	149	4.49	0.06	75	4.25	0.12	85	4.52	0.0	
69	Client Rights	220	4.55	0.04	158	4.63	0.05	73	4.52	0.08	71	4.68	0.0	
70	Client Safety	196	4.81	0.03	149	4.82	0.04	74	4.88	0.04	85	4.85	0.04	
71	Client Safety Checks	217	4.68	0.04	158	4.59	0.05	73	4.58	0.09	70	4.80	0.0	
72	Client Self-advocacy	198	4.17	0.05	149	4.31	0.06	75	4.32	0.09	85	4.21	0.0	
73	Client Spiritual and Cultural Beliefs	217	4.03	0.05	160	4.07	0.07	73	4.08	0.11	71	4.18	0.0	
74	Client-centered Care	197	4.44	0.05	148	4.49	0.06	74	4.51	0.08	85	4.48	0.0	

	ge Statements Subgroup Ana		,					Com	munity-l	nased			
Survey			Hospita	I	Lon	g-term (Care	Conn	Facility				
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
75	Code of Ethics	215	4.44	0.05	159	4.43	0.06	73	4.45	0.08	71	4.49	0.08
76	Cognitive Behavioral Therapy	196	3.56	0.07	148	3.89	0.08	75	3.69	0.11	85	3.81	0.09
77	Colostomies	218	3.82	0.07	160	3.99	0.07	73	3.81	0.12	69	4.12	0.09
78	Community Resources	197	3.86	0.07	150	3.79	0.08	75	3.83	0.11	84	3.79	0.10
79	Complementary Therapies	218	3.22	0.06	159	3.39	0.08	71	3.46	0.12	69	3.54	0.11
80	Compression Stockings	197	3.97	0.06	150	3.98	0.07	75	3.87	0.12	85	3.88	0.09
81	Confidentiality	219	4.69	0.04	158	4.70	0.04	72	4.72	0.06	70	4.76	0.07
82	Conflict Resolution	198	4.14	0.06	148	4.17	0.07	75	4.16	0.09	84	4.05	0.09
83	Continuity of Care	219	4.23	0.06	160	4.36	0.05	73	4.26	0.09	71	4.28	0.09
84	Controlled Substances	197	4.36	0.06	149	4.44	0.06	75	4.25	0.09	85	4.38	0.08
85	Coping Mechanisms	220	3.85	0.06	160	3.95	0.06	73	3.96	0.09	71	4.01	0.10
86	Cost Effective Care	196	3.75	0.07	150	3.73	0.09	75	3.71	0.12	85	3.61	0.10
87	Crisis Intervention	220	3.99	0.06	159	4.19	0.07	72	4.17	0.10	71	4.21	0.11
88	Cultural Diversity	197	4.20	0.06	150	4.23	0.07	74	4.16	0.11	85	4.24	0.08
89	Data Collection	220	4.19	0.06	158	4.39	0.06	73	4.15	0.10	71	4.41	0.09
90	De-escalation Techniques	197	4.07	0.06	149	4.11	0.08	75	4.12	0.11	85	4.19	0.08
91	Developmental Milestones	220	3.68	0.06	159	3.69	0.07	73	3.86	0.10	70	3.90	0.09
92	Diagnostic Procedures	196	3.89	0.06	149	4.05	0.07	75	3.89	0.10	85	4.13	0.08
93	Discharge Process	219	3.75	0.06	160	3.88	0.07	73	3.58	0.11	69	3.94	0.09
94	Drainage Devices	195	3.98	0.06	150	3.96	0.07	75	3.87	0.10	85	4.08	0.08
95	Dressing Changes	219	4.23	0.05	157	4.36	0.06	72	4.29	0.10	71	4.32	0.09
96	Ear Irrigation	197	3.40	0.08	149	3.58	0.09	75	3.45	0.14	85	3.66	0.11
97	Electrocardiogram Equipment	219	3.46	0.07	160	3.67	0.08	73	3.89	0.12	71	3.66	0.10
98	Electrocardiograms (EKG/ ECG)	196	3.74	0.08	150	3.81	0.09	74	3.78	0.12	85	3.94	0.09
99	Electrolyte Imbalances	219	4.35	0.05	160	4.46	0.06	72	4.28	0.12	71	4.45	0.08
100	Electronic Medical Records	198	4.34	0.05	150	4.41	0.06	74	4.36	0.08	85	4.24	0.09
101	Emergency Preparedness	218	4.17	0.07	160	4.48	0.06	73	4.41	0.10	71	4.27	0.10
102	End-of-life Care	195	4.23	0.06	150	4.52	0.05	75	4.12	0.10	85	4.22	0.08
103	Enteral Feedings	219	4.04	0.06	159	4.27	0.06	73	4.04	0.14	71	4.21	0.11
104	Enteral Tube Management	196	4.12	0.07	149	4.36	0.06	74	4.14	0.10	84	4.14	0.08
105	Epidurals	218	3.00	0.08	159	3.16	0.10	73	3.08	0.13	70	3.29	0.14
106	Evidence-based Care	196	3.98	0.07	150	4.14	0.07	75	4.09	0.11	84	4.07	0.09
107	Evidence-based Research	220	3.74	0.07	158	3.78	0.08	73	3.81	0.13	70	3.81	0.12
108	Eye Irrigation	197	3.35	0.08	150	3.57	0.08	74	3.54	0.13	85	3.67	0.11
109	Family Dynamics	219	3.64	0.06	160	3.71	0.07	73	3.66	0.11	71	3.79	0.10
110	Family Medical History	197	3.78	0.07	149	3.84	0.08	75	3.73	0.11	85	3.84	0.09
111	Fetal Heart Monitoring	219	3.11	0.08	158	3.39	0.11	72	3.71	0.15	70	3.51	0.15
112	Fluid Imbalances	196	4.07	0.07	149	4.32	0.07	74	4.22	0.10	85	4.45	0.07
113	Gastrointestinal Checks	220	4.08	0.05	160	4.13	0.07	73	4.04	0.12	71	4.27	0.09

			Hospita	I	Lon	g-term (Care	Comi	nunity-l Facility		Other			
Survey Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std Err.	
114	Genitourinary Checks	195	3.98	0.06	150	4.04	0.07	74	3.97	0.12	85	4.13	0.08	
115	Grieving Process	220	3.95	0.05	159	4.06	0.06	73	3.95	0.10	71	4.07	0.09	
116	Group Therapy Sessions	197	3.17	0.09	150	3.21	0.10	75	3.13	0.13	85	3.24	0.1	
117	G-tubes	220	3.95	0.06	159	4.26	0.06	73	3.97	0.13	71	4.24	0.10	
118	Health Care Provider Orders	197	4.49	0.05	150	4.61	0.06	74	4.49	0.09	85	4.64	0.0	
119	Health Promotion Programs	219	3.64	0.06	159	3.68	0.07	73	3.70	0.11	70	3.77	0.10	
120	Health Screening Programs	192	3.67	0.07	146	3.71	0.09	75	3.75	0.11	85	3.87	0.0	
121	Hearing Impairments	220	3.72	0.06	160	3.83	0.08	73	3.86	0.10	71	3.92	0.0	
122	Herbal Supplements	197	3.49	0.07	150	3.39	0.09	75	3.49	0.12	85	3.31	0.1	
123	High Risk Behaviors	220	3.97	0.06	159	4.13	0.07	73	4.10	0.09	70	4.21	0.0	
124	HIPAA	197	4.68	0.04	150	4.78	0.04	75	4.79	0.05	85	4.82	0.0	
125	Hospice Care	218	3.75	0.06	157	4.04	0.07	72	3.97	0.12	71	4.04	0.0	
126	Hypoxia	196	4.53	0.06	150	4.63	0.05	75	4.57	0.08	85	4.66	0.0	
127	Ileostomies	220	3.69	0.07	158	3.96	0.08	73	3.75	0.14	71	3.99	0.1	
128	Immobilized Client Care	197	4.23	0.06	150	4.45	0.05	75	4.09	0.11	85	4.20	0.0	
129	Immunizations	220	3.96	0.06	159	3.93	0.07	73	4.12	0.10	71	4.11	0.0	
130	Incident Reporting	198	4.20	0.06	150	4.45	0.06	74	4.38	0.08	85	4.39	0.0	
131	Infection Control	219	4.75	0.04	160	4.76	0.04	73	4.84	0.05	71	4.83	0.0	
132	Information Technology	198	4.07	0.06	149	4.14	0.07	74	3.93	0.11	85	3.92	0.0	
133	Injury Prevention	218	4.48	0.05	158	4.46	0.06	73	4.59	0.07	71	4.73	0.0	
134	Integumentary Checks	198	4.40	0.05	148	4.49	0.06	75	4.40	0.10	84	4.42	0.0	
135	Interdisciplinary Roles and Responsibilities	218	3.88	0.05	159	4.01	0.07	73	4.04	0.11	71	4.06	0.0	
136	Interdisciplinary Team Collaboration	198	4.10	0.07	147	4.30	0.07	75	4.16	0.10	85	4.11	0.0	
137	Invasive Procedures	219	3.74	0.07	159	3.95	0.08	73	3.79	0.14	71	4.06	0.1	
138	Isolation Techniques	198	4.30	0.06	150	4.62	0.05	75	4.21	0.11	85	4.36	0.0	
139	IV Flow Rates	219	4.16	0.06	158	4.06	0.08	72	3.93	0.14	71	4.11	0.1	
140	IV Site Maintenance	198	4.27	0.07	150	4.37	0.08	74	4.16	0.11	85	4.45	0.0	
141	IV Solutions	219	4.13	0.06	160	4.13	0.08	73	3.82	0.14	71	4.08	0.1	
142	J-tubes	198	3.93	0.07	148	4.09	0.09	74	4.04	0.11	85	4.11	0.1	
143	Labor Complications	219	3.28	0.08	159	3.50	0.10	73	3.63	0.15	70	3.63	0.1	
144	Labor Process	196	3.08	0.08	149	3.34	0.11	75	3.32	0.13	85	3.54	0.1	
145	Laboratory Tests	220	4.36	0.05	160	4.33	0.06	73	4.21	0.10	70	4.44	0.0	
146	Lead Placement	197	3.83	0.08	149	3.79	0.10	75	3.83	0.13	85	3.98	0.0	
147	Life Stressors	219	3.64	0.06	159	3.70	0.07	73	3.84	0.10	71	3.83	0.1	
148	Maslow's Hierarchy of Needs	198	4.08	0.07	150	4.19	0.08	75	4.05	0.12	85	4.20	0.0	
149	Medical Procedures	219	3.90	0.05	160	4.04	0.07	73	4.14	0.08	71	4.13	0.0	
150	Medical Treatments	195	4.17	0.05	150	4.41	0.05	75	4.29	0.10	84	4.29	0.0	
151	Medication Administration Calculations	220	4.77	0.04	157	4.62	0.05	73	4.56	0.10	71	4.85	0.0	

Knowled	ge Statements Subgroup Ana	ilysis: F	acility										
			Hospita	ı	Lon	g-term (Cara	Comi	nunity-l Facility			Other	
Survey Position			поѕріта	Std.	LOII	g-term (Std.		racility	Std.		Other	Std.
#	Knowledge Statement	N	Avg.	Err.	N	Avg.	Err.	N	Avg.	Err.	N	Avg.	Err.
152	Medication Administration Records	198	4.69	0.04	149	4.73	0.04	75	4.47	0.10	85	4.67	0.06
153	Medication Administration Rights	220	4.84	0.03	159	4.79	0.04	73	4.67	0.07	71	4.90	0.04
154	Medication Administration Sites	197	4.71	0.04	150	4.71	0.04	75	4.71	0.07	85	4.75	0.05
155	Medication Adverse Reactions	220	4.76	0.03	159	4.72	0.04	73	4.73	0.06	71	4.83	0.05
156	Medication Compatibility	198	4.65	0.05	150	4.61	0.06	75	4.67	0.07	85	4.65	0.06
157	Medication Contraindications	220	4.73	0.04	158	4.67	0.05	73	4.59	0.07	71	4.73	0.06
158	Medication Conversions	198	4.64	0.05	150	4.49	0.07	75	4.60	0.08	85	4.66	0.06
159	Medication Disposal	220	4.42	0.05	156	4.41	0.06	73	4.38	0.09	71	4.52	0.09
160	Medication Reconciliation	198	4.46	0.06	150	4.39	0.07	75	4.53	0.08	85	4.49	0.08
161	Medication Safety Practices	218	4.79	0.03	159	4.75	0.04	73	4.64	0.07	71	4.82	0.05
162	Medication Storage	197	4.35	0.06	150	4.43	0.06	75	4.43	0.09	83	4.40	0.09
163	Medication Therapeutic Effects	219	4.65	0.04	157	4.61	0.05	73	4.52	0.07	71	4.65	0.06
164	Musculoskeletal Checks	198	4.29	0.06	150	4.24	0.06	75	4.17	0.10	85	4.26	0.07
165	Narcotic/Controlled Substance Counting Procedures	219	4.45	0.05	159	4.66	0.05	72	4.51	0.09	71	4.52	0.07
166	Narcotics/Controlled Substances	198	4.55	0.04	150	4.68	0.05	74	4.47	0.08	85	4.67	0.06
167	Nasogastric Tube Insertion	217	3.80	0.06	159	3.85	0.09	72	3.90	0.13	70	4.04	0.11
168	Nasogastric Tube Maintenance	198	4.04	0.07	150	4.03	0.09	75	4.13	0.11	85	4.21	0.08
169	Nasogastric Tube Removal	220	3.81	0.06	159	3.79	0.08	73	3.81	0.14	71	3.94	0.11
170	Nasogastric Tubes	198	3.99	0.07	148	3.99	0.09	75	4.08	0.11	85	4.26	0.08
171	Nephrostomies	219	3.34	0.07	160	3.69	0.09	73	3.62	0.14	71	3.65	0.11
172	Neurological Checks	198	4.29	0.06	150	4.55	0.05	75	4.25	0.10	85	4.42	0.08
173	Newborn Client Care	220	3.46	0.08	160	3.50	0.10	73	3.62	0.15	71	3.66	0.13
174	Non-pharmacological Interventions	198	4.02	0.07	150	4.20	0.07	75	4.12	0.11	85	4.08	0.09
175	Nose Irrigation	218	2.86	0.08	157	3.08	0.09	75	3.23	0.12	72	3.19	0.13
176	Nutritional Guidelines	200	3.64	0.07	148	3.86	0.08	75	3.85	0.10	85	3.91	0.09
177	Older Adult Care	220	4.40	0.05	160	4.38	0.05	74	4.32	0.08	73	4.47	0.06
178	OSHA	200	4.08	0.07	149	4.05	0.09	75	4.08	0.11	85	4.09	0.10
179	Ostomies	221	3.84	0.06	160	4.05	0.07	75	3.87	0.11	72	3.99	0.10
180	Ostomy Equipment	199	3.94	0.07	148	4.14	0.07	75	3.92	0.11	85	4.09	0.09
181	Over-the-counter Medications	219	4.20	0.05	160	4.13	0.07	75	4.24	0.08	73	4.23	0.09
182	Oxygen Administration	199	4.53	0.05	148	4.67	0.05	75	4.55	0.09	85	4.54	0.08
183	Oxygen Saturation Monitoring	221	4.57	0.05	159	4.54	0.05	75	4.59	0.07	72	4.54	0.07

Knowled	ge Statements Subgroup Ana	alysis: F	acility											
								Comi	munity-l					
Survey			Hospita		Lon	g-term (Facility		Other			
Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	
184	Pacing Device Care	200	3.56	0.08	148	3.93	0.09	75	3.75	0.13	85	3.78	0.10	
185	Pacing Devices	221	3.22	0.07	159	3.64	0.09	75	3.60	0.13	71	3.63	0.13	
186	Pain Control Devices	199	3.86	0.08	149	4.14	0.08	75	4.05	0.11	85	4.08	0.09	
187	Pain Management	218	4.53	0.05	156	4.57	0.05	74	4.49	0.07	73	4.63	0.07	
188	Palpation	200	4.06	0.07	149	4.14	0.08	75	4.16	0.11	85	4.21	0.08	
189	Patient Controlled Analgesia	220	3.80	0.07	159	3.91	0.08	74	3.86	0.14	73	3.93	0.12	
190	Peripheral Intravenous Catheter Maintenance	200	4.01	0.08	149	4.11	0.08	75	4.03	0.12	85	4.20	0.09	
191	Peripheral Intravenous Catheter Removal	218	3.91	0.08	158	3.85	0.09	75	3.80	0.14	73	3.93	0.13	
192	Peripheral Nerve Catheters	199	3.17	0.09	148	3.45	0.11	74	3.42	0.14	84	3.62	0.12	
193	Personal Biases	219	3.92	0.07	160	3.87	0.09	75	3.85	0.12	72	3.90	0.11	
194	Personal Limitations	199	4.15	0.06	149	4.23	0.07	75	4.09	0.10	84	4.12	0.09	
195	Personal Protective Equipment (PPE)	219	4.69	0.04	158	4.58	0.05	75	4.56	0.07	73	4.75	0.05	
196	Pharmacological Interventions	200	4.53	0.05	149	4.56	0.05	75	4.48	0.08	85	4.47	0.07	
197	Physical Data Guidelines	220	3.78	0.06	158	3.88	0.08	75	3.89	0.10	72	4.04	0.11	
198	Polypharmacy	200	4.28	0.06	148	4.25	0.08	75	4.31	0.10	85	4.24	0.10	
199	Postmortem Care	221	3.71	0.07	156	3.78	0.08	74	3.77	0.12	72	3.85	0.11	
200	Postpartum Client Care	200	3.43	0.08	148	3.61	0.10	75	3.59	0.13	85	3.68	0.11	
201	Post-surgical Care	221	4.21	0.05	159	4.14	0.08	75	4.20	0.12	73	4.12	0.10	
202	Practice Errors	198	4.45	0.06	148	4.39	0.06	74	4.42	0.09	85	4.38	0.08	
203	Prenatal Care	219	3.51	0.08	158	3.45	0.10	75	3.81	0.13	71	3.70	0.12	
204	Prenatal Complications	199	3.33	0.08	149	3.49	0.11	74	3.59	0.14	84	3.90	0.11	
205	Preschool-age Client Care	221	3.47	0.07	158	3.47	0.09	75	3.79	0.12	72	3.75	0.11	
206	Prescribed Medications	200	4.34	0.06	149	4.47	0.06	75	4.48	0.08	85	4.49	0.08	
207	Pre-surgical Care	219	3.83	0.06	158	3.87	0.08	73	3.89	0.12	73	3.86	0.12	
208	Preventative Care	200	4.29	0.05	149	4.25	0.07	74	4.32	0.09	85	4.33	0.08	
209	Prioritization of Client Care	220	4.50	0.04	159	4.53	0.05	75	4.44	0.08	73	4.48	0.09	
210	Privacy and Security	200	4.59	0.05	149	4.61	0.05	75	4.59	0.08	85	4.53	0.07	
211	Professional Accountability	220	4.56	0.05	158	4.55	0.05	74	4.42	0.09	73	4.67	0.06	
212	Professional Boundaries	200	4.60	0.04	148	4.49	0.06	75	4.53	0.09	84	4.42	0.08	
213	Professional Development	221	4.13	0.06	160	4.14	0.07	75	4.24	0.09	73	4.30	0.08	
214	Quality Improvement	200	4.14	0.06	149	4.13	0.07	75	4.21	0.09	85	4.09	0.09	
215	Reality Orientation	221	3.90	0.07	160	4.02	0.07	74	3.89	0.11	73	3.96	0.11	
216	Referrals	198	3.60	0.07	148	3.70	0.08	75	3.57	0.11	83	3.60	0.11	
217	Regulations	221	4.15	0.06	160	4.25	0.07	75	4.13	0.10	73	4.21	0.09	
218	Reminiscence Therapy	199	3.32	0.09	149	3.41	0.10	74	3.24	0.14	85	3.41	0.13	
219	Reporting	220	4.31	0.05	157	4.43	0.05	74	4.42	0.10	72	4.44	0.08	
220	Respiratory Checks	200	4.57	0.05	149	4.60	0.05	75	4.65	0.08	85	4.58	0.07	

Knowied	ge Statements Subgroup Ana	alysis: F	acility					0						
C			Hospita	l	Lon	g-term (Care	Comi	nunity-l Facility		Other			
Survey Position #	Knowledge Statement	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	
221	Respiratory Equipment	220	4.23	0.05	159	4.38	0.07	75	4.16	0.12	73	4.23	0.09	
222	Restraint Alternatives	200	4.21	0.06	149	4.19	0.08	75	4.13	0.12	84	4.15	0.10	
223	Restraints	221	3.96	0.06	157	4.05	0.08	73	3.86	0.13	73	4.01	0.11	
224	Risk Management	200	4.00	0.06	149	4.13	0.07	73	4.11	0.11	84	4.07	0.10	
225	Risk Tools	220	3.65	0.06	159	3.74	0.08	74	3.76	0.12	73	3.75	0.10	
226	Safety Precautions	200	4.61	0.04	149	4.63	0.05	75	4.55	0.09	84	4.60	0.07	
227	School-age Client Care	220	3.57	0.07	159	3.41	0.09	75	3.65	0.12	73	3.74	0.11	
228	Scope of Practice	199	4.59	0.06	148	4.70	0.05	75	4.59	0.08	85	4.64	0.07	
229	Seclusion	219	3.28	0.08	159	3.60	0.09	73	3.38	0.13	73	3.68	0.12	
230	Self Awareness	200	4.06	0.07	149	4.23	0.07	75	4.21	0.10	84	4.19	0.09	
231	Sensory Checks	219	4.13	0.06	157	4.17	0.07	75	4.12	0.11	73	4.21	0.10	
232	Sensory/Perceptual Alterations	199	4.04	0.06	149	4.11	0.07	74	4.08	0.09	84	4.01	0.10	
233	Sequential Compression Devices (SCDs)	221	4.12	0.05	158	3.92	0.08	75	3.93	0.12	73	3.89	0.12	
234	Sexual Practices	200	3.59	0.08	149	3.56	0.09	73	3.59	0.12	85	3.73	0.10	
235	Shift Report/Hand-off	221	4.53	0.04	160	4.41	0.06	75	4.23	0.11	72	4.51	0.09	
236	Skin Integrity	200	4.51	0.05	149	4.60	0.05	75	4.43	0.09	84	4.38	0.08	
237	Sleep Cycles	221	3.30	0.06	159	3.58	0.08	75	3.48	0.11	73	3.42	0.12	
238	Sleep/Rest	199	3.95	0.06	149	4.26	0.06	75	4.01	0.11	85	4.06	0.09	
239	Smoking Cessation	220	3.65	0.06	159	3.68	0.08	75	3.65	0.11	72	3.69	0.11	
240	Social Media Usage	198	3.85	0.08	149	3.81	0.10	75	3.52	0.15	84	3.51	0.14	
241	Specialty Diets	219	3.83	0.06	158	3.96	0.07	75	3.91	0.11	73	3.85	0.11	
242	Specimen Collection	200	4.26	0.06	149	4.32	0.06	74	4.32	0.08	85	4.20	0.09	
243	Specimen Storage	219	3.87	0.06	158	3.96	0.08	75	4.05	0.09	72	3.93	0.11	
244	Staff Competency	199	4.16	0.07	149	4.38	0.07	75	4.23	0.10	85	4.35	0.09	
245	Staff Education	220	3.74	0.06	159	4.04	0.07	75	3.95	0.12	73	3.97	0.10	
246	Staff Safety	200	4.41	0.05	149	4.46	0.06	75	4.53	0.08	84	4.46	0.08	
247	Standardized Pain Rating Scales	221	4.26	0.05	158	4.28	0.06	75	4.19	0.10	73	4.34	0.09	
248	Sterile Technique	199	4.64	0.05	149	4.64	0.06	75	4.73	0.07	85	4.67	0.07	
249	Substance Abuse	220	4.11	0.05	159	4.03	0.07	75	4.17	0.10	73	4.29	0.09	
250	Suctioning	200	4.19	0.07	149	4.32	0.07	75	4.25	0.11	85	4.34	0.09	
251	Surgical Complications	217	4.31	0.05	158	4.25	0.07	75	4.17	0.11	73	4.27	0.10	
252	Surgical Procedures	200	3.77	0.07	149	3.74	0.11	73	3.78	0.12	85	4.09	0.09	
253	Task Assignments	220	3.86	0.06	158	3.92	0.07	75	4.01	0.10	73	4.03	0.10	
254	Therapeutic Communication	200	4.39	0.06	148	4.43	0.06	75	4.37	0.10	85	4.34	0.07	
255	Therapeutic Effects	219	4.00	0.05	156	4.09	0.07	75	4.09	0.09	72	4.11	0.09	
256	Therapeutic Environment	199	4.21	0.06	146	4.26	0.07	75	4.17	0.11	84	4.21	0.08	
257	Toddler Client Care	221	3.40	0.07	159	3.39	0.09	75	3.69	0.12	73	3.70	0.11	
258	Toxicity	199	4.01	0.07	149	4.12	0.08	75	4.19	0.12	83	4.35	0.09	

Cumrau	Knowledge Statement		Hospita	I	Long-term Care			Comi	nunity-l Facility	oased		Other	
Survey Position #		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
259	Tracheostomy	220	3.82	0.07	155	4.14	0.07	74	4.07	0.13	73	4.19	0.11
260	Tracheostomy Care	200	4.02	0.07	146	4.17	0.08	75	4.19	0.11	85	4.27	0.09
261	Transfer Assistive Devices	221	4.14	0.06	159	4.21	0.06	74	4.05	0.12	73	4.04	0.11
262	Transfer Process	200	4.01	0.07	148	4.23	0.07	75	4.00	0.11	84	4.17	0.09
263	Ultrasounds	221	2.88	0.07	158	3.16	0.09	75	3.25	0.13	72	3.10	0.13
264	Universal/Standard Precautions	200	4.47	0.06	149	4.72	0.05	75	4.61	0.09	85	4.65	0.08
265	Urinary Catheter Insertion	221	4.56	0.05	160	4.59	0.05	74	4.32	0.12	73	4.52	0.09
266	Urinary Catheter Maintenance	200	4.51	0.05	149	4.62	0.05	75	4.45	0.09	85	4.53	0.08
267	Urinary Catheter Removal	221	4.38	0.05	160	4.41	0.06	74	4.22	0.13	73	4.29	0.10
268	Urinary Catheters	200	4.46	0.05	149	4.55	0.05	75	4.44	0.10	85	4.48	0.07
269	Urinary Retention	220	4.35	0.05	159	4.41	0.06	74	4.18	0.10	72	4.25	0.10
270	Urostomies	200	3.91	0.07	148	4.09	0.07	75	4.08	0.13	85	4.06	0.10
271	Validation Therapy	219	3.17	0.07	157	3.48	0.08	74	3.46	0.13	71	3.38	0.13
272	Venipuncture	200	3.85	0.08	149	3.97	0.09	74	4.01	0.13	85	4.04	0.10
273	Ventilator Care	220	3.02	0.09	160	3.74	0.09	71	3.90	0.15	73	3.49	0.15
274	Ventilator Equipment	200	3.21	0.09	149	3.62	0.11	75	3.64	0.14	84	3.81	0.11
275	Visual Impairments	219	3.68	0.07	160	3.99	0.07	74	4.00	0.10	73	4.01	0.10
276	Vital Sign Monitoring Devices	200	4.51	0.05	149	4.54	0.06	75	4.55	0.08	85	4.54	0.08
277	Vital Signs	220	4.84	0.03	160	4.76	0.04	73	4.84	0.05	73	4.85	0.05
278	Warming/Cooling Equipment	200	3.84	0.07	149	3.83	0.09	75	3.75	0.12	85	3.93	0.10
279	Withdrawal	221	3.95	0.06	158	3.93	0.07	74	4.12	0.11	72	4.01	0.11
280	Wound Care	200	4.42	0.06	149	4.55	0.05	75	4.41	0.09	85	4.44	0.07
281	Wound Care Equipment	219	4.12	0.06	158	4.34	0.06	74	4.32	0.10	73	4.08	0.11
282	Wound Types	200	4.33	0.06	149	4.52	0.05	75	4.43	0.09	85	4.31	0.08

APPENDIX J: KNOWLEDGE SURVEY NONRESPONDER STUDY

Introduction

The National Council of State Boards of Nursing (NCSBN®) conducted a knowledge statement survey to assess the knowledge newly licensed nurses needed to possess for safe and effective professional practice. The purpose of the study is to inform NCLEX® item development. The overall analyzable response rate for the 2018 LPN/VN Nursing Knowledge Survey was 18.2%. Of the 6,350 Newly Licensed LPN/VNs, LPN/VN Educators and LPN/VN Supervisors who were invited to take the survey, 1,104 completed and returned a valid survey. NCSBN made the decision to contact a sample of the nurses who did not respond to the survey in order to determine if the results of the 2018 LPN/VN Nursing Knowledge Survey could be biased. If there is a systematic difference in the ratings of the knowledge statements between responders and nonresponders, then the results could potentially be biased. Ruling out the potential for systematic differences among raters supports the validity of the results. Additionally, NCSBN wanted to assess the reasons nonresponders did not return the survey in order to increase response rates in future studies.

Methodology

Sample Selection

A random sample of Newly Licensed LPN/VNs, LPN/VN Educators and LPN/VN Supervisors who were invited, but did not respond to the 2018 LPN/VN Nursing Knowledge Survey were contacted via telephone. The sample selected for this study was proportionally equivalent to the population of nonresponders.

Telephone Interview Process

Nonresponders were contacted via telephone by a vendor, using telephone numbers provided by NCSBN. Initially, these nonresponders were asked about their reasons for not completing the 2018 LPN/VN Nursing Knowledge Survey. To facilitate the gathering of data from nonresponders, NCSBN developed a list of possible reasons why invitees may not have responded to the survey from prior research. These

reasons included: "too busy," "did not care," "do not like/trust surveys," "did not receive it," or they were asked to provide another response. Next, in order to provide background on nonresponders, individuals were asked for employment setting/specialty and length of time in their current position. In addition, responders were asked to rate 10 knowledge statements that were listed in the 2018 LPN/VN Nursing Knowledge Survey. Responders were thanked for their time and responses were recorded.

Return Rates

Of the nonresponders who were potential contacts, 90 individuals participated in the study: 30 Newly Licensed LPN/VNs, 30 LPN/VN Educators and 30 LPN/VN Supervisors.

Nonresponder Results

Reasons for Not Responding

In general, reasons for not responding were listed as "did not receive" (61 responses or 67.8%), "too busy" (12 responses or 13.3%), or "other" (13 responses or 14.4%). See Figure J.1.

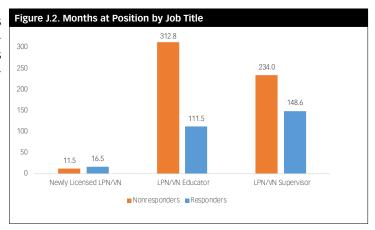
Time at Current Position

Responders were asked how many months they had been in their current position. Nonresponders who were Newly Licensed LPN/VNs averaged 11.5 months (1.0 year) at their job compared to responders, who were asked how many months since they completed course requirements for their nursing programs and averaged 16.5 months (almost 1.4 years). Nonresponding LPN/VN Educators spent an average of 312.8 months (26.1 years) at their position compared to responders who averaged 111.5 months (9.3 years) at their current position. Nonresponding LPN/VN Supervisors spent an average of 234.0 months (19.5 years) at their job compared to responders who spent an average of 148.6 months (12.4 years). See Figure J.2.

Employment Setting/Specialty

Nonresponders were asked to provide their employment setting/specialty area. The different specialties were well represented in this sample. Similar to responders, the largest percentage of Newly Licensed LPN/VN nonresponders listed their employment setting as nursing home (23.3% for nonresponders and 46.9% for responders) and rehabilitation (13.3% for nonresponders and 18.8% for responders). Nonresponding LPN/ VN Supervisors most frequently listed nursing home and home health as employment settings (33.3% each) while most responding LPN/VN Supervisors reported nursing home and medicalsurgical as their employment settings (47.2% and 25.6%, respectively). Nonresponding LPN/VN Educators most frequently reported medical-surgical and other as employment settings (40.0% each). The employment setting most frequently reported among responding LPN/VN Educators was medical-surgical (46.2%). See Table J.1.

14.4% 13.3% 4.44% 67.8% Too Busy Did Not Receive Did Not Care Other



Importance Ratings

Importance ratings of the knowledge statements were provided by the nonresponders and compared to the average rating of the same knowledge statements by survey responders. Overall, nonresponders and responders had similar ratings of knowledge statements. See Table J.2.

busy," or in other situations. Overall, these results provide important information on the validity of the 2018 LPN/VN Nursing Knowledge Survey and why individuals do not complete surveys.

Summary

This study found that the responders and nonresponders rated the importance of 10 knowledge statements similarly. These findings suggest that there are no systematic differences in ratings between the two groups that could bias the results of the study. This lends support to the validity of the findings from the 2018 LPN/VN Nursing Knowledge Survey. Additionally, the findings suggest that individuals did not complete the study because they generally "did not receive the survey," were "too

	Responders						Nonresponders					
	Newly Licensed LPN/ VN		LPN/VN Educator		LPN/VN Supervisor		Newly Licensed LPN/ VN		LPN/VN Educator		LPN/VN Supervisor	
Employment Setting	N	%	N	%	N	%	N	%	N	%	N	%
Critical Care	4	1.3	79	11.7	8	6.4	1	3.3	2	6.7	2	6.7
Medical-surgical Unit	28	9.2	312	46.2	32	25.6	1	3.3	12	40.0	2	6.7
Pediatrics	12	4.0	40	5.9	5	4.0	0	0.0	0	0.0	1	3.3
Nursery	0	0.0	37	5.5	2	1.6	0	0.0	0	0.0	0	0.0
Labor and Delivery	1	0.3	74	10.9	1	0.8	0	0.0	2	6.7	1	3.3
Postpartum Unit	0	0.0	71	10.5	1	0.8	0	0.0	0	0.0	0	0.0
Psychiatry	16	5.3	82	12.1	2	1.6	0	0.0	2	6.7	2	6.7
Assisted Living	43	14.2	9	1.3	3	2.4	1	3.3	0	0.0	0	0.0
Operating Room	5	1.7	13	1.9	3	2.4	1	3.3	0	0.0	1	3.3
Nursing Home	142	46.9	229	33.9	59	47.2	7	23.3	0	0.0	10	33.3
Other Long-term Care	40	13.2	38	5.6	10	8.0	3	10.0	0	0.0	0	0.0
Rehabilitation	57	18.8	60	8.9	31	24.8	4	13.3	0	0.0	1	3.3
Subacute Unit	13	4.3	28	4.1	14	11.2	1	3.3	0	0.0	0	0.0
Transitional Care Unit	9	3.0	18	2.7	6	4.8	0	0.0	0	0.0	0	0.0
Physician/Dentist Office	18	5.9	8	1.2	1	0.8	2	6.7	0	0.0	0	0.0
Occupational Health	0	0.0	3	0.4	1	0.8	0	0.0	0	0.0	0	0.0
Outpatient Clinic	27	8.9	13	1.9	5	4.0	3	10.0	0	0.0	0	0.0
Home Health	33	10.9	18	2.7	18	14.4	3	10.0	0	0.0	10	33.3
Public Health	3	1.0	13	1.9	0	0.0	2	6.7	0	0.0	0	0.0
Student/School Health	13	4.3	18	2.7	0	0.0	0	0.0	0	0.0	0	0.0
Hospice Care	23	7.6	21	3.1	10	8.0	0	0.0	0	0.0	0	0.0
Prison/Correctional Facility/Jail	7	2.3	4	0.6	0	0.0	0	0.0	0	0.0	0	0.0
Short stay/Observational	1	0.3	8	1.2	1	0.8	0	0.0	0	0.0	0	0.0
Step-down/Progressive Care	3	1.0	11	1.6	4	3.2	0	0.0	0	0.0	0	0.0
Other*	18	5.9	91	13.5	11	8.8	1	3.3	12	40.0	0	0.0

Table J.2. Knowledge Statement Importance Ratings for Responders and Nonresponders							
Knowledge Statement	Responder Rating	Nonresponder Rating					
13. Aspiration Precautions	4.67 (n=551)	4.88 (n=90)					
21. Behavioral Management	3.96 (n=550)	4.38 (n=90)					
30. Cardiac Abnormalities	4.24 (n=534)	4.68 (n=90)					
102. End-of-life Care	4.31 (n=534)	4.51 (n=90)					
134. Integumentary Checks	4.44 (n=534)	4.62 (n=90)					
151. Medication Administration Calculations	4.71 (n=553)	4.83 (n=90)					
176. Nutritional Guidelines	3.79 (n-538)	4.12 (n=90)					
221. Respiratory Equipment	4.27 (n=560)	4.78 (n=90)					
247. Standardized Pain Rating Scales	4.27 (n=560)	4.53 (n=90)					
281. Wound Care Equipment	4.22 (n=558)	4.56 (n=90)					



APPENDIX K: LINKING OF KNOWLEDGE STATEMENTS AND ACTIVITY STATEMENTS

Appendix K was developed by the SME panelists and does not reflect the final knowledge statements and categorization.

nking of Knowledge Statements and Activity Statements
Coordinated Care
pply Evidence-based Practice when Providing Care
ient Plan of Care
urrent Research
ridence-based Care
ractice in a Manner Consistent with Code of Ethics for Nurses
ient Rights
ode of Ethics
onfidentiality
PAA
rofessional Boundaries
egulations
cope of Practice
rovide Care Within the Legal Scope of Practice
ient Plan of Care
onfidentiality
РАА
egulations
cope of Practice
aintain Client Confidentiality
ient Plan of Care
onfidentiality
РАА
egulations
cope of Practice
ocial Media Usage
rganize and Prioritize Care Based on Client Needs
arriers to Learning
ient Advocacy
ient Disease Processes and Conditions
ient Plan of Care
ient Preferences
ata Collection
aslow's Hierarchy of Needs
ioritization of Client Care
sk Potential
nift Report/Hand-off
sk Assignments
ssign Client Care and/or Related Tasks (e.g., Assistive Personnel, LPN/VN)

Client Care Assignments

Client Needs

Health Care Provider Orders

Interdisciplinary Roles and Responsibilities

Scope of Practice

Staff Education

Monitor Activities of Assistive Personnel

Assistive Personnel

Interdisciplinary Roles and Responsibilities

Scope of Practice

Participate in Client Data Collection

Client History

Data Collection

Growth and Development

Interdisciplinary Team Collaboration

Therapeutic Communication

Participate in Client Referral Process

Available Resources

Client Advocacy

Client Needs

Client Referral Process

Client Referrals

Client Rights

Interdisciplinary Team Collaboration

Use Data from Various Credible Sources in Making Clinical Decisions

Available Resources

Current Practice

Evidence-based Research

Interdisciplinary Team Collaboration

Contribute to the Development of and/or Update the Client Plan of Care

Barriers to Communication

Barriers to Learning

Client Advocacy

Client Needs

Client Plan of Care

Data Collection

Interdisciplinary Team Collaboration

Scope of Practice

Verify and Process Health Care Provider Orders

Approved Medical Abbreviations

Client Allergies

Client Disease Processes and Conditions

Client Plan of Care

Health Care Provider Order Types

Linking of Knowledge Statements and Activity Statements Health Care Provider Orders Interdisciplinary Team Collaboration Medical Order Transcription Process **Provide and Receive Report** Active Listening Client Plan of Care Interdisciplinary Team Collaboration Shift Report/Hand-off **Advocate for Client Rights and Needs** Advance Directives Client Advocacy Client Needs Client Plan of Care Client Rights Code of Ethics HIPAA Interdisciplinary Team Collaboration Therapeutic Communication **Provide for Privacy Needs** Client Plan of Care Client Preferences Client Privacy Client Rights Client Safety Confidentiality Cultural Diversity HIPAA Interdisciplinary Team Collaboration **Promote Client Self-advocacy** Client Autonomy Client Education Client Needs Client Rights Therapeutic Communication **Involve Client in Care Decision Making** Advance Directives Client Advocacy

Participate in Client Consent Process
Advance Directives

Interdisciplinary Team Collaboration

Therapeutic Communication

Client Consent

Client Autonomy
Client-centered Care

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Client Education

Client Needs

Client Rights

Interdisciplinary Team Collaboration

Learning Barriers

Scope of Practice

Provide Information About Advance Directives

Advance Directives

Available Resources

Client Autonomy

Client Education

Client Needs

Client Privacy

Confidentiality

HIPAA

Interdisciplinary Team Collaboration

Scope of Practice

Participate in Providing Cost Effective Care

Alternative Therapies

Available Resources

Client Plan of Care

Cost Effective Care

Interdisciplinary Team Collaboration

Use Information Technology in Client Care

Available Resources

Client Privacy

Code of Ethics

Confidentiality

Electronic Medical Records

HIPAA

Information Technology

Security

Participate as a Member of an Interdisciplinary Team

Client Advocacy

Client Needs

Client Plan of Care

Client Rights

Evidence-based Care

Interdisciplinary Roles and Responsibilities

Interdisciplinary Team Collaboration

Scope of Practice

Recognize and Report Staff Conflict

Chain of Command

Conflict Resolution

Linking of Knowledge Statements and Activity Statements Emergency Preparedness Incident Reporting Professional Boundaries Staff Safety Recognize Self-limitations of Task/Assignments and Seek Assistance when Needed Available Resources Chain of Command Client Advocacy Personal Limitations Scope of Practice Self Awareness Staff Education Respond to the Unsafe Practice of a Health Care Provider (e.g., Intervene, Report) Chain of Command Client Advocacy Client Plan of Care Client Rights Client Safety Crisis Intervention Incident Reporting Mandatory Reporting Regulations Scope of Practice Staff Safety Unsafe Practices Follow Regulation/Policy for Reporting Specific Issues (e.g., Abuse, Neglect, Gunshot Wound, Communicable Disease) Chain of Command **Emergency Preparedness** Incident Reporting Mandatory Reporting Regulations Participate in Client Discharge or Transfer Active Listening Available Resources Barriers to Communication Barriers to Learning Client Advocacy Client Education Client Needs Client Rights Continuity of Care Discharge Process Interdisciplinary Team Collaboration

Referrals

Transfer Process

Follow-up with Client After Discharge

Available Resources

Continuity of Care

Discharge Process

Follow-up Care Processes

Interdisciplinary Team Collaboration

Therapeutic Communication

Participate in Staff Education (e.g., In-services, Continued Competency)

Barriers to Learning

Evidence-based Care

Interdisciplinary Team Collaboration

Professional Development

Self Awareness

Staff Competency

Staff Education

Participate in Quality Improvement (QI) Activities (e.g., Collecting Data, Serving on QI Committee)

Client Education

Data Collection

Evidence-based Care

Incident Reporting

Interdisciplinary Team Collaboration

Intervention Implementation

Quality Improvement

Staff Education

2. Safety and Infection Control

Verify the Identity of Client

Client Consent

Client Identification

Client Identification Methods

Identify Client Allergies and Intervene as Appropriate

Client Allergies

Client Education

Data Collection

Interdisciplinary Team Collaboration

Intervention Implementation

Medical Procedures

Medication Contraindications

Evaluate the Appropriateness of Health Care Provider Order for Client

Advance Directives

Client Advocacy

Client Allergies

Client Disease Processes and Conditions

Client Plan of Care

Linking of Knowledge Statements and Activity Statements Client Rights Evidence-based Care Health Care Provider Orders Scope of Practice Acknowledge and Document Practice Error (e.g., Incident Report) Chain of Command Client Advocacy Incident Reporting Practice Errors Professional Accountability Regulations Scope of Practice Self Awareness Staff Education Assist in and/or Reinforce Education to Client About Safety Precautions Barriers to Communication Barriers to Learning Client Disease Processes and Conditions Client Education Client Needs Client Plan of Care Client Safety Discharge Process Evidence-based Care Interdisciplinary Team Collaboration Intervention Implementation Safety Precautions Staff Education Use Safe Client Handling Techniques (e.g., Body Mechanics) **Body Mechanics** Client Handling Techniques Client Plan of Care Client Safety Ergonomics Staff Safety Use Transfer Assistive Devices (e.g., Gait/Transfer Belt, Slide Board, Mechanical Lift) **Body Mechanics** Client Handling Techniques Client Plan of Care Client Safety Ergonomics

Interdisciplinary Team Collaboration

Transfer Assistive Devices

Staff Safety

Linking of Knowledge Statements and Activity Statements Assure Availability and Safe Functioning of Client Care Equipment Chain of Command Client Care Equipment Client Plan of Care Client Safety Incident Reporting Regulations **Implement Least Restrictive Restraints or Seclusion** Client Plan of Care Client Rights Client Safety Data Collection Health Care Provider Orders Mandatory Reporting Regulations Restraint Alternatives Restraints Seclusion Follow Protocol for Timed Client Monitoring (e.g., Safety Checks) Client Plan of Care Client Safety Checks Regulations Initiate and Participate in Security Alert (e.g., Infant Abduction, Flight Risk) Chain of Command Client Safety **Emergency Preparedness Emergency Procedures** Mandatory Reporting Security Alerts Staff Safety Identify and Address Unsafe Conditions in Health Care Environment (e.g., Environmental, Biohazard, Fire) Chain of Command Client Safety **Emergency Procedures** Infection Control OSHA Regulations Staff Safety **Unsafe Conditions** Participate in Preparation for Internal and External Disasters (e.g., Fire, Natural Disaster) Client Needs Client Safety **Emergency Preparedness**

Emergency Procedures

Staff Safety

Apply Principles of Infection Control (e.g., Aseptic Technique, Isolation, Sterile Technique, Universal/Standard Precautions)

Aseptic Technique

Biohazard Disposal

Client Disease Processes and Conditions

Client Safety

Infection Control

Isolation Techniques

Mandatory Reporting

Personal Protective Equipment (PPE)

Staff Safety

Sterile Technique

Universal/Standard Precautions

3. Health Promotion and Maintenance

Assist with Fetal Heart Monitoring for the Antepartum Client

Antepartum Client Care

Fetal Heart Monitoring

Assist with Monitoring a Client in Labor

Care for Clients in Labor

Client Preferences

Client Rights

Labor Complications

Labor Process

Non-pharmacological Interventions

Pharmacological Interventions

Monitor Recovery of Stable Postpartum Client

Client Education

Data Collection

Postpartum Client Care

Provide Care that Meets the Needs of the Newborn Less Than 1 Month Old through the Infant or Toddler Client through 2 Years

Abuse Prevention

Available Resources

Client Education

Client Nutrition

Client Safety

Newborn Client Care

Preventative Care

Toddler Client Care

Provide Care that Meets the Needs of the Preschool, School Age and Adolescent Client Ages 3 through 17 Years

Abuse Prevention

Adolescent Client Care

Available Resources

Client Education

Client Nutrition

Client Safety

High Risk Behaviors

Preschool-age Client Care

Preventative Care

School-age Client Care

Provide Care that Meets the Needs of the Adult Client Ages 18 through 64 Years

Abuse Prevention

Adult Client Care

Available Resources

Client Education

Client Nutrition

Client Safety

High Risk Behaviors

Preventative Care

Provide Care that Meets the Needs of the Adult Client Ages 65 and Over

Abuse Prevention

Available Resources

Client Education

Client Nutrition

Client Safety

Older Adult Care

Preventative Care

Compare Client to Developmental Milestones

Data Collection

Developmental Milestones

Developmental Theories

Assist Client with Expected Life Transition (e.g., Attachment to Newborn, Parenting, Retirement)

Available Resources

Client Education

Cultural Diversity

Expected Life Transitions

Psychosocial Support

Collect Data for Health History (e.g., Client Medical History, Family Medical History)

Client Medical History

Data Collection

Family Medical History

Collect Baseline Physical Data (e.g., Skin Integrity, Height and Weight)

Data Collection

Physical Data Guidelines

Identify Barriers to Communication

Barriers to Communication

Identify Barriers to Learning

Barriers to Learning

Participate in Health Screening or Health Promotion Programs

Client Education

Data Collection

Health Promotion Programs

Health Screening Programs

Interdisciplinary Team Collaboration

Provide Information for Prevention of High Risk Behaviors (e.g., Substance Abuse, Sexual Practices, Smoking Cessation)

Available Resources

Client Education

Cognitive Behavioral Therapy

High Risk Behaviors

Polypharmacy

Sexual Practices

Smoking Cessation

Substance Abuse

Identify Clients in Need of Immunizations (Required and Voluntary)

Available Resources

Client Education

Immunizations

Identify Community Resources for Clients

Community Resources

4. Psychosocial Integrity

Use Therapeutic Communication Techniques with Client

Barriers to Communication

Therapeutic Communication

Therapeutic Communication Techniques

Provide Emotional Support to Client

Active Listening

Client Mental Status

Client Psychosocial Needs

Client Rights

Life Stressors

Professional Boundaries

Therapeutic Communication

Promote Positive Self-esteem of Client

Client Mental Status

Client Needs

Client Self-advocacy

Therapeutic Communication

Reinforce Education to Caregivers/Family on Ways to Manage Client with Behavioral Disorders

Available Resources

Behavioral Disorders

Behavioral Management

Client Education

Assist Client to Cope/Adapt to Stressful Events and Changes in Health Status

Alternative Therapies

Available Resources

Client Education

Coping Mechanisms

Crisis Management

Interdisciplinary Team Collaboration

Life Stressors

Therapeutic Communication

Recognize Stressors that Affect Client Care

Client Disease Processes and Conditions

Client Needs

Cultural Diversity

Life Stressors

Promote a Therapeutic Environment

Client Needs

Therapeutic Communication

Therapeutic Environments

Incorporate Behavioral Management Techniques when Caring for a Client

Alternative Therapies

Behavioral Management Techniques

Client Mental Status

Identify Client Use of Effective and Ineffective Coping Mechanisms

Coping Mechanisms

Data Collection

Explore Reasons for Client Non-compliance with Treatment Plan

Barriers to Communication

Barriers to Learning

Barriers to Treatment

Client Non-compliance

Cultural Diversity

Data Collection

Therapeutic Communication

Collect Data Regarding Client Psychosocial Functioning

Client Psychosocial Functioning

Data Collection

Therapeutic Communication

Collect Data on Client Potential for Violence to Self and Others

Client Mental Status

Client Safety

Data Collection

Life Stressors

Staff Safety

Identify Signs and Symptoms of Substance Abuse, Chemical Dependency, Withdrawal or Toxicity

Chemical Dependency

Client Safety

High Risk Behaviors

Substance Abuse

Toxicity

Withdrawal

Assist in the Care of the Cognitively Impaired Client

Client Needs

Client Plan of Care

Client Rights

Client Safety

Cognitively Impaired Client Care

Staff Safety

Therapeutic Communication

Assist in the Care of a Client Experiencing Sensory/Perceptual Alterations

Assistive Devices

Client Needs

Client Plan of Care

Client Safety

Interdisciplinary Team Collaboration

Sensory/Perceptual Alterations

Assist in Managing the Care of an Angry and/or Agitated Client (e.g., De-escalation Techniques)

Angry and/or Agitated Client Care

Coping Mechanisms

De-escalation Techniques

Non-pharmacological Interventions

Pharmacological Interventions

Regulations

Restraints

Plan Care with Consideration of Client Spiritual or Cultural Beliefs

Client Cultural Beliefs

Client Needs

Client Spiritual Beliefs

Personal Biases

Professional Boundaries

Participate in Reminiscence Therapy, Validation Therapy or Reality Orientation

Reality Orientation

Reminiscence Therapy

Validation Therapy

Participate in Client Group Session

Confidentiality

Group Therapy Sessions

Therapeutic Communication

Provide End-of-life Care and Education to Clients

Linking of Knowledge Statements and Activity Statements Advance Directives Available Resources Barriers to Learning Client Advocacy Client Cultural Beliefs Client Education Client Needs Client Privacy Client Spiritual Beliefs End-of-life Care Family Dynamics **Grieving Process** Hospice Care Palliative Care Professional Boundaries Therapeutic Communication 5. Basic Care and Comfort **Monitor and Provide for Client Nutritional Needs** Client Disease Processes and Conditions Client Education Client Needs Client Nutrition Client Preferences **Cultural Diversity** Interdisciplinary Team Collaboration **Nutritional Guidelines** Specialty Diets **Provide Feeding for Client with Enteral Tubes Aspiration Precautions** Client Nutrition Client Safety **Enteral Feedings Enteral Tube Complications** Enteral Tube Management **Enteral Tube Types** Health Care Provider Orders Interdisciplinary Team Collaboration Specialty Diets **Provide Site Care for Client with Enteral Tubes** Enteral Tube Management Enteral Tube Site Care Skin Integrity Provide Care to Client with Bowel or Bladder Management Protocol

Available Resources

Linking of Knowledge Statements and Activity Statements Bladder Management Bowel Management Client Nutrition Client Plan of Care Client Privacy Client Rights Confidentiality Health Care Provider Orders Skin Integrity Monitor Client Intake/Output Client Disease Processes and Conditions Client Intake/Output Client Nutrition Data Collection Interdisciplinary Team Collaboration **Provide Measures to Promote Sleep/Rest** Client Preferences Non-pharmacological Interventions Pharmacological Interventions Sleep Cycles Sleep/Rest Therapeutic Environment **Assist with Activities of Daily Living** Activities of Daily Living Client Plan of Care Client Preferences Interdisciplinary Team Collaboration Task Assignments Provide for Mobility Needs (e.g., Ambulation, Range of Motion, Transfer, Repositioning, Use of Adaptive Equipment) Adaptive Equipment Available Resources Client Education Client Mobility Needs Client Plan of Care Client Preferences Client Safety Ergonomics Interdisciplinary Team Collaboration Skin Integrity **Provide Care to an Immobilized Client Based on Need** Adaptive Equipment Client Plan of Care

Client Safety

Linking of Knowledge Statements and Activity Statements Immobilized Client Care Skin Integrity Staff Safety Assist in the Care and Comfort for a Client with a Visual and/or Hearing Impairment Adaptive Equipment Available Resources Client Needs Client Plan of Care Hearing Impairments Safe Health Care Environment Visual Impairments Perform Irrigation (e.g., Urinary Catheter, Bladder, Wound, Ear, Nose, Eye) Bladder Irrigation Catheter Types Ear Irrigation Eye Irrigation Infection Control Nose Irrigation Urinary Irrigation Wound Irrigation **Assist in Providing Postmortem Care** Cultural Diversity Postmortem Care Professional Boundaries Regulations **Use Measures to Maintain or Improve Client Skin Integrity** Adaptive Equipment Client Nutrition Data Collection Evidence-based Care Incident Reporting Non-pharmacological Interventions Pharmacological Interventions Regulations Skin Integrity Wound Care Promote Alternative/Complementary Therapy in Providing Client Care (e.g., Music Therapy, Pet Therapy) Alternative Therapies Client Plan of Care Client Preferences Complementary Therapies Cultural Diversity Current Research

Evidence-based Care

Interdisciplinary Team Collaboration

Provide Non-pharmacological Measures for Pain Relief (e.g., Imagery, Massage, Repositioning)

Assistive Devices

Client Needs

Client Plan of Care

Client Preferences

Evidence-based Care

Non-pharmacological Interventions

Pain Relief

Professional Boundaries

Evaluate Pain Using Standardized Rating Scales

Client Cognitive Ability

Client Education

Data Collection

Interdisciplinary Team Collaboration

Standardized Pain Rating Scales

Therapeutic Communication

6. Pharmacological Therapies

Reconcile and Maintain Medication List or Medication Administration Record (e.g., Prescribed Medications, Herbal Supplements, Over-the-counter Medications)

Client Plan of Care

Herbal Supplements

Interdisciplinary Team Collaboration

Medication Administration Records

Medication Lists

Medication Reconciliation

Over-the-counter Medications

Polypharmacy

Prescribed Medications

Regulations

Maintain Medication Safety Practices (e.g., Storage, Checking for Expiration Dates, Compatibility)

Client Safety

Interdisciplinary Team Collaboration

Medication Administration Rights

Medication Compatibility

Medication Contraindications

Medication Disposal

Medication Expiration Dates

Medication Interactions

Medication Safety Practices

Medication Storage

Polypharmacy

Regulations

Reinforce Education to Client Regarding Medications

Adaptive Equipment

Barriers to Learning

Client Education

Client Needs

Client Preferences

Client Rights

Herbal Supplements

Over-the-counter Medications

Prescribed Medications

Perform Calculations Needed for Medication Administration

Conversions

IV Flow Rates

Medication Administration Calculations

Safe Dosages

Collect Required Data Prior to Medication Administration (e.g., Contraindications, Desired Therapeutic Effects, Current Medications)

Client Rights

Data Collection

Medication Allergies

Medication Contraindications

Medication Interactions

Therapeutic Effects

Follow the Rights of Medication Administration

Medication Administration Rights

Regulations

Administer Medication by Oral Route

Client Preferences

Client Safety

Data Collection

Interdisciplinary Team Collaboration

Medication Administration Rights

Oral Medication Administration Methods

Oral Medications

Administer Medication by Gastrointestinal Tube (e.g., G-tube, Nasogastric (NG) Tube, G-button, J-tube)

Client Safety

Data Collection

Gastrointestinal Tube Medication Administration Methods

Gastrointestinal Tube Medications

G-buttons

G-tubes

Infection Control

Interdisciplinary Team Collaboration

J-tubes

Medication Administration Rights

Nasogastric Tubes

Skin Integrity

Administer a Subcutaneous, Intradermal or Intramuscular Medication

Biohazard Disposal

Client Safety

Data Collection

Infection Control

Interdisciplinary Team Collaboration

Intradermal Medication Administration Methods

Intradermal Medications

Intramuscular Medication Administration Methods

Intramuscular Medications

Medication Administration Rights

Medication Administration Sites

Skin Integrity

Staff Safety

Subcutaneous Medication Administration Methods

Subcutaneous Medications

Administer Medication by Ear, Eye, Nose, Inhalation, Rectum, Vagina or Skin Route

Client Privacy

Client Safety

Data Collection

Ear Medication Administration Methods

Ear Medications

Eye Medication Administration Methods

Eye Medications

Infection Control

Inhalation Medication Administration Methods

Inhalation Medications

Interdisciplinary Team Collaboration

Medication Administration Rights

Nasal Medication Administration Methods

Nasal Medications

Professional Boundaries

Rectal Medication Administration Methods

Rectal Medications

Skin Integrity

Topical Medication Administration Methods

Topical Medications

Vaginal Medication Administration Methods

Vaginal Medications

Administer Intravenous Piggyback (Secondary) Medications

Client Safety

Infection Control

Interdisciplinary Team Collaboration

Intravenous Piggyback (Secondary) Medication Administration

Intravenous Piggyback (Secondary) Medication Calculations

Intravenous Piggyback (Secondary) Medications

IV Site Maintenance

Medication Administration Rights

Medication Compatibility

Medication Contraindications

Medication Interactions

Skin Integrity

Calculate and Monitor Intravenous (IV) Flow Rate

Client Safety

Infection Control

Interdisciplinary Team Collaboration

IV Flow Rates

IV Medication Administration Methods

IV Medications

IV Site Maintenance

IV Solutions

Medication Administration Calculations

Medication Administration Rights

Medication Compatibility

Medication Contraindications

Medication Interactions

Skin Integrity

Monitor Transfusion of Blood Product

Blood Products

Blood Transfusion Reactions

Blood Transfusions

Client Rights

Client Safety

Data Collection

Interdisciplinary Team Collaboration

Maintain Pain Control Devices (e.g., Epidural, Patient Controlled Analgesia, Peripheral Nerve Catheter)

Client Education

Data Collection

Epidurals

Pain Control Devices

Pain Control Medication Administration

Pain Control Medications

Patient Controlled Analgesias

Peripheral Nerve Catheters

Regulations

Skin Integrity

Standardized Pain Rating Scales

Evaluate Client Response to Medication (e.g., Adverse Reactions, Interactions, Therapeutic Effects)

Client Comfort Level

Data Collection

Gradual Dose Reductions

Medication Adverse Reactions

Medication Allergies

Medication Contraindications

Medication Interactions

Medication Therapeutic Effects

Count Narcotics/Controlled Substances and Report Discrepancies

Controlled Substances

Incident Reporting

Medication Reconciliation

Narcotic/Controlled Substance Counting Procedures

Narcotics

Regulations

Substance Abuse

7. Reduction of Risk Potential

Identify Client Risk and Implement Interventions

Client Safety

Data Collection

High Risk Behaviors

Interdisciplinary Team Collaboration

Non-pharmacological Interventions

Pharmacological Interventions

Risk Assessment

Risk Management

Risk Tools

Use Precautions to Prevent Injury and/or Complications Associated with a Procedure or Diagnosis

Client Disease Processes and Conditions

Client Plan of Care

Data Collection

Diagnostic Tests

Evidence-based Care

Health Care Provider Orders

Infection Control

Injury Prevention

Medical Procedure Complications

Medical Procedures

Identify Signs or Symptoms of Potential Prenatal Complications

Client Education

Data Collection

Prenatal Care

Prenatal Complications

Check and Monitor Client Vital Signs

Client Baseline Vital Signs

Data Collection

Vital Sign Monitoring Devices

Vital Sign Parameters

Vital Signs

Evaluate Client Oxygen (O2) Saturation

Client Baseline Oxygen Saturation

Client History

Data Collection

Hvpoxia

Oxygen Saturation

Oxygen Saturation Monitoring Devices

Oxygen Saturation Parameters

Perform Focused Data Collection Based on Client Condition (e.g., Neurological Checks, Circulatory Checks)

Circulatory Checks

Client Nutrition

Data Collection

Gastrointestinal Checks

Genitourinary Checks

Head, Eyes, Ears, Nose and Throat Checks

Integumentary Checks

Musculoskeletal Checks

Neurological Checks

Psychosocial Status Checks

Respiratory Checks

Sensory Checks

Check for Urinary Retention (e.g., Bladder Scan, Ultrasound, Palpation)

Bladder Scans

Client Disease Processes and Conditions

Data Collection

Interdisciplinary Team Collaboration

Palpation

Ultrasounds

Urinary Retention

Insert, Maintain and Remove Urinary Catheter

Client Preferences

Data Collection

Health Care Provider Orders

Infection Control

Urinary Catheter

Urinary Catheter Insertion

Urinary Catheter Maintenance

Urinary Catheter Removal

Urinary Catheter Types and Sizes

Collect Specimen for Diagnostic Testing (e.g., Blood, Urine, Stool, Sputum)

Blood Collection

Client Education

Cultures

Data Collection

Diagnostic Tests

Health Care Provider Orders

Infection Control

Regulations

Specimen Collection

Specimen Storage

Sputum Collection

Stool Collection

Urine Collection

Monitor Diagnostic or Laboratory Test Results

Client Rights

Diagnostic Test Result Parameters

Diagnostic Test Results

Diagnostic Tests

Interdisciplinary Team Collaboration

Laboratory Test Result Parameters

Laboratory Test Results

Laboratory Tests

Regulations

Test Result Reporting

Assist with the Performance of a Diagnostic or Invasive Procedure

Client Rights

Client Safety

Diagnostic Procedures

Infection Control

Interdisciplinary Team Collaboration

Invasive Procedures

Scope of Practice

Skin Integrity

Assist with Care for Client Before and After Surgical Procedure

Client Consent

Client Education

Client Rights

Data Collection

Interdisciplinary Team Collaboration

Pain Management

Post-surgical Care

Pre-surgical Care

Surgical Complications

Surgical Procedures

Monitor Client Responses to Procedures and Treatments

Barriers to Treatment

Client Disease Processes and Conditions

Data Collection

Medical Procedure Complications

Medical Procedures

Medical Treatments

Medication Contraindications

Medication Interactions

Pain Management

Reinforce Client Education About Procedures and Treatments

Barriers to Communication

Barriers to Learning

Client Education

Medical Procedures

Medical Treatments

Therapeutic Communication

Monitor Continuous or Intermittent Suction of Nasogastric (NG) Tube

Client Disease Processes and Conditions

Client Safety

Data Collection

Emergency Preparedness

Nasogastric Tube Management

Nasogastric Tubes

Suctioning Equipment

Suctioning Parameters

Insert, Maintain and Remove Nasogastric (NG) Tube

Client Disease Processes and Conditions

Client Safety

Data Collection

Nasogastric Tube Insertion

Nasogastric Tube Maintenance

Nasogastric Tube Management

Nasogastric Tube Removal

Nasogastric Tube Verification

Nasogastric Tubes

Apply and Check Proper Use of Compression Stockings and/or Sequential Compression Devices (SCD)

Client Disease Processes and Conditions

Compression Stocking Application

Compression Stockings

Data Collection

Sequential Compression Devices (SCD)

Sequential Compression Devices (SCD) Application

Skin Integrity

Perform an Electrocardiogram (EKG/ECG)

Data Collection

Electrocardiogram Equipment

Electrocardiogram Rhythms

Electrocardiograms (EKG/ECG)

Lead Placement

Perform Blood Glucose Monitoring

Blood Glucose Monitoring

Blood Glucose Monitoring Equipment

Blood Glucose Parameters

Client Compliance Issues

Client Disease Processes and Conditions

Client Education

Client Needs

Client Physical Limitations

Client Privacy

Data Collection

Infection Control

Perform Venipuncture for Blood Draws

Biohazard Disposal

Client Safety

Data Collection

Infection Control

Staff Safety

Venipuncture

Venipuncture Equipment

Venipuncture Techniques

Maintain Central Venous Catheter

Central Venous Catheter

Central Venous Catheter Maintenance

Central Venous Catheter Types

Data Collection

Infection Control

Skin Integrity

Maintain and Remove Peripheral Intravenous (IV) Catheter

Biohazard Disposal

Data Collection

Infection Control

Peripheral Intravenous Catheter Maintenance

Peripheral Intravenous Catheter Removal

Peripheral Intravenous Catheter Types

Peripheral Intravenous Catheters

Skin Integrity

8. Physiological Adaptation

Identify Signs and Symptoms Related to Acute or Chronic Illness

Acute Illness Signs and Symptoms

Acute Illnesses

Chronic Illness Signs and Symptoms

Chronic Illnesses

Client Disease Processes and Conditions

Data Collection

Pain Management

Recognize and Report Change in Client Condition

Change of Client Condition Reporting

Client Disease Processes and Conditions

Data Collection

Interdisciplinary Team Collaboration

Reinforce Education to Client Regarding Care and Condition

Available Resources

Barriers to Communication

Barriers to Learning

Client Disease Processes and Conditions

Client Education

Therapeutic Communication

Perform Wound Care and/or Dressing Change

Client Disease Processes and Conditions

Client Plan of Care

Data Collection

Dressing Change Equipment

Dressing Change Procedures

Dressing Changes

Dressing Types

Evidence-based Care

Health Care Provider Orders

Infection Control

Interdisciplinary Team Collaboration

Pain Management

Skin Integrity

Wound Care

Wound Care Equipment

Wound Types

Provide Care for Client Drainage Device (e.g., Wound Drain, Chest Tube)

Chest Tubes

Data Collection

Drainage Device Care

Drainage Devices

Emergency Preparedness

Skin Integrity

Wound Care

Wound Drainage

Assist with Client Wound Drainage Device Removal

Client Disease Processes and Conditions

Data Collection

Health Care Provider Orders

Infection Control

Pain Management

Scope of Practice

Skin Integrity

Wound Care

Wound Drainage

Wound Drainage Device Removal

Wound Drainage Devices

Remove Wound Sutures or Staples

Client Education

Data Collection

Skin Integrity

Would Staple Removal

Would Suture Removal

Wound Care

Wound Staples

Wound Sutures

Respond and Intervene to a Client Life-threatening Situation (e.g., Cardiopulmonary Resuscitation)

Advance Directives

Cardiopulmonary Resuscitation

Client Disease Processes and Conditions

Client Rights

Client Safety

Data Collection

Emergency Preparedness

Interdisciplinary Team Collaboration

Non-pharmacological Interventions

Pharmacological Interventions

Intervene to Improve Client Respiratory Status (e.g., Breathing Treatment, Suctioning, Repositioning)

Breathing Treatments

Client Disease Processes and Conditions

Client Repositioning Procedures

Client Safety

Data Collection

Interdisciplinary Team Collaboration

Non-pharmacological Interventions

Oxygen Administration

Oxygen Saturation Monitoring

Pharmacological Interventions

Respiratory Equipment

Suctioning

Suctioning Equipment

Recognize and Report Basic Abnormalities on a Client Cardiac Monitor Strip

Cardiac Abnormalities

Cardiac Arrhythmias

Cardiac Monitoring Strips

Data Collection

Test Result Reporting

Provide Care for a Client with a Fluid and Electrolyte Imbalance

Client Disease Processes and Conditions

Client Nutrition

Data Collection

Electrolyte Imbalance Care

Electrolyte Imbalances

Fluid and Electrolyte Parameters

Fluid Imbalance Care

Fluid Imbalances

Medication Management

Provide Cooling/Warming Measures to Restore Normal Body Temperature

Client Safety

Cooling Measures

Data Collection

Non-pharmacological Interventions

Pharmacological Interventions

Skin Integrity

Warming Measures

Warming/Cooling Equipment

Provide Care to Client with an Ostomy (e.g., Colostomy, Ileostomy, Urostomy)

Available Resources

Client Disease Processes and Conditions

Client Education

Client Nutrition

Client Privacy

Client Psychosocial Needs

Colostomies

Colostomy Care

Data Collection

Linking of Knowledge Statements and Activity Statements Ileostomies Ileostomy Care Nephrostomies Nephrostomy Care Ostomies Ostomy Care Ostomy Equipment Skin Integrity Specialty Diets Urostomies Urostomy Care **Provide Care for a Client with a Tracheostomy** Client Disease Processes and Conditions Client Education Client Nutrition Client Privacy Client Psychosocial Needs Client Safety Data Collection Infection Control Interdisciplinary Team Collaboration Skin Integrity Tracheostomies Tracheostomy Care Tracheostomy Equipment **Provide Care to Client on Ventilator** Client Disease Processes and Conditions Client Education Client Nutrition Client Safety **Emergency Preparedness** Infection Control Interdisciplinary Team Collaboration Ventilator Care Ventilator Equipment Ventilators Assist in the Care of a Client with a Pacing Device Client Disease Processes and Conditions Client Education Client Safety **Emergency Preparedness** Interdisciplinary Team Collaboration Pacing Device Care Pacing Devices



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