

---

# *Job Analysis Report for the Clinical Nurse Leader (CNL)*

*Conducted on behalf of*



COMMISSION ON NURSE CERTIFICATION

January 2023

---

*Prepared by:*



Nick Baker  
Assessment Design Specialist

## ACKNOWLEDGEMENTS

We would like to thank the many individuals who provided invaluable assistance throughout the conduct of the Commission on Nurse Certification's Clinical Nurse Leader Job Analysis Study.

Above all, we thank the many dedicated professionals who generously contributed their time and expertise. Over 240 individuals participated in different phases of the job analysis including Task Force members, survey respondents, and Test Specifications members.

At the Commission on Nurse Certification (CNC), Allison Jacobs, Associate Director of Population Health Initiatives, provided excellent support throughout the project.

At Prometric, Rachel Araujo and Zachary Mcnatt, provided excellent oversight and guidance throughout the job analysis process.

# TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS</b> .....	<b>i</b>
<b>TABLE OF CONTENTS</b> .....	<b>ii</b>
<b>LIST OF FIGURES</b> .....	<b>iii</b>
<b>LIST OF TABLES</b> .....	<b>iv</b>
<b>LIST OF APPENDICES</b> .....	<b>v</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>vi</b>
<b>INTRODUCTION</b> .....	<b>1</b>
<b>METHOD</b> .....	<b>3</b>
1. Conduct of a Planning Meeting.....	3
2. Development of the Survey .....	3
3. Dissemination of the Survey .....	5
4. Analysis of the Survey Data.....	5
5. Development of the Test Specifications .....	6
<b>RESULTS</b> .....	<b>7</b>
Survey Responses.....	7
Demographic Characteristics of Survey Respondents .....	7
Overall Ratings .....	13
Subgroup Analysis of KSA Ratings.....	13
Content Coverage Ratings.....	14
Test Content Recommendations .....	15
Additional Comments .....	15
<b>DEVELOPMENT OF TEST SPECIFICATIONS FOR THE CNL EXAMINATION</b> .....	<b>17</b>
Presentation of the Job Analysis Project & Results to the Test Specifications Committee.....	17
Identification of the KSA Statements to be Included on the CNL Exam .....	17
KSAs Recommended for Inclusion .....	17
Development of Test Content Weights .....	17
<b>SUMMARY &amp; CONCLUSIONS</b> .....	<b>18</b>

## LIST OF FIGURES

Figure 1. Demographic Question 1: <i>How many years have you worked in the nursing field?</i> .....	7
Figure 2. Demographic Question 2: <i>Do you currently hold the CNL certification?</i> .....	7
Figure 3. Demographic Question 2B: <i>How many years have you held the CNL credential?</i> .....	8
Figure 4. Demographic Question 3: <i>Does your organization have formal CNL role positions?</i> .....	8
Figure 5. Demographic Question 4: <i>Are you utilizing the CNL skillset in your day-to-day practice?</i> .....	8
Figure 6. Demographic Question 5: <i>Regardless of your title, are you functioning as a Certified CNL?</i> .....	9
Figure 7. Demographic Question 5B: <i>How would you describe your role?</i> .....	9
Figure 8. Demographic Question 6: <i>Which of the following best describes your title?</i> .....	10
Figure 9. Demographic Question 7: <i>What is your primary work setting?</i> .....	10
Figure 10. Demographic Question 8: <i>In which country do you primarily practice?</i> .....	11
Figure 11. Demographic Question 8B: <i>If practicing in the United States, please select your state.</i> .....	11
Figure 12. Demographic Question 9: <i>What is your age?</i> .....	12
Figure 13. Demographic Question 10: <i>What is your gender identity?</i> .....	12
Figure 14. Demographic Question 11: <i>Which of the following best describes you?</i> .....	13
Figure 15. Additional Comments Question 1: <i>How confident do you feel in your grasp of CNL KSAs?</i> .....	16
Figure 16. Additional Comments Question 2: <i>Does your employer provide financial or other incentives for achieving the CNL credential?</i> .....	16
Figure 17. Additional Comments Question 2B: <i>Can you please describe the incentive(s)?</i> .....	16

## LIST OF TABLES

Table 1. KSAs by Pass, Borderline & Fail categories .....	13
Table 2. Mean, Standard Deviation & Frequency Distribution % of KSA Content Coverage .....	15
Table 3. Survey Respondents' Test Content Recommendations by Mean % & Standard Deviations.....	16
Table 4. Test Content Weights Recommended by the Test Specifications Committee .....	17

## LIST OF APPENDICES

- Appendix A1. Task Force Participants
- Appendix B2. Pre-Meeting Information
- Appendix B. Job Analysis Survey
- Appendix C1. Background and General Information Questions  
(Demographic Characteristics of Respondents)
- Appendix C2. Background and General Information Questions Write-In Responses
- Appendix D. KSA Importance  
(Means, Standard Deviations, and Frequency Percent Distributions)
- Appendix E. Indices of Agreement
- Appendix F. Content Coverage Comments
- Appendix G1. Additional Comments
- Appendix G2. Additional Comments Write-In Responses
- Appendix H. Test Specifications
- Appendix H. Test Content Weights

## EXECUTIVE SUMMARY

The Commission on Nurse Certification (CNC) has a mission to “govern the CNL certification activities and promote CNL practice.”<sup>1</sup> The CNC requested a Job Analysis Study from Prometric for the Clinical Nurse Leader (CNL) Examination.

A job analysis study is designed to obtain descriptive information about the tasks performed on a job and the knowledge, skills, and abilities (KSAs) needed to adequately perform those tasks. The purpose of the job analysis study was to:

- validate the KSAs important for clinical nurse leaders; and,
- develop test specifications for the CNL Exam.

### **Conduct of the Job Analysis Study**

The job analysis study consisted of several activities: background research, interviews with subject matter experts to ensure the representativeness of the KSA statements; survey development; survey dissemination; compilation of survey results; and test specifications development. The successful outcome of the job analysis study depended on the excellent information provided by clinical nurse leaders.

### **Survey Development**

Survey research is an effective way to identify the KSAs that are important for clinical nurse leaders. The KSA statements included on the survey covered three domains of practice. The development of the survey was based on a draft of KSA statements developed from a variety of resources, but primarily on the previous job analysis completed in 2016.

### **Survey Content**

The survey, disseminated in July of 2022, consisted of five sections. CNC distributed the survey to clinical nurse leaders. As an incentive to complete the survey, participants could enter a drawing to win a free conference registration for the 2023 CNL Research Symposium and CNL Summit.

Survey Sections
Section 1: Background & General Information
Section 2: Knowledge, Skills & Abilities (KSAs)
Section 3: Domain Weighting
Section 4: Additional Comments
Section 5: Incentives

<sup>1</sup> From [aacnnursing.org/portals/42/CNL/bylaws](https://aacnnursing.org/portals/42/CNL/bylaws), retrieved Dec 2022

## Results

### Survey Response

A total of 230 clinical nurse leaders submitted completed surveys. Based on the analysis of survey responses, a representative group of clinical nurse leaders completed the survey in sufficient numbers to meet the requirements for statistical analysis of the results. This is evidenced by review of the responses for each of the background and general information questions as well as confirmation by the Test Specifications Committee.

### Survey Ratings

Participants were asked to rate the KSA statements by their importance for a CNL using a five-point scale (0 = *Not Performed* to 4 = *Very Important*).

### Content Coverage

Evidence was provided for the comprehensiveness of the content coverage within the domains. If the KSA statements within a domain are adequately defined, then it should be judged as being well covered. Respondents indicated that the content within each domain was well covered, thus supporting the comprehensiveness of the defined domains.

### Test Specifications Development

In January 2023, a Test Specifications Committee convened to review the results of the job analysis and to create the test content outline that will guide the development of the CNL examination.

### Summary

In summary, this study used a multi-method approach to identify the KSAs that are important to the competent performance of clinical nurse leader. The job analysis process allowed for input from a representative group of clinical nurse leaders and was conducted within the guidelines of professionally sound practice. The results of the job analysis can be used by the CNC to develop the CNL examination.

#### RESULTS AT A GLANCE

##### WHO COMPLETED THE SURVEY

*A total of 230 responses were used for analysis. The majority of respondents had 10+ years of experience in the nursing field, currently functioned in a nurse leadership role, and utilized their CNL skillset in their day-to-day practice.*

##### KSA IMPORTANCE RATINGS

*A total of 118 of the 118 KSA statements achieved high importance ratings for the overall group.*



## INTRODUCTION

The Commission on Nurse Certification (CNC) has a mission to “govern the CNL certification activities and promote CNL practice.”<sup>2</sup> The CNC requested a Job Analysis Study from Prometric for the Clinical Nurse Leader (CNL) Examination.

This report describes the JA study including the:

- rationale for conducting the job analysis study;
- methods used to define knowledge, skills, and abilities;
- types of data analyses conducted and their results; and
- results and conduct of the test specifications meeting.

### ***Job Analysis Study & Adherence to Professional Standards***

A job analysis study refers to procedures designed to obtain descriptive information about the tasks performed on a job and the knowledge, skills, and abilities (KSAs) requisite to the performance of those tasks. The specific type of information collected during a job analysis study is determined by the purpose for which the information will be used.

For purposes of developing credentialing examinations, a job analysis study should identify important knowledge, skills, or abilities deemed important by clinical nurse leaders.

The use of a job analysis study (also known as practice analysis, role and function study, or role delineation) to define content domains is a critical component in establishing the content validity of the certification. Content validity refers to the extent to which the content covered by an examination is representative of the knowledge, skills, and abilities.

A well-designed job analysis study should include the participation of a representative group of subject matter experts (SMEs) who reflect the diversity within the profession. Diversity refers to regional or job context factors and to factors such as experience, gender, and race/ethnicity. Demonstration of content validity is accomplished through the judgments of SMEs. The process is enhanced by the inclusion of large numbers of experts who represent the diversity of the relevant areas of expertise.

*The Standards for Educational and Psychological Testing*<sup>3</sup> (2014) (*The Standards*) is a comprehensive technical guide that provides criteria for the evaluation of tests, testing practices, and the effects of test use. It was developed jointly by the American Psychological Association (APA), the American Educational Research Association (AERA), and the National Council on Measurement in Education (NCME). The guidelines presented in *The Standards*, by professional consensus, have come to define the necessary components of quality testing. As a consequence, a testing program that adheres to *The Standards* is more likely to be judged to be valid and defensible than one that does not.

---

<sup>2</sup> From [aacnnursing.org/portals/42/CNL/bylaws](http://aacnnursing.org/portals/42/CNL/bylaws), retrieved Dec 2022

<sup>3</sup> American Educational Research Association, American Psychological Association, National Council on Measurement in Education (2014). *The Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association.

As stated in Standard 11.13:

*“The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale and evidence should be provided to support the claim that the knowledge or skills being assessed are required for credential-worthy performance in that occupation and are consistent with the purpose for which the credentialing program was instituted.... Typically, some form of job or practice analysis provides the primary basis for defining the content domain...” (pp 181-182)*

The job analysis study for the CNL examination was designed to follow the guidelines presented in *The Standards* and to adhere to accepted professional practice.

## METHOD

The job analysis study for clinical nurse leaders involved a multi-method approach that included meetings with subject matter experts and a survey. This section of the report describes the activities conducted for the job analysis study.

First, experts identified the knowledge, skills, and abilities they believed were important to the practice of clinical nurse leadership. Then, a survey was developed and disseminated to clinical nurse leaders. The purpose of the survey was to obtain verification (or refutation) that the KSAs identified by the experts are important to the work of clinical nurse leaders.

Survey research functions as a “check and balance” on the judgments of the experts and reduces the likelihood that unimportant areas will be considered in the development of the test specifications. The use of a survey is also an efficient and cost-effective method of obtaining input from large numbers of experts and makes it possible for analysis of ratings by appropriate subgroups of respondents.

The survey results provide information to guide the development of test specifications and content-valid examinations. What matters most is that a certification examination covers the important knowledge needed to perform job activities.

The steps of the job analysis study are described in detail below:

### **1. Conduct of a Planning Meeting**

In April 2022, CNC representatives and the Prometric staff responsible for the conduct of the job analysis held a planning meeting via web conference. During the planning meeting, the selection of the Task Force Committee members and Test Specifications Committee members, meeting dates and logistics, and survey delivery were topics of discussion.

### **2. Development of the Survey**

#### **Conduct of the Job Analysis Study Task Force Meeting**

The Task Force Committee was comprised of a representative group of clinical nurse leaders. In total, thirteen CNLs comprised the committee. A list of the Task Force Committee members appears in Appendix A1. The Task Force meeting was conducted via web conference on April 25 & 26, 2022. The purpose of the meeting was to develop the survey content. Prometric staff facilitated the meeting.

Prometric staff sent a pre-meeting email to the Task Force that included a document consisting of the meeting agenda and what to expect during the meeting. This document is included in Appendix A2.

Activities conducted during the meeting included reviewing and, as needed, revising the major domains and the KSAs necessary for the competent performance of clinical nurse leaders. The draft list presented to the Task Force was developed using the results of the 2016 Job Analysis. The survey rating scale and background and general information questions were presented, discussed, and revised as needed.

### **STEPS OF THE JOB ANALYSIS STUDY**

1. Conduct of a planning meeting
2. Development of the survey instrument
3. Dissemination of the survey
4. Analysis of the survey data
5. Development of the test specifications

## Survey Construction & Review Activities

### Survey Construction

Upon the completion of the Task Force Meeting, Prometric staff constructed the draft survey. The survey covered the following domains:

1. Nursing Leadership
2. Clinical Outcomes Management
3. Care Environment Management

### Survey Review by Task Force Committee

Each Task Force member received a copy of the draft survey. The purpose of the review was to provide the Committee with an opportunity to view their work and recommend any revisions.

Comments provided by the Task Force Committee for the online survey were compiled by Prometric staff and reviewed with the Task Force members via web conference in May. Refinements, as recommended by the Task Force, were incorporated into the online survey.

### Final Version of the Survey

The final version of the online surveys consisted of five sections: *Section 1: Background and General Information*; *Section 2: Knowledge, Skills, and Abilities*; *Section 3: Domain Weighting*; *Section 4: Additional Comments*; and *Section 5: Incentives*.

In *Section 1: Background and General Information*, survey participants responded to general and background information questions about themselves and their professional activities.

In *Section 2: Knowledge, Skills, and Abilities*, survey participants rated the KSA statements using the following importance scale:

Level of importance scale for CNL tasks
0 = Not performed
1 = Of no importance
2 = Of some importance
3 = Important
4 = Very important

In *Section 3: Domain Weighting*, survey participants indicated the content weights that the knowledge areas below should receive on the exam:

1. Nursing Leadership
2. Clinical Outcomes Management
3. Care Environment Management

This was accomplished by distributing 100 percentage points across the three knowledge areas. These distributions represented the allocation of examination items survey participants believed should be devoted to each knowledge area.

In *Section 4: Additional Comments*, survey respondents were given the opportunity to answer the questions: “How confident do you feel in your grasp of the Clinical Nurse Leader (CNL) knowledge, skills, and abilities (KSAs)?”, “Does your employer provide financial or other incentives for achieving the CNL

credential?” and “How do you expect your work role to change over the next 5 years? What tasks will be performed and what knowledge will be needed to meet changing practice demands?”

In *Section 5: Incentive*, survey respondents had the option of providing their email address to enter a drawing to win a free conference registration for the 2023 CNL Research Symposium and CNL Summit.

### 3. Dissemination of the Survey

Prometric provided the survey link to the CNC in July for dissemination to clinical nurse leaders. The invited survey participants received two reminder emails prior to the survey’s close in October. Appendix B contains the online survey.

### 4. Analysis of the Survey Data

As previously noted, the purpose of the survey was to validate the knowledge, skills, and abilities that relatively large numbers of clinical nurse leaders judged to be relevant (verified as important) to their work. This objective was accomplished through an analysis of the mean importance ratings for KSA statements. The derivation of test specifications from those statements verified as important by the surveyed clinical nurse leaders provides a substantial evidential basis for the content validity of credentialing examinations.

Based on information obtained from the survey, data analyses by respondent subgroups (e.g., practice setting) are possible when sample size permits. A subgroup category is required to have at least 30 respondents to be included in the mean analyses. This is a necessary condition to ensure that the mean value based upon the sample of respondents is an accurate estimate of the corresponding population mean value.

The following quantitative data analyses were produced:

- Means, standard deviations, and frequency (percentage) distributions for KSA statements and content coverage ratings
- Means and standard deviations for test content recommendations
- Index of agreement values for designated subgroups
- Crosstabs for selected demographic questions

#### Criterion for Interpretation of Mean Importance Ratings

Since a major purpose of the survey is to ensure that only validated KSA statements are included in the development of test specifications, a criterion (cut point) for inclusion needs to be established.

A criterion used in similar studies is a mean importance rating that represents the midpoint between moderately important and important. For the importance rating scale used across many studies, the value of this criterion is 2.50.

#### Definition of Pass, Borderline, And Fail Categories for Task and Knowledge Importance Mean Ratings

	<u>Means</u>
Pass:	At or above 2.50
Borderline:	2.40 to 2.49
Fail:	Less than 2.40

This criterion is consistent with the intent of content validity. Therefore, for this job analysis, Prometric recommended the value of this criterion should be set at 2.50. Accordingly, the KSA statements were grouped into one of three categories: Pass, Borderline, or Fail as determined by their mean importance ratings. The skill criticality ratings used the same criterion.

- The Pass Category contains those statements whose mean ratings are at or above 2.50 and are eligible for inclusion in the development of test specifications.
- The Borderline Category contains those statements whose mean ratings are between 2.40 and 2.49. The Borderline Category is included to provide a point of discussion for the Task Force to determine if the statement(s) warrant(s) inclusion in the test specifications.
- The Fail Category contains those statements whose mean ratings are less than 2.40. It is recommended that statements in the Fail Category be excluded from consideration in the test specifications.

### **5. Development of the Test Specifications**

A meeting was facilitated by Prometric staff to develop the test specifications based on the job analysis results. The meeting was conducted via web conference on January 3, 2022. The meeting focused on:

- finalizing the KSA statements that are important for inclusion based on the survey results; and
- establishing the percentage test content weights for each area on the examination; and,

These percentage test weights guide examination development activities.

## RESULTS

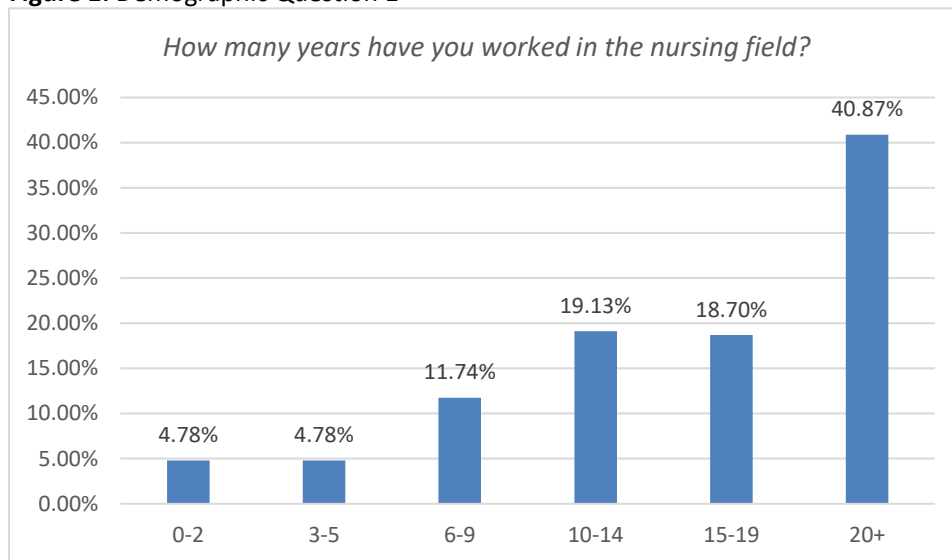
### Survey Responses

A total of 401 participants completed some portion of the survey. 230 responses were used for analysis. Based on the analysis of survey responses, a representative group of clinical nurse leaders completed the survey in sufficient numbers to meet the requirements to conduct statistical analysis. This was evidenced by the distribution of responses for each of the background information questions and was confirmed through discussion with the Committee.

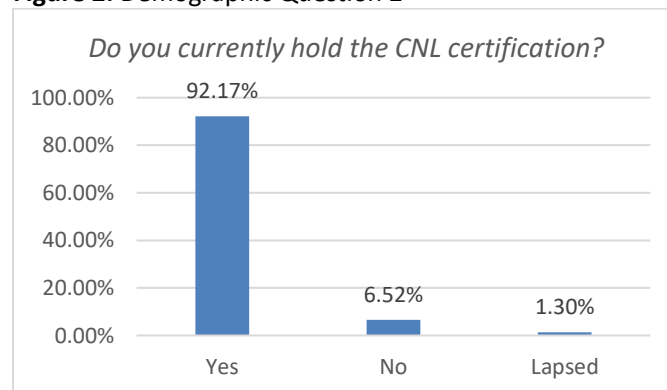
### Demographic Characteristics of Survey Respondents

The profile of survey respondents is below. All responses to the background and general information section of the survey are provided in Appendix C1. Write-in responses to “Other, please specify” options are provided in Appendix C2. The results in the figures below reflect the sample size used for analysis of 230.

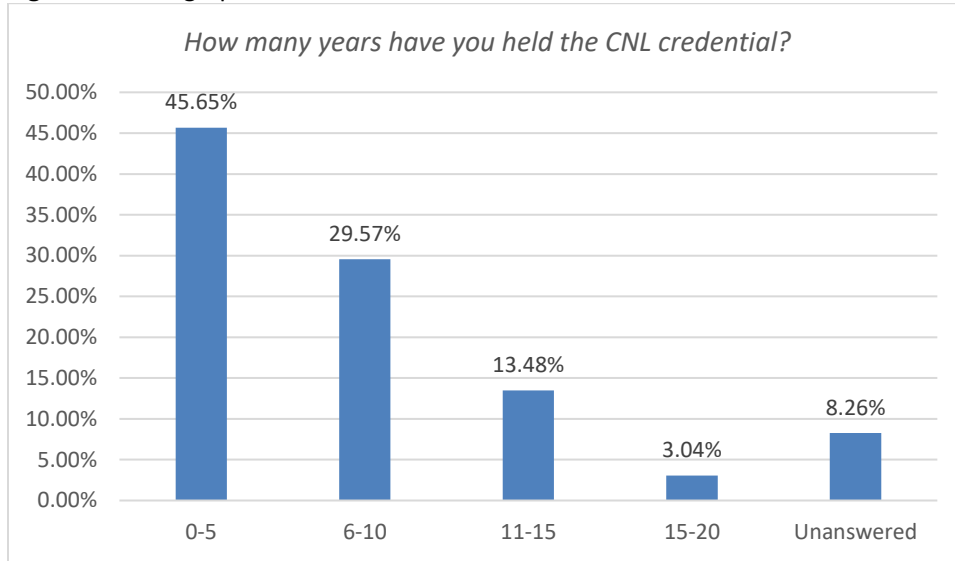
**Figure 1: Demographic Question 1**



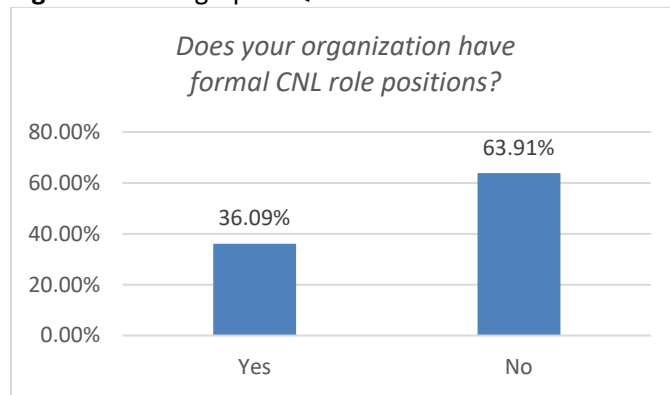
**Figure 2: Demographic Question 2**



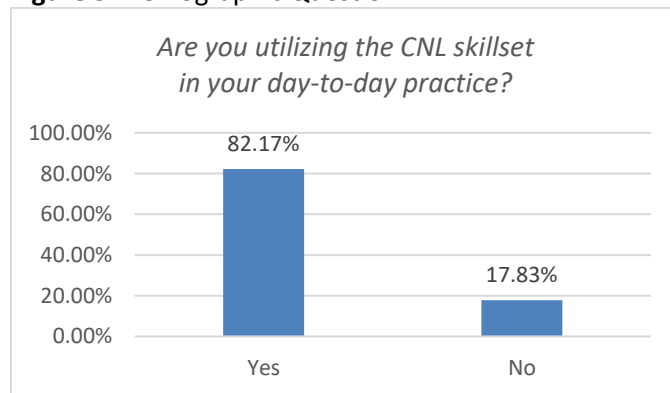
**Figure 3: Demographic Question 2B**



**Figure 4: Demographic Question 3**

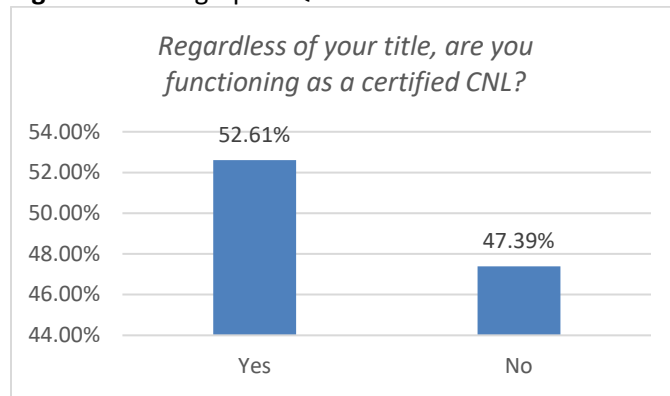


**Figure 5: Demographic Question 4**

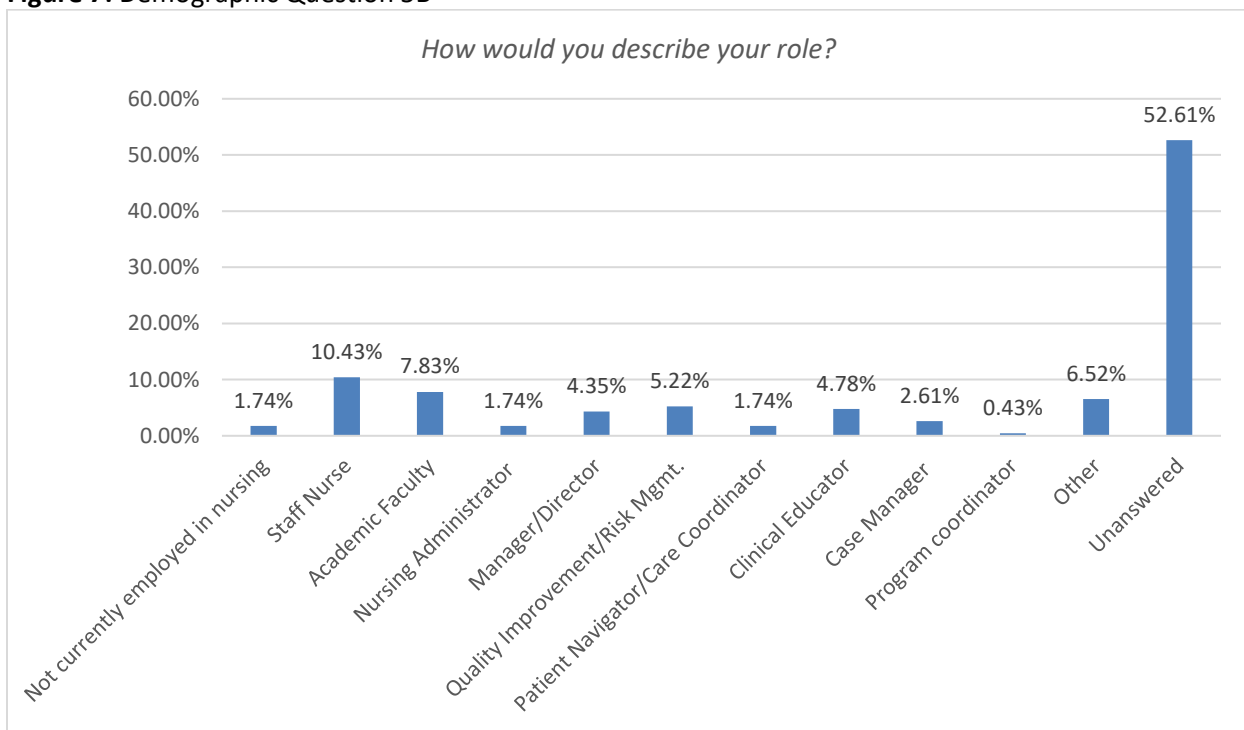




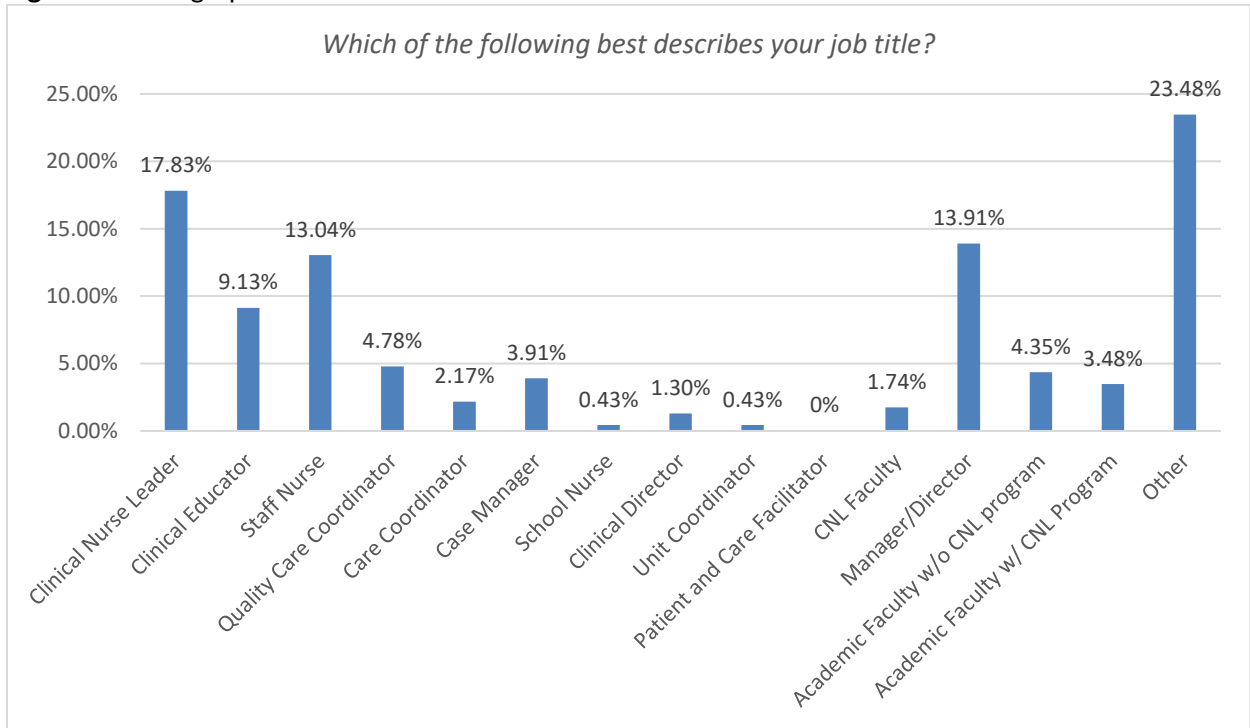
**Figure 6: Demographic Question 5**



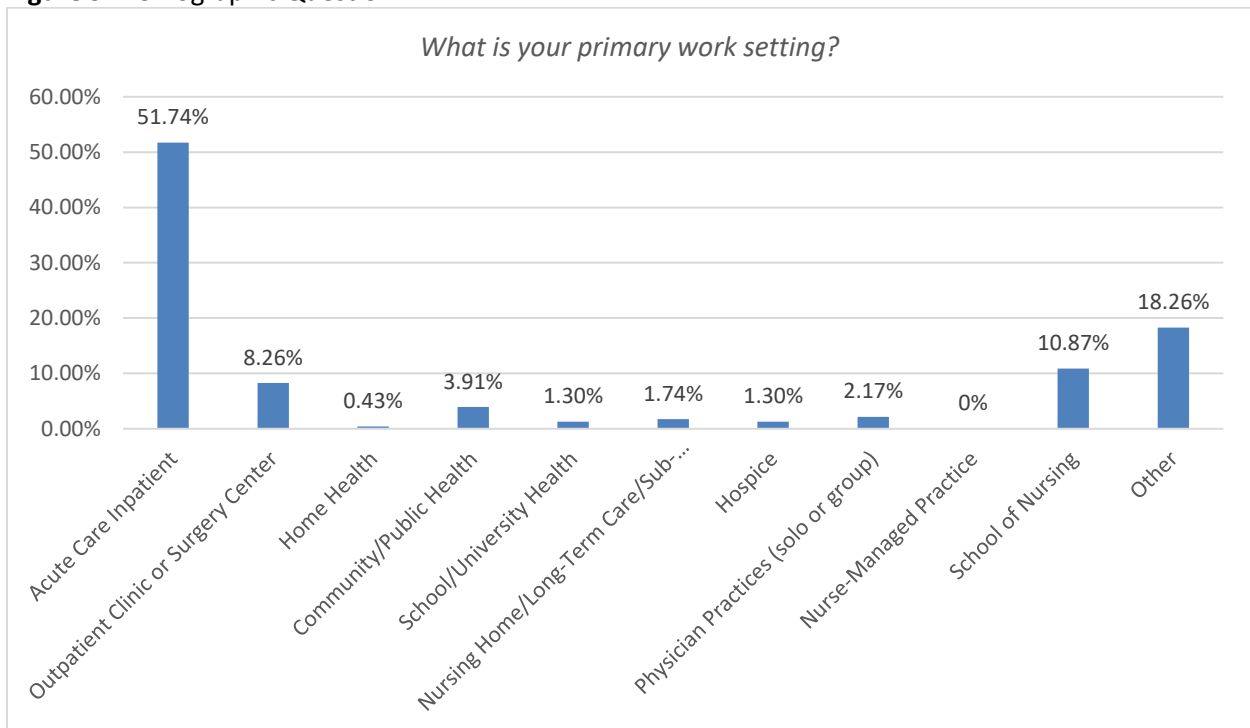
**Figure 7: Demographic Question 5B**



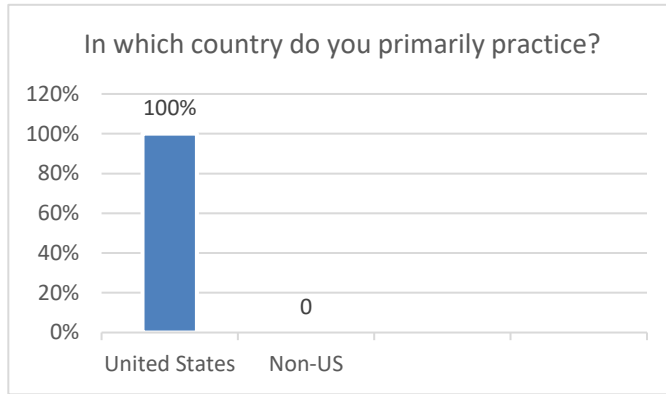
**Figure 8: Demographic Question 6**



**Figure 9: Demographic Question 7**



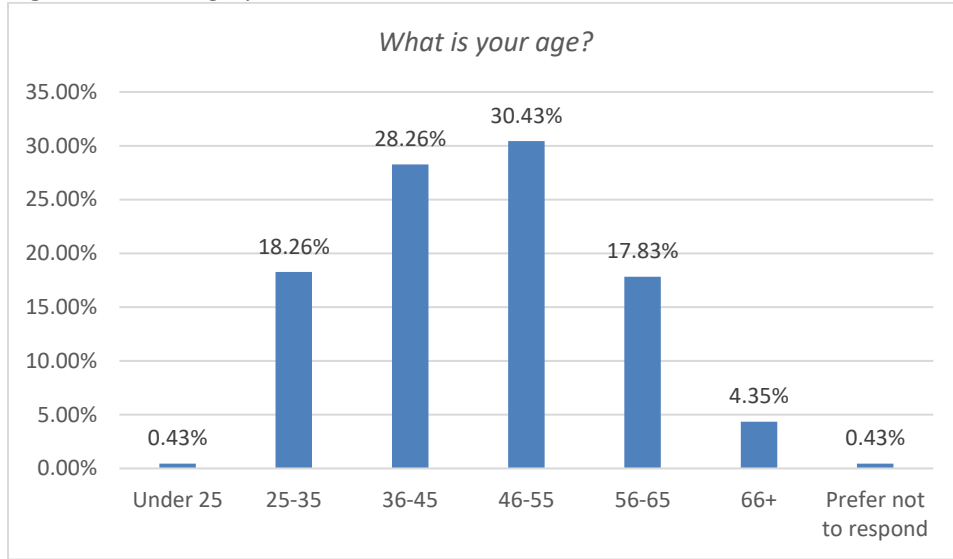
**Figure 10: Demographic Question 8**



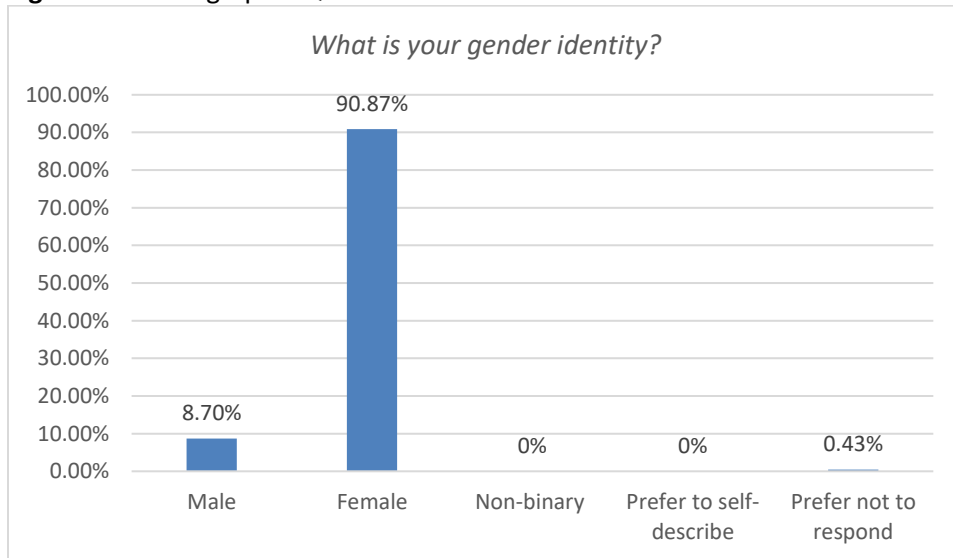
**Figure 11: Demographic Question 8B**



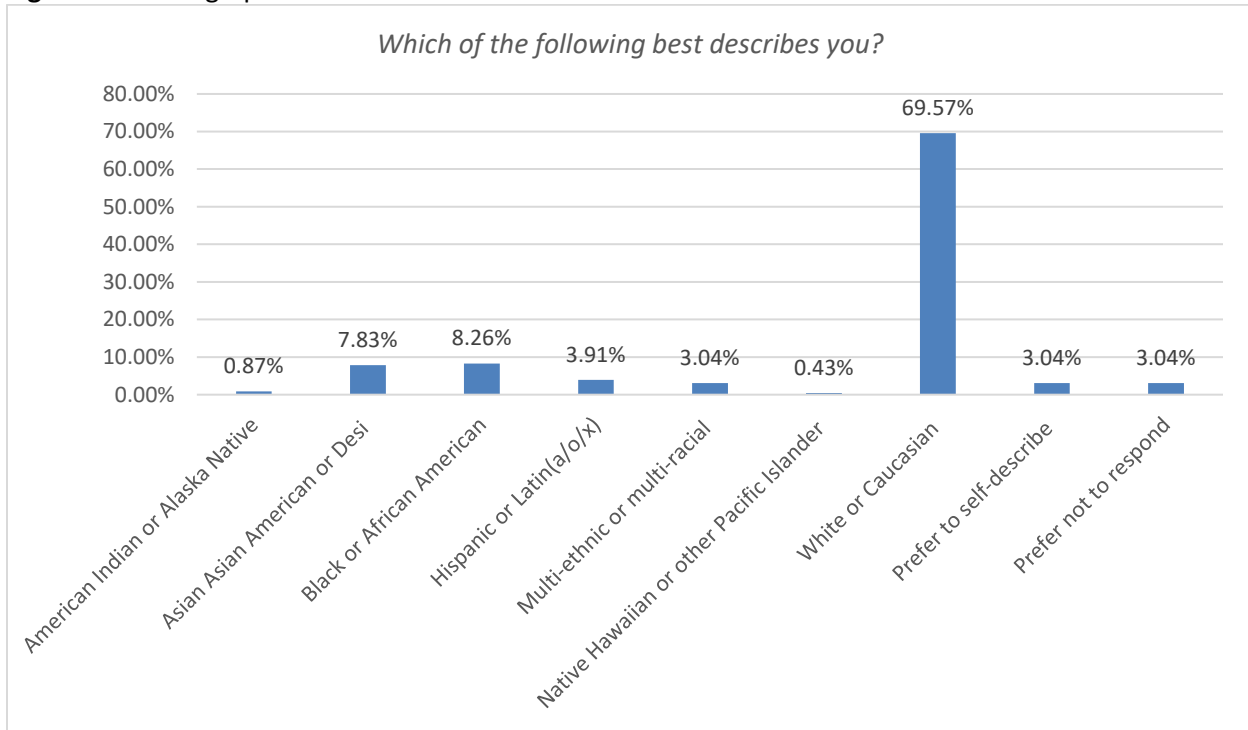
**Figure 12: Demographic Question 9**



**Figure 13: Demographic Question 10**



**Figure 14: Demographic Question 11**



**Overall Ratings**

The following provides a summary of survey respondents’ ratings of the KSA statements. The survey respondents passed 118 (100%) of the 118 KSA statements. Means and standard deviations for the KSAs included on the survey are in Appendix D. A total of 118 (100%) of the 118 KSAs achieved high importance means. Table 1 shows the delineation of KSAs in Pass, Borderline, and Fail categories by domain.

**Table 1: KSAs by Pass, Borderline, and Fail categories**

Domains	No. of KSA Statements	Pass (Mean 2.50 or Above)	Borderline (Mean 2.40 to 2.49)	Fail (Mean Less than 2.40)
1. Nursing Leadership	44	44	0	0
2. Clinical Outcomes Management	26	26	0	0
3. Care Environment Management	48	48	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Percentage</b>		<b>100%</b>	<b>0%</b>	<b>0%</b>

No KSA statements were rated as borderline or failing.

**Subgroup Analysis of KSA Ratings**

The index of agreement (IOA) is a measure of the extent to which subgroups of respondents agree on which tasks and knowledge are important. Using the mean importance ratings for tasks and knowledge, indices of agreement were computed:

- If the subgroup means are above the critical importance value (mean ratings at or above 2.50), then they agree that the content is important.

- If the subgroup means are below the critical importance value (mean ratings less than 2.50), then the subgroups agree that the content is considered less important.
- By contrast, if one subgroup's (for example, female) mean ratings are above the critical importance value and another subgroup's (for example, male) means are below the critical importance value then the subgroups are in disagreement as to whether the content is important.

The index of agreement provides a method of computing the similarity in judgments between groups and is tailored to the purpose of a job analysis study more than the correlation coefficient. Although the correlation coefficient measures the tendency toward agreement along the full range of possible ratings, the agreement index focuses on whether two groups agree that the content should (or should not) be included in an examination.

As one of the major purposes of this job analysis study is to identify appropriate test content, the agreement index provides a statistical method to address this question at the subgroup level. Furthermore, the agreement index requires only 30 respondents per subgroup for computation, whereas the correlation coefficient requires at least 100 respondents per subgroup to provide a reliable measure of agreement.

An illustrative example for two groups on a survey with 100 knowledge areas shows how to compute the index. If two groups passed the same 96 knowledge areas and failed the same 2 knowledge areas (out of the 100 total knowledge areas in the survey), the consistency index would be computed as  $Agreement = (96 + 2)/100 = 0.98$ . Values of 0.80 or less show less than optimal agreement and therefore additional mean analyses are required.

The index of agreement coefficients for KSAs are in Appendix E. Agreement coefficients were produced on the following background questions:

- How many years have you worked in the nursing field?
- Does your organization have formal CNL role positions?
- Are you functioning as a Certified Clinical Nurse Leader?

The agreement coefficients ranged from 0.98 to 1.00 for the KSA statements. For questions where the agreement coefficients for all groups was greater than 0.80, no additional mean analysis is required.

### **Content Coverage Ratings**

The survey participants indicated how well the KSA statements within each of the domains covered important aspects of that area. These responses provide an indication of the comprehensiveness of the survey content.

The five-point rating scale included 0 = Very Poorly, 1 = Poorly, 2 = Adequately, 3 = Well, and 4 = Very Well. The means and standard deviations for the KSA ratings are provided in Table 2. The means ranged from 3.37 to 3.39 for the KSA statements. These means provide evidence that the KSAs were well covered on the survey.

**Table 2: Mean, Standard Deviation, and Frequency Distribution Percentage of KSA Content Coverage**

Domain	Content Coverage						
	Mean	SD	Frequency Percentage				
			Very poorly 0 =	Poorly 1 =	Adequately 2 =	Well 3 =	Very well 4 =
1. Nursing Leadership	3.39	0.74	0%	0.87%	12.61%	33.04%	53.04%
2. Clinical Outcomes Management	3.38	0.76	0%	1.74%	11.30%	33.48%	52.17%
3. Care Environment Management	3.37	0.76	0%	1.74%	10.87%	31.30%	48.26%

Survey respondents could write in statements that they believe should be included in the listing of important KSAs. See Appendix F for the content coverage write-in comments. The Test Specifications Committee reviewed the comments to determine whether there were important statements not covered on the survey that should be included in the test specifications.

### Test Content Recommendations

In *Survey Section 3: Domain Weighting*, participants were asked to assign a percentage weight to each knowledge domain. The sum of percentage weights was required to equal 100. This information guided the Test Specifications Committee in making decisions about how much emphasis the domains should receive on the test content outline. The mean weights across all survey respondents are in Table 3.

**Table 3: Survey Respondents' Test Content Recommendations by Mean Percentages & Standard Deviations**

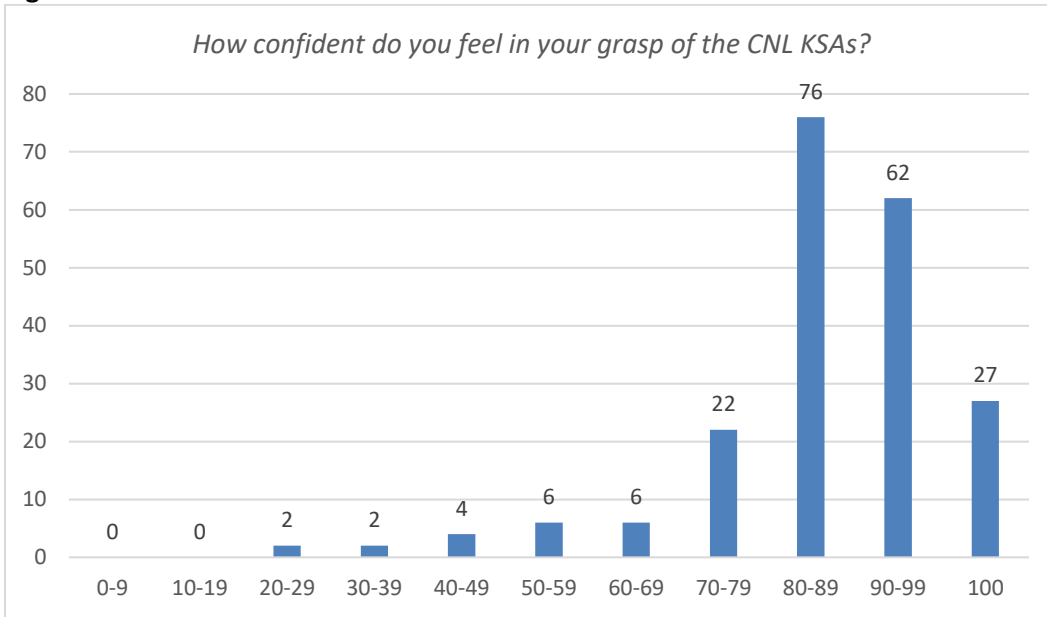
Domain	Mean (%)	SD (%)	Range	
			Minimum	Maximum
1. Nursing Leadership	33.28%	11.52%	6	100
2. Clinical Outcomes Management	36.87%	10.08%	0	70
3. Care Environment Management	29.84%	8.60%	0	50

### Additional Comments

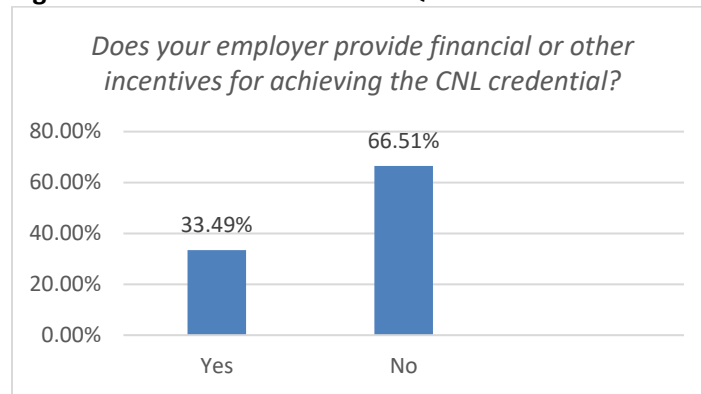
Many survey respondents provided responses to the optional questions in *Section 4: Additional Comments*. Responses to questions 1, 2, and 2B of the Additional Comments section of the survey are provided in Appendix G1. Write-in responses to the question, "How do you expect your work role to change over the next 5 years? What tasks will be performed and what knowledge will be needed to meet changing practice demands?" are provided in Appendix G2.

The results in the following figures below reflect the response sizes of 207, 215, and 72, respectively.

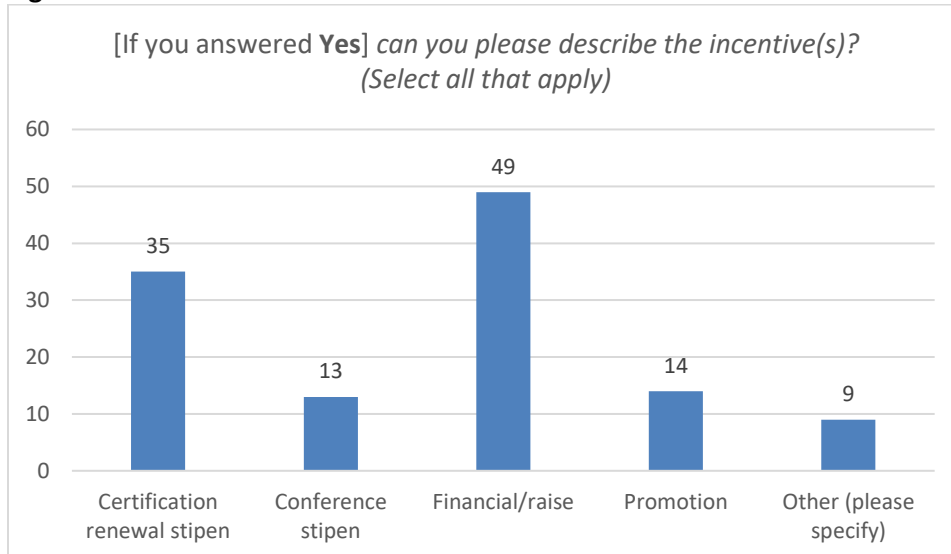
**Figure 15: Additional Comments Question 1**



**Figure 16: Additional Comments Question 2**



**Figure 17: Additional Comments Question 2B**





## DEVELOPMENT OF TEST SPECIFICATIONS FOR THE CNL EXAMINATION

A meeting was facilitated by Prometric staff to develop the test specifications based on the job analysis results. The test specification meeting for the CNL Exam was conducted via web conference on January 3, 2022. The steps involved in the development of test specifications included the following:

- presentation of the job analysis project and results to the Test Specifications Committee;
- identification of the KSA statements to be included on the CNL test specifications; and
- development of the test content weights for the exam

### *Presentation of the Job Analysis Project & Results to the Test Specifications Committee*

The first activity involved in the test specification development was to provide the Test Specifications Committee an overview of the job analysis activities that were conducted and to present the results of the study.

### *Identification of the KSA Statements to be Included on the CNL Examination*

The Test Specifications Committee reviewed the KSA results to make final recommendations about the areas that should be included on the exam. The survey results served as the primary source of information used by the Test Specification Committee members to make test content decisions. Recommendations were based on the following criteria:

- the mean KSA ratings for all respondents;
- the frequency distribution of ratings for all respondents; and,
- the appropriateness of the content for the examination.

The approved test specifications are in Appendix H.

### *KSAs Recommended for Inclusion*

- A total of 118 of the 118 KSAs achieved mean ratings at or above 2.50 (Pass Category) and were included on the test specifications.
- No KSA statements achieved mean ratings below 2.50 (Borderline and Fail Categories).

### *Development of Test Content Weights*

The Test Specifications Committee participated in an exercise that required each member to assign a percentage weight to each of the knowledge domains. Weights were then entered into a spreadsheet and shown to the committee. The committee members were able to compare the test content weights derived from the survey responses to their own estimates. This resulted in a productive discussion among the committee members regarding the optimal percentages for the exam.

Table 4 shows the test specifications recommendations including the percentage content. The complete test weighting exercise is in Appendix I.

**Table 4:** *Test Content Weights Recommended by the Test Spec Committee*

Domains	No. of Statements	% Weight
1. Nursing Leadership	44	31%
2. Clinical Outcomes Management	26	37%
3. Care Environment Management	48	32%

## SUMMARY & CONCLUSIONS

The job analysis study for Clinical Nurse Leadership examination identified knowledge, skill, and ability statements that are important to the work performed by clinical nurse leaders. Further, the data collected will guide the development of the test specifications that will be used to develop the examination.

The KSA statements were developed through an iterative process involving the combined efforts of the Commission on Nurse Certification, subject matter experts, and Prometric staff. These statements were entered into a survey format and subjected to verification/refutation through the dissemination of a survey to clinical nurse leaders. The survey participants were asked to rate the importance of the KSA statements.

The results of the study support the following:

- All of the KSA statements that were verified as important through the survey provide the foundation of empirically derived information from which to develop test specifications for the CNL examination.
- Evidence was provided in this study that the comprehensiveness of the content within the KSA domains was well covered.
- The process utilized and all of the information that resulted from the analysis supported the development of the test specifications.

In summary, the study used a multi-method approach to identify the KSAs that are important to the work performed by clinical nurse leaders. The results of the study were used to develop the test specifications for the CNL examination.