



NCSBN

National Council of State Boards of Nursing

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2010 Knowledge
Survey of Nurse Aides
Employed in Nursing
Homes/Long-term Care,
Hospitals/Acute Care
and Community/Home
Health Care Settings



Report of Findings from the

**2010 Knowledge Survey of Nurse Aides
Employed in Nursing Homes/Long-term
Care, Hospitals/Acute Care and
Community/Home Health Care Settings**

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

Mission Statement

The National Council of State Boards of Nursing (NCSBN®) provides education, service and research through collaborative leadership to promote evidence-based regulatory excellence for patient safety and public protection.

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TABLE OF CONTENTS

List of Tables	v
List of Figures	vi
Acknowledgments	vii
Executive Summary	1
Background of Study	1
Methodology	1
Methodology Reviewers	1
Panel of SMEs	1
Survey Development	1
Survey Process	1
Sample Selection	1
Mailing Procedure	2
Confidentiality	2
Return Rates	2
NA Knowledge Statement Nonresponder Study	2
Demographics, Experiences and Work Environments of Participants	2
Demographics/Past Experiences	2
Work/Employment Setting	2
Client Health Conditions and Ages	2
Shifts Worked	3
NAE License, Title and Supervision	3
Knowledge Statement Importance Findings	3
Reliability	3
Importance of Knowledge	3
Summary	3
Conclusion	3
Background of Study	7
Methodology	8
Methodology Reviewers	8
SMEs	8
Survey Development	8
Survey Process	9
Sample Selection	9
Mailing Procedure	9
Confidentiality	9
Return Rates	9
NA Knowledge Statement Nonresponder Study	9
Summary	9
Demographics, Experiences and Work Environments of Participants	11
Demographics/Past Experiences	11
Gender	11

Race/Ethnicity	11
NA Experience and NAE Supervisory Experience	11
Work Setting	11
Facilities	11
Job Title	12
Employment Setting	12
Client Health Conditions	13
Client Ages	13
Shifts and Hours Worked	13
NAE License, Title and Supervision	13
Educational Preparation	14
Knowledge/Skills Included in Training	14
Certifications Earned	14
Enrolled in Formal Nursing Programs	14
Summary	15
Knowledge Statement Importance Findings	16
Overview of Methods	16
Knowledge Statement Characteristics	16
Reliability	16
Importance of Knowledge Statement	16
Summary	16
Conclusions	28
References	29
Appendix A: 2010 Knowledge Survey of Nurse Aides Methodology Experts	30
Appendix B: Subject Matter Expert Panel	31
Appendix C: Importance Ratings Sorted By Lowest to Highest Average Importance Rating By the Entry-Level Cohort	33
Appendix D: 2010 Nurse Aide Knowledge Nonresponder Study	45
Appendix E.1: 2010 Nurse Aide Knowledge Survey Questionnaire, Version One	48
Appendix E.2: 2010 Nurse Aide Knowledge Survey Questionnaire, Version Two	56
Appendix E.3: 2010 Nurse Aide Evaluator (NAE) Knowledge Survey Questionnaire, Version One	64
Appendix E.4: 2010 Nurse Aide Evaluator Knowledge Survey Questionnaire, Version Two	71
Appendix F: 2010 Nurse Aide Knowledge Nonresponder Survey Questionnaire	78

LIST OF TABLES

Table 1. Gender	11
Table 2. Race/Ethnicity.	11
Table 3. Hospital/Acute Care Setting	12
Table 4. Nursing Home/Long-Term Care	12
Table 5. Community/Home Health Care	12
Table 6. NA Job Title	12
Table 7. Shifts Worked	13
Table 8. NAE License Held	13
Table 9. NAE Title	14
Table 10. Number of Entry-Level NAs Supervised	14
Table 11. NA Educational Preparation	14
Table 12. NA Skills in Training	14
Table 13. Certifications Earned	15
Table 14. Reasons for Nonenrollment	15
Table 15. Knowledge Importance Ratings	17

LIST OF FIGURES

Figure 1. NA Years Experience	11
Figure 2. NAE Years Supervising	11
Figure 3. Employment Setting	12
Figure 4. Client Health Conditions	13
Figure 5. Client Age	13
Figure 6. Hours Worked Last Shift	13
Figure 7. Average Importance Ratings by New NAs and NAEs	16

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NCSBN also acknowledges the NCSBN NNAAP® & MACE® Examinations department for their review and support of this research endeavor. In addition, the authors gratefully acknowledge the assistance of Melissa Franke and Melissa Snyder in the preparation of this document, which was essential for the completion of this study.

EXECUTIVE SUMMARY

Background of Study

The National Council of State Boards of Nursing (NCSBN[®]) is responsible for assisting its members, the boards of nursing in the U.S. and its territories, in the mission of public protection through safe nursing practice. Care provided by certified entry-level nurse aides/nursing assistants (NAs) directly impacts client safety and influences the quality of care provided by licensed nurses. As nursing practice changes, knowledge required by NAs may change. Knowledge studies can help to provide a means of identifying these changes.

The primary purpose of this study is to identify the knowledge needed by certified entry-level NAs, which are defined as individuals, regardless of title, who assist with the delivery of direct nursing care to clients/patients/residents. Results of this study can be used to help item writers and reviewers with test development activities for the National Nurse Aide Assessment Program (NNAAP[®]), while also providing education programs with a better understanding of the knowledge requirements relevant to safe and effective work of certified entry-level NAs.

Methodology

A number of steps are necessary to perform an analysis of the knowledge needed by certified entry-level NAs. The methodology used to carry out the 2010 Knowledge Survey of NAs included selecting a panel of subject matter experts (SMEs), all of whom supervised or performed the work of NAs; developing 228 knowledge statements currently required of NAs; creating a survey instrument for NAs and nurse aide/assistant evaluators (NAEs); completing the sample selection and data collection procedures; adding an assurance of confidentiality for participants; obtaining approval to conduct the study; obtaining and collating survey response rates; and determining the degree to which participants were representative of the population of certified entry-level NAs.

Methodology Reviewers

Chosen for their psychometric expertise in practice/job analysis and certification examination development, three methodology reviewers examined the methodologies and procedures utilized in this study. All three reviewers indicated the methodologies were psychometrically sound, legally defensible and in compliance with professional testing standards.

Panel of SMEs

A panel of 14 registered nurses (RNs) and one certified entry-level NA was assembled to assist with the knowledge study. Panel members worked with and/or supervised NAs who had less than 12 months of experience postcertification or were certified entry-level NAs themselves. Panel members represented all four NCSBN geographic areas and major NA employment settings.

The panel reviewed the existing category structure for the NA activity statements and described the types of knowledge needed by certified entry-level NAs. The panel then developed a current list of knowledge statements for each activity statement within each content category based on recent data gathered by SMEs.

Survey Development

There were four surveys developed using a total of 228 NA knowledge statements; two surveys were developed for NAs and two for NAEs, who are licensed nurses that supervise NAs. A total of 124 statements were added to each form and there were 20 knowledge statements common across both sets of survey forms. The survey also included questions about the NAs' work settings, past experiences and demographics.

Survey Process

Sample Selection

The sample for the current study was selected from a variety of health care settings where NAs were employed. Using a random sampling method, a

total of 6,500 health care directors from nursing homes/long-term care, hospitals/acute care and community/home health care settings were identified to receive the surveys.

Mailing Procedure

Each of the 6,500 health care directors was sent a packet containing three surveys: two NA surveys and one NAE survey. Instructions were given to the health care directors to give the NA surveys to certified entry-level NAs and the NAE survey to licensed nurses who supervise NAs.

In addition to the survey, potential survey participants received a presurvey notice and two survey reminders to increase response rates. The survey was conducted from February through April 2010.

Confidentiality

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

Return Rates

Of the 6,500 health care directors that were sent the packet of surveys, a total of 68 surveys was returned due to incorrect addresses. The adjusted total number of surveys sent was 6,432. An additional 44 respondents were removed from the NA survey because they did not identify how long they were certified. A total of 806 health care facilities returned NA surveys, of which 492 returned both NA surveys, resulting in 1,298 total NA surveys. A response rate of 12.5% was observed at the facility level for NAs.

A total of 823 NAE surveys were returned and there were no sample exclusion criteria. The adjusted total number of surveys sent was 6,494. The return rate for NAEs was 12.7%.

NA Knowledge Statement Nonresponder Study

In order to ensure the validity of the results, NCSBN conducted a study to see if there were any systematic differences in those who responded and those who did not. The results suggest that there is no systematic bias between results from the responder and nonresponder cohorts.

Demographics, Experiences and Work Environments of Participants

Demographics/Past Experiences

The majority (91.1%) of all NA responders were female. The NA responders were 69.2% White, 16.5% African-American and 7.8% Hispanic.

A large group of NAs (39.6%) reported working an average of one year or less. NAEs most frequently reported having five years or less supervisory experience (26.5%).

Work/Employment Setting

The majority of respondents (42.5% of NAs and 53.8% of NAEs) reported working in a skilled care unit in a nursing home/long term care setting; only 0.5% of NAs and 0.9% of NAEs reported working in an operating room in a hospital/acute care setting. Most respondents considered the NA entry-level title as either certified nurse aide (37.9% of NAs and 45.7% of NAEs) or certified nursing assistant (35.4% of NAs and 43.0% of NAEs).

Most respondents worked in rural settings (45.1% of NAs and 52.9% of NAEs) and the average number of clients seen daily by an NA was 11.37 (std. err. = 6.9) for NAs and 20.33 (std. err. = 22.1) for NAEs.

Client Health Conditions and Ages

NAs and NAEs reported caring frequently for clients with stable chronic conditions (42.6% of NAs and 69.7% of NAEs), clients with end-of-life conditions (42.5% of NAs and 59.9% of NAEs) and for NAs, clients with acute conditions (43.7%). The majority of NAs and NAEs reported caring for older adult clients aged 65 to 85 (63.5% of NAs and 81.4% of NAEs) and older adult clients aged over 85 (26.8% of NAs and 53.8% of NAEs).

Shifts Worked

The shifts most commonly worked by NAs and NAEs were eight- to twelve-hour shifts (60.2% of NAs and 84.6% of NAEs) during the day. Only 5.4% of NAs and 3.1% of NAEs reported working rotating shifts.

NAE License, Title and Supervision

Most NAEs (69.4%) had an RN license; 27.4% indicated having a licensed practical/vocational nurse (LPN/VN) license. NAE responders (25.1%) reported a position title of director or assistant director and 19.8% reported being a charge nurse. NAEs most frequently reported supervising seven or more (17.6%) and two (17.5%) certified entry-level NAs.

Knowledge Statement Importance Findings

Reliability

Reliability indices were calculated to assess the capability of the survey to coherently measure the knowledge statements relevant to the safe and effective work of certified entry-level NAs. Cronbach's reliability estimates were calculated for all four surveys' importance rating scales. All instruments (two NA surveys and two NAE surveys) exhibited a reliability value of 0.99, which indicated a high degree of reliability. These high reliability values indicate the surveys were reliably measuring the knowledge statements associated with entry-level NA work.

Importance of Knowledge

Responders were asked to rate the overall importance of each knowledge statement using a five-point scale: 1 (not important), 2 (minimally important), 3 (moderately important), 4 (very important) and 5 (critically important). For NAs, the average importance ratings ranged from 3.11 to 4.83 and for NAEs, the range was between 2.67 and 4.85.

Summary

Responders to the 2010 Knowledge Survey of NAs found the knowledge statements listed in the survey to be representative of the knowledge needed

for an entry-level NA to perform their work safely and effectively. The sample was reflective of those who work as or supervise NAs.

Conclusion

The 2010 Knowledge Survey of NAs employed several methods to describe the knowledge needed by certified entry-level NAs in the U.S.: (1) document reviews; (2) entry-level NAs activity list review; (3) SMEs; and (4) a large scale survey. The reliability and validity of the survey instruments was quite good.

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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 and certification examinations. The *2009 Job Analysis of Nurse Aides Employed in Nursing Homes/Long-term Care, Hospitals/Acute Care and Community/Home Health Care Settings* study is the basis for establishing examination content for entry-level nurse aides/nursing assistants (NAs). The primary purpose of this study is to identify the essential knowledge needed by certified entry-level NAs. Information from NAs and nurse aide evaluators (NAEs) was used to identify relative importance of relevant knowledge statements. These knowledge statements will help test developers of the National Nurse Aide Assessment Program (NNAAP[®]) to better understand the knowledge necessary to perform NA activities safely and effectively. It will also help item writers and reviewers with test development activities related to the NNAAP. However, the knowledge statements will not be part of the NNAAP content outline.

This study of the knowledge needed by NAs in nursing homes/long-term care, hospitals/acute care and community/home health care settings is the latest in a series of studies of NA professionals performed by NCSBN. Results of this study can also be used to assist education programs with having a better understanding of the knowledge requirements relevant to safe and effective work of certified entry-level NAs.

METHODOLOGY

A number of steps are necessary to perform an analysis of the knowledge needed by certified entry-level NAs to perform their work safely and effectively in order to protect the public. This section provides a description of the methodology used to conduct the 2010 Knowledge Survey of NAs. Descriptions of subject matter expert (SME) panel processes, survey development, sample selection and data collection procedures are provided, as well as information about assurance of confidentiality, response rates and the degree to which participants were representative of the population of certified entry-level NAs.

Methodology Reviewers

A total of three methodology reviewers, chosen for their expertise in practice/job analysis and certification examination development, reviewed the methodologies and procedures utilized in this study. All three reviewers indicated this methodology was psychometrically sound, legally defensible and in compliance with industry standards for job analyses. *See Appendix A for a listing of methodology reviewers.*

SMEs

A panel of 14 registered nurses (RNs) and one certified entry-level NA was assembled to assist with the job analysis. Panel members worked with and/or supervised NAs who had less than 12 months of experience postcertification or were certified entry-level NAs themselves and represented all four NCSBN geographic areas and major work settings where NAs are employed. *See Appendix B for a listing of SMEs.*

Survey Development

A number of processes were used to construct, evaluate and refine the survey instrument used for the 2010 knowledge statement study. The activities identified in the recently completed *2009 Job Analysis of Nurse Aides Employed in Nursing Homes/Long-term Care, Hospitals/Acute Care and Community/Home Health Care Settings* study were the basis for the development of the knowledge

statements by SMEs in this study. The SME panel reviewed the recently approved NA activity list to determine what knowledge was required to perform all of the activities. Each activity was reviewed and knowledge statements were generated. Redundant knowledge statements were removed and a final list of 228 knowledge statements was identified for the survey.

There were 228 NA statements that were incorporated into a job analysis survey. The survey also included questions about the NAs' work settings, past experiences and demographics. Given the number of statements, a total of four surveys were developed from the knowledge statement list to minimize responders' fatigue. Of these surveys, two were developed for certified entry-level NAs and two were developed for NAEs. A total of 124 statements were on each form and there were 20 knowledge statements common across both sets of survey forms. Due to the difference in nature of work among NAs and NAEs, researchers developed two slightly different surveys for the groups to gather demographic information relevant to each. Despite the slight differences in demographic information asked, the knowledge statements were common across both respondent groups. *The surveys can be found in Appendix F.*

The NA survey contained five sections. In the first section there were questions related to the type of work environment for the respondents. The second section contained knowledge statements that described the role of the NA. The third section contained questions describing the educational background of the NA. The fourth section asked about personal background information and the fifth section provided space for responders to write comments or suggestions about the study.

The NAE survey contained four sections. In the first section there were questions related to type of work environment for the respondents. The second section contained the same statements found on the NA survey that described the knowledge required to be an NA. The third section contained information about the respondent's personal background and section four contained an area for comments.

Survey Process

Sample Selection

A sample of 6,500 health care directors was randomly selected from the dataset sent by a mailing agency. The dataset contained the current addresses and contact names of health care directors in nursing homes/long-term care, hospitals/acute care and community/home health care settings. The breakdown of the sample according to the facilities in which the health care directors are employed is as follows: 1,400 hospitals (21.5%), 3,950 nursing homes (60.8%), 150 long-term care facilities (2.3%) and 1,000 home health care facilities (15.4%).

Each of the 6,500 health care directors was sent packages that contained three surveys. The total was split by two (3,250) since there were two forms of each survey. The health care directors were instructed to give the package to one NAE in their facility. The NAEs were instructed to complete one survey and give the other two to NAs in their work setting who had less than 12 months of experience postcertification. This method was chosen because there is currently no available national database on NA registrations.

Mailing Procedure

A total of three paper surveys was distributed in packets among 6,500 health care directors. Each packet contained two NA surveys and one NAE survey. In addition to the survey, potential survey participants received a presurvey notice and two survey reminders to increase response rates. The survey was conducted from February through April 2010.

Confidentiality

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

Return Rates

Of the 6,500 health care directors that were sent the packet of surveys, a total of 68 surveys was returned due to incorrect addresses. The adjusted total number of surveys sent was 6,432. An additional 44 respondents were removed from the NA survey because they did not identify how long they were certified. A total of 806 health care facilities returned NA surveys, of which 492 returned both NA surveys, resulting in 1,298 total NA surveys. A response rate of 12.5% was observed at the facility level for NAs.

A total of 823 NAE surveys was returned and there were no sample exclusion criteria. The adjusted total number of surveys sent was 6,494. The return rate for NAEs was 12.7%.

NA Knowledge Statement Nonresponder Study

In order to ensure the validity of the results, NCSBN conducted a secondary survey sent to nonresponders to determine if those not responding would have rated the survey knowledge statements differently than responders. If there are no systematic differences among knowledge statement ratings of responders and nonresponders, we have further evidence of the validity of the 2010 Knowledge Survey of NAs results. In the present study, nonresponders rated the knowledge statements similar to the responders, lending support for the validity of the results. *See Appendix D for a full report of the nonresponder study. See Appendix F for the nonresponder survey.*

Summary

A panel of 14 RNs and one NA provided the foundation for the 2010 Knowledge Survey of NAs. The panel identified the category structure describing the types of activities performed by certified entry-level NAs. Once the list of categories was created, the panel members worked to create a list of knowledge statements needed by a certified entry-level NA. Each statement was reviewed for applicability to certified entry-level NA work and the relationship to the delivery of safe nursing care to the public. In the end, there were 228 knowledge statements. A total of four survey instruments for data collection was developed and revised based on those

knowledge statements. The surveys were mailed from February through April 2010. After the surveys were received, the nonresponder study was conducted in May 2010. The response rates for all the surveys in this study were as good as expected.

DEMOGRAPHICS, EXPERIENCES AND WORK ENVIRONMENTS OF PARTICIPANTS

Demographics/Past Experiences

Demographic information, including gender, and racial and ethnic backgrounds, are presented next, followed by descriptions of responders' work environments, including settings, shifts worked and client characteristics.

Gender

The majority of NA (91.1%) and NAE (96.6%) responders reported being female. See Table 1.

	NA %	NAE %
Female	91.1	96.6
Male	8.9	3.4

Race/Ethnicity

NA and NAE respondents were ethnically diverse, with 69.2% of NAs and 86.1% of NAEs reporting being White non-Hispanic. See Table 2 for racial/ethnic backgrounds.

Category	NA %	NAE %
African-American	16.5	6.2
Asian Indian	0.2	0.1
Asian other	2.0	2.8
Hispanic	7.8	2.7
Native American	1.0	0.9
Pacific Islander	0.6	0.4
White non-Hispanic	69.2	86.1
Other	2.8	0.9

NA Experience and NAE Supervisory Experience

Health care directors were asked to give the survey to entry-level NAs with one year or less work experience postcertification. Only 39.6% of the NA respondents fell into this category. Subsequent analyses evaluate differences in importance ratings among the Years Experience categories. See Figure 1. Less than a third of the NAEs (26.5%) indicated that they have five or less years of experience supervising NAs. See Figure 2.

Figure 1. NA Years Experience

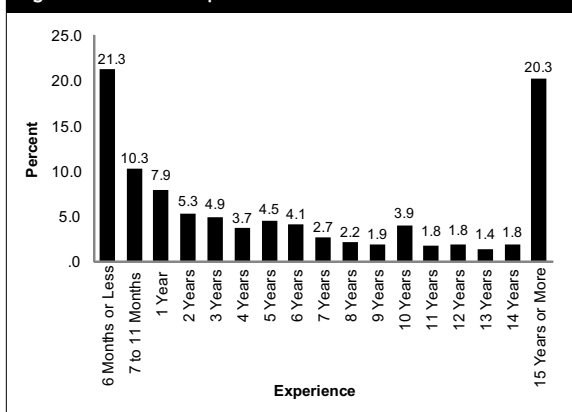
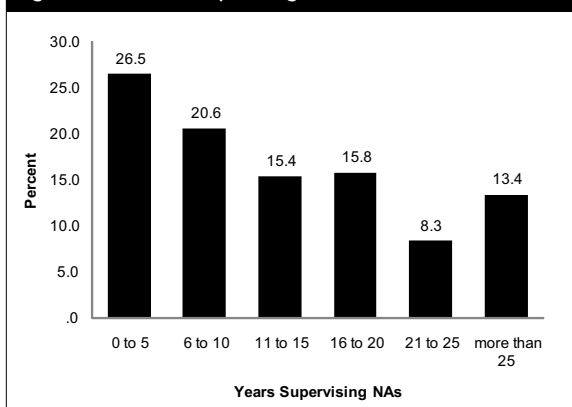


Figure 2. NAE Years Supervising



Work Setting

Facilities

The following major NA work setting types were identified: hospital/acute care facilities, nursing homes/long-term care settings and community/home health care settings. Most NAs and NAEs reported working in an extended care facility (24.3% of NAs and 19.9% of NAEs) or a medical/surgical unit within hospital and/or acute care settings (15.5% of NAs and 19.2% of NAEs). See Table 3.

In nursing homes/long-term settings, many respondents worked in the skilled care unit (42.5% of NAs and 53.8% of NAEs). See Table 4. Not many respondents indicated that they worked in community/home health care settings. The highest percentage category within this setting type was home health

Table 3. Hospital/Acute Care Setting

Hospital/Acute Care	NA %	NAE %
Central supply	1.9	1.1
Chemical dependency unit	0.4	0.7
Emergency room	3.0	3.8
Extended care facility/rehabilitation unit	24.3	19.9
Inpatient hospice care	6.2	4.4
Intensive care unit	1.8	3.3
Intermediate care/step down unit	4.1	3.9
Labor and delivery unit	0.7	2.4
Medical/surgical unit (includes sub-specialties like orthopedics, oncology, etc.)	15.5	19.2
Nursery	1.2	2.1
Operating room	0.5	0.9
Pediatric unit	0.7	2.8
Postpartum/maternity unit	0.9	2.9
Psychiatric unit	2.2	2.2
Recovery room	0.9	0.9
Other	8.9	10.4

Table 4. Nursing Home/Long-term Care

Nursing Home/Long-Term Care	NA %	NAE %
Assisted living facility	19.3	10.3
Intermediate care unit	11.2	15.2
Personal care unit	13.3	6.0
Skilled care unit	42.5	53.8
Sub-acute unit	5.4	6.9
Other	5.5	5.5

Table 5. Community/Home Health Care

Community Home Health Care	NA %	NAE %
Clinic/outpatient unit/ambulatory surgical care	2.9	1.1
Home health in client's residence	14.6	10.4
Hospice care in client's residence	6.1	4.1
Other	5.0	2.9

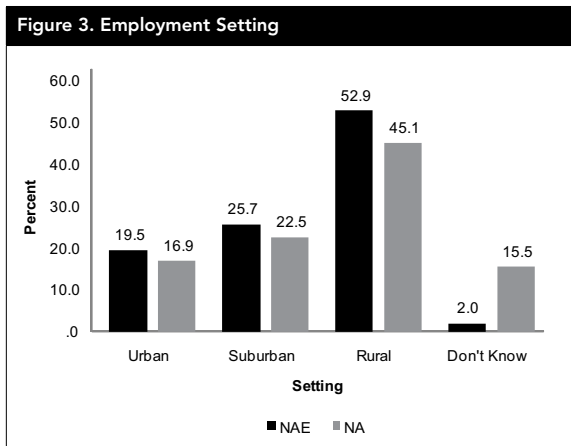
in a client's residence (14.6% of NAs and 10.4% of NAEs). See Table 5

Job Title

Respondents were also asked what best describes the job title they held. NA respondents were asked to select one NA title among several in a list and NAE respondents were asked to select all job titles they supervised. A total of 37.9% of NAs and 45.7% of NAEs selected certified nurse aide, while 35.4%

Table 6. NA Job Title

Title	NA %	NAE %
Care partner	0.3	0.6
Certified home health aide	4.7	6.4
Certified medication aide	1.6	6.3
Certified medication technician	0.4	2.3
Certified nurse aide	37.9	45.7
Certified nursing assistant	35.4	43.0
Charge aide	0.3	0.4
Dietary aide	0.0	0.7
Home health aide	2.4	5.0
Homemaker	0.2	1.6
Medication aide	0.3	2.9
Medication tech	0.1	0.7
Nurse aide/assistant	9.6	19.0
Orderly	0.0	0.7
Patient care technician	2.4	2.2
Personal or patient care attendant	1.8	3.4
Psychiatric aide	0.4	0.7
Other	2.0	9.8



of NAs and 43.0% of NAEs identified certified nursing assistants. See Table 6.

Employment Setting

As seen in Figure 3, most respondents worked in rural settings (45.1% of NAs and 52.9% of NAEs). The average number of clients seen daily by an NA was reported as 11.37 (std.err.= 6.9) for NAs and 20.33 (std.err.= 22.1) for NAEs.

Figure 4. Client Health Conditions

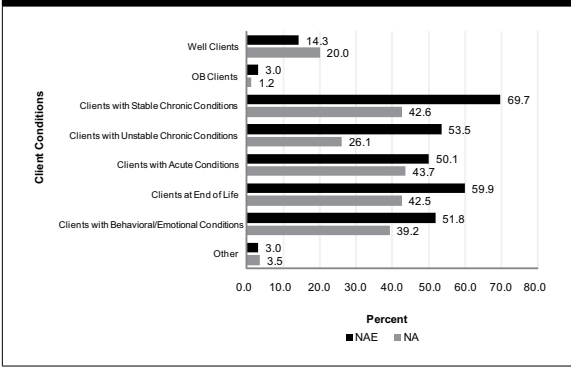


Figure 5. Client Age

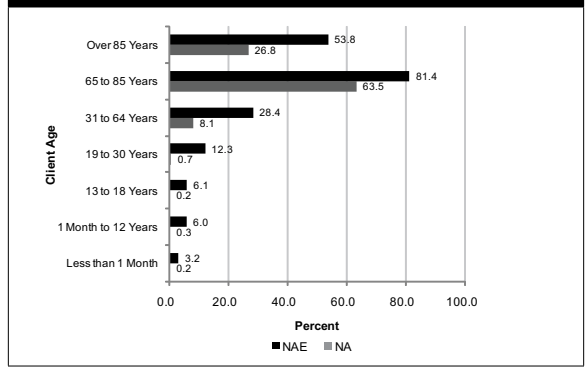


Figure 6. Hours Worked Last Shift

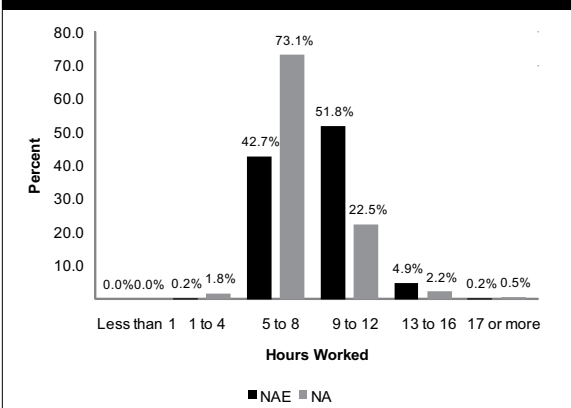


Table 7. Shifts Worked

Work Shift	NA %	NAE %
Rotating shift	5.4	3.1
Days 8, 10, or 12 hour shift	60.2	84.6
Evenings 8, 10, or 12 hour shift	23.7	7.9
Nights 8, 10, or 12 hour shift	6.9	2.7
Other	3.7	1.7

Table 8. NAE License Held

License	% Selected
RN	69.4
LPN/LVN	27.4
Other	2.1

Client Health Conditions

NAs reported caring most frequently for clients with acute conditions (43.7%), clients with clients with stable chronic conditions (42.6%) and clients at end of life (42.5%). NAEs reported caring most frequently for stable chronic clients (69.7%), clients at end of life (59.9%) and clients with unstable chronic conditions (53.5%). The ability to give multiple answers allowed for percentages to total more than 100.0%. See Figure 4.

Client Ages

The majority of NAs reported caring for adult clients aged 65 to 85 (63.5%) and adult clients aged over 85 (26.8%). NAEs reported caring for older adult clients aged 65 to 85 (81.4%) and adult clients aged over 85 (53.8%). See Figure 5. NAs were asked to provide only one answer. The NAEs, because they generally supervise multiple NAs, were given the ability to

provide multiple answers, thus allowing for percentages to total more than 100.0%.

Shifts and Hours Worked

The shifts most commonly worked by NAs were days (60.2%) and evenings (23.7%). Only 5.4% of NA respondents reported working rotating shifts. A total of 84.6% of the NAE respondents worked day shifts. See Table 7. On the respondent's last shift worked, the majority of NA and NAE respondents selected working five- to eight-hour shifts (73.1% NA and 42.7% NAE) or nine- to 12-hour shifts (22.5% NA and 51.8% NAE). See Figure 6.

NAE License, Title and Supervision

Unique questions were asked on the NAE survey about types of licenses held and position titles because NAEs hold different titles and licenses than NAs. Most NAE respondents (69.4%) had an

Table 9. NAE Title

Position Title	NAE %
Charge Nurse	19.8
Coordinator	4.0
Director/Assistant Director	25.1
Head Nurse/Unit Manager	8.0
Inservice Educator	8.1
Staff LPN	8.6
Staff RN	10.0
Supervisor	9.6
Team Leader	1.8
Other	4.9

Table 10. Number of Entry-Level NAs Supervised

Number	NAE %
One	16.4
Two	17.5
Three	12.0
Four	8.4
Five	5.5
Six	5.0
Seven or more	17.6
None	17.7

Table 11. NA Educational Preparation

Preparation	NA %
Previous work experience	34.4
High school course	10.9
Classes in nurse education program	7.1
Course from current employer	22.2
Course from previous employer	18.0
Course from community or junior college	21.8
Course from technical or vocational school	26.3
Military training	1.0
None	2.1
Other	8.5

*Respondents could select multiple responses

RN license. See Table 8. Respondents were allowed to select all licenses that apply and 1.1% did not respond to the question. Director/assistant director (25.1%) and charge nurse (19.8%) titles were most frequently selected; a few (1.8%) selected team leader as a title. See Table 9. There was a diverse distribution of the number of certified entry-level NAs supervised by NAEs ranging from six (5.0%) to seven or more (17.6%). See Table 10.

Table 12. NA Skills in Training

Skills Taught	NA %
Admin of oral/topical medications	12.8
Admin of insulin	5.9
Admin of oxygen	25.7
Blood glucose testing	5.5
Blood draw for lab testing	21.8
Special care for infants	6.2
Special care for elderly	31.3
Special care for psychiatric	6.5
Special care for respiratory	7.3
Other	30.4
Emergency care above CPR	6.2
Removal of peripheral catheter	9.8
Removal of indwelling catheter	3.9

*Respondents could select multiple responses

Educational Preparation

In response to a question about types of educational preparation for work as an NA, over one-third of the respondents identified previous work experience (34.4%) as the type of preparation for the role as a NA. Courses from technical or vocational school (26.3%), current employer (22.2%) and community or junior college (21.8%) were selected by a large number of NA respondents. See Table 11.

Knowledge/Skills Included in Training

Nearly one-third of the NA respondents identified special care for elderly (31.3%) as a skill taught in their training program. Few (3.9%) selected removal of indwelling catheter and blood glucose testing (5.5%). See Table 12.

Certifications Earned

A large majority of NA respondents (87.5%) indicated that they were a certified nurse aide/certified nursing assistant. Few had additional certifications. See Table 13.

Enrolled in Formal Nursing Programs

Very few (7.7%) of the NA respondents indicated that they were in a formal nursing program: 12.2% have applied, but were not currently enrolled; 3.0% indicated they were in a licensed practical/vocational nurse (LPN/VN) program; 0.4% were enrolled

in an RN diploma program; 3.5% were enrolled in an RN associate program; and 1.4% were enrolled in an RN baccalaureate program. A total of 12.5% of the NAs reported having nonnursing college degrees.

Reasons provided by NA respondents for applying to a formal nursing program, but not being enrolled included currently completing prerequisite courses (3.4% of respondents seeking an LPN/VN license gave this response and 4.9% of respondents seeking an RN license gave this response) and unable to afford tuition (3.9% of respondents seeking an LPN/VN license gave this response and 2.2% of respondents seeking an RN gave this response). These figures are based on the total number of respondents. See *Table 14*.

Summary

The NAs and NAEs responding to the 2010 Knowledge Survey of NAs were primarily white females with various years of experience. The majority worked day or evening shifts in skilled care units in a long-term care or nursing home facility. The responders cared mostly for clients with stable chronic conditions who were 65 years of age or older. About one-third of the respondents indicated that they received their training from previous work experience and less than 20.0% of the NA respondents indicated that they are enrolled in or are seeking enrollment in a formal nursing education program.

Table 13. Certifications Earned

Certification	NA %
Geriatric nurse assistant (GNA)	3.1
Certified nurse assistant (CNA)	87.5
Certified medication assistant (CMA)	4.9
Certified medication technician (CMT)	1.1
CMA including insulin	1.6
CMT including insulin	1.1
None	5.6
Other	9.0

*Respondents could select multiple responses

Table 14. Reasons for Nonenrollment

Reason	Seeking LPN/VN %	Seeking RN %
Currently completing prerequisite	3.4	4.9
On waiting list	2.2	2.2
Unable to afford tuition	3.9	2.2
Did not meet admission requirements	0.4	0.3
Classes were full	0.6	0.5
Other	2.1	1.8

KNOWLEDGE STATEMENT IMPORTANCE FINDINGS

Findings relative to the NA knowledge statements are presented in this section of the report. The methods used to collect and analyze knowledge statement findings and importance of the knowledge statements will be discussed.

Overview of Methods

In the knowledge surveys for certified NAs and NAEs were asked to provide overall importance ratings on each statement. They were asked to rate the overall importance on a scale of 1 to 5. The five-point importance scale ranged from 1 being not important to 5 being critically important.

Knowledge Statement Characteristics

Reliability

Reliability indices were calculated to assess the capability of the survey to measure the activities relevant to safe and effective work of certified entry-level NAs. Cronbach's alpha coefficients were calculated on importance ratings for the NA and NAE surveys. Alpha coefficients range from zero to one; a value of 0.70 or greater is considered adequate (Cronbach, 1951). Reliability estimates were 0.99 or higher for each of the survey forms, suggesting that the

surveys were very reliable, approaching the theoretical maximum value.

Importance of Knowledge Statement

Responders were asked to rate the importance of each statement. Average importance ratings were calculated by averaging the total importance ratings. A total of four categories were created for this data: NAs with one year or less of experience, two to 10 years experience, more than 10 years experience and NAE respondents. When reviewing the data, an emphasis was placed on the certified entry-level NAs (one year or less) cohort and the NAE cohort.

For the certified entry-level NA cohort, statement 1, *Knowledge of basic foot anatomy*, had the lowest average importance rating of 3.11. Conversely, statement 213, *Knowledge of signs of suspected neglect, mistreatment or abuse*, had the highest average rating of 4.83. In evaluating the NAE cohort's importance ratings, statement 143, *Knowledge of converting pounds to kilograms*, was rated least important at 2.67, while statement 56, *Knowledge of hand washing and hand hygiene techniques*, had the highest average rating of 4.85. With respect to the relationship between the certified entry-level NA cohort and the NAE cohort, average importance ratings had a high correlation ($r=0.90$, $p<0.01$). See Figure 7 and Table 15 for percent performing activity information. Appendix C contains importance ratings sorted from low to high based on the newly certified cohort.

Summary

Responders to the 2010 Knowledge Survey of NAs found the statements listed in the survey to be representative of the knowledge needed to perform work in their work settings. In general, the importance ratings and their relative rankings given by certified entry-level NAs and NAEs were similar, supporting the validity of the results. The reliability estimates of the survey instruments were high.

Figure 7. Average Importance Ratings by New NAs and NAEs

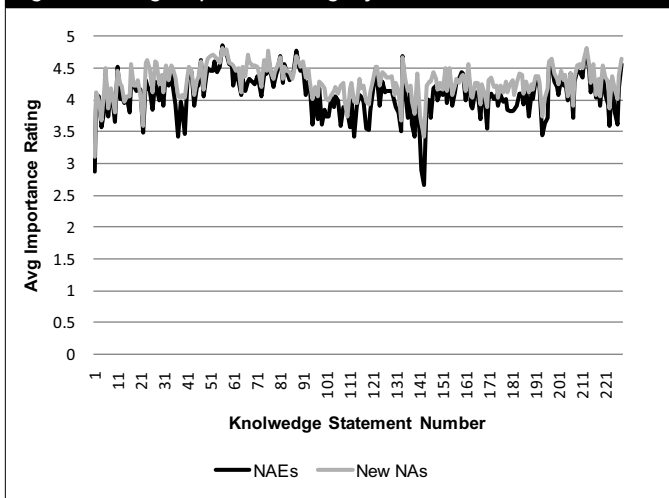


Table 15. Knowledge Importance Ratings

Know #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
1	basic foot anatomy	209	3.11	0.07	227	3.18	0.07	197	3.36	0.08	394	2.87	0.05
2	care for dentures	213	4.12	0.05	227	4.00	0.05	196	4.03	0.05	399	4.08	0.03
3	denture removal and insertion	212	4.00	0.06	227	3.91	0.06	194	3.97	0.05	393	4.06	0.04
4	nail care procedures	209	3.68	0.07	228	3.64	0.06	193	3.76	0.07	401	3.57	0.05
5	normal versus abnormal mouth conditions	210	4.13	0.06	226	4.05	0.06	196	4.13	0.06	397	3.83	0.05
6	procedure and purpose for providing pericare	210	4.49	0.05	226	4.41	0.05	193	4.31	0.06	398	4.41	0.04
7	procedures for foot care	211	3.86	0.06	227	3.84	0.06	198	3.98	0.06	398	3.73	0.05
8	procedures for mouth care	211	4.19	0.05	228	4.17	0.05	194	4.20	0.05	397	4.15	0.03
9	purpose for mouth care	212	4.08	0.06	227	4.11	0.05	195	4.12	0.06	399	4.05	0.04
10	purpose for nail care	209	3.79	0.07	227	3.83	0.06	195	3.83	0.07	397	3.66	0.05
11	purpose for skin care	510	4.45	0.03	427	4.46	0.03	347	4.47	0.03	819	4.52	0.02
12	obstacles that affect dressing and undressing clients	212	4.24	0.06	226	4.14	0.05	196	4.09	0.05	400	4.01	0.04
13	procedures for dressing and undressing clients	212	4.23	0.05	227	4.07	0.05	196	4.03	0.05	399	4.07	0.04
14	procedures for grooming	213	3.97	0.06	227	3.89	0.05	198	3.97	0.05	400	3.95	0.04
15	purposes for grooming	510	4.05	0.03	424	4.04	0.04	345	4.07	0.04	818	4.00	0.02
16	adaptive eating devices	211	4.06	0.06	226	3.98	0.06	195	4.11	0.06	398	3.81	0.04
17	dietary restrictions	213	4.57	0.05	229	4.41	0.05	195	4.47	0.05	400	4.26	0.04
18	feeding techniques	213	4.23	0.05	226	4.18	0.05	191	4.37	0.06	400	4.23	0.04
19	foods included in fluid intake	211	4.23	0.05	228	4.21	0.05	197	4.23	0.06	400	4.15	0.04
20	measuring oral fluid intake	211	4.31	0.05	227	4.22	0.05	197	4.36	0.05	401	4.19	0.04
21	methods for giving fluids by mouth	210	4.08	0.06	227	4.04	0.06	195	4.14	0.06	398	4.16	0.04
22	procedures for serving and removing meal tray	209	3.59	0.07	224	3.53	0.06	196	3.52	0.07	399	3.49	0.05
23	servicing the correct meal to the correct client	211	4.59	0.04	227	4.45	0.05	195	4.46	0.06	398	4.32	0.05
24	signs and symptoms of dehydration	211	4.63	0.04	227	4.55	0.04	197	4.60	0.04	399	4.22	0.04

Know #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
		25	special diets	507	4.47	0.03	427	4.42	0.03	348	4.46	0.04	814
26	supplemental nutrition	211	4.13	0.06	226	4.09	0.05	196	4.18	0.06	400	3.85	0.04
27	the importance of serving the correct meal to client	211	4.61	0.04	226	4.52	0.05	195	4.48	0.06	400	4.30	0.04
28	the need for fluids in the body	212	4.58	0.04	228	4.44	0.05	197	4.47	0.05	400	4.18	0.04
29	the role of nutrition and hydration on skin care	210	4.25	0.05	227	4.20	0.05	197	4.29	0.05	398	3.99	0.04
30	assisting the client with toileting	210	4.40	0.05	226	4.34	0.05	195	4.26	0.05	398	4.37	0.03
31	bowel and bladder training	208	4.13	0.06	228	4.08	0.05	196	4.12	0.06	400	3.91	0.04
32	cleaning the client after elimination	209	4.55	0.04	229	4.44	0.05	196	4.38	0.04	396	4.48	0.03
33	emptying urinary drainage device	211	4.31	0.05	226	4.26	0.05	194	4.23	0.05	398	4.22	0.04
34	incontinence care	211	4.54	0.05	228	4.47	0.04	196	4.40	0.04	399	4.46	0.03
35	normal versus abnormal characteristics of urine and stool	509	4.49	0.03	427	4.46	0.03	344	4.47	0.04	813	4.23	0.03
36	normal versus abnormal ostomy output	209	4.34	0.05	227	4.24	0.05	194	4.26	0.06	399	3.92	0.05
37	ostomy types	208	4.06	0.06	226	3.91	0.05	192	3.85	0.07	397	3.43	0.05
38	purpose, types and uses of toileting equipment and devices	209	4.03	0.06	228	3.96	0.05	193	3.99	0.06	399	3.97	0.04
39	types and uses of incontinence products	210	4.07	0.06	226	3.96	0.05	193	3.85	0.05	398	3.86	0.04
40	urinary catheter types	208	4.03	0.06	229	3.90	0.06	192	3.79	0.07	399	3.47	0.05
41	client-specific needs during position changes	208	4.38	0.05	227	4.28	0.05	195	4.30	0.05	399	4.32	0.04
42	comfort measures and care during the dying process	211	4.52	0.05	229	4.57	0.04	193	4.45	0.05	398	4.39	0.04
43	correct body alignment and positioning techniques	208	4.47	0.04	223	4.44	0.04	196	4.41	0.04	399	4.44	0.03
44	measures to promote rest and sleep	209	4.07	0.05	224	4.01	0.05	192	3.95	0.06	400	3.91	0.04
45	pain relief or comfort measures	208	4.31	0.05	223	4.31	0.05	194	4.30	0.05	398	4.20	0.04
46	physical comfort measures and techniques	504	4.36	0.03	424	4.31	0.03	342	4.29	0.03	812	4.22	0.02
47	reporting client symptoms of pain or discomfort	209	4.61	0.04	224	4.56	0.04	194	4.50	0.04	399	4.62	0.03

Table 15. Knowledge Importance Ratings

Item #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
48	the benefits of physical comfort	209	4.15	0.05	223	4.14	0.05	189	4.26	0.05	399	4.06	0.03
49	verbal and nonverbal signs and symptoms of pain or discomfort	210	4.56	0.04	221	4.46	0.04	191	4.42	0.04	399	4.37	0.03
50	airborne precautions	206	4.64	0.04	221	4.59	0.04	189	4.60	0.04	398	4.50	0.03
51	biohazardous waste	206	4.68	0.04	219	4.58	0.04	191	4.64	0.04	399	4.45	0.03
52	biohazardous waste disposal	204	4.71	0.04	220	4.58	0.04	188	4.65	0.04	399	4.46	0.04
53	contact precautions	209	4.69	0.04	222	4.60	0.04	190	4.66	0.04	398	4.60	0.03
54	disinfection techniques	205	4.64	0.04	222	4.54	0.04	191	4.54	0.04	396	4.44	0.04
55	droplet precautions	206	4.59	0.05	223	4.57	0.04	191	4.64	0.05	398	4.53	0.03
56	hand washing and hand hygiene techniques	507	4.81	0.02	422	4.75	0.02	344	4.78	0.02	819	4.85	0.01
57	standard precautions	503	4.70	0.02	421	4.67	0.03	341	4.72	0.03	820	4.78	0.02
58	the spread of infection or infection transmission	206	4.79	0.03	222	4.71	0.04	191	4.77	0.03	396	4.73	0.02
59	the types and uses of personal protective equipment	208	4.58	0.05	220	4.50	0.04	189	4.58	0.04	397	4.57	0.03
60	ambulation safety	205	4.57	0.04	220	4.49	0.04	188	4.47	0.04	398	4.53	0.03
61	basic life support procedures	203	4.54	0.05	216	4.42	0.05	184	4.48	0.06	399	4.23	0.05
62	body mechanics	199	4.45	0.04	213	4.37	0.05	186	4.43	0.04	399	4.45	0.03
63	call system devices and placement within reach	200	4.51	0.04	217	4.43	0.05	184	4.39	0.05	398	4.28	0.04
64	client positioning during mouth care	213	4.12	0.06	228	4.00	0.05	195	4.04	0.06	397	4.08	0.04
65	client risk factors for injuries	213	4.51	0.04	229	4.37	0.04	196	4.44	0.04	397	4.34	0.03
66	client-safety alarm types and uses	212	4.38	0.05	228	4.27	0.05	194	4.23	0.05	398	4.14	0.04
67	CPR/basic life support skills	212	4.71	0.04	229	4.64	0.04	197	4.64	0.05	398	4.29	0.05
68	emergency and disaster situations and responses	510	4.60	0.03	426	4.57	0.03	346	4.63	0.03	817	4.33	0.03
69	environmental dangers to the client's health and safety	212	4.54	0.05	228	4.46	0.04	193	4.52	0.04	397	4.30	0.04
70	evacuation procedures and techniques	213	4.54	0.04	229	4.46	0.04	195	4.51	0.04	397	4.24	0.04

Know #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
		213	4.53	0.04	0.04	226	4.50	0.04	193	4.53	0.04	398	4.37
71	fire and disaster safety plans	213	4.53	0.04	226	4.50	0.04	193	4.53	0.04	398	4.37	0.04
72	fire prevention techniques	211	4.44	0.05	227	4.36	0.05	191	4.42	0.05	398	4.29	0.04
73	how to provide a clean, safe and neat living space	213	4.20	0.05	229	4.11	0.05	196	4.22	0.05	398	4.06	0.04
74	indications that client might be suicidal	511	4.62	0.03	429	4.62	0.03	348	4.68	0.03	816	4.38	0.03
75	lifting and transfer devices	213	4.45	0.05	228	4.35	0.05	196	4.42	0.05	395	4.42	0.03
76	methods to relieve choking and clear airway	213	4.77	0.03	229	4.71	0.03	195	4.77	0.04	396	4.69	0.03
77	methods used to identify client	213	4.45	0.05	229	4.39	0.05	195	4.55	0.05	395	4.42	0.04
78	oxygen safety and storage	212	4.33	0.05	228	4.30	0.05	195	4.44	0.05	395	4.21	0.04
79	reasons for checking client status routinely	213	4.43	0.04	227	4.35	0.05	194	4.38	0.05	395	4.32	0.04
80	reasons to identify client before care	213	4.54	0.04	228	4.43	0.05	194	4.47	0.05	397	4.47	0.03
81	recognizing and reporting signs and symptoms of client's change in condition	212	4.66	0.03	226	4.59	0.04	195	4.64	0.04	396	4.69	0.03
82	restraint complications	209	4.33	0.05	229	4.18	0.06	191	4.22	0.07	396	4.28	0.05
83	safe transfer and lifting techniques	212	4.51	0.04	227	4.47	0.04	194	4.48	0.04	396	4.56	0.03
84	safety and accident prevention measures and devices	210	4.46	0.05	226	4.32	0.04	197	4.41	0.04	397	4.43	0.03
85	safety considerations during transport	211	4.44	0.05	227	4.26	0.05	195	4.38	0.05	397	4.31	0.04
86	safety techniques during toileting	213	4.34	0.05	226	4.24	0.05	196	4.33	0.04	396	4.40	0.03
87	self limitations and understanding when to seek assistance	212	4.42	0.05	227	4.34	0.04	195	4.34	0.04	397	4.45	0.03
88	signs and symptoms of airway obstruction	213	4.69	0.04	228	4.68	0.04	196	4.72	0.04	397	4.77	0.02
89	signs and symptoms of feeding complications	211	4.58	0.04	227	4.56	0.04	195	4.53	0.05	394	4.52	0.04
90	strategies to safely care for angry or potentially violent clients	211	4.52	0.04	227	4.51	0.04	196	4.52	0.04	398	4.47	0.03
91	the importance of responding to client-safety alarms promptly	213	4.61	0.04	228	4.46	0.05	197	4.47	0.05	400	4.51	0.04
92	the purpose for client rounds	212	4.36	0.04	227	4.26	0.05	194	4.22	0.06	399	4.07	0.05

Table 15. Knowledge Importance Ratings

Know #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
		93	timely response to and importance of call systems	212	4.49	0.04	227	4.32	0.05	195	4.27	0.06	398
94	ambulation techniques with and without a device	213	4.29	0.05	228	4.16	0.05	195	4.28	0.04	400	4.24	0.03
95	behavior modification	211	4.01	0.06	229	4.07	0.05	195	4.07	0.05	400	3.62	0.04
96	care for client in restraints	212	4.20	0.06	229	4.20	0.05	193	4.17	0.06	399	4.03	0.05
97	care, cleaning and storage of equipment	212	4.05	0.06	226	3.92	0.05	196	3.96	0.06	399	3.69	0.04
98	client positioning techniques	212	4.28	0.05	227	4.22	0.05	197	4.20	0.05	395	4.19	0.04
99	client preparation for diagnostic test, procedure or surgery per directive	211	4.24	0.06	226	4.14	0.06	195	4.11	0.07	396	3.61	0.05
100	client transport methods and devices	212	4.19	0.05	226	4.14	0.05	195	4.02	0.05	397	3.84	0.04
101	client's personal equipment maintenance and care	212	4.01	0.06	227	3.96	0.05	193	3.94	0.06	400	3.73	0.04
102	devices used to measure client's height and weight	211	4.00	0.06	229	3.81	0.06	195	3.89	0.06	398	3.75	0.05
103	elastic stockings/anti-embolism hose application and removal techniques	513	4.07	0.03	427	4.07	0.04	347	4.11	0.04	817	4.03	0.03
104	emotional support techniques	212	4.15	0.05	227	4.15	0.05	195	4.11	0.05	400	3.88	0.04
105	environmental conditions for bathing clients	212	4.20	0.05	228	4.11	0.05	197	4.20	0.04	399	4.06	0.03
106	equipment and supplies needed for bathing	211	4.09	0.05	226	4.01	0.05	196	4.05	0.05	398	4.00	0.04
107	ostomy care procedures	212	4.23	0.06	227	4.16	0.05	195	4.02	0.06	398	3.60	0.05
108	oxygen devices and methods of delivery	211	4.26	0.06	225	4.16	0.06	195	4.08	0.06	400	3.89	0.04
109	positioning devices	210	3.97	0.06	228	3.89	0.06	195	3.99	0.05	398	3.88	0.04
110	procedure for making occupied or unoccupied beds	211	3.75	0.06	228	3.75	0.06	192	3.78	0.05	399	3.81	0.04
111	procedure for performing and recording pulse oximetry	210	4.19	0.06	227	4.08	0.06	191	4.13	0.06	396	3.56	0.06
112	procedures and techniques for measuring and recording intake and output	211	4.27	0.05	227	4.15	0.05	195	4.19	0.06	397	4.00	0.05

Know #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
		113	procedures for admission, discharge and transfer	209	3.97	0.06	225	3.74	0.07	192	3.80	0.07	397
114	procedures for different types of baths	211	3.95	0.06	228	3.93	0.06	194	3.98	0.05	399	3.90	0.04
115	observing, recording and measuring intake and output	507	4.33	0.03	427	4.24	0.04	345	4.30	0.04	818	4.08	0.03
116	range of motion precautions	509	4.18	0.03	424	4.20	0.04	345	4.22	0.04	819	4.05	0.03
117	the need to promote client independence	501	4.22	0.03	424	4.22	0.03	338	4.20	0.03	819	3.96	0.03
118	promoting client participation in group or other activities	506	3.96	0.04	426	3.91	0.04	343	3.84	0.04	818	3.55	0.03
119	promoting client participation in recreational activities	507	3.92	0.04	426	3.88	0.04	343	3.83	0.05	819	3.53	0.03
120	client's religious and cultural beliefs and practices	510	4.12	0.03	427	4.10	0.04	344	4.09	0.04	820	3.83	0.03
121	how to handle conflict	508	4.31	0.03	425	4.31	0.03	345	4.29	0.04	815	4.15	0.03
122	how to maintain dignity and privacy during care	507	4.52	0.03	426	4.50	0.03	342	4.50	0.03	815	4.50	0.02
123	reporting requirements for disputes, grievances, abuse and suspicious workplace activities	509	4.53	0.03	428	4.43	0.03	345	4.55	0.03	815	4.34	0.03
124	promoting client and family role in plan of care	508	4.22	0.03	424	4.17	0.04	344	4.24	0.04	815	3.91	0.03
125	procedures for moving a client in bed	298	4.44	0.04	201	4.34	0.05	152	4.32	0.05	418	4.28	0.03
126	procedures for obtaining and recording blood pressure	299	4.39	0.04	201	4.39	0.05	153	4.49	0.05	421	4.11	0.05
127	procedures for obtaining and recording body temperature	299	4.34	0.04	200	4.34	0.05	153	4.46	0.05	419	4.15	0.04
128	procedures for obtaining and recording pulse rate	296	4.35	0.04	200	4.37	0.05	153	4.47	0.05	421	4.14	0.04
129	procedures for obtaining and recording respiratory rate	300	4.36	0.04	201	4.33	0.05	153	4.46	0.05	418	4.15	0.04
130	procedures to measure and record client's height and weight	299	4.07	0.05	198	4.08	0.06	151	4.18	0.05	418	3.98	0.04

Table 15. Knowledge Importance Ratings

Item #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
		131	procedures to secure and respect client's personal belongings	299	4.26	0.04	200	4.16	0.05	152	4.27	0.05	418
132	prosthetic and orthotic device application and removal techniques	296	4.13	0.05	199	4.18	0.06	152	4.24	0.06	419	3.81	0.04
133	reality orientation therapy	293	3.67	0.06	198	3.77	0.06	145	3.81	0.06	418	3.51	0.04
134	safe transfer techniques	300	4.67	0.03	199	4.58	0.04	151	4.65	0.04	419	4.69	0.02
135	skills that promote client's sense of security	300	4.32	0.04	199	4.30	0.04	147	4.29	0.05	418	4.11	0.03
136	specimen collection types and procedures	295	4.14	0.05	199	4.23	0.06	149	4.28	0.06	417	3.72	0.05
137	techniques and devices for addressing the unique needs and behaviors of the client with cognitive impairment	299	4.22	0.04	198	4.24	0.05	152	4.35	0.06	417	4.16	0.04
138	turning, coughing and deep breathing techniques	299	3.96	0.05	201	4.05	0.06	150	4.18	0.07	420	3.61	0.05
139	types, applications and uses of restraints	296	3.77	0.07	198	3.87	0.08	150	3.85	0.10	412	3.42	0.07
140	urinary catheter care procedures	300	4.42	0.04	200	4.48	0.05	150	4.42	0.06	419	4.19	0.04
141	validation therapy	295	3.76	0.06	193	3.77	0.07	146	3.84	0.08	415	3.35	0.05
142	converting ounces to milliliters	298	3.62	0.06	199	3.64	0.08	147	3.44	0.10	419	2.89	0.06
143	converting pounds to kilograms	298	3.42	0.07	200	3.53	0.08	150	3.47	0.10	419	2.67	0.06
144	how to report and document client behavior	298	4.22	0.04	200	4.24	0.05	150	4.33	0.05	420	4.02	0.04
145	intake and output calculations	297	4.29	0.04	200	4.29	0.05	152	4.45	0.05	415	3.98	0.04
146	normal versus abnormal pulse oximetry readings	297	4.29	0.05	200	4.35	0.06	147	4.41	0.07	418	3.72	0.06
147	normal versus abnormal vital signs	296	4.45	0.04	200	4.48	0.05	149	4.56	0.05	416	4.17	0.05
148	observing and reporting behavioral changes	299	4.32	0.04	200	4.35	0.05	150	4.39	0.05	416	4.23	0.03
149	procedures for calculating and recording meal intake	299	4.16	0.04	201	4.23	0.05	150	4.22	0.06	416	3.99	0.04
150	reporting changes in client's intake and output	298	4.26	0.04	197	4.36	0.06	151	4.43	0.05	414	4.13	0.04
151	reporting changes in client's weight	296	4.17	0.04	200	4.35	0.05	152	4.46	0.05	418	4.08	0.04

K no #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
		297	4.49	0.04	200	4.58	0.05	152	4.65	0.05	416	4.28	0.04
152	reporting process for suicidal clients	297	4.14	0.05	198	4.22	0.06	149	4.21	0.07	415	3.95	0.04
153	complications due to prosthetic and orthotic device use	296	4.49	0.04	200	4.57	0.04	149	4.55	0.05	418	4.32	0.04
154	normal and abnormal color, movement and sensation of extremities	294	4.07	0.05	200	4.07	0.06	150	4.11	0.06	413	3.92	0.04
155	normal joint mobility	297	4.23	0.04	197	4.28	0.05	151	4.26	0.05	411	4.11	0.04
156	normal versus abnormal skin and nail conditions	297	4.34	0.04	196	4.34	0.05	150	4.37	0.05	417	4.26	0.03
157	normal versus abnormal skin appearance	295	4.26	0.05	197	4.30	0.05	147	4.34	0.06	420	4.34	0.03
158	pressure relieving devices and techniques	298	4.38	0.04	199	4.40	0.04	149	4.35	0.05	421	4.44	0.03
159	procedures for inspecting and providing skin care	299	4.38	0.04	199	4.40	0.04	149	4.36	0.05	420	4.42	0.03
160	purposes of skin care	295	4.13	0.04	197	4.22	0.04	148	4.25	0.05	420	4.00	0.04
161	range of motion exercises	296	4.55	0.04	196	4.59	0.04	150	4.58	0.05	421	4.45	0.03
162	risk factors for skin breakdown	294	4.06	0.05	197	4.04	0.06	149	4.11	0.05	420	3.91	0.04
163	the aging process and its effect on the body	293	4.03	0.05	198	4.12	0.05	144	4.17	0.06	421	3.86	0.04
164	adaptive devices for clients with sensory impairment	292	4.27	0.04	198	4.25	0.05	149	4.23	0.06	417	4.11	0.03
165	ambulation devices and use	293	4.26	0.04	193	4.23	0.05	151	4.26	0.05	419	4.12	0.03
166	client mobility and functional limitations	294	3.93	0.05	196	3.99	0.06	147	4.03	0.07	419	3.70	0.04
167	prosthetic and orthotic devices	289	4.26	0.04	194	4.22	0.05	150	4.24	0.05	421	4.05	0.03
168	basic emotional needs	286	4.09	0.04	192	4.18	0.05	147	4.24	0.05	419	4.06	0.03
169	behaviors related to cognitive impairments	287	3.89	0.05	192	3.95	0.05	147	4.01	0.06	420	3.55	0.04
170	client recreational activities	280	4.30	0.04	191	4.29	0.05	147	4.29	0.05	421	4.02	0.04
171	client's need for acceptance and sense of belonging	275	4.35	0.04	189	4.36	0.04	146	4.37	0.05	419	4.10	0.04
172	client's need for sense of security	278	4.21	0.04	188	4.14	0.05	142	4.22	0.05	420	4.01	0.03
173	cognitive impairments	299	4.23	0.04	200	4.27	0.05	151	4.28	0.06	420	4.08	0.03
174	meeting the needs of sensory impaired clients												

Table 15. Knowledge Importance Ratings

No # K	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
		297	4.04	0.04	198	4.04	0.05	152	3.91	0.07	418	3.91	0.04
175	personal preference considerations	297	4.04	0.04	198	4.04	0.05	152	3.91	0.07	418	3.91	0.04
176	physical and emotional benefits of bathing clients	299	4.23	0.04	199	4.25	0.04	151	4.28	0.05	421	4.09	0.03
177	sensory impairments	298	4.11	0.04	201	4.15	0.05	150	4.12	0.06	420	3.97	0.03
178	skills that promote client's feeling of acceptance and belonging	298	4.29	0.04	201	4.27	0.05	151	4.25	0.05	418	4.00	0.04
179	techniques for helping the client express emotions	298	4.12	0.04	199	4.15	0.05	151	4.15	0.05	420	3.85	0.04
180	the stages of grief	298	4.24	0.04	200	4.25	0.05	151	4.31	0.05	420	3.83	0.04
181	care for the body after death	298	4.31	0.04	200	4.23	0.05	150	4.30	0.06	419	3.82	0.04
182	cultural and personal preference considerations	296	4.08	0.04	201	4.08	0.05	152	4.13	0.06	420	3.85	0.04
183	dignity, spiritual and cultural considerations after death	299	4.28	0.04	200	4.17	0.06	151	4.27	0.06	420	3.91	0.04
184	dignity, spiritual and cultural considerations for death and dying	299	4.41	0.04	200	4.36	0.05	150	4.36	0.05	418	4.10	0.04
185	the death and dying process	298	4.40	0.04	199	4.38	0.05	151	4.36	0.05	418	4.11	0.03
186	the need to report client's cultural/religious/spiritual preferences and needs	297	4.11	0.05	200	4.15	0.05	151	4.14	0.06	419	3.92	0.04
187	active listening skills	299	4.29	0.04	200	4.30	0.05	151	4.35	0.05	415	4.19	0.03
188	approved medical terminology	299	4.11	0.05	200	4.11	0.06	151	4.21	0.06	419	3.74	0.04
189	chain of command	295	4.25	0.04	201	4.27	0.05	150	4.34	0.05	418	4.11	0.04
190	identifying and reporting barriers to communication	298	4.16	0.04	201	4.17	0.05	150	4.21	0.05	420	4.00	0.03
191	respectful communication	297	4.38	0.03	201	4.32	0.04	152	4.38	0.04	419	4.32	0.03
192	respectful communication skills	298	4.37	0.03	200	4.32	0.05	150	4.39	0.05	417	4.31	0.03
193	shift change report	297	4.27	0.04	200	4.30	0.05	149	4.35	0.05	417	4.18	0.04
194	the need for an interpreter	295	3.75	0.06	200	3.80	0.07	151	3.75	0.08	419	3.44	0.05
195	advanced directives	293	4.03	0.05	199	3.99	0.06	147	4.14	0.07	416	3.64	0.05
196	client grievance and dispute processes	291	4.18	0.04	201	4.15	0.05	150	4.17	0.06	418	3.72	0.05
197	client privacy and confidentiality	296	4.61	0.03	200	4.65	0.04	150	4.60	0.04	418	4.58	0.03

No. #	Knowledge of	NA 0 to 1 yr.				NA 2 to 10 yrs.				NA 11 or more yrs.				NAE			
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	
		198	client rights	297	4.65	0.03	200	4.67	0.03	151	4.58	0.04	418	4.53	0.03	418	4.53
199	client-centered care	297	4.41	0.04	201	4.36	0.04	148	4.34	0.05	419	4.30	0.03	419	4.30	0.03	
200	client-centered environment	299	4.34	0.04	200	4.28	0.04	152	4.29	0.05	417	4.20	0.03	417	4.20	0.03	
201	client's environmental preferences	296	4.24	0.04	200	4.18	0.05	150	4.17	0.06	417	4.08	0.03	417	4.08	0.03	
202	how to promote client self-esteem and dignity	295	4.45	0.03	201	4.39	0.04	149	4.36	0.05	417	4.32	0.03	417	4.32	0.03	
203	interactions to promote client dignity during meals	299	4.30	0.04	200	4.27	0.05	150	4.33	0.05	415	4.22	0.03	415	4.22	0.03	
204	privacy, dignity, safety and comfort during linen changes	297	4.40	0.04	200	4.38	0.05	151	4.34	0.05	416	4.30	0.03	416	4.30	0.03	
205	restraint alternatives	297	4.06	0.05	198	3.99	0.06	150	4.05	0.08	414	3.99	0.05	414	3.99	0.05	
206	the need to explain care to client prior to procedures	298	4.41	0.04	199	4.42	0.04	152	4.40	0.05	415	4.41	0.03	415	4.41	0.03	
207	ways to support the sexuality of the client	295	3.92	0.05	201	4.07	0.06	147	4.09	0.07	416	3.71	0.04	416	3.71	0.04	
208	documentation guidelines	298	4.35	0.04	198	4.35	0.05	151	4.36	0.05	416	4.28	0.03	416	4.28	0.03	
209	Health Insurance Portability and Accountability Act (HIPAA)	299	4.55	0.04	198	4.57	0.04	150	4.47	0.07	416	4.45	0.03	416	4.45	0.03	
210	Health Insurance Portability and Accountability Act (HIPAA) violations	298	4.56	0.04	199	4.59	0.04	149	4.48	0.07	418	4.44	0.03	418	4.44	0.03	
211	procedures to report unusual incidents	298	4.51	0.03	201	4.43	0.05	150	4.46	0.05	414	4.35	0.03	414	4.35	0.03	
212	right and wrong conduct for nurse aides	299	4.65	0.03	201	4.56	0.04	150	4.58	0.04	416	4.61	0.03	416	4.61	0.03	
213	signs of suspected neglect, mistreatment or abuse	299	4.83	0.02	199	4.82	0.03	151	4.89	0.03	418	4.76	0.02	418	4.76	0.02	
214	suspicious workplace activity	299	4.53	0.04	199	4.51	0.05	152	4.56	0.05	417	4.43	0.03	417	4.43	0.03	
215	continuing education or in-service requirements	297	4.27	0.04	198	4.19	0.05	150	4.29	0.06	417	4.11	0.04	417	4.11	0.04	
216	following client's plan of care as assigned	298	4.56	0.03	198	4.48	0.04	151	4.46	0.05	415	4.44	0.03	415	4.44	0.03	
217	how to identify self by name and job title	298	4.08	0.05	198	4.04	0.06	149	4.17	0.05	415	4.03	0.04	415	4.03	0.04	
218	nurse aide role as a member of the health-care team	298	4.33	0.04	199	4.29	0.05	149	4.36	0.05	416	4.21	0.03	416	4.21	0.03	

Table 15. Knowledge Importance Ratings

Kno #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
219	nurse aide role in reinforcement of client and family education	297	4.05	0.05	198	4.05	0.06	149	4.13	0.06	418	3.91	0.04
220	nurse aide roles and responsibilities	299	4.55	0.03	199	4.47	0.04	151	4.48	0.04	415	4.37	0.03
221	nurse aide's participation in plan of care process	299	4.35	0.04	198	4.26	0.05	150	4.31	0.05	419	4.08	0.04
222	nurse aide's role in assisting client with life transitions	299	4.29	0.04	197	4.26	0.05	152	4.26	0.06	414	3.92	0.04
223	performance improvement and cost containment programs	298	3.87	0.06	197	3.89	0.07	151	3.88	0.07	416	3.58	0.05
224	prioritizing client care	298	4.38	0.04	197	4.25	0.05	151	4.35	0.05	415	4.29	0.04
225	promoting family's role in client care	300	4.16	0.05	195	4.13	0.06	149	4.21	0.06	411	3.81	0.04
226	the nurse aide role in assisting the nurse with a dressing change	296	4.02	0.05	196	4.03	0.06	152	4.08	0.06	418	3.61	0.04
227	ways to modify nurse aide's behavior in response to the client's behavior	296	4.39	0.04	196	4.29	0.05	152	4.40	0.05	417	4.19	0.03
228	working within a team	299	4.64	0.03	198	4.55	0.05	152	4.60	0.04	414	4.55	0.03

CONCLUSIONS

The 2010 Knowledge Survey of NAs employed several methods to describe the knowledge needed by certified entry-level NAs in the U.S.: (1) document reviews; (2) entry-level NAs activity list review; (3) SMEs; and (4) a large scale survey. The reliability and validity of the survey instruments was quite good. Responders found the knowledge statements listed in the survey to be representative of the knowledge needed for a certified entry-level NA to perform their work safely and effectively.

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APPENDIX A: 2010 KNOWLEDGE SURVEY OF NURSE AIDES METHODOLOGY EXPERTS

Sandra Neustel, PhD, is director of Psychometrics and Research at the National Board of Examiners in Optometry. She oversees scoring, analysis and reporting of all optometry examinations. Neustel is an expert in the field of licensure and certification testing. She has co-authored chapters in testing and measurement handbooks, including *Educational Measurement: Issues and Practice* and *Handbook of Test Development*. Prior to joining the National Board of Examiners in Optometry, Neustel was a psychometrician at the American Registry of Radiologic Technologists.

William Ellery Samuels, PhD, is director of Assessment at the College of Staten Island, The City University of New York. He has created and evaluated education programs in a wide variety of settings, including primary and secondary schools; colleges; and after-school, government, non-profit and community-based programs. In this capacity, Samuels oversees and conducts a variety of job and practice analyses. Prior to returning to academia, he served as director of Humane Education at the American Society for the Prevention of Cruelty to Animals (ASPCA).

Cynthia Searcy, PhD, is managing director of Assessment at the Federation of State Boards of Physical Therapy (FSBPT). She is responsible for leading all assessment-related activities supporting the National Physical Therapy Examination, including the Physical Therapist and Physical Therapist Assistant Examinations and related state-level jurisprudence examinations. With more than 10 years of experience in the testing industry, Searcy is familiar with planning and executing various job analyses and knowledge surveys. Before joining FSBPT, Searcy was senior research scientist at the American Institutes for Research in Washington, D.C.

APPENDIX B: SUBJECT MATTER EXPERT PANEL

Area I

Participant: Anita Beaver, RN, NAC Program Director

Employer: Ferry County Hospital District 1
Republic, Wyo.

Beaver has been in nursing for 12 years and has been teaching nurse aides/nursing assistants (NAs) for three years. She currently supervises and teaches nursing assistants certified (NACs).

Participant: Toni Decklever, MA, RN, Trainer and Consultant

Employer: State of Wyoming
Cheyenne, Wyo.

Decklever has been in nursing for 26 years and has been teaching NAs for 20 years. She is currently the state coordinator for the National Nurse Aide Assessment Program (NNAAP®) testing process in Wyoming. She is also a consultant for certified nursing assistant (CNA) programs.

Participant: Ginger Pierson, MSN, RN, CCRN, CNS, Clinical Nurse Specialist

Employer: Hoag Memorial Hospital Presbyterian
Newport Beach, Calif.

Pierson has been in nursing for 29 years and has been teaching NAs for 19 years. She currently supervises and teaches CNAs.

Participant: Carol Whitehurst, MN, RN, Director of Education

Employer: Casa Dorinda
Santa Barbara, Calif.

Whitehurst has been in nursing for 29 years and has been teaching NAs for 20 years. She currently orients, trains and educates CNAs.

Area II

Participant: Carrie Claybundy, RN, Director of Nursing, Long-term Care

Employer: Lakewood Health Center
Baudette, Minn.

Claybundy has been in nursing for 10 years and has been teaching NAs for five years. In her current capacity, she supervises CNAs.

Participant: Bonnie Wendt, RN, Coordinator of Nursing Assistant Registry

Employer: Minnesota Health Department
St. Paul, Minn.

Wendt has been in nursing for 31 years and has been supervising NAs for five years. She currently oversees the approval of NA training and testing programs.

Area III

Participant: Mary Francisco, RN, DON, Quality Management Consultant

Employer: Sentara Life Care Corporation
Norfolk, Va.

Francisco has been in nursing for 39 years and has been teaching NAs for 15 years. She currently coordinates and oversees the education of CNAs in seven facilities.

Participant: Danielle Hull, CNA
Employer: Parthenon Healthcare of Crestview
 Crestview, Fla.

Hull has been a CNA for less than one year. She participated in the KSA Job Analysis Meeting to provide her expertise as an entry-level CNA.

Participant: Christie King, RN, CNA, Staff Developer
Employer: Parthenon Healthcare of Crestview
 Crestview, Fla.

King has been in nursing for 14 years and has been teaching NAs for eight years. As staff developer, she teaches the CNA prep course.

Participant: Maxine Lindsey, RN, Executive Director
Employer: CNA Training Center
 Jackson, Miss.

Lindsey has been in nursing for 41 years. In her current position, she is responsible for overall management of the CNA training school, in addition to providing classroom and clinical instruction.

Participant: Agnes Moore, RN, NBCT, Nurse Aide Program Manager
Employer: NCDPI/CTE/HOE/Nurse Aide
 Raleigh, N.C.

Moore has been in nursing for 35 years and has been teaching NAs for nine years. She currently manages the NA program.

Participant: Anita Worrell, RN, Director of Nursing
Employer: Cabot Nursing and Rehabilitation
 Cabot, Ark.

Worrell has been in nursing for 13 years. In her current position, she manages a staff of 60 in an 89-bed facility.

Area IV

Participant: Cindy Criswell, MS, RN, Director of Nursing
Employer: Good Shepherd
 Allentown, Pa.

Throughout her 34-year nursing career, Criswell has been supervising NAs. In her current capacity, she oversees the nursing program.

Participant: Teresa Englemann, RN, CRRN, Regional Coordinator, Nurse Aide Instructor
Employer: TLC Institute
 Harrisburg, Pa.

Englemann has been in nursing for 40 years and has been teaching NAs for five years. She currently works as an instructor for NA programs.

APPENDIX C: IMPORTANCE RATINGS SORTED BY LOWEST TO HIGHEST AVERAGE IMPORTANCE RATING BY THE ENTRY-LEVEL COHORT

Know #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
1	basic foot anatomy	209	3.11	0.07	227	3.18	0.07	197	3.36	0.08	394	2.87	0.05									
143	converting pounds to kilograms	298	3.42	0.07	200	3.53	0.08	150	3.47	0.10	419	2.67	0.06									
22	procedures for serving and removing meal tray	209	3.59	0.07	224	3.53	0.06	196	3.52	0.07	399	3.49	0.05									
142	converting ounces to milliliters	298	3.62	0.06	199	3.64	0.08	147	3.44	0.10	419	2.89	0.06									
133	reality orientation therapy	293	3.67	0.06	198	3.77	0.06	145	3.81	0.06	418	3.51	0.04									
4	nail care procedures	209	3.68	0.07	228	3.64	0.06	193	3.76	0.07	401	3.57	0.05									
110	procedure for making occupied or unoccupied beds	211	3.75	0.06	228	3.75	0.06	192	3.78	0.05	399	3.81	0.04									
194	the need for an interpreter	295	3.75	0.06	200	3.80	0.07	151	3.75	0.08	419	3.44	0.05									
141	validation therapy	295	3.76	0.06	193	3.77	0.07	146	3.84	0.08	415	3.35	0.05									
139	types, applications and uses of restraints	296	3.77	0.07	198	3.87	0.08	150	3.85	0.10	412	3.42	0.07									
10	purpose for nail care	209	3.79	0.07	227	3.83	0.06	195	3.83	0.07	397	3.66	0.05									
7	procedures for foot care	211	3.86	0.06	227	3.84	0.06	198	3.98	0.06	398	3.73	0.05									
223	performance improvement and cost containment programs	298	3.87	0.06	197	3.89	0.07	151	3.88	0.07	416	3.58	0.05									
170	client recreational activities	287	3.89	0.05	192	3.95	0.05	147	4.01	0.06	420	3.55	0.04									
207	ways to support the sexuality of the client	295	3.92	0.05	201	4.07	0.06	147	4.09	0.07	416	3.71	0.04									
119	promoting client participation in recreational activities	507	3.92	0.04	426	3.88	0.04	343	3.83	0.05	819	3.53	0.03									
167	prosthetic and orthotic devices	294	3.93	0.05	196	3.99	0.06	147	4.03	0.07	419	3.70	0.04									
114	procedures for different types of baths	211	3.95	0.06	228	3.93	0.06	194	3.98	0.05	399	3.90	0.04									
138	turning, coughing and deep breathing techniques	299	3.96	0.05	201	4.05	0.06	150	4.18	0.07	420	3.61	0.05									
118	promoting client participation in group or other activities	506	3.96	0.04	426	3.91	0.04	343	3.84	0.04	818	3.55	0.03									
113	procedures for admission, discharge and transfer	209	3.97	0.06	225	3.74	0.07	192	3.80	0.07	397	3.43	0.06									

Know #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
109	positioning devices	210	3.97	0.06	228	3.89	0.06	195	3.99	0.05	398	3.88	0.04									
14	procedures for grooming	213	3.97	0.06	227	3.89	0.05	198	3.97	0.05	400	3.95	0.04									
3	denture removal and insertion	212	4.00	0.06	227	3.91	0.06	194	3.97	0.05	393	4.06	0.04									
102	devices used to measure client's height and weight	211	4.00	0.06	229	3.81	0.06	195	3.89	0.06	398	3.75	0.05									
101	client's personal equipment maintenance and care	212	4.01	0.06	227	3.96	0.05	193	3.94	0.06	400	3.73	0.04									
95	behavior modification	211	4.01	0.06	229	4.07	0.05	195	4.07	0.05	400	3.62	0.04									
226	the nurse aide role in assisting the nurse with a dressing change	296	4.02	0.05	196	4.03	0.06	152	4.08	0.06	418	3.61	0.04									
164	adaptive devices for clients with sensory impairment	293	4.03	0.05	198	4.12	0.05	144	4.17	0.06	421	3.86	0.04									
38	purpose, types and uses of toileting equipment and devices	209	4.03	0.06	228	3.96	0.05	193	3.99	0.06	399	3.97	0.04									
40	urinary catheter types	208	4.03	0.06	229	3.90	0.06	192	3.79	0.07	399	3.47	0.05									
195	advanced directives	293	4.03	0.05	199	3.99	0.06	147	4.14	0.07	416	3.64	0.05									
175	personal preference considerations	297	4.04	0.04	198	4.04	0.05	152	3.91	0.07	418	3.91	0.04									
97	care, cleaning and storage of equipment	212	4.05	0.06	226	3.92	0.05	196	3.96	0.06	399	3.69	0.04									
15	purposes for grooming	510	4.05	0.03	424	4.04	0.04	345	4.07	0.04	818	4.00	0.02									
219	nurse aide role in reinforcement of client and family education	297	4.05	0.05	198	4.05	0.06	149	4.13	0.06	418	3.91	0.04									
37	ostomy types	208	4.06	0.06	226	3.91	0.05	192	3.85	0.07	397	3.43	0.05									
163	the aging process and its effect on the body	294	4.06	0.05	197	4.04	0.06	149	4.11	0.05	420	3.91	0.04									
205	restraint alternatives	297	4.06	0.05	198	3.99	0.06	150	4.05	0.08	414	3.99	0.05									
16	adaptive eating devices	211	4.06	0.06	226	3.98	0.06	195	4.11	0.06	398	3.81	0.04									
130	procedures to measure and record client's height and weight	299	4.07	0.05	198	4.08	0.06	151	4.18	0.05	418	3.98	0.04									
39	types and uses of incontinence products	210	4.07	0.06	226	3.96	0.05	193	3.85	0.05	398	3.86	0.04									

Appendix C. Importance Ratings Sorted By Lowest to Highest Average Importance Rating By the Entry-Level Cohort

Item #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
155	normal joint mobility	294	4.07	0.05	200	4.07	0.06	150	4.11	0.06	413	3.92	0.04									
44	measures to promote rest and sleep	209	4.07	0.05	224	4.01	0.05	192	3.95	0.06	400	3.91	0.04									
103	elastic stockings/anti-embolism hose application and removal techniques	513	4.07	0.03	427	4.07	0.04	347	4.11	0.04	817	4.03	0.03									
21	methods for giving fluids by mouth	210	4.08	0.06	227	4.04	0.06	195	4.14	0.06	398	4.16	0.04									
217	how to identify self by name and job title	298	4.08	0.05	198	4.04	0.06	149	4.17	0.05	415	4.03	0.04									
182	cultural and personal preference considerations	296	4.08	0.04	201	4.08	0.05	152	4.13	0.06	420	3.85	0.04									
9	purpose for mouth care	212	4.08	0.06	227	4.11	0.05	195	4.12	0.06	399	4.05	0.04									
106	equipment and supplies needed for bathing	211	4.09	0.05	226	4.01	0.05	196	4.05	0.05	398	4.00	0.04									
169	behaviors related to cognitive impairments	286	4.09	0.04	192	4.18	0.05	147	4.24	0.05	419	4.06	0.03									
186	the need to report client's cultural/religious/spiritual preferences and needs	297	4.11	0.05	200	4.15	0.05	151	4.14	0.06	419	3.92	0.04									
177	sensory impairments	298	4.11	0.04	201	4.15	0.05	150	4.12	0.06	420	3.97	0.03									
188	approved medical terminology	299	4.11	0.05	200	4.11	0.06	151	4.21	0.06	419	3.74	0.04									
2	care for dentures	213	4.12	0.05	227	4.00	0.05	196	4.03	0.05	399	4.08	0.03									
179	techniques for helping the client express emotions	298	4.12	0.04	199	4.15	0.05	151	4.15	0.05	420	3.85	0.04									
120	client's religious and cultural beliefs and practices	510	4.12	0.03	427	4.10	0.04	344	4.09	0.04	820	3.83	0.03									
64	client positioning during mouth care	213	4.12	0.06	228	4.00	0.05	195	4.04	0.06	397	4.08	0.04									
31	bowel and bladder training	208	4.13	0.06	228	4.08	0.05	196	4.12	0.06	400	3.91	0.04									
26	supplemental nutrition	211	4.13	0.06	226	4.09	0.05	196	4.18	0.06	400	3.85	0.04									
132	prosthetic and orthotic device application and removal techniques	296	4.13	0.05	199	4.18	0.06	152	4.24	0.06	419	3.81	0.04									

Know #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
161	range of motion exercises	295	4.13	0.04	197	4.22	0.04	148	4.25	0.05	420	4.00	0.04	420	4.00	0.04	420	4.00	0.04			
5	normal versus abnormal mouth conditions	210	4.13	0.06	226	4.05	0.06	196	4.13	0.06	397	3.83	0.05	397	3.83	0.05	397	3.83	0.05			
153	complications due to prosthetic and orthotic device use	297	4.14	0.05	198	4.22	0.06	149	4.21	0.07	415	3.95	0.04	415	3.95	0.04	415	3.95	0.04			
136	specimen collection types and procedures	295	4.14	0.05	199	4.23	0.06	149	4.28	0.06	417	3.72	0.05	417	3.72	0.05	417	3.72	0.05			
104	emotional support techniques	212	4.15	0.05	227	4.15	0.05	195	4.11	0.05	400	3.88	0.04	400	3.88	0.04	400	3.88	0.04			
48	the benefits of physical comfort	209	4.15	0.05	223	4.14	0.05	189	4.26	0.05	399	4.06	0.03	399	4.06	0.03	399	4.06	0.03			
225	promoting family's role in client care	300	4.16	0.05	195	4.13	0.06	149	4.21	0.06	411	3.81	0.04	411	3.81	0.04	411	3.81	0.04			
149	procedures for calculating and recording meal intake	299	4.16	0.04	201	4.23	0.05	150	4.22	0.06	416	3.99	0.04	416	3.99	0.04	416	3.99	0.04			
190	identifying and reporting barriers to communication	298	4.16	0.04	201	4.17	0.05	150	4.21	0.05	420	4.00	0.03	420	4.00	0.03	420	4.00	0.03			
151	reporting changes in client's weight	296	4.17	0.04	200	4.35	0.05	152	4.46	0.05	418	4.08	0.04	418	4.08	0.04	418	4.08	0.04			
196	client grievance and dispute processes	291	4.18	0.04	201	4.15	0.05	150	4.17	0.06	418	3.72	0.05	418	3.72	0.05	418	3.72	0.05			
116	range of motion precautions	509	4.18	0.03	424	4.20	0.04	345	4.22	0.04	819	4.05	0.03	819	4.05	0.03	819	4.05	0.03			
100	client transport methods and devices	212	4.19	0.05	226	4.14	0.05	195	4.02	0.05	397	3.84	0.04	397	3.84	0.04	397	3.84	0.04			
8	procedures for mouth care	211	4.19	0.05	228	4.17	0.05	194	4.20	0.05	397	4.15	0.03	397	4.15	0.03	397	4.15	0.03			
111	procedure for performing and recording pulse oximetry	210	4.19	0.06	227	4.08	0.06	191	4.13	0.06	396	3.56	0.06	396	3.56	0.06	396	3.56	0.06			
73	how to provide a clean, safe and neat living space	213	4.20	0.05	229	4.11	0.05	196	4.22	0.05	398	4.06	0.04	398	4.06	0.04	398	4.06	0.04			
96	care for client in restraints	212	4.20	0.06	229	4.20	0.05	193	4.17	0.06	399	4.03	0.05	399	4.03	0.05	399	4.03	0.05			
105	environmental conditions for bathing clients	212	4.20	0.05	228	4.11	0.05	197	4.20	0.04	399	4.06	0.03	399	4.06	0.03	399	4.06	0.03			
173	cognitive impairments	278	4.21	0.04	188	4.14	0.05	142	4.22	0.05	420	4.01	0.03	420	4.01	0.03	420	4.01	0.03			
124	promoting client and family role in plan of care	508	4.22	0.03	424	4.17	0.04	344	4.24	0.04	815	3.91	0.03	815	3.91	0.03	815	3.91	0.03			

Appendix C. Importance Ratings Sorted By Lowest to Highest Average Importance Rating By the Entry-Level Cohort

K no #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
144	how to report and document client behavior	298	4.22	0.04	200	4.24	0.05	150	4.33	0.05	420	4.02	0.04									
117	the need to promote client independence	501	4.22	0.03	424	4.22	0.03	338	4.20	0.03	819	3.96	0.03									
137	techniques and devices for addressing the unique needs and behaviors of the client with cognitive impairment	299	4.22	0.04	198	4.24	0.05	152	4.35	0.06	417	4.16	0.04									
13	procedures for dressing and undressing clients	212	4.23	0.05	227	4.07	0.05	196	4.03	0.05	399	4.07	0.04									
174	meeting the needs of sensory impaired clients	299	4.23	0.04	200	4.27	0.05	151	4.28	0.06	420	4.08	0.03									
107	ostomy care procedures	212	4.23	0.06	227	4.16	0.05	195	4.02	0.06	398	3.60	0.05									
19	foods included in fluid intake	211	4.23	0.05	228	4.21	0.05	197	4.23	0.06	400	4.15	0.04									
156	normal versus abnormal skin and nail conditions	297	4.23	0.04	197	4.28	0.05	151	4.26	0.05	411	4.11	0.04									
176	physical and emotional benefits of bathing clients	299	4.23	0.04	199	4.25	0.04	151	4.28	0.05	421	4.09	0.03									
18	feeding techniques	213	4.23	0.05	226	4.18	0.05	191	4.37	0.06	400	4.23	0.04									
201	client's environmental preferences	296	4.24	0.04	200	4.18	0.05	150	4.17	0.06	417	4.08	0.03									
99	client preparation for diagnostic test, procedure or surgery per directive	211	4.24	0.06	226	4.14	0.06	195	4.11	0.07	396	3.61	0.05									
12	obstacles that affect dressing and undressing clients	212	4.24	0.06	226	4.14	0.05	196	4.09	0.05	400	4.01	0.04									
180	the stages of grief	298	4.24	0.04	200	4.25	0.05	151	4.31	0.05	420	3.83	0.04									
29	the role of nutrition and hydration on skin care	210	4.25	0.05	227	4.20	0.05	197	4.29	0.05	398	3.99	0.04									
189	chain of command	295	4.25	0.04	201	4.27	0.05	150	4.34	0.05	418	4.11	0.04									
168	basic emotional needs	289	4.26	0.04	194	4.22	0.05	150	4.24	0.05	421	4.05	0.03									
166	client mobility and functional limitations	293	4.26	0.04	193	4.23	0.05	151	4.26	0.05	419	4.12	0.03									

Know #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
108	oxygen devices and methods of delivery	211	4.26	0.06	225	4.16	0.06	195	4.08	0.06	400	3.89	0.04									
158	pressure relieving devices and techniques	295	4.26	0.05	197	4.30	0.05	147	4.34	0.06	420	4.34	0.03									
150	reporting changes in client's intake and output	298	4.26	0.04	197	4.36	0.06	151	4.43	0.05	414	4.13	0.04									
131	procedures to secure and respect client's personal belongings	299	4.26	0.04	200	4.16	0.05	152	4.27	0.05	418	3.89	0.04									
193	shift change report	297	4.27	0.04	200	4.30	0.05	149	4.35	0.05	417	4.18	0.04									
215	continuing education or in-service requirements	297	4.27	0.04	198	4.19	0.05	150	4.29	0.06	417	4.11	0.04									
165	ambulation devices and use	292	4.27	0.04	198	4.25	0.05	149	4.23	0.06	417	4.11	0.03									
112	procedures and techniques for measuring and recording intake and output	211	4.27	0.05	227	4.15	0.05	195	4.19	0.06	397	4.00	0.05									
183	dignity, spiritual and cultural considerations after death	299	4.28	0.04	200	4.17	0.06	151	4.27	0.06	420	3.91	0.04									
98	client positioning techniques	212	4.28	0.05	227	4.22	0.05	197	4.20	0.05	395	4.19	0.04									
146	normal versus abnormal pulse oximetry readings	297	4.29	0.05	200	4.35	0.06	147	4.41	0.07	418	3.72	0.06									
187	active listening skills	299	4.29	0.04	200	4.30	0.05	151	4.35	0.05	415	4.19	0.03									
145	intake and output calculations	297	4.29	0.04	200	4.29	0.05	152	4.45	0.05	415	3.98	0.04									
222	nurse aide's role in assisting client with life transitions	299	4.29	0.04	197	4.26	0.05	152	4.26	0.06	414	3.92	0.04									
94	ambulation techniques with and without a device	213	4.29	0.05	228	4.16	0.05	195	4.28	0.04	400	4.24	0.03									
178	skills that promote client's feeling of acceptance and belonging	298	4.29	0.04	201	4.27	0.05	151	4.25	0.05	418	4.00	0.04									
171	client's need for acceptance and sense of belonging	280	4.30	0.04	191	4.29	0.05	147	4.29	0.05	421	4.02	0.04									
203	interactions to promote client dignity during meals	299	4.30	0.04	200	4.27	0.05	150	4.33	0.05	415	4.22	0.03									

Appendix C. Importance Ratings Sorted By Lowest to Highest Average Importance Rating By the Entry-Level Cohort

Item #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
121	how to handle conflict	508	4.31	0.03	425	4.31	0.03	345	4.29	0.04	815	4.15	0.03									
45	pain relief or comfort measures	208	4.31	0.05	223	4.31	0.05	194	4.30	0.05	398	4.20	0.04									
181	care for the body after death	298	4.31	0.04	200	4.23	0.05	150	4.30	0.06	419	3.82	0.04									
20	measuring oral fluid intake	211	4.31	0.05	227	4.22	0.05	197	4.36	0.05	401	4.19	0.04									
33	emptying urinary drainage device	211	4.31	0.05	226	4.26	0.05	194	4.23	0.05	398	4.22	0.04									
135	skills that promote client's sense of security	300	4.32	0.04	199	4.30	0.04	147	4.29	0.05	418	4.11	0.03									
148	observing and reporting behavioral changes	299	4.32	0.04	200	4.35	0.05	150	4.39	0.05	416	4.23	0.03									
115	observing, recording and measuring intake and output	507	4.33	0.03	427	4.24	0.04	345	4.30	0.04	818	4.08	0.03									
82	restraint complications	209	4.33	0.05	229	4.18	0.06	191	4.22	0.07	396	4.28	0.05									
218	nurse aide role as a member of the healthcare team	298	4.33	0.04	199	4.29	0.05	149	4.36	0.05	416	4.21	0.03									
78	oxygen safety and storage	212	4.33	0.05	228	4.30	0.05	195	4.44	0.05	395	4.21	0.04									
200	client-centered environment	299	4.34	0.04	200	4.28	0.04	152	4.29	0.05	417	4.20	0.03									
86	safety techniques during toileting	213	4.34	0.05	226	4.24	0.05	196	4.33	0.04	396	4.40	0.03									
157	normal versus abnormal skin appearance	297	4.34	0.04	196	4.34	0.05	150	4.37	0.05	417	4.26	0.03									
127	procedures for obtaining and recording body temperature	299	4.34	0.04	200	4.34	0.05	153	4.46	0.05	419	4.15	0.04									
36	normal versus abnormal ostomy output	209	4.34	0.05	227	4.24	0.05	194	4.26	0.06	399	3.92	0.05									
208	documentation guidelines	298	4.35	0.04	198	4.35	0.05	151	4.36	0.05	416	4.28	0.03									
172	client's need for sense of security	275	4.35	0.04	189	4.36	0.04	146	4.37	0.05	419	4.10	0.04									
128	procedures for obtaining and recording pulse rate	296	4.35	0.04	200	4.37	0.05	153	4.47	0.05	421	4.14	0.04									
221	nurse aide's participation in plan of care process	299	4.35	0.04	198	4.26	0.05	150	4.31	0.05	419	4.08	0.04									

Know #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
46	physical comfort measures and techniques	504	4.36	0.03	424	4.31	0.03	342	4.29	0.03	812	4.22	0.02	812	4.22	0.02	812	4.22	0.02			
92	the purpose for client rounds	212	4.36	0.04	227	4.26	0.05	194	4.22	0.06	399	4.07	0.05	399	4.07	0.05	399	4.07	0.05			
129	procedures for obtaining and recording respiratory rate	300	4.36	0.04	201	4.33	0.05	153	4.46	0.05	418	4.15	0.04	418	4.15	0.04	418	4.15	0.04			
192	respectful communication skills	298	4.37	0.03	200	4.32	0.05	150	4.39	0.05	417	4.31	0.03	417	4.31	0.03	417	4.31	0.03			
41	client specific needs during position changes	208	4.38	0.05	227	4.28	0.05	195	4.30	0.05	399	4.32	0.04	399	4.32	0.04	399	4.32	0.04			
224	prioritizing client care	298	4.38	0.04	197	4.25	0.05	151	4.35	0.05	415	4.29	0.04	415	4.29	0.04	415	4.29	0.04			
191	respectful communication	297	4.38	0.03	201	4.32	0.04	152	4.38	0.04	419	4.32	0.03	419	4.32	0.03	419	4.32	0.03			
66	client-safety alarm types and uses	212	4.38	0.05	228	4.27	0.05	194	4.23	0.05	398	4.14	0.04	398	4.14	0.04	398	4.14	0.04			
159	procedures for inspecting and providing skin care	298	4.38	0.04	199	4.40	0.04	149	4.35	0.05	421	4.44	0.03	421	4.44	0.03	421	4.44	0.03			
160	purposes of skin care	299	4.38	0.04	199	4.40	0.04	149	4.36	0.05	420	4.42	0.03	420	4.42	0.03	420	4.42	0.03			
126	procedures for obtaining and recording blood pressure	299	4.39	0.04	201	4.39	0.05	153	4.49	0.05	421	4.11	0.05	421	4.11	0.05	421	4.11	0.05			
227	ways to modify nurse aide's behavior in response to the client's behavior	296	4.39	0.04	196	4.29	0.05	152	4.40	0.05	417	4.19	0.03	417	4.19	0.03	417	4.19	0.03			
204	privacy, dignity, safety and comfort during linen changes	297	4.40	0.04	200	4.38	0.05	151	4.34	0.05	416	4.30	0.03	416	4.30	0.03	416	4.30	0.03			
185	the death and dying process	298	4.40	0.04	199	4.38	0.05	151	4.36	0.05	418	4.11	0.03	418	4.11	0.03	418	4.11	0.03			
30	assisting the client with toileting	210	4.40	0.05	226	4.34	0.05	195	4.26	0.05	398	4.37	0.03	398	4.37	0.03	398	4.37	0.03			
199	client-centered care	297	4.41	0.04	201	4.36	0.04	148	4.34	0.05	419	4.30	0.03	419	4.30	0.03	419	4.30	0.03			
184	dignity, spiritual and cultural considerations for death and dying	299	4.41	0.04	200	4.36	0.05	150	4.36	0.05	418	4.10	0.04	418	4.10	0.04	418	4.10	0.04			
206	the need to explain care to client prior to procedures	298	4.41	0.04	199	4.42	0.04	152	4.40	0.05	415	4.41	0.03	415	4.41	0.03	415	4.41	0.03			
87	self limitations and understanding when to seek assistance	212	4.42	0.05	227	4.34	0.04	195	4.34	0.04	397	4.45	0.03	397	4.45	0.03	397	4.45	0.03			

Appendix C. Importance Ratings Sorted By Lowest to Highest Average Importance Rating By the Entry-Level Cohort

Item #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
		140	urinary catheter care procedures	300	4.42	0.04	200	4.48	0.05	150	4.42	0.06	419
79	reasons for checking client status routinely	213	4.43	0.04	227	4.35	0.05	194	4.38	0.05	395	4.32	0.04
72	fire prevention techniques	211	4.44	0.05	227	4.36	0.05	191	4.42	0.05	398	4.29	0.04
125	procedures for moving a client in bed	298	4.44	0.04	201	4.34	0.05	152	4.32	0.05	418	4.28	0.03
85	safety considerations during transport	211	4.44	0.05	227	4.26	0.05	195	4.38	0.05	397	4.31	0.04
147	normal versus abnormal vital signs	296	4.45	0.04	200	4.48	0.05	149	4.56	0.05	416	4.17	0.05
77	methods used to identify client	213	4.45	0.05	229	4.39	0.05	195	4.55	0.05	395	4.42	0.04
62	body mechanics	199	4.45	0.04	213	4.37	0.05	186	4.43	0.04	399	4.45	0.03
75	lifting and transfer devices	213	4.45	0.05	228	4.35	0.05	196	4.42	0.05	395	4.42	0.03
202	how to promote client self-esteem and dignity	295	4.45	0.03	201	4.39	0.04	149	4.36	0.05	417	4.32	0.03
11	purpose for skin care	510	4.45	0.03	427	4.46	0.03	347	4.47	0.03	819	4.52	0.02
84	safety and accident prevention measures and devices	210	4.46	0.05	226	4.32	0.04	197	4.41	0.04	397	4.43	0.03
43	correct body alignment and positioning techniques	208	4.47	0.04	223	4.44	0.04	196	4.41	0.04	399	4.44	0.03
25	special diets	507	4.47	0.03	427	4.42	0.03	348	4.46	0.04	814	4.15	0.03
93	timely response to and importance of call systems	212	4.49	0.04	227	4.32	0.05	195	4.27	0.06	398	4.30	0.04
35	normal versus abnormal characteristics of urine and stool	509	4.49	0.03	427	4.46	0.03	344	4.47	0.04	813	4.23	0.03
154	normal and abnormal color, movement and sensation of extremities	296	4.49	0.04	200	4.57	0.04	149	4.55	0.05	418	4.32	0.04
6	procedure and purpose for providing pericare	210	4.49	0.05	226	4.41	0.05	193	4.31	0.06	398	4.41	0.04
152	reporting process for suicidal clients	297	4.49	0.04	200	4.58	0.05	152	4.65	0.05	416	4.28	0.04

Appendix C. Importance Ratings Sorted By Lowest to Highest Average Importance Rating By the Entry-Level Cohort													
Know #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
63	call system devices and placement within reach	200	4.51	0.04	217	4.43	0.05	184	4.39	0.05	398	4.28	0.04
211	procedures to report unusual incidents	298	4.51	0.03	201	4.43	0.05	150	4.46	0.05	414	4.35	0.03
65	client risk factors for injuries	213	4.51	0.04	229	4.37	0.04	196	4.44	0.04	397	4.34	0.03
83	safe transfer and lifting techniques	212	4.51	0.04	227	4.47	0.04	194	4.48	0.04	396	4.56	0.03
90	strategies to safely care for angry or potentially violent clients	211	4.52	0.04	227	4.51	0.04	196	4.52	0.04	398	4.47	0.03
122	how to maintain dignity and privacy during care	507	4.52	0.03	426	4.50	0.03	342	4.50	0.03	815	4.50	0.02
42	comfort measures and care during the dying process	211	4.52	0.05	229	4.57	0.04	193	4.45	0.05	398	4.39	0.04
123	reporting requirements for disputes, grievances, abuse and suspicious workplace activities	509	4.53	0.03	428	4.43	0.03	345	4.55	0.03	815	4.34	0.03
71	fire and disaster safety plans	213	4.53	0.04	226	4.50	0.04	193	4.53	0.04	398	4.37	0.04
214	suspicious workplace activity	299	4.53	0.04	199	4.51	0.05	152	4.56	0.05	417	4.43	0.03
80	reasons to identify client before care	213	4.54	0.04	228	4.43	0.05	194	4.47	0.05	397	4.47	0.03
34	incontinence care	211	4.54	0.05	228	4.47	0.04	196	4.40	0.04	399	4.46	0.03
61	basic life support procedures	203	4.54	0.05	216	4.42	0.05	184	4.48	0.06	399	4.23	0.05
69	environmental dangers to the client's health and safety	212	4.54	0.05	228	4.46	0.04	193	4.52	0.04	397	4.30	0.04
70	evacuation procedures and techniques	213	4.54	0.04	229	4.46	0.04	195	4.51	0.04	397	4.24	0.04
32	cleaning the client after elimination	209	4.55	0.04	229	4.44	0.05	196	4.38	0.04	396	4.48	0.03
209	Health Insurance Portability and Accountability Act (HIPAA)	299	4.55	0.04	198	4.57	0.04	150	4.47	0.07	416	4.45	0.03
220	nurse aide roles and responsibilities	299	4.55	0.03	199	4.47	0.04	151	4.48	0.04	415	4.37	0.03
162	risk factors for skin breakdown	296	4.55	0.04	196	4.59	0.04	150	4.58	0.05	421	4.45	0.03

Appendix C. Importance Ratings Sorted By Lowest to Highest Average Importance Rating By the Entry-Level Cohort

Item #	Knowledge of	NA 0 to 1 yr.						NA 2 to 10 yrs.						NA 11 or more yrs.						NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.			
210	Health Insurance Portability and Accountability Act (HIPAA) violations	298	4.56	0.04	199	4.59	0.04	149	4.48	0.07	418	4.44	0.03									
49	verbal and nonverbal signs and symptoms of pain or discomfort	210	4.56	0.04	221	4.46	0.04	191	4.42	0.04	399	4.37	0.03									
216	following client's plan of care as assigned	298	4.56	0.03	198	4.48	0.04	151	4.46	0.05	415	4.44	0.03									
60	ambulation safety	205	4.57	0.04	220	4.49	0.04	188	4.47	0.04	398	4.53	0.03									
17	dietary restrictions	213	4.57	0.05	229	4.41	0.05	195	4.47	0.05	400	4.26	0.04									
28	the need for fluids in the body	212	4.58	0.04	228	4.44	0.05	197	4.47	0.05	400	4.18	0.04									
59	the types and uses of personal protective equipment	208	4.58	0.05	220	4.50	0.04	189	4.58	0.04	397	4.57	0.03									
89	signs and symptoms of feeding complications	211	4.58	0.04	227	4.56	0.04	195	4.53	0.05	394	4.52	0.04									
55	droplet precautions	206	4.59	0.05	223	4.57	0.04	191	4.64	0.05	398	4.53	0.03									
23	servicing the correct meal to the correct client	211	4.59	0.04	227	4.45	0.05	195	4.46	0.06	398	4.32	0.05									
68	emergency and disaster situations and responses	510	4.60	0.03	426	4.57	0.03	346	4.63	0.03	817	4.33	0.03									
27	the importance of servicing the correct meal to client	211	4.61	0.04	226	4.52	0.05	195	4.48	0.06	400	4.30	0.04									
197	client privacy and confidentiality	296	4.61	0.03	200	4.65	0.04	150	4.60	0.04	418	4.58	0.03									
91	the importance of responding to client-safety alarms promptly	213	4.61	0.04	228	4.46	0.05	197	4.47	0.05	400	4.51	0.04									
47	reporting client symptoms of pain or discomfort	209	4.61	0.04	224	4.56	0.04	194	4.50	0.04	399	4.62	0.03									
74	indications that client might be suicidal	511	4.62	0.03	429	4.62	0.03	348	4.68	0.03	816	4.38	0.03									
24	signs and symptoms of dehydration	211	4.63	0.04	227	4.55	0.04	197	4.60	0.04	399	4.22	0.04									
50	airborne precautions	206	4.64	0.04	221	4.59	0.04	189	4.60	0.04	398	4.50	0.03									
228	working within a team	299	4.64	0.03	198	4.55	0.05	152	4.60	0.04	414	4.55	0.03									
54	disinfection techniques	205	4.64	0.04	222	4.54	0.04	191	4.54	0.04	396	4.44	0.04									

Appendix C. Importance Ratings Sorted By Lowest to Highest Average Importance Rating By the Entry-Level Cohort													
Know #	Knowledge of	NA 0 to 1 yr.			NA 2 to 10 yrs.			NA 11 or more yrs.			NAE		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
212	right and wrong conduct for nurse aides	299	4.65	0.03	201	4.56	0.04	150	4.58	0.04	416	4.61	0.03
198	client rights	297	4.65	0.03	200	4.67	0.03	151	4.58	0.04	418	4.53	0.03
81	recognizing and reporting signs and symptoms of client's change in condition	212	4.66	0.03	226	4.59	0.04	195	4.64	0.04	396	4.69	0.03
134	safe transfer techniques	300	4.67	0.03	199	4.58	0.04	151	4.65	0.04	419	4.69	0.02
51	biohazardous waste	206	4.68	0.04	219	4.58	0.04	191	4.64	0.04	399	4.45	0.03
53	contact precautions	209	4.69	0.04	222	4.60	0.04	190	4.66	0.04	398	4.60	0.03
88	signs and symptoms of airway obstruction	213	4.69	0.04	228	4.68	0.04	196	4.72	0.04	397	4.77	0.02
57	standard precautions	503	4.70	0.02	421	4.67	0.03	341	4.72	0.03	820	4.78	0.02
52	biohazardous waste disposal	204	4.71	0.04	220	4.58	0.04	188	4.65	0.04	399	4.46	0.04
67	CPR/basic life support skills	212	4.71	0.04	229	4.64	0.04	197	4.64	0.05	398	4.29	0.05
76	methods to relieve choking and clear airway	213	4.77	0.03	229	4.71	0.03	195	4.77	0.04	396	4.69	0.03
58	the spread of infection or infection transmission	206	4.79	0.03	222	4.71	0.04	191	4.77	0.03	396	4.73	0.02
56	hand washing and hand hygiene techniques	507	4.81	0.02	422	4.75	0.02	344	4.78	0.02	819	4.85	0.01
213	signs of suspected neglect, mistreatment or abuse	299	4.83	0.02	199	4.82	0.03	151	4.89	0.03	418	4.76	0.02

APPENDIX D: 2010 NURSE AIDE KNOWLEDGE NONRESPONDER STUDY

Introduction

The National Council of State Boards of Nursing (NCSBN®) conducts studies to assess work environments and emerging practice changes. The goal of this study was to evaluate what knowledge components are necessary for entry-level nurse aide/nursing assistant (NA) work.

Of the 6,500 total health care directors that were sent the packet of surveys, a total of 68 surveys was returned due to incorrect addresses. The adjusted total number of surveys sent was 6,432. An additional 44 respondents were removed from the NA survey because they did not identify how long they were licensed. A total of 806 health care facilities returned NA surveys, of which 492 returned both NA surveys, resulting in 1,298 total NA surveys. A response rate of 12.5% was observed at the facility level for NAs.

For the NAE surveys mailed to the same health care settings, a total of 823 surveys was returned and there were no sample exclusion criteria, but 68 were removed due to incorrect addresses. The adjusted total number of surveys sent was 6,494. The return rate for NAE surveys was 12.7%.

In order to ensure the validity of the results, NCSBN contacted a random sample of individuals who chose not to participate in the survey to ascertain the reasons for not returning the survey and to compare a sample of activity statement ratings, as well as demographic information, against the NA survey responders. The study was also conducted to determine whether there were any systematic differences in those who responded and those who did not.

Background of Study

Findings from the 2010 NA Nonresponder Study will provide possible reasons why individuals do not participate in surveys and show the differences between survey responders and those not responding to determine if they were systematically different in terms of demographics and ratings of the activity statements. This study was conducted to determine if the results for the job analysis were somehow biased.

Table D-1. Hospital/Acute Care

Hospital/Acute Care	NA %	NAE %	Nonresponder %
Central supply	1.9	1.1	0.0
Chemical dependency unit	0.4	0.7	0.0
Emergency room	3.0	3.8	0.0
Extended care facility/rehabilitation unit	24.3	19.9	17.4
Inpatient hospice care	6.2	4.4	8.7
Intensive care unit	1.8	3.3	0.0
Intermediate care/step down unit	4.1	3.9	0.0
Labor and delivery unit	0.7	2.4	4.3
Medical/surgical unit (includes sub-specialties like orthopedics, oncology, etc.)	15.5	19.2	13.0
Nursery	1.2	2.1	4.3
Operating room	0.5	0.9	4.3
Pediatric unit	0.7	2.8	4.3
Postpartum/maternity unit	0.9	2.9	4.3
Psychiatric unit	2.2	2.2	0.0
Recovery room	0.9	0.9	4.3
Other	8.9	10.4	13.0

Table D-2. Nursing Home/Long-term Care

Nursing Home/Long-term Care	NA %	NAE %	Nonresponder %
Assisted living facility	19.3	10.3	13.0
Intermediate care unit	11.2	15.2	8.7
Personal care unit	13.3	6.0	4.3
Skilled care unit	42.5	53.8	65.2
Sub-acute unit	5.4	6.9	8.7
Other	5.5	5.5	8.7

Table D-3. Community/Home Health Care

Community home health care	NA %	NAE %	Nonresponder %
Clinic/outpatient unit/ambulatory surgical care	2.9	1.1	0.0
Home health in client's residence	14.6	10.4	17.4
Hospice care in client's residence	6.1	4.1	13.0
Other	5.0	2.9	8.7
Sub-acute unit	5.4	6.9	8.7
Other	5.5	5.5	8.7

Know. #	Knowledge of	NA 0 to 1 yr.			NAE			Nonresponder		
		N	Avg.	Std. Err.	N	Avg.	Std. Err.	N	Avg.	Std. Err.
13	procedures for dressing and undressing client	212	4.23	0.05	399	4.07	0.04	22	4.36	0.19
23	servicing the correct meal to the correct client	211	4.59	0.04	398	4.32	0.05	21	4.55	0.24
30	assisting the client with toileting	210	4.4	0.05	398	4.37	0.03	22	4.68	0.12
98	client positioning techniques	212	4.28	0.05	395	4.19	0.04	22	4.86	0.07
115	observing, recording and measuring intake and output	507	4.33	0.03	818	4.08	0.03	21	4.45	0.26
166	client mobility and functional limitations	293	4.26	0.04	419	4.12	0.03	22	4.77	0.09
178	skills that promote client's feeling of acceptance and belonging	298	4.29	0.04	418	4.00	0.04	22	4.50	0.17
182	cultural and personal preference considerations	296	4.08	0.04	420	3.85	0.04	22	4.27	0.18
122	how to maintain dignity and privacy during care	507	4.52	0.03	815	4.50	0.02	22	4.86	0.07
216	following client's plan of care as assigned	298	4.56	0.03	415	4.44	0.03	22	4.86	0.07

Methodology

Sample Selection

A random sample of certified entry-level NAs who were invited, but did not respond to the 2010 Knowledge Survey of NAs, was mailed a short survey containing a few demographic questions and 10 knowledge statements.

Survey Instrument and Process

Nonresponders were mailed a short version of the survey where they were asked about their reasons for not completing the original survey. In order to facilitate the gathering of data from nonresponders, NCSBN developed a list of possible reasons why invitees may not have responded to the survey based on prior research. Possible reasons included the following: too busy, did not care, do not like/trust surveys, did not receive or other. Second, individuals were asked demographic information in order to provide background information on nonresponders, such as employment setting/specialty and length of time working as an NA or

nurse aide/assistant evaluator (NAE). In addition, nonresponders were asked to rate the importance of 10 knowledge statements that were listed in the NA job analysis survey. This survey contains the responses of 23 NAs or NAEs who participated in the nonresponder study.

Nonresponder Results

Reasons for Not Responding

Reasons for not responding included, but were not limited to, did not receive (34.8%), too busy (26.1%) or other (39.1%). None of the nonresponders indicated did not care or do not like/trust surveys as a reason for not returning the survey.

Licenses/Certifications Held

Most (60.9%) held an RN license, 26.1% selected CNA, 8.7% were an LPN/VN and 8.7% selected other.

Work Position

Of the 23 responses, 36.4% indicated that their position was as an NA, 31.8% indicated that they were

an NAE, 31.8% selected other and one respondent did not answer the question.

Employment Setting/Specialty

Nonresponders were asked to provide their employment setting/specialty. The different nursing specialties/employment settings were well represented in this sample as seen in Tables D-1, D-2 and D-3. The largest percentage in nursing home/long-term care settings (65.2%) worked in a skilled care unit (the largest percentage in the original survey); in hospital/acute settings, the largest percentage (17.4%) worked in an extensive care facility/rehabilitation unit; and in community/home health settings, the largest percentage (17.4%) worked in home health in a client's residence. Few worked in all of the community settings.

Importance Ratings

In general, the importance ratings between nonresponders and responders were very similar, with no activity statement's importance rating differing by more than 0.70 points. Nonresponders systematically provided higher ratings. See *Table D-4 for a comparison of importance ratings between responders and nonresponders.*

Summary

The nonresponder study suggests that the main reasons individuals did not complete the study was because they were either too busy, did not receive the survey or for other reasons. Overall, these results provide important information on why individuals do not complete surveys. More importantly, the ratings of the knowledge statements were similar, which indicates that the results of the survey are not systematically biased. The nonresponder study provides support for the validity of the results from the 2010 Knowledge Survey of NAs.

SECTION 1: WORK ENVIRONMENT

NOTE: Answer all of the following questions based on your last day of work as a nurse aide.

- 1. Which of the following best describes your employment setting(s) on the last day you worked as a nurse aide?**
(Review the entire list and select ALL that apply.)

HOSPITALS or ACUTE CARE SETTINGS

- Central supply
- Chemical dependency unit
- Emergency room
- Extended care facility/Rehabilitation unit
- In-patient hospice care
- Intensive care unit
- Intermediate care/Step down unit
- Labor and delivery unit
- Medical/Surgical unit (includes sub-specialties e.g., orthopedics, oncology, etc.)
- Nursery
- Operating room
- Pediatric unit
- Postpartum/Maternity unit
- Psychiatric unit
- Recovery room
- Other, please specify: _____

NURSING HOME/LONG-TERM CARE

- Assisted living facility
- Intermediate care unit
- Personal care unit
- Skilled care unit
- Sub-acute unit
- Other, please specify: _____

COMMUNITY/HOME HEALTH CARE

- Clinic/Outpatient unit/Ambulatory surgical care
- Home health in client's residence
- Hospice care in client's residence
- Other, please specify: _____

- 2. Approximately how long have you worked in the employment setting(s) you marked in Question 1?**
(Select only ONE answer)

- 6 months or less
- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years
- 8 years
- 9 years
- 10 years
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years or more

- 3. Which of the following best describes your title in the setting(s) you marked in Question 1?** (Select only ONE answer)

- Care partner
- Certified home health aide
- Certified medication aide/assistant
- Certified medication technician
- Certified nurse aide
- Certified nursing assistant
- Charge aide/Senior aide
- Dietary aide
- Home health aide
- Homemaker
- Medication aide/assistant
- Medication technician
- Nurse aide/Nursing assistant
- Orderly
- Patient care technician
- Personal or patient care attendant/assistant
- Psychiatric aide
- Other, please specify: _____

- 4. How many hours per week do you work as a nurse aide in the setting(s) you marked in Question 1?**

(Select only ONE answer)

- 1-5 hours
- 6-10 hours
- 11-15 hours
- 16-20 hours
- 21-25 hours
- 26-30 hours
- 31-35 hours
- 36-40 hours
- 41-45 hours
- 46-50 hours
- 51-55 hours
- 56-60 hours
- 60 hours or more

- 5. What shift do you usually work in the employment setting(s) you marked in Question 1?** (Select only ONE answer)

- Rotating shift
- Days (8, 10, or 12 hour shift)
- Evenings (8, 10, or 12 hour shift)
- Nights (8, 10, or 12 hour shift)
- Other, please specify: _____

- 6. How many hours did you work on the last shift you worked?**

- Less than 1 hour
- 1 hour-4 hours
- 5-8 hours
- 9-12 hours
- 13-16 hours
- 17 hours or more

- 7. Which of the following best describes the ages of most of the clients to whom you provided care on the last shift you worked?**
(Select only ONE answer)

- Newborns (less than 1 month)
- Infants/children (1 month-12 years)
- Adolescents (ages 13-18)
- Young adults (ages 19-30)
- Middle adults (ages 31-64)
- Older adults (ages 65-85)
- Elder adults (over the age of 85)

SECTION 1: WORK ENVIRONMENT *(continued)*

8. Which of the following best describes the condition of most of the clients to whom you provided care on the last day of work? *(Select ALL that apply)*

- Well clients, possibly with minor illnesses
- OB (maternity) clients
- Clients with stable chronic conditions
- Clients with unstable chronic conditions
- Clients with acute conditions, including clients with medical, surgical or critical conditions
- Clients at end of life
- Clients with behavioral/emotional conditions
- Other, please specify: _____

9. Which of the following best describes the employment setting(s) you marked in Question 1?

(Select only ONE answer)

- Urban/metropolitan area
- Suburban area
- Rural area
- I do not know

10. To how many clients were you assigned to provide care on your last day of work? *(Select only ONE answer)*

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> 0 clients | <input type="checkbox"/> 11 clients | <input type="checkbox"/> 21 clients |
| <input type="checkbox"/> 1 client | <input type="checkbox"/> 12 clients | <input type="checkbox"/> 22 clients |
| <input type="checkbox"/> 2 clients | <input type="checkbox"/> 13 clients | <input type="checkbox"/> 23 clients |
| <input type="checkbox"/> 3 clients | <input type="checkbox"/> 14 clients | <input type="checkbox"/> 24 clients |
| <input type="checkbox"/> 4 clients | <input type="checkbox"/> 15 clients | <input type="checkbox"/> 25 clients |
| <input type="checkbox"/> 5 clients | <input type="checkbox"/> 16 clients | <input type="checkbox"/> 26 clients |
| <input type="checkbox"/> 6 clients | <input type="checkbox"/> 17 clients | <input type="checkbox"/> 27 clients |
| <input type="checkbox"/> 7 clients | <input type="checkbox"/> 18 clients | <input type="checkbox"/> 28 clients |
| <input type="checkbox"/> 8 clients | <input type="checkbox"/> 19 clients | <input type="checkbox"/> 29 clients |
| <input type="checkbox"/> 9 clients | <input type="checkbox"/> 20 clients | <input type="checkbox"/> 30 or more clients |
| <input type="checkbox"/> 10 clients | | |

11. What is the total length of time you have worked as a nurse aide? *(Select only ONE answer)*

- | | | |
|---|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> 6 months or less | <input type="checkbox"/> 5 years | <input type="checkbox"/> 11 years |
| <input type="checkbox"/> 7 to 11 months | <input type="checkbox"/> 6 years | <input type="checkbox"/> 12 years |
| <input type="checkbox"/> 1 year | <input type="checkbox"/> 7 years | <input type="checkbox"/> 13 years |
| <input type="checkbox"/> 2 years | <input type="checkbox"/> 8 years | <input type="checkbox"/> 14 years |
| <input type="checkbox"/> 3 years | <input type="checkbox"/> 9 years | <input type="checkbox"/> 15 years |
| <input type="checkbox"/> 4 years | <input type="checkbox"/> 10 years | or more |

SECTION 2: KNOWLEDGE NEEDED

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective work, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

- 1 = Not Important**
- 2 = Minimally Important**
- 3 = Moderately Important**
- 4 = Very Important**
- 5 = Critically Important**

KNOWLEDGE OF:

1. basic foot anatomy
2. care for dentures
3. denture removal and insertion
4. nail care procedures
5. normal versus abnormal mouth conditions
6. procedure and purpose for providing pericare
7. procedures for foot care
8. procedures for mouth care
9. purpose for mouth care
10. purpose for nail care
11. purpose for skin care
12. obstacles that affect dressing and undressing client
13. procedures for dressing and undressing client
14. procedures for grooming
15. purposes for grooming
16. adaptive eating devices
17. dietary restrictions
18. feeding techniques

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
1	1	2	3	4	5
2	1	2	3	4	5
3	1	2	3	4	5
4	1	2	3	4	5
5	1	2	3	4	5
6	1	2	3	4	5
7	1	2	3	4	5
8	1	2	3	4	5
9	1	2	3	4	5
10	1	2	3	4	5
11	1	2	3	4	5
12	1	2	3	4	5
13	1	2	3	4	5
14	1	2	3	4	5
15	1	2	3	4	5
16	1	2	3	4	5
17	1	2	3	4	5
18	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective work, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

- 1 = Not Important
- 2 = Minimally Important
- 3 = Moderately Important
- 4 = Very Important
- 5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
19. foods included in fluid intake	1	2	3	4	5
20. measuring oral fluid intake	1	2	3	4	5
21. methods for giving fluids by mouth	1	2	3	4	5
22. procedures for serving and removing meal tray	1	2	3	4	5
23. serving the correct meal to the correct client	1	2	3	4	5
24. signs and symptoms of dehydration	1	2	3	4	5
25. special diets	1	2	3	4	5
26. supplemental nutrition	1	2	3	4	5
27. the importance of serving the correct meal to client	1	2	3	4	5
28. the need for fluids in the body	1	2	3	4	5
29. the role of nutrition and hydration on skin care	1	2	3	4	5
30. assisting the client with toileting	1	2	3	4	5
31. bowel and bladder training	1	2	3	4	5
32. cleaning the client after elimination	1	2	3	4	5
33. emptying urinary drainage device	1	2	3	4	5
34. incontinence care	1	2	3	4	5
35. normal versus abnormal characteristics of urine and stool	1	2	3	4	5
36. normal versus abnormal ostomy output	1	2	3	4	5
37. ostomy types	1	2	3	4	5
38. purpose, types and uses of toileting equipment and devices	1	2	3	4	5
39. types and uses of incontinence products	1	2	3	4	5
40. urinary catheter types	1	2	3	4	5
41. client specific needs during position changes	1	2	3	4	5
42. comfort measures and care during the dying process	1	2	3	4	5
43. correct body alignment and positioning techniques	1	2	3	4	5
44. measures to promote rest and sleep	1	2	3	4	5
45. pain relief or comfort measures	1	2	3	4	5
46. physical comfort measures and techniques	1	2	3	4	5
47. reporting client symptoms of pain or discomfort	1	2	3	4	5
48. the benefits of physical comfort	1	2	3	4	5
49. verbal and nonverbal signs and symptoms of pain or discomfort	1	2	3	4	5
50. airborne precautions	1	2	3	4	5
51. biohazardous waste	1	2	3	4	5
52. biohazardous waste disposal	1	2	3	4	5
53. contact precautions	1	2	3	4	5
54. disinfection techniques	1	2	3	4	5
55. droplet precautions	1	2	3	4	5
56. hand washing and hand hygiene techniques	1	2	3	4	5
57. standard/universal precautions	1	2	3	4	5
58. the spread of infection or infection transmission	1	2	3	4	5
59. the types and uses of personal protective equipment	1	2	3	4	5
60. ambulation safety	1	2	3	4	5
61. basic life support procedures	1	2	3	4	5
62. body mechanics	1	2	3	4	5
63. call system devices and placement within reach	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective work, regardless of specific work setting. (Select one importance rating per knowledge statement.)

For each activity fill in one oval for an importance rating using the following scale:

- 1 = Not Important**
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
64. client positioning during mouth care	1	2	3	4	5
65. client risk factors for injuries	1	2	3	4	5
66. client-safety alarm types and uses	1	2	3	4	5
67. CPR/basic life support skills	1	2	3	4	5
68. emergency and disaster situations and responses	1	2	3	4	5
69. environmental dangers to the client's health and safety	1	2	3	4	5
70. evacuation procedures and techniques	1	2	3	4	5
71. fire and disaster safety plans	1	2	3	4	5
72. fire prevention techniques	1	2	3	4	5
73. how to provide a clean, safe and neat living space	1	2	3	4	5
74. indications that client might be suicidal	1	2	3	4	5
75. lifting and transfer devices	1	2	3	4	5
76. methods to relieve choking and clear airway	1	2	3	4	5
77. methods used to identify client	1	2	3	4	5
78. oxygen safety and storage	1	2	3	4	5
79. reasons for checking client status routinely	1	2	3	4	5
80. reasons to identify client before care	1	2	3	4	5
81. recognizing and reporting signs and symptoms of client's change in condition	1	2	3	4	5
82. restraint complications	1	2	3	4	5
83. safe transfer and lifting techniques	1	2	3	4	5
84. safety and accident prevention measures and devices	1	2	3	4	5
85. safety considerations during transport	1	2	3	4	5
86. safety techniques during toileting	1	2	3	4	5
87. self limitations and understanding when to seek assistance	1	2	3	4	5
88. signs and symptoms of airway obstruction	1	2	3	4	5
89. signs and symptoms of feeding complications	1	2	3	4	5
90. strategies to safely care for angry or potentially violent clients	1	2	3	4	5
91. the importance of responding to client-safety alarms promptly	1	2	3	4	5
92. the purpose for client rounds	1	2	3	4	5
93. timely response to and importance of call systems	1	2	3	4	5
94. ambulation techniques with and without a device	1	2	3	4	5
95. behavior modification	1	2	3	4	5
96. care for client in restraints	1	2	3	4	5
97. care, cleaning and storage of equipment	1	2	3	4	5
98. client positioning techniques	1	2	3	4	5
99. client preparation for diagnostic test, procedure or surgery per directive	1	2	3	4	5
100. client transport methods and devices	1	2	3	4	5
101. client's personal equipment maintenance and care	1	2	3	4	5
102. devices used to measure client's height and weight	1	2	3	4	5
103. elastic stockings/anti-embolism hose application and removal techniques	1	2	3	4	5
104. emotional support techniques	1	2	3	4	5
105. environmental conditions for bathing clients	1	2	3	4	5
106. equipment and supplies needed for bathing	1	2	3	4	5
107. ostomy care procedures	1	2	3	4	5
108. oxygen devices and methods of delivery	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective work, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

1 = Not Important
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
109. positioning devices	1	2	3	4	5
110. procedure for making occupied or unoccupied beds	1	2	3	4	5
111. procedure for performing and recording pulse oximetry	1	2	3	4	5
112. procedures and techniques for measuring and recording intake and output	1	2	3	4	5
113. procedures for admission, discharge and transfer	1	2	3	4	5
114. procedures for different types of baths	1	2	3	4	5
115. observing, recording and measuring intake and output	1	2	3	4	5
116. range of motion precautions	1	2	3	4	5
117. the need to promote client independence	1	2	3	4	5
118. promoting client participation in group activities	1	2	3	4	5
119. promoting client participation in recreational activities	1	2	3	4	5
120. client's religious and cultural beliefs and practices	1	2	3	4	5
121. how to handle conflict	1	2	3	4	5
122. how to maintain dignity and privacy during care	1	2	3	4	5
123. reporting requirements for disputes, grievances, abuse and suspicious workplace activities	1	2	3	4	5
124. promoting client and family role in plan of care	1	2	3	4	5

SECTION 3: EDUCATIONAL BACKGROUND

1. What type of preparation did you have for your current work as a nurse aide? (Select ALL that apply)

- | | |
|---|--|
| <input type="radio"/> Previous work experience | <input type="radio"/> Course offered by community or junior college |
| <input type="radio"/> High school course | <input type="radio"/> Course offered by technical or vocational school |
| <input type="radio"/> Classes in a nursing education program (LPN or LVN or RN) | <input type="radio"/> Course or training while in military service |
| <input type="radio"/> Course offered by current employer | <input type="radio"/> None |
| <input type="radio"/> Course offered by previous employer | <input type="radio"/> Other, please specify: _____ |

2. Besides basic nurse aide skills, which of the following areas of knowledge/skill were included in the course(s) or classes you marked in Question 1 of this section? (Select ALL that apply)

- | | |
|--|--|
| <input type="radio"/> Administration of oral and/or topical medications | <input type="radio"/> Emergency care procedures other than basic life support or CPR |
| <input type="radio"/> Administration of insulin | <input type="radio"/> Removal of peripheral intravenous catheter |
| <input type="radio"/> Administration of oxygen | <input type="radio"/> Removal of indwelling urinary catheter |
| <input type="radio"/> Drawing blood from veins for laboratory testing | |
| <input type="radio"/> Blood glucose testing (finger-stick testing) | |
| <input type="radio"/> Special care required by infants and/or children | → please specify: _____ |
| <input type="radio"/> Special care required by geriatric (elderly) clients | → please specify: _____ |
| <input type="radio"/> Special care required by psychiatric clients | → please specify: _____ |
| <input type="radio"/> Special care required by respiratory clients | → please specify: _____ |
| <input type="radio"/> Other, please specify: _____ | |

3. Which of the following certifications have you earned? (Select ALL that apply)

- | | |
|--|--|
| <input type="radio"/> GNA – Geriatric Nurse Aide/Nursing Assistant | <input type="radio"/> CMT – Certified Medication Technician - including insulin administration |
| <input type="radio"/> CNA – Certified Nurse Aide/Nursing Assistant | <input type="radio"/> None |
| <input type="radio"/> CMA – Certified Medication Aide/Assistant | <input type="radio"/> Other, please specify: _____ |
| <input type="radio"/> CMT – Certified Medication Technician | |
| <input type="radio"/> CMA – Certified Medication Aide/Assistant - including insulin administration | |

4. Are you currently enrolled in a formal nursing education program?

- Yes – ANSWER Question 4a; then SKIP to Question 6
- I have applied, but am not currently enrolled – SKIP to Question 5
- No – SKIP to Question 6

4a. If yes, in which of the following programs are you enrolled? (Select ALL that apply)

- | | |
|---|--|
| <input type="radio"/> Practical/Vocational Nursing (LPN or LVN) | <input type="radio"/> Registered Nurse – bachelor’s degree program |
| <input type="radio"/> Registered Nurse – diploma program | <input type="radio"/> Other, please specify: _____ |
| <input type="radio"/> Registered Nurse – associate degree program | |

5. If you have applied to a formal nursing education program, please indicate the reason(s) you are not currently enrolled? (Select ALL that apply)

Applied to LPN or LVN Program

- Currently completing pre-requisite courses
- On a waiting list for admissions
- Unable to afford tuition
- Did not meet admission requirements
- Turned down because classes are full
- Other, please specify: _____

Applied to RN Program

- Currently completing pre-requisite courses
- On a waiting list for admissions
- Unable to afford tuition
- Did not meet admission requirements
- Turned down because classes are full
- Other, please specify: _____

6. Do you have a non-nursing college degree?

- No Yes, please specify: _____

APPENDIX E.2: 2010 NURSE AIDE KNOWLEDGE SURVEY QUESTIONNAIRE, VERSION TWO



National Council of State Boards of Nursing CERTIFIED ENTRY-LEVEL NURSE AIDE KNOWLEDGE SURVEY

This questionnaire is part of a comprehensive study of the knowledge needed by certified entry-level nurse aides/nursing assistants with less than 12 months of work experience post-certification in the United States and its jurisdictions. The study is being conducted by the National Council of State Boards of Nursing.

INSTRUCTIONS

Please read each question carefully and respond by filling in the oval of the response that most closely represents your answer. Most questions have several alternative answers. Choose the answer that best applies to your work and fill in the appropriate oval(s). A few questions ask you to write information. Print your answer legibly in the space provided following the question.

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

For the purpose of this study, "nurse aides" are individuals, regardless of title, assisting with the delivery of direct nursing care to "clients." The "client" is defined as an individual, individual plus family (or significant other[s]). "Clients" are the same as "residents" or "patients." In addition, "last day of work as a nurse aide" also refers to the last shift you worked.

Your answers will be kept confidential. Your individual responses to the questions will not be released.

<p>Correct marks</p>	<p>Incorrect marks</p>	<ul style="list-style-type: none"> • Use a pencil. • Do not use a pen. • Make heavy dark marks that fill the oval completely. • If you want to change an answer, erase completely.
----------------------	------------------------	--

FOR OFFICE USE ONLY

Version

1

SECTION 1: WORK ENVIRONMENT

NOTE: Answer all of the following questions based on your last day of work as a nurse aide.

1. Which of the following best describes your employment setting(s) on the last day you worked as a nurse aide?
(Review the entire list and select ALL that apply.)

HOSPITALS or ACUTE CARE SETTINGS

- Central supply
- Chemical dependency unit
- Emergency room
- Extended care facility/Rehabilitation unit
- In-patient hospice care
- Intensive care unit
- Intermediate care/Step down unit
- Labor and delivery unit
- Medical/Surgical unit (includes sub-specialties e.g., orthopedics, oncology, etc.)
- Nursery
- Operating room
- Pediatric unit
- Postpartum/Maternity unit
- Psychiatric unit
- Recovery room
- Other, please specify: _____

NURSING HOME/LONG-TERM CARE

- Assisted living facility
- Intermediate care unit
- Personal care unit
- Skilled care unit
- Sub-acute unit
- Other, please specify: _____

COMMUNITY/HOME HEALTH CARE

- Clinic/Outpatient unit/Ambulatory surgical care
- Home health in client's residence
- Hospice care in client's residence
- Other, please specify: _____

2. Approximately how long have you worked in the employment setting(s) you marked in Question 1?
(Select only ONE answer)

- 6 months or less
- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years
- 8 years
- 9 years
- 10 years
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years or more

3. Which of the following best describes your title in the setting(s) you marked in Question 1? (Select only ONE answer)

- Care partner
- Certified home health aide
- Certified medication aide/assistant
- Certified medication technician
- Certified nurse aide
- Certified nursing assistant
- Charge aide/Senior aide
- Dietary aide
- Home health aide
- Homemaker
- Medication aide/assistant
- Medication technician
- Nurse aide/Nursing assistant
- Orderly
- Patient care technician
- Personal or patient care attendant/assistant
- Psychiatric aide
- Other, please specify: _____

4. How many hours per week do you work as a nurse aide in the setting(s) you marked in Question 1?

- (Select only ONE answer)
- 1-5 hours
 - 6-10 hours
 - 11-15 hours
 - 16-20 hours
 - 21-25 hours
 - 26-30 hours
 - 31-35 hours
 - 36-40 hours
 - 41-45 hours
 - 46-50 hours
 - 51-55 hours
 - 56-60 hours
 - 60 hours or more

5. What shift do you usually work in the employment setting(s) you marked in Question 1? (Select only ONE answer)

- Rotating shift
- Days (8, 10, or 12 hour shift)
- Evenings (8, 10, or 12 hour shift)
- Nights (8, 10, or 12 hour shift)
- Other, please specify: _____

6. How many hours did you work on the last shift you worked?

- Less than 1 hour
- 1 hour-4 hours
- 5-8 hours
- 9-12 hours
- 13-16 hours
- 17 hours or more

7. Which of the following best describes the ages of most of the clients to whom you provided care on the last shift you worked?
(Select only ONE answer)

- Newborns (less than 1 month)
- Infants/children (1 month-12 years)
- Adolescents (ages 13-18)
- Young adults (ages 19-30)
- Middle adults (ages 31-64)
- Older adults (ages 65-85)
- Elder adults (over the age of 85)

SECTION 1: WORK ENVIRONMENT *(continued)*

8. Which of the following **best** describes the condition of **most** of the clients to whom you provided care on the last day of work? *(Select ALL that apply)*

- Well clients, possibly with minor illnesses
- OB (maternity) clients
- Clients with stable chronic conditions
- Clients with unstable chronic conditions
- Clients with acute conditions, including clients with medical, surgical or critical conditions
- Clients at end of life
- Clients with behavioral/emotional conditions
- Other, please specify: _____

9. Which of the following **best** describes the employment setting(s) you marked in Question 1?

(Select only ONE answer)

- Urban/metropolitan area
- Suburban area
- Rural area
- I do not know

10. To how many clients were you assigned to provide care on your last day of work? *(Select only ONE answer)*

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> 0 clients | <input type="checkbox"/> 11 clients | <input type="checkbox"/> 21 clients |
| <input type="checkbox"/> 1 client | <input type="checkbox"/> 12 clients | <input type="checkbox"/> 22 clients |
| <input type="checkbox"/> 2 clients | <input type="checkbox"/> 13 clients | <input type="checkbox"/> 23 clients |
| <input type="checkbox"/> 3 clients | <input type="checkbox"/> 14 clients | <input type="checkbox"/> 24 clients |
| <input type="checkbox"/> 4 clients | <input type="checkbox"/> 15 clients | <input type="checkbox"/> 25 clients |
| <input type="checkbox"/> 5 clients | <input type="checkbox"/> 16 clients | <input type="checkbox"/> 26 clients |
| <input type="checkbox"/> 6 clients | <input type="checkbox"/> 17 clients | <input type="checkbox"/> 27 clients |
| <input type="checkbox"/> 7 clients | <input type="checkbox"/> 18 clients | <input type="checkbox"/> 28 clients |
| <input type="checkbox"/> 8 clients | <input type="checkbox"/> 19 clients | <input type="checkbox"/> 29 clients |
| <input type="checkbox"/> 9 clients | <input type="checkbox"/> 20 clients | <input type="checkbox"/> 30 or more clients |
| <input type="checkbox"/> 10 clients | | |

11. What is the total length of time you have worked as a nurse aide? *(Select only ONE answer)*

- | | | |
|---|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> 6 months or less | <input type="checkbox"/> 5 years | <input type="checkbox"/> 11 years |
| <input type="checkbox"/> 7 to 11 months | <input type="checkbox"/> 6 years | <input type="checkbox"/> 12 years |
| <input type="checkbox"/> 1 year | <input type="checkbox"/> 7 years | <input type="checkbox"/> 13 years |
| <input type="checkbox"/> 2 years | <input type="checkbox"/> 8 years | <input type="checkbox"/> 14 years |
| <input type="checkbox"/> 3 years | <input type="checkbox"/> 9 years | <input type="checkbox"/> 15 years |
| <input type="checkbox"/> 4 years | <input type="checkbox"/> 10 years | <input type="checkbox"/> or more |

SECTION 2: KNOWLEDGE NEEDED

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective work, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

- 1 = Not Important
- 2 = Minimally Important
- 3 = Moderately Important
- 4 = Very Important
- 5 = Critically Important

KNOWLEDGE OF:

1. purpose for skin care
2. purposes for grooming
3. special diets
4. normal versus abnormal characteristics of urine and stool
5. physical comfort measures and techniques
6. hand washing and hand hygiene techniques
7. standard/universal precautions
8. emergency and disaster situations and responses
9. indications that client might be suicidal
10. elastic stockings/anti-embolism hose application and removal techniques
11. procedures for moving a client in bed
12. procedures for obtaining and recording blood pressure
13. procedures for obtaining and recording body temperature
14. procedures for obtaining and recording pulse rate
15. procedures for obtaining and recording respiratory rate
16. procedures to measure and record client's height and weight
17. procedures to secure and respect client's personal belongings
18. prosthetic and orthotic device application and removal techniques

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
1	1	2	3	4	5
2	1	2	3	4	5
3	1	2	3	4	5
4	1	2	3	4	5
5	1	2	3	4	5
6	1	2	3	4	5
7	1	2	3	4	5
8	1	2	3	4	5
9	1	2	3	4	5
10	1	2	3	4	5
11	1	2	3	4	5
12	1	2	3	4	5
13	1	2	3	4	5
14	1	2	3	4	5
15	1	2	3	4	5
16	1	2	3	4	5
17	1	2	3	4	5
18	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective work, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

1 = Not Important
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
19. reality orientation therapy	1	2	3	4	5
20. safe transfer techniques	1	2	3	4	5
21. skills that promote client's sense of security	1	2	3	4	5
22. specimen collection types and procedures	1	2	3	4	5
23. techniques and devices for addressing the unique needs and behaviors of the client with cognitive impairment	1	2	3	4	5
24. turning, coughing and deep breathing techniques	1	2	3	4	5
25. types, applications and uses of restraints	1	2	3	4	5
26. urinary catheter care procedures	1	2	3	4	5
27. validation therapy	1	2	3	4	5
28. converting ounces to milliliters	1	2	3	4	5
29. converting pounds to kilograms	1	2	3	4	5
30. how to report and document client behavior	1	2	3	4	5
31. intake and output calculations	1	2	3	4	5
32. normal versus abnormal pulse oximetry readings	1	2	3	4	5
33. normal versus abnormal vital signs	1	2	3	4	5
34. observing and reporting behavioral changes	1	2	3	4	5
35. observing, recording and measuring intake and output	1	2	3	4	5
36. procedures for calculating and recording meal intake	1	2	3	4	5
37. reporting changes in client's intake and output	1	2	3	4	5
38. reporting changes in client's weight	1	2	3	4	5
39. reporting process for suicidal clients	1	2	3	4	5
40. complications due to prosthetic and orthotic device use	1	2	3	4	5
41. normal and abnormal color, movement and sensation of extremities	1	2	3	4	5
42. normal joint mobility	1	2	3	4	5
43. normal versus abnormal skin and nail conditions	1	2	3	4	5
44. normal versus abnormal skin appearance	1	2	3	4	5
45. pressure relieving devices and techniques	1	2	3	4	5
46. procedures for inspecting and providing skin care	1	2	3	4	5
47. purposes of skin care	1	2	3	4	5
48. range of motion exercises	1	2	3	4	5
49. range of motion precautions	1	2	3	4	5
50. risk factors for skin breakdown	1	2	3	4	5
51. the aging process and its effect on the body	1	2	3	4	5
52. adaptive devices for clients with sensory impairment	1	2	3	4	5
53. ambulation devices and use	1	2	3	4	5
54. client mobility and functional limitations	1	2	3	4	5
55. prosthetic and orthotic devices	1	2	3	4	5
56. the need to promote client independence	1	2	3	4	5
57. basic emotional needs	1	2	3	4	5
58. behaviors related to cognitive impairments	1	2	3	4	5
59. client recreational activities	1	2	3	4	5
60. client's need for acceptance and sense of belonging	1	2	3	4	5
61. client's need for sense of security	1	2	3	4	5
62. cognitive impairments	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective work, regardless of specific work setting. (Select one importance rating per knowledge statement.)

For each activity fill in one oval for an importance rating using the following scale:

- 1 = Not Important
- 2 = Minimally Important
- 3 = Moderately Important
- 4 = Very Important
- 5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
63. meeting the needs of sensory impaired clients	1	2	3	4	5
64. personal preference considerations	1	2	3	4	5
65. physical and emotional benefits of bathing clients	1	2	3	4	5
66. promoting client participation in group activities	1	2	3	4	5
67. promoting client participation in recreational activities	1	2	3	4	5
68. sensory impairments	1	2	3	4	5
69. skills that promote client's feeling of acceptance and belonging	1	2	3	4	5
70. techniques for helping the client express emotions	1	2	3	4	5
71. the stages of grief	1	2	3	4	5
72. care for the body after death	1	2	3	4	5
73. client's religious and cultural beliefs and practices	1	2	3	4	5
74. cultural and personal preference considerations	1	2	3	4	5
75. dignity, spiritual and cultural considerations for a client after death	1	2	3	4	5
76. dignity, spiritual and cultural considerations for a dying client	1	2	3	4	5
77. the death and dying process	1	2	3	4	5
78. the need to report client's cultural/religious/spiritual preferences and needs	1	2	3	4	5
79. active listening skills	1	2	3	4	5
80. approved medical terminology	1	2	3	4	5
81. chain of command	1	2	3	4	5
82. how to handle conflict	1	2	3	4	5
83. identifying and reporting barriers to communication	1	2	3	4	5
84. respectful communication	1	2	3	4	5
85. respectful communication skills	1	2	3	4	5
86. shift change report	1	2	3	4	5
87. the need for an interpreter	1	2	3	4	5
88. advanced directives	1	2	3	4	5
89. client grievance and dispute processes	1	2	3	4	5
90. client privacy and confidentiality	1	2	3	4	5
91. client rights	1	2	3	4	5
92. client-centered care	1	2	3	4	5
93. client-centered environment	1	2	3	4	5
94. client's environmental preferences	1	2	3	4	5
95. how to maintain dignity and privacy during care	1	2	3	4	5
96. how to promote client self-esteem and dignity	1	2	3	4	5
97. interactions to promote client dignity during meals	1	2	3	4	5
98. privacy, dignity, safety and comfort during linen changes	1	2	3	4	5
99. restraint alternatives	1	2	3	4	5
100. the need to explain care to client prior to procedures	1	2	3	4	5
101. ways to support the sexuality of the client	1	2	3	4	5
102. documentation guidelines	1	2	3	4	5
103. Health Insurance Portability and Accountability Act (HIPAA)	1	2	3	4	5
104. Health Insurance Portability and Accountability Act (HIPAA) violations	1	2	3	4	5
105. procedures to report unusual incidents	1	2	3	4	5
106. reporting requirements for disputes, grievances, abuse and suspicious workplace activities	1	2	3	4	5
107. right and wrong conduct for nurse aides	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective work, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

1 = Not Important
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
108. signs of suspected neglect, mistreatment or abuse	1	2	3	4	5
109. suspicious workplace activity	1	2	3	4	5
110. continuing education or in-service requirements	1	2	3	4	5
111. following client’s plan of care as assigned	1	2	3	4	5
112. how to identify self by name and job title	1	2	3	4	5
113. nurse aide role as a member of the healthcare team	1	2	3	4	5
114. nurse aide role in reinforcement of client and family education	1	2	3	4	5
115. nurse aide roles and responsibilities	1	2	3	4	5
116. nurse aide’s participation in plan of care process	1	2	3	4	5
117. nurse aide’s role in assisting client with life transitions	1	2	3	4	5
118. performance improvement and cost containment programs	1	2	3	4	5
119. prioritizing client care	1	2	3	4	5
120. promoting client and family role in plan of care	1	2	3	4	5
121. promoting family’s role in client care	1	2	3	4	5
122. the nurse aide role in assisting the nurse with a dressing change	1	2	3	4	5
123. ways to modify nurse aide’s behavior in response to the client’s behavior	1	2	3	4	5
124. working within a team	1	2	3	4	5

SECTION 3: EDUCATIONAL BACKGROUND

1. What type of preparation did you have for your current work as a nurse aide? (Select ALL that apply)

- | | |
|---|--|
| <input type="radio"/> Previous work experience | <input type="radio"/> Course offered by community or junior college |
| <input type="radio"/> High school course | <input type="radio"/> Course offered by technical or vocational school |
| <input type="radio"/> Classes in a nursing education program (LPN or LVN or RN) | <input type="radio"/> Course or training while in military service |
| <input type="radio"/> Course offered by current employer | <input type="radio"/> None |
| <input type="radio"/> Course offered by previous employer | <input type="radio"/> Other, please specify: _____ |

2. Besides basic nurse aide skills, which of the following areas of knowledge/skill were included in the course(s) or classes you marked in Question 1 of this section? (Select ALL that apply)

- | | |
|--|--|
| <input type="radio"/> Administration of oral and/or topical medications | <input type="radio"/> Emergency care procedures other than basic life support or CPR |
| <input type="radio"/> Administration of insulin | <input type="radio"/> Removal of peripheral intravenous catheter |
| <input type="radio"/> Administration of oxygen | <input type="radio"/> Removal of indwelling urinary catheter |
| <input type="radio"/> Drawing blood from veins for laboratory testing | |
| <input type="radio"/> Blood glucose testing (finger-stick testing) | |
| <input type="radio"/> Special care required by infants and/or children | → please specify: _____ |
| <input type="radio"/> Special care required by geriatric (elderly) clients | → please specify: _____ |
| <input type="radio"/> Special care required by psychiatric clients | → please specify: _____ |
| <input type="radio"/> Special care required by respiratory clients | → please specify: _____ |
| <input type="radio"/> Other, please specify: _____ | |

3. Which of the following certifications have you earned? (Select ALL that apply)

- | | |
|--|--|
| <input type="radio"/> GNA – Geriatric Nurse Aide/Nursing Assistant | <input type="radio"/> CMT – Certified Medication Technician - including insulin administration |
| <input type="radio"/> CNA – Certified Nurse Aide/Nursing Assistant | <input type="radio"/> None |
| <input type="radio"/> CMA – Certified Medication Aide/Assistant | <input type="radio"/> Other, please specify: _____ |
| <input type="radio"/> CMT – Certified Medication Technician | |
| <input type="radio"/> CMA – Certified Medication Aide/Assistant - including insulin administration | |

4. Are you currently enrolled in a formal nursing education program?

- Yes – ANSWER Question 4a; then SKIP to Question 6
- I have applied, but am not currently enrolled – SKIP to Question 5
- No – SKIP to Question 6

4a. If yes, in which of the following programs are you enrolled? (Select ALL that apply)

- | | |
|---|--|
| <input type="radio"/> Practical/Vocational Nursing (LPN or LVN) | <input type="radio"/> Registered Nurse – bachelor’s degree program |
| <input type="radio"/> Registered Nurse – diploma program | <input type="radio"/> Other, please specify: _____ |
| <input type="radio"/> Registered Nurse – associate degree program | |

5. If you have applied to a formal nursing education program, please indicate the reason(s) you are not currently enrolled? (Select ALL that apply)

Applied to LPN or LVN Program

- Currently completing pre-requisite courses
- On a waiting list for admissions
- Unable to afford tuition
- Did not meet admission requirements
- Turned down because classes are full
- Other, please specify: _____

Applied to RN Program

- Currently completing pre-requisite courses
- On a waiting list for admissions
- Unable to afford tuition
- Did not meet admission requirements
- Turned down because classes are full
- Other, please specify: _____

6. Do you have a non-nursing college degree?

- No Yes, please specify: _____

SECTION 4: PERSONAL BACKGROUND

Answers to the following questions will be used to describe the individuals completing this questionnaire. No individual answers will be reported.

1. What is your gender?

- Male
- Female

2. Select below the answer most descriptive of your racial/ethnic background. (Select only ONE answer)

- African American
- Asian Indian
- Asian other
- Hispanic
- Native American
- Pacific Islander
- White - not of Hispanic origin
- Other, please specify: _____

3. Is English the first language you learned to speak?

- Yes
- No

4. What is your age in years?

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

SECTION 5: COMMENTS

If we need more information to clarify the results of this study, we may call some persons. If you are willing to be contacted, please **provide your phone number below**:

Daytime or Early Evening

Phone Number with Area Code:

()	-		-				
0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9

You may write any comments or suggestions that you have in the space below.

After you complete this form, please return it in the enclosed postage-paid envelope.
Thank you for your assistance with this important study!

SECTION 1: WORK ENVIRONMENT *(continued)*

3. Please record the number of years you have been working in your current position. Example: 8 years is represented as "08"

		NUMBER OF YEARS IN CURRENT POSITION
0	0	
1	1	
2	2	
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	

4. Please record the total number of years you held a position(s) requiring that you evaluate the work performed by entry-level nurse aides/nursing assistants.

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

5. Which of the following best describes the highest level of education you have completed? (Select only ONE answer)

- Licensed practical/vocational nursing program
- RN - diploma program
- RN - associate program
- RN - baccalaureate program
- Baccalaureate degree in a field other than nursing
- Master's degree in nursing
- Master's degree in field other than nursing
- Nurse practitioner program (master's or certificate)
- Doctoral program
- Any nursing program not in the U.S.
- Other, please specify: _____

6. Which of the following best describes the work setting(s) in which you currently supervise and/or evaluate the work performed by nurse aides? (Review the entire list and select ALL that apply)

HOSPITALS or ACUTE CARE SETTINGS

- Central supply
- Chemical dependency unit
- Emergency room
- Extended care facility/Rehabilitation unit
- In-patient hospice care
- Intensive care unit
- Intermediate care/Step down unit
- Labor and delivery unit
- Medical/Surgical unit (includes sub-specialties e.g., orthopedics, oncology, etc.)
- Nursery
- Operating room
- Pediatric unit
- Postpartum/Maternity unit
- Psychiatric unit
- Recovery room
- Other, please specify: _____

NURSING HOME/LONG-TERM CARE

- Assisted living facility
- Intermediate care unit
- Personal care unit
- Skilled care unit
- Sub-acute unit
- Other, please specify: _____

COMMUNITY/HOME HEALTH CARE

- Clinic/Outpatient unit/Ambulatory surgical care
- Home health in client's residence
- Hospice care in client's residence
- Other, please specify: _____

7. Which of the following best describes the ages of most of the clients to whom nurse aides provided care in your work setting(s)? (Select ALL that apply)

- Newborns (less than 1 month)
- Infants/children (1 month-12 years)
- Adolescents (ages 13-18)
- Young adults (ages 19-30)
- Middle adults (ages 31-64)
- Older adults (ages 65-85)
- Elder adults (over the age of 85)

8. Which of the following best describes the condition of most of the clients to whom nurse aides provide care in your work setting(s)? (Select ALL that apply)

- Well clients, possibly with minor illnesses
- OB (maternity) clients
- Clients with stable chronic conditions
- Clients with unstable chronic conditions
- Clients with acute conditions, including clients with medical, surgical or critical conditions
- Clients at end of life
- Clients with behavioral/emotional conditions
- Other, please specify: _____

SECTION 1: WORK ENVIRONMENT *(continued)*

9. What shift do you usually work? *(Select only ONE answer)*

- Rotating shift
- Days (8, 10, or 12 hour shift)
- Evenings (8, 10, or 12 hour shift)
- Nights (8, 10, or 12 hour shift)
- Other, please specify: _____

10. How many hours did you work on your last shift/day of work? *(Select only ONE answer)*

- Less than 1 hour
- 1 hour-4 hours
- 5-8 hours
- 9-12 hours
- 13-16 hours
- 17 hours or more

11. Which of the following best describes the location of your employment setting(s)? *(Select only ONE answer)*

- Urban/metropolitan area
- Suburban area
- Rural area
- I do not know

12. If you work in a community-based setting, how many beds do you have for inpatient use? *(Select only ONE answer)*

- Under 5 beds
- 6-10 beds
- 11-15 beds
- 16-20 beds
- 20 beds or more
- I do not know
- I do not work in a community-based setting

13. If you work in a hospital or nursing home, how many beds do you have for inpatient use? *(Select only ONE answer)*

- Under 50 beds
- 51-99 beds
- 100-299 beds
- 300-499 beds
- 500 beds or more
- I do not know
- I do not work in a hospital or nursing home

14. In your work setting(s), what is the average number of clients cared for daily by entry-level nurse aides?

<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>

AVERAGE
NUMBER OF
CLIENTS SEEN
DAILY

15. How many entry-level nurse aides did you supervise on your last shift? *(Select only ONE answer)*

- None
- 1
- 2
- 3
- 4
- 5
- 6
- 7 or more

16. Which of the following titles are used for the entry-level nurse aides that you supervise or evaluate?

(Select all that apply)

- Care partner
- Certified home health aide
- Certified medication aide/assistant
- Certified medication technician
- Certified nurse aide
- Certified nursing assistant
- Charge aide/Senior aide
- Dietary aide
- Home health aide
- Homemaker
- Medication aide/assistant
- Medication technician
- Nursing assistant
- Orderly
- Patient care technician
- Personal or patient care attendant/assistant
- Psychiatric aide
- Other, please specify: _____

SECTION 2: KNOWLEDGE NEEDED

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective professional practice, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

1 = Not Important
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
1. basic foot anatomy	1	2	3	4	5
2. care for dentures	1	2	3	4	5
3. denture removal and insertion	1	2	3	4	5
4. nail care procedures	1	2	3	4	5
5. normal versus abnormal mouth conditions	1	2	3	4	5
6. procedure and purpose for providing pericare	1	2	3	4	5
7. procedures for foot care	1	2	3	4	5
8. procedures for mouth care	1	2	3	4	5
9. purpose for mouth care	1	2	3	4	5
10. purpose for nail care	1	2	3	4	5
11. purpose for skin care	1	2	3	4	5
12. obstacles that affect dressing and undressing client	1	2	3	4	5
13. procedures for dressing and undressing client	1	2	3	4	5
14. procedures for grooming	1	2	3	4	5
15. purposes for grooming	1	2	3	4	5
16. adaptive eating devices	1	2	3	4	5
17. dietary restrictions	1	2	3	4	5
18. feeding techniques	1	2	3	4	5
19. foods included in fluid intake	1	2	3	4	5
20. measuring oral fluid intake	1	2	3	4	5
21. methods for giving fluids by mouth	1	2	3	4	5
22. procedures for serving and removing meal tray	1	2	3	4	5
23. serving the correct meal to the correct client	1	2	3	4	5
24. signs and symptoms of dehydration	1	2	3	4	5
25. special diets	1	2	3	4	5
26. supplemental nutrition	1	2	3	4	5
27. the importance of serving the correct meal to client	1	2	3	4	5
28. the need for fluids in the body	1	2	3	4	5
29. the role of nutrition and hydration on skin care	1	2	3	4	5
30. assisting the client with toileting	1	2	3	4	5
31. bowel and bladder training	1	2	3	4	5
32. cleaning the client after elimination	1	2	3	4	5
33. emptying urinary drainage device	1	2	3	4	5
34. incontinence care	1	2	3	4	5
35. normal versus abnormal characteristics of urine and stool	1	2	3	4	5
36. normal versus abnormal ostomy output	1	2	3	4	5
37. ostomy types	1	2	3	4	5
38. purpose, types and uses of toileting equipment and devices	1	2	3	4	5
39. types and uses of incontinence products	1	2	3	4	5
40. urinary catheter types	1	2	3	4	5
41. client specific needs during position changes	1	2	3	4	5
42. comfort measures and care during the dying process	1	2	3	4	5
43. correct body alignment and positioning techniques	1	2	3	4	5
44. measures to promote rest and sleep	1	2	3	4	5
45. pain relief or comfort measures	1	2	3	4	5

KNOWLEDGE OF:

1. basic foot anatomy
2. care for dentures
3. denture removal and insertion
4. nail care procedures
5. normal versus abnormal mouth conditions
6. procedure and purpose for providing pericare
7. procedures for foot care
8. procedures for mouth care
9. purpose for mouth care
10. purpose for nail care
11. purpose for skin care
12. obstacles that affect dressing and undressing client
13. procedures for dressing and undressing client
14. procedures for grooming
15. purposes for grooming
16. adaptive eating devices
17. dietary restrictions
18. feeding techniques
19. foods included in fluid intake
20. measuring oral fluid intake
21. methods for giving fluids by mouth
22. procedures for serving and removing meal tray
23. serving the correct meal to the correct client
24. signs and symptoms of dehydration
25. special diets
26. supplemental nutrition
27. the importance of serving the correct meal to client
28. the need for fluids in the body
29. the role of nutrition and hydration on skin care
30. assisting the client with toileting
31. bowel and bladder training
32. cleaning the client after elimination
33. emptying urinary drainage device
34. incontinence care
35. normal versus abnormal characteristics of urine and stool
36. normal versus abnormal ostomy output
37. ostomy types
38. purpose, types and uses of toileting equipment and devices
39. types and uses of incontinence products
40. urinary catheter types
41. client specific needs during position changes
42. comfort measures and care during the dying process
43. correct body alignment and positioning techniques
44. measures to promote rest and sleep
45. pain relief or comfort measures

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective professional practice, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

- 1 = Not Important**
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
46. physical comfort measures and techniques	1	2	3	4	5
47. reporting client symptoms of pain or discomfort	1	2	3	4	5
48. the benefits of physical comfort	1	2	3	4	5
49. verbal and nonverbal signs and symptoms of pain or discomfort	1	2	3	4	5
50. airborne precautions	1	2	3	4	5
51. biohazardous waste	1	2	3	4	5
52. biohazardous waste disposal	1	2	3	4	5
53. contact precautions	1	2	3	4	5
54. disinfection techniques	1	2	3	4	5
55. droplet precautions	1	2	3	4	5
56. hand washing and hand hygiene techniques	1	2	3	4	5
57. standard/universal precautions	1	2	3	4	5
58. the spread of infection or infection transmission	1	2	3	4	5
59. the types and uses of personal protective equipment	1	2	3	4	5
60. ambulation safety	1	2	3	4	5
61. basic life support procedures	1	2	3	4	5
62. body mechanics	1	2	3	4	5
63. call system devices and placement within reach	1	2	3	4	5
64. client positioning during mouth care	1	2	3	4	5
65. client risk factors for injuries	1	2	3	4	5
66. client-safety alarm types and uses	1	2	3	4	5
67. CPR/basic life support skills	1	2	3	4	5
68. emergency and disaster situations and responses	1	2	3	4	5
69. environmental dangers to the client's health and safety	1	2	3	4	5
70. evacuation procedures and techniques	1	2	3	4	5
71. fire and disaster safety plans	1	2	3	4	5
72. fire prevention techniques	1	2	3	4	5
73. how to provide a clean, safe and neat living space	1	2	3	4	5
74. indications that client might be suicidal	1	2	3	4	5
75. lifting and transfer devices	1	2	3	4	5
76. methods to relieve choking and clear airway	1	2	3	4	5
77. methods used to identify client	1	2	3	4	5
78. oxygen safety and storage	1	2	3	4	5
79. reasons for checking client status routinely	1	2	3	4	5
80. reasons to identify client before care	1	2	3	4	5
81. recognizing and reporting signs and symptoms of client's change in condition	1	2	3	4	5
82. restraint complications	1	2	3	4	5
83. safe transfer and lifting techniques	1	2	3	4	5
84. safety and accident prevention measures and devices	1	2	3	4	5
85. safety considerations during transport	1	2	3	4	5
86. safety techniques during toileting	1	2	3	4	5
87. self limitations and understanding when to seek assistance	1	2	3	4	5
88. signs and symptoms of airway obstruction	1	2	3	4	5
89. signs and symptoms of feeding complications	1	2	3	4	5
90. strategies to safely care for angry or potentially violent clients	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective professional practice, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

1 = Not Important
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
91. the importance of responding to client-safety alarms promptly	1	2	3	4	5
92. the purpose for client rounds	1	2	3	4	5
93. timely response to and importance of call systems	1	2	3	4	5
94. ambulation techniques with and without a device	1	2	3	4	5
95. behavior modification	1	2	3	4	5
96. care for client in restraints	1	2	3	4	5
97. care, cleaning and storage of equipment	1	2	3	4	5
98. client positioning techniques	1	2	3	4	5
99. client preparation for diagnostic test, procedure or surgery per directive	1	2	3	4	5
100. client transport methods and devices	1	2	3	4	5
101. client's personal equipment maintenance and care	1	2	3	4	5
102. devices used to measure client's height and weight	1	2	3	4	5
103. elastic stockings/anti-embolism hose application and removal techniques	1	2	3	4	5
104. emotional support techniques	1	2	3	4	5
105. environmental conditions for bathing clients	1	2	3	4	5
106. equipment and supplies needed for bathing	1	2	3	4	5
107. ostomy care procedures	1	2	3	4	5
108. oxygen devices and methods of delivery	1	2	3	4	5
109. positioning devices	1	2	3	4	5
110. procedure for making occupied or unoccupied beds	1	2	3	4	5
111. procedure for performing and recording pulse oximetry	1	2	3	4	5
112. procedures and techniques for measuring and recording intake and output	1	2	3	4	5
113. procedures for admission, discharge and transfer	1	2	3	4	5
114. procedures for different types of baths	1	2	3	4	5
115. observing, recording and measuring intake and output	1	2	3	4	5
116. range of motion precautions	1	2	3	4	5
117. the need to promote client independence	1	2	3	4	5
118. promoting client participation in group activities	1	2	3	4	5
119. promoting client participation in recreational activities	1	2	3	4	5
120. client's religious and cultural beliefs and practices	1	2	3	4	5
121. how to handle conflict	1	2	3	4	5
122. how to maintain dignity and privacy during care	1	2	3	4	5
123. reporting requirements for disputes, grievances, abuse and suspicious workplace activities	1	2	3	4	5
124. promoting client and family role in plan of care	1	2	3	4	5

125. Are there any areas of knowledge needed by certified entry-level nurse aides in your work setting that were NOT listed on this survey?

- No
- Yes (Please list activitie(s) in the space provided):

SECTION 3: PERSONAL BACKGROUND

Answers to the following questions will be used to describe the individuals completing this questionnaire. No individual answers will be reported.

1. What is your gender?

- Male Female

2. Select below the answer most descriptive of your racial/ethnic background. (Select only ONE answer)

- African American
- Asian Indian
- Asian other
- Hispanic
- Native American
- Pacific Islander
- White - not of Hispanic origin
- Other, please specify: _____

3. Is English the first language you learned to speak?

- Yes No

4. What is your age in years?

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

SECTION 4: COMMENTS

If we need more information to clarify the results of this study, we may call some persons. If you are willing to be contacted, please **provide your phone number below**:

**Daytime or Early Evening
Phone Number with Area Code:**

()	-			-				
0	0	0	●	0	0	0	●	0	0	0
1	1	1		1	1	1		1	1	1
2	2	2		2	2	2		2	2	2
3	3	3		3	3	3		3	3	3
4	4	4		4	4	4		4	4	4
5	5	5		5	5	5		5	5	5
6	6	6		6	6	6		6	6	6
7	7	7		7	7	7		7	7	7
8	8	8		8	8	8		8	8	8
9	9	9		9	9	9		9	9	9

You may write any comments or suggestions that you have in the space below.

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

Thank you for your assistance with this important study!

SECTION 1: WORK ENVIRONMENT *(continued)*

3. Please record the number of years you have been working in your current position. *Example: 8 years is represented as "08"*

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

NUMBER OF
YEARS IN
CURRENT
POSITION

4. Please record the total number of years you held a position(s) requiring that you evaluate the work performed by entry-level nurse aides/nursing assistants.

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

YEARS

5. Which of the following best describes the highest level of education you have completed? *(Select only ONE answer)*

- Licensed practical/vocational nursing program
- RN - diploma program
- RN - associate program
- RN - baccalaureate program
- Baccalaureate degree in a field other than nursing
- Master's degree in nursing
- Master's degree in field other than nursing
- Nurse practitioner program (master's or certificate)
- Doctoral program
- Any nursing program not in the U.S.
- Other, please specify: _____

6. Which of the following best describes the work setting(s) in which you currently supervise and/or evaluate the work performed by nurse aides? *(Review the entire list and select ALL that apply)*

HOSPITALS or ACUTE CARE SETTINGS

- Central supply
- Chemical dependency unit
- Emergency room
- Extended care facility/Rehabilitation unit
- In-patient hospice care
- Intensive care unit
- Intermediate care/Step down unit
- Labor and delivery unit
- Medical/Surgical unit (includes sub-specialties e.g., orthopedics, oncology, etc.)
- Nursery
- Operating room
- Pediatric unit
- Postpartum/Maternity unit
- Psychiatric unit
- Recovery room
- Other, please specify: _____

NURSING HOME/LONG-TERM CARE

- Assisted living facility
- Intermediate care unit
- Personal care unit
- Skilled care unit
- Sub-acute unit
- Other, please specify: _____

COMMUNITY/HOME HEALTH CARE

- Clinic/Outpatient unit/Ambulatory surgical care
- Home health in client's residence
- Hospice care in client's residence
- Other, please specify: _____

7. Which of the following best describes the ages of most of the clients to whom nurse aides provided care in your work setting(s)? *(Select ALL that apply)*

- Newborns (less than 1 month)
- Infants/children (1 month-12 years)
- Adolescents (ages 13-18)
- Young adults (ages 19-30)
- Middle adults (ages 31-64)
- Older adults (ages 65-85)
- Elder adults (over the age of 85)

8. Which of the following best describes the condition of most of the clients to whom nurse aides provide care in your work setting(s)? *(Select ALL that apply)*

- Well clients, possibly with minor illnesses
- OB (maternity) clients
- Clients with stable chronic conditions
- Clients with unstable chronic conditions
- Clients with acute conditions, including clients with medical, surgical or critical conditions
- Clients at end of life
- Clients with behavioral/emotional conditions
- Other, please specify: _____

SECTION 1: WORK ENVIRONMENT *(continued)*

- 9. What shift do you usually work?** *(Select only ONE answer)*
- Rotating shift
 - Days (8, 10, or 12 hour shift)
 - Evenings (8, 10, or 12 hour shift)
 - Nights (8, 10, or 12 hour shift)
 - Other, please specify: _____

- 10. How many hours did you work on your last shift/day of work?** *(Select only ONE answer)*
- Less than 1 hour
 - 1 hour-4 hours
 - 5-8 hours
 - 9-12 hours
 - 13-16 hours
 - 17 hours or more

- 11. Which of the following best describes the location of your employment setting(s)?** *(Select only ONE answer)*
- Urban/metropolitan area
 - Suburban area
 - Rural area
 - I do not know

- 12. If you work in a community-based setting, how many beds do you have for inpatient use?** *(Select only ONE answer)*
- Under 5 beds
 - 6-10 beds
 - 11-15 beds
 - 16-20 beds
 - 20 beds or more
 - I do not know
 - I do not work in a community-based setting

- 13. If you work in a hospital or nursing home, how many beds do you have for inpatient use?** *(Select only ONE answer)*
- Under 50 beds
 - 51-99 beds
 - 100-299 beds
 - 300-499 beds
 - 500 beds or more
 - I do not know
 - I do not work in a hospital or nursing home

- 14. In your work setting(s), what is the average number of clients cared for daily by entry-level nurse aides?**

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

AVERAGE NUMBER OF CLIENTS SEEN DAILY

- 15. How many entry-level nurse aides did you supervise on your last shift?** *(Select only ONE answer)*
- None
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7 or more

- 16. Which of the following titles are used for the entry-level nurse aides that you supervise or evaluate?** *(Select all that apply)*
- Care partner
 - Certified home health aide
 - Certified medication aide/assistant
 - Certified medication technician
 - Certified nurse aide
 - Certified nursing assistant
 - Charge aide/Senior aide
 - Dietary aide
 - Home health aide
 - Homemaker
 - Medication aide/assistant
 - Medication technician
 - Nursing assistant
 - Orderly
 - Patient care technician
 - Personal or patient care attendant/assistant
 - Psychiatric aide
 - Other, please specify: _____

SECTION 2: KNOWLEDGE NEEDED

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective professional practice, regardless of specific work setting. (*Select one importance rating per knowledge statement.*)

For each activity fill in one oval for an importance rating using the following scale:

- 1 = Not Important**
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
1. purpose for skin care	1	2	3	4	5
2. purposes for grooming	1	2	3	4	5
3. special diets	1	2	3	4	5
4. normal versus abnormal characteristics of urine and stool	1	2	3	4	5
5. physical comfort measures and techniques	1	2	3	4	5
6. hand washing and hand hygiene techniques	1	2	3	4	5
7. standard/universal precautions	1	2	3	4	5
8. emergency and disaster situations and responses	1	2	3	4	5
9. indications that client might be suicidal	1	2	3	4	5
10. elastic stockings/anti-embolism hose application and removal techniques	1	2	3	4	5
11. procedures for moving a client in bed	1	2	3	4	5
12. procedures for obtaining and recording blood pressure	1	2	3	4	5
13. procedures for obtaining and recording body temperature	1	2	3	4	5
14. procedures for obtaining and recording pulse rate	1	2	3	4	5
15. procedures for obtaining and recording respiratory rate	1	2	3	4	5
16. procedures to measure and record client's height and weight	1	2	3	4	5
17. procedures to secure and respect client's personal belongings	1	2	3	4	5
18. prosthetic and orthotic device application and removal techniques	1	2	3	4	5
19. reality orientation therapy	1	2	3	4	5
20. safe transfer techniques	1	2	3	4	5
21. skills that promote client's sense of security	1	2	3	4	5
22. specimen collection types and procedures	1	2	3	4	5
23. techniques and devices for addressing the unique needs and behaviors of the client with cognitive impairment	1	2	3	4	5
24. turning, coughing and deep breathing techniques	1	2	3	4	5
25. types, applications and uses of restraints	1	2	3	4	5
26. urinary catheter care procedures	1	2	3	4	5
27. validation therapy	1	2	3	4	5
28. converting ounces to milliliters	1	2	3	4	5
29. converting pounds to kilograms	1	2	3	4	5
30. how to report and document client behavior	1	2	3	4	5
31. intake and output calculations	1	2	3	4	5
32. normal versus abnormal pulse oximetry readings	1	2	3	4	5
33. normal versus abnormal vital signs	1	2	3	4	5
34. observing and reporting behavioral changes	1	2	3	4	5
35. observing, recording and measuring intake and output	1	2	3	4	5
36. procedures for calculating and recording meal intake	1	2	3	4	5
37. reporting changes in client's intake and output	1	2	3	4	5
38. reporting changes in client's weight	1	2	3	4	5
39. reporting process for suicidal clients	1	2	3	4	5
40. complications due to prosthetic and orthotic device use	1	2	3	4	5
41. normal and abnormal color, movement and sensation of extremities	1	2	3	4	5
42. normal joint mobility	1	2	3	4	5
43. normal versus abnormal skin and nail conditions	1	2	3	4	5
44. normal versus abnormal skin appearance	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective professional practice, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

1 = Not Important
2 = Minimally Important
3 = Moderately Important
4 = Very Important
5 = Critically Important

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
45. pressure relieving devices and techniques	1	2	3	4	5
46. procedures for inspecting and providing skin care	1	2	3	4	5
47. purposes of skin care	1	2	3	4	5
48. range of motion exercises	1	2	3	4	5
49. range of motion precautions	1	2	3	4	5
50. risk factors for skin breakdown	1	2	3	4	5
51. the aging process and its effect on the body	1	2	3	4	5
52. adaptive devices for clients with sensory impairment	1	2	3	4	5
53. ambulation devices and use	1	2	3	4	5
54. client mobility and functional limitations	1	2	3	4	5
55. prosthetic and orthotic devices	1	2	3	4	5
56. the need to promote client independence	1	2	3	4	5
57. basic emotional needs	1	2	3	4	5
58. behaviors related to cognitive impairments	1	2	3	4	5
59. client recreational activities	1	2	3	4	5
60. client's need for acceptance and sense of belonging	1	2	3	4	5
61. client's need for sense of security	1	2	3	4	5
62. cognitive impairments	1	2	3	4	5
63. meeting the needs of sensory impaired clients	1	2	3	4	5
64. personal preference consideration	1	2	3	4	5
65. physical and emotional benefits of bathing clients	1	2	3	4	5
66. promoting client participation in group activities	1	2	3	4	5
67. promoting client participation in recreational activities	1	2	3	4	5
68. sensory impairments	1	2	3	4	5
69. skills that promote client's feeling of acceptance and belonging	1	2	3	4	5
70. techniques for helping the client express emotions	1	2	3	4	5
71. the stages of grief	1	2	3	4	5
72. care for the body after death	1	2	3	4	5
73. client's religious and cultural beliefs and practices	1	2	3	4	5
74. cultural and personal preference considerations	1	2	3	4	5
75. dignity, spiritual and cultural considerations for a client after death	1	2	3	4	5
76. dignity, spiritual and cultural considerations for a dying client	1	2	3	4	5
77. the death and dying process	1	2	3	4	5
78. the need to report client's cultural/religious/spiritual preferences and needs	1	2	3	4	5
79. active listening skills	1	2	3	4	5
80. approved medical terminology	1	2	3	4	5
81. chain of command	1	2	3	4	5
82. how to handle conflict	1	2	3	4	5
83. identifying and reporting barriers to communication	1	2	3	4	5
84. respectful communication	1	2	3	4	5
85. respectful communication skills	1	2	3	4	5
86. shift change report	1	2	3	4	5
87. the need for an interpreter	1	2	3	4	5
88. advanced directives	1	2	3	4	5
89. client grievance and dispute processes	1	2	3	4	5

SECTION 2: KNOWLEDGE NEEDED *(continued)*

INSTRUCTIONS: Please rate the overall importance of the possession of this **knowledge** by newly certified nurse aides for safe and effective professional practice, regardless of specific work setting. *(Select one importance rating per knowledge statement.)*

For each activity fill in one oval for an importance rating using the following scale:

- 1 = Not Important**
- 2 = Minimally Important**
- 3 = Moderately Important**
- 4 = Very Important**
- 5 = Critically Important**

KNOWLEDGE OF:

	1 Not Important	2 Minimally Important	3 Moderately Important	4 Very Important	5 Critically Important
90. client privacy and confidentiality	1	2	3	4	5
91. client rights	1	2	3	4	5
92. client-centered care	1	2	3	4	5
93. client-centered environment	1	2	3	4	5
94. client's environmental preferences	1	2	3	4	5
95. how to maintain dignity and privacy during care	1	2	3	4	5
96. how to promote client self-esteem and dignity	1	2	3	4	5
97. interactions to promote client dignity during meals	1	2	3	4	5
98. privacy, dignity, safety and comfort during linen changes	1	2	3	4	5
99. restraint alternatives	1	2	3	4	5
100. the need to explain care to client prior to procedures	1	2	3	4	5
101. ways to support the sexuality of the client	1	2	3	4	5
102. documentation guidelines	1	2	3	4	5
103. Health Insurance Portability and Accountability Act (HIPAA)	1	2	3	4	5
104. Health Insurance Portability and Accountability Act (HIPAA) violations	1	2	3	4	5
105. procedures to report unusual incidents	1	2	3	4	5
106. reporting requirements for disputes, grievances, abuse and suspicious workplace activities	1	2	3	4	5
107. right and wrong conduct for nurse aides	1	2	3	4	5
108. signs of suspected neglect, mistreatment or abuse	1	2	3	4	5
109. suspicious workplace activity	1	2	3	4	5
110. continuing education or in-service requirements	1	2	3	4	5
111. following client's plan of care as assigned	1	2	3	4	5
112. how to identify self by name and job title	1	2	3	4	5
113. nurse aide role as a member of the healthcare team	1	2	3	4	5
114. nurse aide role in reinforcement of client and family education	1	2	3	4	5
115. nurse aide roles and responsibilities	1	2	3	4	5
116. nurse aide's participation in plan of care process	1	2	3	4	5
117. nurse aide's role in assisting client with life transitions	1	2	3	4	5
118. performance improvement and cost containment programs	1	2	3	4	5
119. prioritizing client care	1	2	3	4	5
120. promoting client and family role in plan of care	1	2	3	4	5
121. promoting family's role in client care	1	2	3	4	5
122. the nurse aide role in assisting the nurse with a dressing change	1	2	3	4	5
123. ways to modify nurse aide's behavior in response to the client's behavior	1	2	3	4	5
124. working within a team	1	2	3	4	5

125. Are there any areas of knowledge needed by certified entry-level nurse aides in your work setting that were NOT listed on this survey?

- No
- Yes (Please list activitie(s) in the space provided): _____

SECTION 3: PERSONAL BACKGROUND

Answers to the following questions will be used to describe the individuals completing this questionnaire. No individual answers will be reported.

1. What is your gender?

- Male
- Female

2. Select below the answer most descriptive of your racial/ethnic background. (Select only ONE answer)

- African American
- Asian Indian
- Asian other
- Hispanic
- Native American
- Pacific Islander
- White - not of Hispanic origin
- Other, please specify: _____

3. Is English the first language you learned to speak?

- Yes
- No

4. What is your age in years?

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

SECTION 4: COMMENTS

If we need more information to clarify the results of this study, we may call some persons. If you are willing to be contacted, please **provide your phone number below**:

**Daytime or Early Evening
Phone Number with Area Code:**

()	-																	
0	0	0	●	0	0	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1		1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2		2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3		3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4		4	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5		5	5	5		5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6		6	6	6		6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7		7	7	7		7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8		8	8	8		8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9		9	9	9		9	9	9	9	9	9	9	9	9	9	9	9	9

You may write any comments or suggestions that you have in the space below.

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

Thank you for your assistance with this important study!

APPENDIX F: 2010 NURSE AIDE KNOWLEDGE NONRESPONDER SURVEY QUESTIONNAIRE



National Council of State Boards of Nursing CERTIFIED ENTRY-LEVEL NURSE AIDE NURSING KNOWLEDGE SURVEY

This survey is the follow-up of a comprehensive study of the nursing knowledge needed by certified entry-level nurse aides/nursing assistants. This study is being conducted by the National Council of State Boards of Nursing (NCSBN®).

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

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



Correct marks



Incorrect marks

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

1. You did not respond to the Entry-Level Nurse Aide Knowledge Survey in March 2010 because you:

- Were too busy Do not like/trust surveys
 Did not care Did not receive it
 Other (please specify): _____

2. What type(s) of nursing license/certification do you hold? (Select ALL that apply)

- Certified Nurse Aide (CNA)
 Licensed practical or vocational nurse (LPN/LVN)
 Registered Nurse (RN)
 Other (please specify): _____

3. What best describes your position at work?

- Nurse Aide/Nursing Assistant
 Nurse Aide Evaluator (skip to Question 5)
 Other (please specify): _____

4. What is the total length of time you have worked as a nurse aide? (Select ONE response)

- | | | |
|--|--------------------------------|--|
| <input type="radio"/> 6 months or less | <input type="radio"/> 5 years | <input type="radio"/> 11 years |
| <input type="radio"/> 7 to 11 months | <input type="radio"/> 6 years | <input type="radio"/> 12 years |
| <input type="radio"/> 1 year | <input type="radio"/> 7 years | <input type="radio"/> 13 years |
| <input type="radio"/> 2 years | <input type="radio"/> 8 years | <input type="radio"/> 14 years |
| <input type="radio"/> 3 years | <input type="radio"/> 9 years | <input type="radio"/> 15 years or more |
| <input type="radio"/> 4 years | <input type="radio"/> 10 years | |

5. Which of the following best describes your employment setting(s) on the last day you worked? (Review the entire list and select ALL that apply)

HOSPITALS or ACUTE CARE SETTINGS

- Central supply
 Chemical dependency unit
 Emergency room
 Extended care facility/Rehabilitation unit
 In-patient hospice care
 Intensive care unit
 Intermediate care/Step down unit
 Labor and delivery unit
 Medical/Surgical unit (includes sub-specialties like orthopedics, oncology, etc.)
 Nursery
 Operating room
 Pediatric unit
 Postpartum/Maternity unit
 Psychiatric unit
 Recovery room
 Other (please specify): _____

NURSING HOME/LONG-TERM CARE

- Assisted living facility
 Intermediate care unit
 Personal care unit
 Skilled care unit
 Sub-acute unit
 Other (please specify): _____

COMMUNITY/HOME HEALTH CARE

- Clinical/Outpatient unit/Ambulatory surgical care
 Home health in client's residence
 Hospice care in client's residence
 Other (please specify): _____

Continue on the other side of this sheet ►

