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2006 Job Analysis
of Medication
Assistants



Report of Findings from the

2006 Job Analysis of Medication Assistants

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

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A.W.

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 four territories, in their mission of public protection through safe nursing practice. Care provided by medication assistants (MAs) impacts client safety directly and influences the quality of care provided by licensed nurses. As nursing practice changes, the activities performed by those assisting nurses may change. Periodic job analyses provide a means of identifying the activities delegated to and performed by MAs.

This 2006 research is the first time NCSBN has performed an MA job analysis. However, NCSBN has performed job analyses for registered nurses (RNs), licensed practical/vocational nurses (LPN/VNs) and nursing assistants for many years. Results of MA job analyses may be used by boards of nursing as they regulate the practice of MAs or the nurses overseeing them, by educational programs as they plan curriculums for nurses and their assistants, and by entities involved in the assessment of MA competencies.

One of the most important uses for a job analysis is to provide validity evidence to support an assessment or examination. The *Joint Standards for Educational and Psychological Testing* (APA, AERA and NCME, 1999) state:

Standard 14.10

When evidence of validity on test content is presented, the rationale for defining and describing a specific job content domain in a particular way (e.g., tasks, knowledge, skills, abilities or other personal characteristics) should be stated clearly.

Standard 14.14

The content domain to be covered by a credentialing test should be defined clearly and justified in terms of importance of the content for the credential-worthy performance in an occupation or profession. A rationale should be provided to support

a claim that the knowledge or skills being assessed are required for credential-worthy performance in an occupation and are consistent with the purpose for which the licensing or certification program was instituted.

Indeed, it has been stated that a practice analysis should address those competencies that are needed to practice safely and effectively in order to protect the public (CLEAR, 2004).

Methodology

A nonexperimental, descriptive study was conducted to explore the activities performed by MAs as well as the frequency and importance of performing the activities in the provision of safe client care.

Panel of Subject Matter Experts (SMEs)

A panel of 14 nurses and MAs was assembled to assist with the job analysis. Panel members all supervised (or personally performed) the work of MAs and represented all NCSBN geographic areas and all major nursing specialties.

The panel of subject matter experts (SMEs) used activity logs, job descriptions, policy and procedure manuals, medication assistant curriculum, job analyses, and state nurse practice acts, as well as their own intimate knowledge of MA work to create a list of 104 activities performed by MAs. The activity list was created within the framework developed by the panel of SMEs.

Questionnaire Development

An adequate assessment of MA work requires information about the frequency of activity performance and the importance of each activity in relation to client safety and well-being. Data related to the frequency with which activities are performed and the importance of activity performance were collected from practicing MAs.

The *Medication Assistant (MA) Practice Analysis Study* contained four sections. Section One asked questions about the MAs' work environment including setting, hours worked, and types and numbers

of clients for whom care was provided. Section Two covered educational preparation and certifications achieved. The 104 MA activities were arranged in random order in Section Three. Section Four allowed the writing of comments and suggestions by the respondent.

Survey Process

A random sample of 7,000 MAs was generated from lists supplied to NCSBN by various state agencies. A five-stage, first-class mailing process was used to engage potential participants in the study. All potential participants were promised confidentiality with regard to their participation and their responses. The study protocol was reviewed and approved by NCSBN's executive director for compliance with organizational guidelines for research studies involving human subjects.

In March 2006, 7,000 surveys were sent to a mailing house to be distributed to MAs across the country. Prior to mailing inside the continental U.S., the mailing house checked the addresses using a program that accesses the National Change of Address (NCOA) database. This program identified 619 invalid addresses, mostly due to persons moving without providing a change of address. From the 6,381 remaining mailings, an additional 651 surveys were returned due to incorrect addresses. Surveys were returned by 1,433 respondents for an adjusted return rate of 25.0%.

A count of valid responses for the remaining 1,433 scanned surveys was conducted. Analysis was conducted on all ratings. Valid responses were counted for all ratings and 50% completion was established as the cut-off. A total of 145 records were removed based on this cut-off. Therefore, the analyzable surveys have valid responses for at least 50% of all ratings. Analyzable surveys were returned by 1,288 respondents for an analyzable return rate of 22.5%.

Demographics

A total of 1,288 MAs responded to the survey. The majority of respondents reported being female (91.9%). Overall, the average age of respondent MAs was 43 years (SD 12.46 years).

The majority of respondent MAs reported their ethnicity as White/Non-Hispanic (64.6%) while 0.4% were Asian Indian, 20.4% were African American and 6.9% were Hispanic.

Of the respondent MAs, 20.8% had one year or less of total experience, 38.1% had two to five years of experience, 19.5% had 6 to 10 years of experience, 9.3% had 11 to 15 years of experience, and 12.2% had over 15 years of experience.

On average, respondents reported approximately seven years of MA experience. About half (49.8%) of responding MAs indicated receiving MA training from their employer. They also frequently reported being prepared through courses offered by their community or junior college (25.4%) and training offered by technical or vocational schools (23.6%). The majority of MA respondents (89.4%) reported being required to complete specific medication assistant training. On average, respondents reported that 50 hours of classroom training and 31 hours of clinical training were required. Approximately 77.1% of respondents indicated that being a certified nursing aide/assistant was an additional requirement to become an MA while 67.6% indicated that receipt of a high school diploma/GED was required.

When asked about training completed, MAs were most likely to have completed medication training (35.9%), dialysis technician training (34.1%) and home health aide training (31.6%). MAs were least likely to have completed training as an advanced or skilled nurse assistant (CNA Advanced) (1.2%).

When asked about certifications earned, MAs were most likely to have earned dialysis technician (81.1%), basic nurse assistant (CNA) (66.6%) and first aid (61.6%) certifications. MAs were least likely to have earned CNA Advanced (0.5%) certifications.

Approximately 9.0% of the MA respondents reported current enrollment in nursing education programs. Of the respondents enrolled, 46.7% were enrolled in LPN/VN programs, and 38.7% were enrolled in RN programs (24.0% of these were in associate degree programs). Approximately 10.5% reported that they had applied to but were not currently enrolled in a nursing education program.

When asked whether continuing education was required, a majority (76.2%) of MA respondents

reported “yes.” On average, respondents reported a requirement of 11 hours of continuing education contact hours.

Work Settings

Medication Assistant Employment Settings

MA respondents most frequently reported employment in long-term care facilities (56.1%), assisted living facilities (32.5%) and rehabilitation facilities (11.1%). The least frequently reported practice settings were day care (adult or child) (1.6%), schools (2.6%) and correctional facilities (2.6%).

Shifts Worked

The majority of the MA respondents (53.6%) reported working 8 hours per shift.

Hours Employed and Worked

Approximately 49.3% of MAs actually reported being employed to work 40 hours or more per week as a MA. However, 40.7% reported working 40 hours or more per week as a MA.

Client Ages And Types

MAs were asked to indicate all of the age groups and types of clients that they cared for in their roles as MAs. MAs were most likely to care for clients aged 65 to 85 years (77.6%), clients over the age of 85 (57.2%) and clients aged 31 to 64 years (40.0%). MAs provided care most for clients with behavioral/emotional conditions (66.9%), clients with stable chronic conditions (59.9%) and clients at the “end of life” (52.0%). MAs were asked the number of clients they administered medication to during a typical shift. MAs administered medication to an average of 28 clients per shift.

Activity Performance Findings

Overview of Methods

The 2006 MA Survey asked respondents to provide frequency and importance ratings for each of the 104 activity statements on the survey. In addition, respondents were asked to indicate if an activity was not applicable to his or her work setting by marking the “NA Not Applicable” response.

Applicability of Activities to Practice Setting

Respondents indicated an activity was not applicable to his or her work setting by marking the “NA Not Applicable” response. The activities ranged from 1.43% not applicable (more than 1% of the respondents reported that the activity was not performed within their work settings or almost 99% of respondents do perform the activity) to 89.10% (nearly 9 out of 10 of the respondents reported the activity was not applicable within their work setting or only 10% of respondents do perform the activity).

Frequency of Activity Performance

Respondents were asked to rate the frequency of performance of all activities that were applicable to their work settings. They reported how frequently they performed the activity in a typical shift using a five-point scale: “0 Less than 1 Time” to “4 times or more.” Frequency of performance for all activities ranged from an average of 0.26 times in a typical shift to 3.87 times in a typical shift.

Importance of Activity Performance

Respondents were asked to rank the importance of performing each MA activity considering “safety and/or improving functioning and health status of the client.” Importance ratings were recorded using a four-point scale: “1 Not Important” to “4 Extremely Important.” Importance of performance for all activities ranged from 2.96 to 3.96 on the four-point scale.

Subgroup Analyses

To ensure practice was consistent across certain parameters, analyses were conducted to determine if MA practice activities were viewed similarly by respondents regardless of years of experience, work setting and geographic location. Mean importance ratings for all activity statements were calculated based on 24 subgroups. These subgroups were derived from responses to three demographic questions related to years of experience, work setting and NCSBN geographic area. In summary, average importance ratings were calculated according to years of experience, work setting and geographic area.

Conclusion

A nonexperimental, descriptive study was performed to explore the importance and frequency of activities performed by MAs. More than 1,400 MAs responded. In general, importance ratings were comparable across work settings, years of experience and geographic location. Results of this study can be used to describe MA practice across a variety of work settings. In addition, the results of the study can be used to identify core MA activities.

Report of Findings from the

2006 Job Analysis of Medication Assistants

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

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 member board territories, in their mission of public protection through safe nursing practice. Care provided by medication assistants (MAs) impacts client safety directly and influences the quality of care provided by licensed nurses. As nursing practice itself changes, the activities performed by those assisting nurses may change. Periodic job analyses provide a means of identifying the activities performed and/or delegated to MAs.

This 2006 research is the first MA job analysis performed by NCSBN. However, NCSBN has been performing job analyses for registered nurses (RNs), licensed practical/vocational nurses (LPN/VNs) and nursing assistants for many years. The results of MA job analyses may be used by boards of nursing as they regulate the practice of MAs or the nurses overseeing them, by educational programs as they plan curriculums for nurses and their assistants, and by entities involved in the assessment of MA competencies.

One of the most important uses for a job analysis is to provide validity evidence to support an assessment or examination. *The Joint Standards for Educational and Psychological Testing* (AERA, APA and NCME, 1999) states:

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Indeed, it has been stated that a practice analysis should address those competencies that are needed to practice safely and effectively in order to protect the public (CLEAR, 2004).

METHODOLOGY

A nonexperimental, descriptive study was conducted to explore the activities performed by MAs as well as the frequency and importance of performing the activities in the provision of safe client care.

In order to ensure that the methodology that was used for the *2006 Medication Assistant Job Analysis* met and/or exceeded industry standards, an independent External Job Analysis Panel of Methodology Experts reviewed and approved the general methodology. See *Appendix A for the list of External Job Analysis Methodology Experts and their qualifications*.

Panel of Subject Matter Experts (SMEs)

A panel of 14 nurses and MAs was assembled to assist with the job analysis. Panel members all supervised (or personally performed) the work of MAs and represented all geographic areas of the country and all major nursing specialties and practice settings for MAs. Refer to *Appendix B for a listing of panel members and their qualifications*.

The subject matter experts (SMEs) were asked to submit daily activity logs for at least three MAs whom they supervise. In addition, the SMEs submitted MA curriculum, policies and procedures, job descriptions, evaluation forms and orientation manuals. All of these documents, as well as activity statements from other job analyses, state nurse practice acts, and a draft of NCSBN's Medication Assistant Certified Curriculum were available for the panel to use as source documents. The panel used the activity logs, source documents and their own intimate knowledge of MA work to create a list of 104 activities performed by MAs in various practice settings.

Additionally, the SMEs developed a draft content category structure that would assist them as they developed the activity list.

The panel members worked to create a list of nursing activities performed within each content category. Each MA activity was reviewed for applicability to MA practice and the safety of the client. Care was

taken to create the MA activities at approximately the same level of conceptual specificity, to avoid redundancy within and between categories, and to ensure that the activity statements were clear, understandable and observable. In addition, the panel took care to ensure that the list of activities was comprehensive in order to ensure that there was no artificial restriction in the range of activities. The SMEs also considered the number of activities so as not to create an overwhelming burden for the responding MA. Appendix C contains a copy of the survey form.

Questionnaire Development

An adequate assessment of MA work requires information about the frequency of activity performance and importance of each activity in relation to client safety and well-being. Data related to the frequency with which activities are performed and the importance of activity performance were collected from practicing MAs.

The questionnaire form and 104 activity statements were reviewed by NCSBN's Practice, Regulation and Education Committee. Then the survey form was piloted and revisions made as needed.

The Medication Assistant (MA) Practice Analysis Study contained four sections. Section One asked questions about the MA's work environment including setting, hours worked, and types and numbers of clients for whom care was provided. Section Two covered educational preparation and certifications achieved. The 104 MA activities were arranged in random order in Section Three. Section Four allowed the writing of comments and suggestions by respondents. Appendix C contains a copy of the 2006 MA survey.

Survey Process

A random sample of the names and addresses of 7,000 MAs was generated from lists supplied to NCSBN by various state agencies. A five-stage, first-class mailing process was used to engage potential participants in the study. All potential participants

were promised confidentiality with regard to their participation and their responses. The study protocol was reviewed and approved by NCSBN's executive director for compliance with organizational guidelines for research studies involving human subjects.

Mailing

Prior to the mailing of the survey, an announcement postcard was mailed to the respondents telling them to expect a survey in a few days and that the survey was very important. This announcement was followed by the first-class mailing of the survey, which included a cover letter that described the scope and purpose of the study. One week later, a reminder postcard was sent. A second reminder postcard was sent to nonresponders two weeks later. After three weeks a third postcard was mailed. A second survey was sent to any participants who requested one. *See Appendix D for copies of the announcement postcard, cover letter and reminder postcards.*

Representativeness

It became clear that not all jurisdictions could be represented in the sample either because the jurisdiction does not regulate the practice of MAs or because the jurisdiction does not maintain a registry of MAs with addresses that could be disclosed to NCSBN. After contacting several agencies in each jurisdiction, only 13 jurisdictions met the criteria. Only those 13 jurisdictions were included in the sample.

The intention was to mail a survey to a sample of 7,000 MAs such that each of the 13 jurisdictions had equal representation or roughly 538 people for each jurisdiction. The rationale for using equal representation across jurisdictions was to assess whether there is a common practice across jurisdictions. Although the intention was to equally weight the jurisdictions, some jurisdictions had fewer than 538 MAs with complete addresses and current certification. As a result, some jurisdictions contributed fewer than the desired number of participants and others contributed slightly more to keep the sample at the targeted 7,000. *See Table 1.*

As expected, the jurisdictions that comprised smaller percentages of the sample represented smaller percentages of the cohort that responded. Conversely, several jurisdictions that were well represented in the sample were surprisingly underrepresented in the cohort that responded (i.e., Kentucky, Nebraska and Washington). The reason for the difference in response tendencies across jurisdictions is unclear, however, the difference may be related to the currency of the addresses in the registries.

Confidentiality

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

Return Rates

In March 2006, 7,000 surveys were sent to a mailing house to be distributed to MAs in the identified jurisdictions. Prior to mailing inside the continental U.S., the mailing house checked the addresses

Table 1. Representativeness

State	Equal Representation %	Estimated Population %	Sample %	Survey %
IN	7.7	3.5	9.5	14.5
KS	7.7	8.6	9.3	9.9
KY	7.7	6.6	8.5	3.6
MD	7.7	20.8	8.8	6.7
NC	7.7	0.1	0.7	1.6
ND	7.7	1.6	9.8	15.1
NE	7.7	19.2	9.8	0.2
NH	7.7	0.1	1.0	1.5
NJ	7.7	1.7	9.7	11.2
NM	7.7	0.3	4.2	7.2
OR	7.7	1.4	10.0	14.2
TX	7.7	9.5	9.9	12.1
WA	7.7	26.6	8.8	2.2

The adjusted response rate was 22.5%.

using a program that accesses the National Change of Address (NCOA) database. This program identified 619 invalid addresses, mostly due to persons moving without providing a change of address. From the 6,381 remaining mailings, an additional 651 surveys were returned due to incorrect addresses. Surveys were returned by 1,433 respondents for an adjusted return rate of 25%. The data set was then analyzed to ensure it met quality assurance criteria.

A count of valid responses for the 1,433 scanned surveys was conducted. Analysis was conducted on all responses. Valid responses were counted for all ratings and 50% completion was established as the cut-off. A total of 145 records were removed based on this cut-off. Therefore, the analyzable surveys have valid responses for at least 50% of all 208 ratings. Analyzable surveys were returned by 1,288 respondents for an analyzable response rate of 22.5%.

Summary

A panel of SMEs met and created a list of MA activities. A data collection instrument was created and sent to 7,000 MAs. A 22.5% response rate of analyzable surveys was obtained. This job analysis contains the responses of 1,288 MAs.

DEMOGRAPHICS, EXPERIENCES AND PRACTICE ENVIRONMENTS OF PARTICIPANTS

A total of 1,288 MAs responded to the survey. This section reports on the demographic information from those 1,288 respondents.

Age and Gender

The majority of respondent MAs reported being female (91.9%). Overall, the average age of respondent MAs was 43 years (SD 12.46 years). The reported ages of respondent MAs ranged from 16 to 79 years old.

NCSBN Geographic Area

Respondents were asked the state/territory in which they were currently practicing. Responses were grouped into the four areas of NCSBN's member boards. Area II had the largest representation with 38.4% of the responding MAs. Area III had the lowest percentage of representation. There were 23 respondents who did not answer this question. See *Figure 1*. Note that Table 2 lists the NCSBN member jurisdictions in each NCSBN geographic area when the survey was conducted.

Ethnicity

The majority of respondent MAs reported their ethnicity as White/Non-Hispanic (64.6%) while 0.4% were Asian Indian, 20.4% were African American and 6.9% were Hispanic. There were 55 respondents who did not answer this question. See *Figure 2*.

Years of Experience

Respondents reported an average of approximately 7 years of MA experience. Figure 3 presents the distribution of years of experience. Of the respondent MAs, 20.8% had 1 year or less of total experience, 38.1% had 2 to 5 years of experience, 19.5% had 6 to 10 years of experience, 9.3% had 11 to 15 years of experience, and 12.2% had more than 15 years of experience. See *Table 3*.

Figure 1. NCSBN Geographic Area Representation

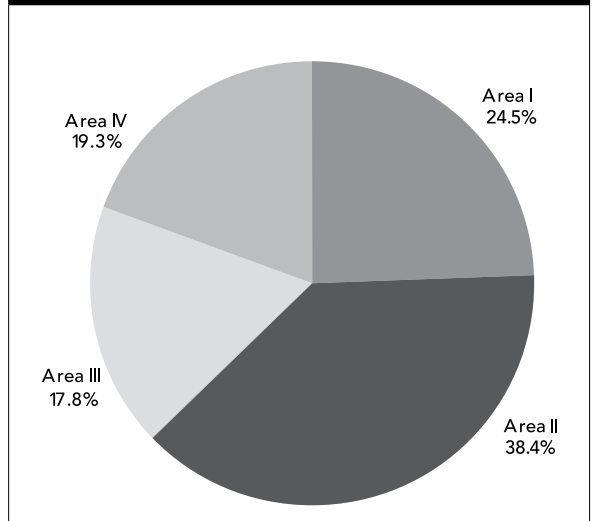


Table 2. Jurisdictions Included in NCSBN Geographic Areas

Area I	Area II	Area III	Area IV
Alaska	Illinois	Alabama	Connecticut
American Samoa	Indiana	Arkansas	Delaware
Arizona	Iowa	Florida	District of Columbia
California	Kansas	Georgia	Maine
Colorado	Michigan	Kentucky	Maryland
Guam	Minnesota	Louisiana	Massachusetts
Hawaii	Missouri	Mississippi	New Hampshire
Idaho	Nebraska	North Carolina	New Jersey
Montana	North Dakota	Oklahoma	New York
Nevada	Ohio	South Carolina	Pennsylvania
New Mexico	South Dakota	Tennessee	Puerto Rico
Northern Mariana Islands	West Virginia	Texas	Rhode Island
Oregon	Wisconsin	Virginia	Vermont
Utah			Virgin Islands
Washington			
Wyoming			

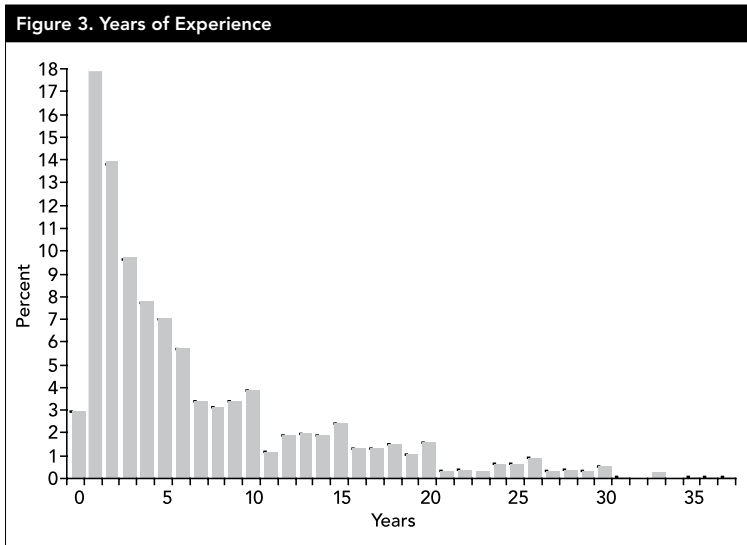
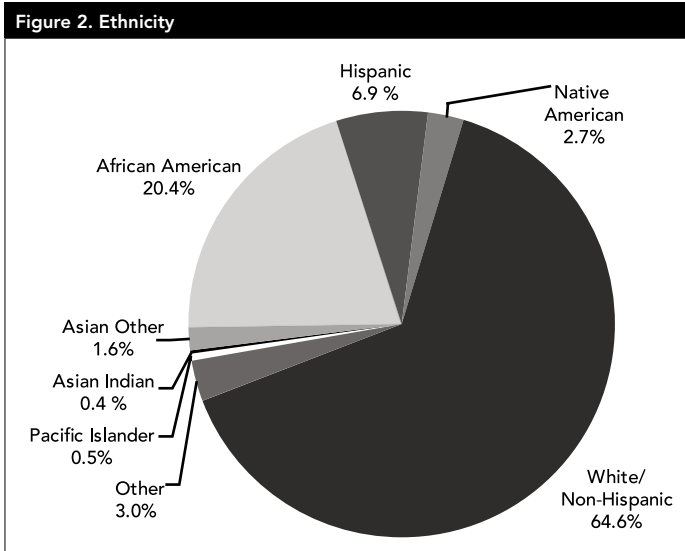


Table 3. Years of Experience

Range	Frequency	Percent (%)
1 Year or Less	251	20.8
2 to 5 Years	461	38.1
6 to 10 Years	236	19.5
11 to 15 Years	113	9.3
More than 15 Years	148	12.2

MA Preparation

Training Received

The MAs were asked to indicate all of the types of training they received. Of the respondents, nearly half (49.8%) of the MAs indicated receiving training from their employer. MAs also frequently reported being prepared through training offered by their community or junior college (25.4%) and training offered by technical or vocational schools (23.6%). See Table 4.

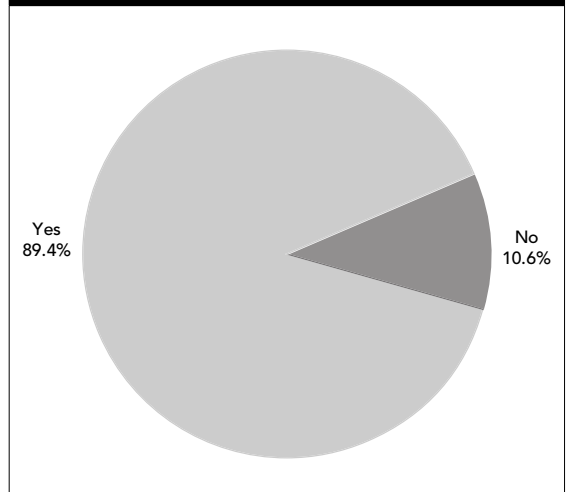
Table 4. Training Received

Training Provider	Frequency	Percent (%)
No training was required	19	1.5
Training offered by employer	641	49.8
Training offered by community or junior college	327	25.4
Training offered by technical or vocational school	304	23.6
Training received while in military	4	0.3
Training sponsored by State agency	125	9.7
Other	52	4.0

Specific Medication Assistant Training

The majority of MA respondents (89.4%) reported being required to complete specific medication assistant training. See Figure 4.

Figure 4. Specific Medication Assistant Training Required



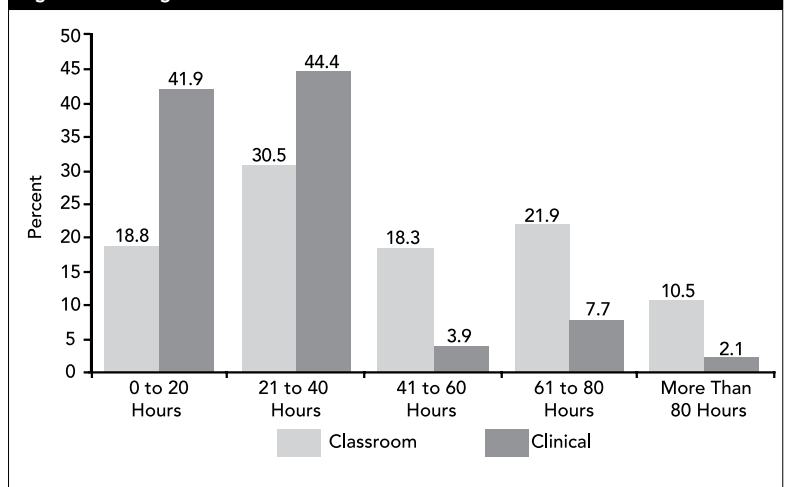
Training Hours

The majority of responding MAs reported having 60 hours or less of classroom training and 40 hours or less of clinical training. On average, respondents reported 50 hours of classroom training and 31 hours of clinical training were required. See Figure 5.

Additional Requirements

Approximately 77.1% of respondents indicated being a certified nursing aide/assistant was an additional requirement to become an MA while 67.6% indicated receipt of a high school diploma/GED was required. See Table 5.

Figure 5. Training Hours



Training Programs

MAs were most likely to have completed medication (35.9%), dialysis technician (34.1%) and home health aide (31.6%) training programs. MAs were least likely to have completed training as advanced or skilled nurse assistants (CNA Advanced) (1.2%). See *Table 6*.

Certification Program/Course

MAs were asked to indicate all of the certification programs/courses that they had completed. They were most likely to have completed certification courses for dialysis technician (81.1%), basic nurse assistant (CNA) (66.6%) and first aid (61.6%). MAs were least likely to have earned CNA Advanced (0.5%) certifications. See *Table 7*.

Enrollment in Nursing Programs

Of the MA respondents, 9.0% reported current enrollment in nursing education programs. Approximately 10.5% reported that they had applied to but were not currently enrolled in a nursing education program. See *Table 8*.

Type of Program Enrollment

Of the respondents enrolled, 46.7% were enrolled in LPN/VN programs and 38.7% were enrolled in RN programs (24.0% of these were in associate degree programs). See *Table 9*.

Continuing Education

When asked whether continuing education was required, a majority (76.2%) of MA respondents reported "yes." See *Figure 6*.

Annual Continuing Education Requirement

As shown in *Table 10*, the majority of respondents reported a requirement between 1 and 8 hours of continuing education per year. On average, respondents reported an annual requirement of 11 hours of continuing education contact hours.

Table 5. Additional Requirements

Requirement	Frequency	Percent (%)
High School Diploma/GED	871	67.6
Certified Nurse Aide/Assistant	993	77.1
Assessment Test	261	9.2
Home Health Aide	119	20.3
Other	98	7.6

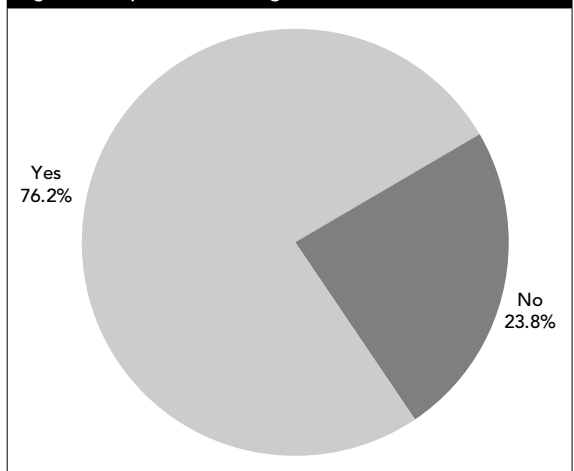
*Respondents were asked to select all that apply

Table 6. Training Program Completed

Program	Frequency	Percent (%)
Medication	462	35.9
Dialysis Technician	439	34.1
Home Health Aide	407	31.6
Geriatric Care	399	31.0
First Aid	396	30.7
Phlebotomy	371	28.8
Basic Nurse Assistant (CNA)	357	27.7
Wound Care	258	20.0
Psychiatric/Mental Health Aide	233	18.1
Pharmacy Technician	227	17.6
Basic Life Support (CPR)	192	14.9
Feeding Assistant	187	14.5
Restorative Care	131	10.2
Alzheimer's Care	52	4.0
Other	34	2.6
Intravenous Therapy	33	2.6
Hospice Care	31	2.4
Advanced or Skilled Nurse Assistant (CNA Advanced)	16	1.2

*Respondents were asked to select all that apply

Figure 6. Required Continuing Education



Work Settings and Shifts

Medication Assistant Work Settings

MA respondents most frequently reported employment in long-term care facilities (56.1%), assisted living facilities (32.5%) and rehabilitation facilities (11.1%). The least frequently reported work settings were day care (adult or child) (1.6%), schools (2.6%) and correctional facilities (2.6%). See *Table 11*.

Shifts Worked

The majority of the MA respondents (53.6%) reported working 8 hours per shift as shown in *Figure 7*.

Hours Employed and Hours Worked Per Week

Respondents worked an average of 28.89 hours each week. Approximately 49.3% of MAs reported that they were employed to work 40 hours or more per week as an MA. However, 40.7% of the respondents reported that they actually worked 40 hours or more per week as an MA. See *Figures 8 and 9*.

Clients

Client Ages

MAs were asked to indicate all of the age groups of clients that they cared for in their roles as MAs. As seen in *Figure 10*, MAs were most likely to care for clients aged 65 to 85 years (77.6%), clients over the age of 85 (57.2%) and clients aged 31 to 64 years (40.0%).

Client Conditions

MAs were asked to indicate all of the types of “medical conditions” of the clients for whom they provided care. MAs provided care most for clients with behavioral/emotional conditions (66.9%), clients with stable chronic conditions (59.9%) and clients at the “end of life” (52.0%) as shown in *Figure 11*.

Administering Medication

MAs were asked the number of clients they administered medication to during a typical shift. See *Figure 12*. MAs administered medication to an average of 28 clients per shift.

Table 7. Certification Program/Course Completed

Program	Frequency	Percent (%)
Dialysis Technician	1,045	81.1
Basic Nurse Assistant (CNA)	858	66.6
First Aid	793	61.6
Basic Life Support (CPR)	472	36.6
Home Health Aide	437	33.9
Psychiatric/Mental Health Aide	226	17.5
Geriatric Care	204	15.8
Medication	203	15.8
Phlebotomy	147	11.4
Pharmacy Technician	111	8.6
Wound Care	67	5.2
Restorative Care	59	4.6
Feeding Assistant	52	4.0
Alzheimer's Care	50	3.9
Other	45	3.5
Intravenous Therapy	33	2.6
Hospice Care	28	2.2
Advanced or Skilled Nurse Assistant (CNA Advanced)	7	0.5

*Respondents were asked to select all that apply

Table 8. Formal Nursing Education Program Enrollment

Response	Frequency	Percent (%)
No	1,012	80.5
Applied but not currently enrolled	132	10.5
Yes	113	9.0

Table 9. Type of Program Enrollment

Program	Frequency	Percent (%)
LPN/VN	70	46.7
RN-Associate Degree Program	36	24.0
RN-Diploma	4	2.7
RN-Bachelor's Degree Program	18	12.0
Other	22	14.7

Table 10. Annual Continuing Education Requirement

Range	Frequency	Percent (%)
0 Hours	9	1.0
1 to 8 Hours	490	54.7
9 to 12 Hours	212	23.7
More than 12 Hours	185	20.6

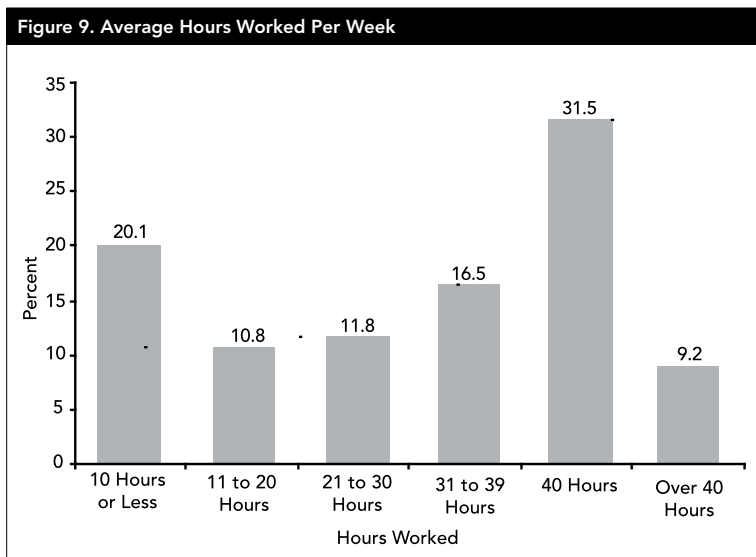
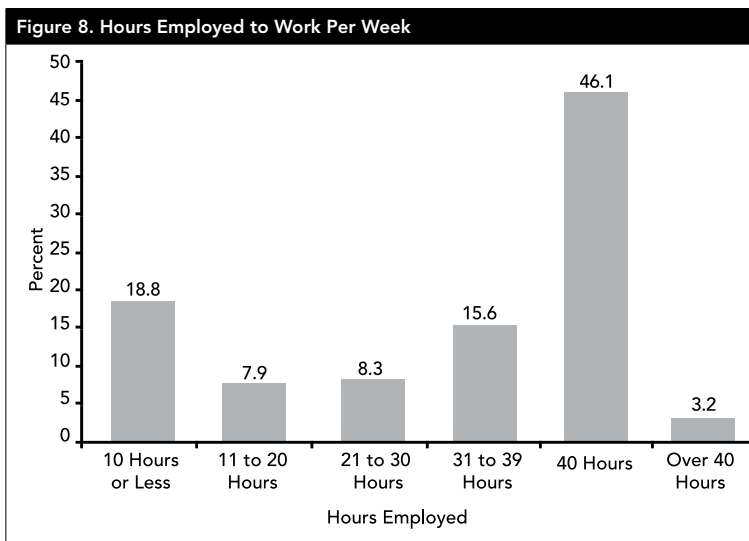
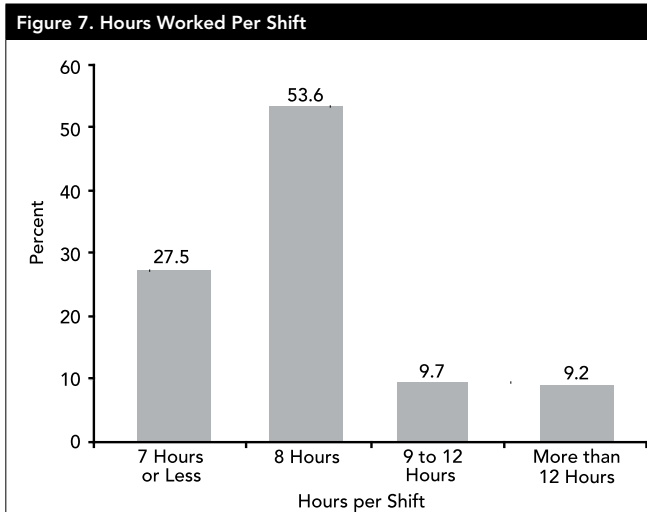


Figure 10. Client Ages

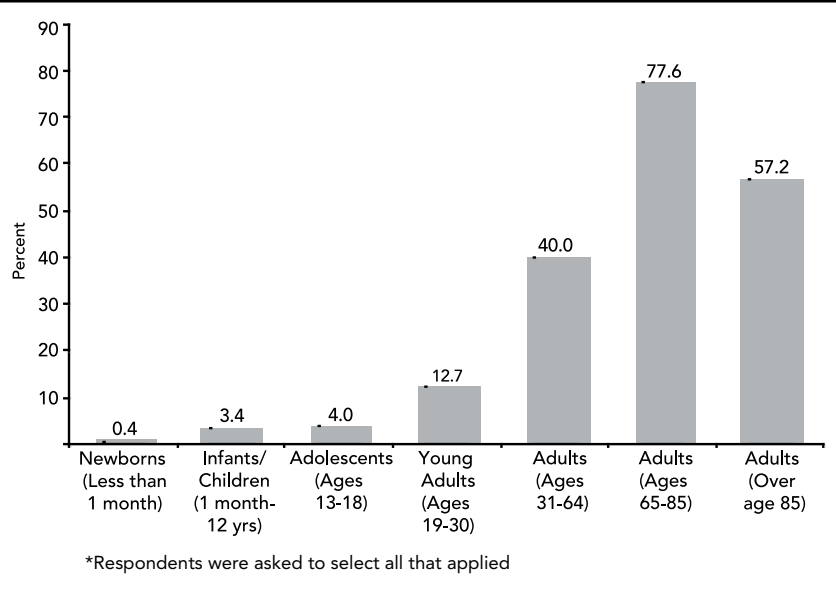


Figure 11. Client Conditions

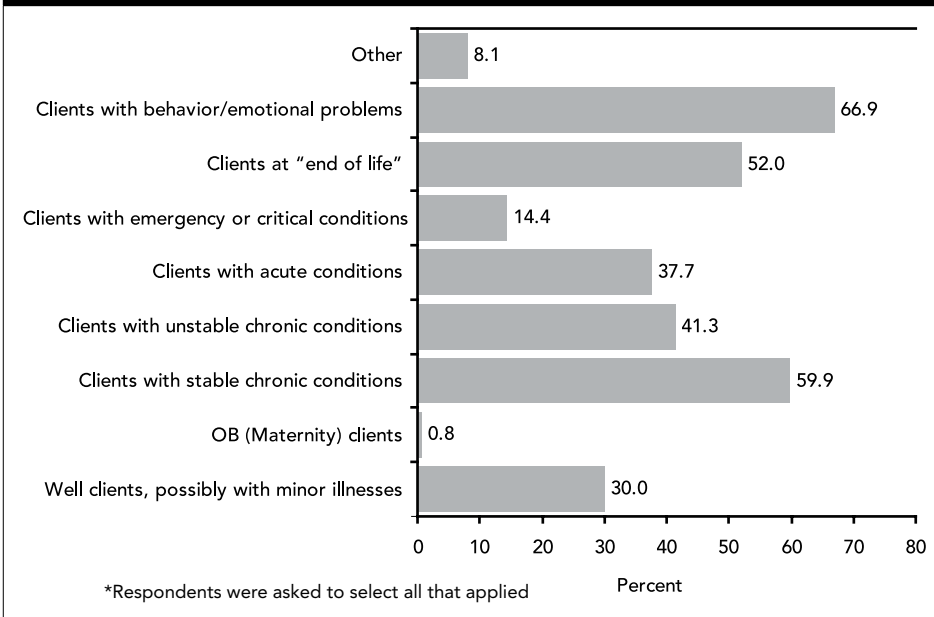
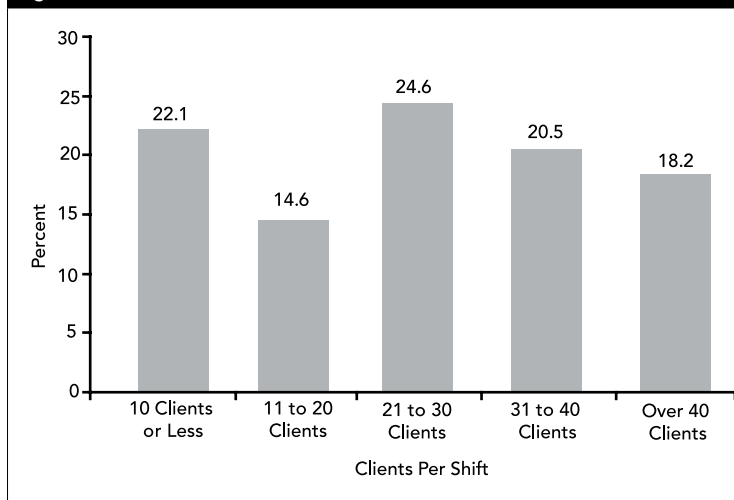


Table 11. Medication Assistant Work Setting

Setting	Frequency	Percent (%)
Long-Term Care Facility	723	56.1
Assisted Living Facility	419	32.5
Rehabilitation Facility	143	11.1
Developmental Disabilities Facility	113	8.8
Residential Facility	106	8.2
Home Health	95	7.4
Psychiatric or Mental Health Facility	82	6.4
Hospice	73	5.7
Group Home	69	5.4
Hospital	38	3.0
Community-Based or Ambulatory Care Facility/Organization	37	2.9
Correctional Facility	34	2.6
Schools	33	2.6
Daycare (Adult or Child)	20	1.6
Other	63	4.9

Figure 12. Clients Administered Medication Per Shift

Summary

The majority of MAs responding to the 2006 *Medication Assistant Practice Analysis Survey* were female averaging 43 years of age. Most of the MAs were trained for their current work by their employers or received training from their community or junior college. Most of the MAs who had earned medication certification had also earned a dialysis technician certification. About 9.0% of MA respondents were enrolled in a nursing education program. An additional 10.5% of MA respondents had applied to a nursing education program but were not enrolled. The majority of MAs were required to complete some continuing education on an annual basis.

The majority of responding MAs were employed in long-term care facilities and assisted living facilities. They were most likely to care for older clients with behavioral/emotional conditions, clients with stable chronic conditions and clients at "end of life." Most respondents worked 8-hour shifts and reported working an average of 28.9 hours per week. MAs administered medication to an average of 28 clients per shift.

ACTIVITY PERFORMANCE FINDINGS

Findings relative to the activities performed by MAs are presented in this section of the report. The methods used to collect and analyze findings related to frequency and importance of MA activity performance will be discussed. A validation of the survey findings by the SME panel will also be provided.

Activity Performance Characteristics

This section contains the rating responses of the 1,288 respondent MAs ranging from less than one to more than 35 years of experience, and who are practicing as MAs. Findings relative to the activities performed by MAs are presented in this section of the report. The methods used to collect and analyze activity findings related to frequency and importance of MA activity performance will be discussed. A validation of the survey instrument by the SME panel will also be provided.

Reliability of the Instrument

To evaluate the instrument, a statistic known as coefficient alpha was calculated. This estimate is affected by the number of questions and the number of respondents. Higher values (e.g., greater than 0.90) reflect lower error, with a maximum theoretical value of 1.0. For this survey, the importance ratings had a reliability estimate of 0.98, which suggested limited error (Hopkins, K.D., Stanley, J.C., Hopkins, B.R. 1990).

Validation of Findings

The SME panel was asked to rate the 104 activity statements using the frequency and importance scales. The results of their ratings were averaged for each activity statement. Table 12 shows the five activities that received the lowest and highest activity ratings by the SMEs and the mean frequency and importance ratings by MA respondents. The activities that were predicted by the SMEs to be performed most frequently were activities that the respondents rated as being performed most frequently. The activities that were predicted by SMEs to be most important were activities that the respondents rated as most

important. This congruence between expert ratings and respondent ratings helps to provide validation for activity statements and respondent ratings.

Representativeness of Activity Statements

The participants were asked whether the activities on their questionnaire represented what they actually performed in their positions. A majority (79.5%) indicated that the activities were representative of their current practice. This finding indicates that the survey was perceived by respondents as being a sufficient or reasonable representation of their work. This information is important for establishing the content validity of the survey. In addition, the respondents were asked to list any activity statements that were "missing." These comments were reviewed by NCSBN nursing content staff. In general, the "missing" activities were already included in the lists of activity statements. Examples of "missing" activities noted by several respondents included "Fax orders" and "Suppositories-rectal/vaginal." Activity statements "Take telephone orders for medications" and "Take (receive) written orders for medication" could include "Fax orders." Similarly, activity statements "Administer a medication by rectal route" and "Administer a medication by vaginal route" includes "Suppositories-rectal/vaginal." These finding further helped to establish the content validity of the survey instrument.

Overview of Methods

The 2006 MA survey asked respondents to provide frequency and importance ratings for each of the 104 activity statements on the survey. The scale of frequency ranged from "0 Less Than 1 Time" to "4 Times or More." Importance was rated on a scale of "1 Not Important" to "4 Extremely Important." Respondents were asked to provide the ratings based on a typical shift. Activities sorted in the order they appeared on the 2006 MA Survey can be found in Table 13.

Table 12. Response Validation Sorted by Activity Number

Activity #	SME Low Frequency Activities	Respondent Mean Frequency
t7	Perform Cardiopulmonary Resuscitation (CPR)	0.26
t8	Initiate emergency care for a client who is choking	0.45
t38	Report violation of client rights within required time frame	1.10
t42	Report unsafe practice by a health care worker (e.g., improper care, substance abuse, medication theft)	0.80
t65	Administer an emergency medication (e.g., epinephrine Epi-pen™)	0.68
Activity #	SME High Frequency Activities	Respondent Mean Frequency
t48	Adhere to basic authorized job duties	3.60
t49	Identify if a medication or route is appropriate to administer	3.25
t95	Follow safety policies/procedures used to prevent incidents and accidents	3.62
t98	Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])	3.87
t99	Follow facility/agency procedures to verify client identity (e.g., client name bands, allergy bands)	3.55
Activity #	SME Low Importance Activities	Respondent Mean Importance
t9	Assist with admission, transfer, and/or discharge of client	2.98
t25	Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)	2.96
t31	Take verbal order for medication	3.03
t32	Take telephone orders for medication	2.97
t68	Administer medication by intradermal route (e.g., PPD test)	3.00
Activity #	SME High Importance Activities	Respondent Mean Importance
t46	Maintain confidentiality	3.93
t78	Use the six "rights" when administering medication (right drug, right dose, right client, right time, right route, right documentation)	3.96
t79	Checks medications three times before giving	3.93
t88	Review medication orders for completeness (dose, time, route, frequency, name of medication)	3.90
t101	Recognize life threatening emergencies	3.89

Table 13. Activities Sorted in Survey Order

ID #	Activity Statement	Frequency		Importance
		% NA	Mean	Mean
t1	Use effective time management skills	6.49	3.64	3.62
t2	Assist client with activities of daily living (ADLs) (e.g., bathing, feeding, hygiene, toileting)	15.19	2.97	3.44
t3	Assist client with self-administration of medication	24.11	2.78	3.43
t4	Perform capillary blood glucose testing	43.15	2.54	3.45
t5	Provide non-invasive treatments (e.g., basic first aid and continuous passive motion [CPM] machine)	44.70	1.78	3.02
t6	Measure client vital signs (e.g., temperature, pulse, respiration, and blood pressure)	5.99	3.04	3.67
t7	Perform Cardiopulmonary Resuscitation (CPR)	34.26	0.26	3.60
t8	Initiate emergency care for a client who is choking	20.18	0.45	3.72
t9	Assist with admission, transfer, and/or discharge of client	37.76	1.64	2.98
t10	Use cost effective measures when providing client care (e.g., supplies)	29.52	2.68	3.09
t11	Use restraints according to agency policy	55.74	1.70	2.97
t12	Identify signs and/or symptoms of high or low blood sugar	12.23	2.22	3.78
t13	Report signs and/or symptoms of high or low blood sugar	10.22	2.18	3.81
t14	Administer oxygen as ordered	29.60	2.26	3.61
t15	Check oxygen saturation percentage using pulse oximetry	34.77	2.43	3.51
t16	Maintain the supply of medication	11.74	3.06	3.75
t17	Take client's apical pulse	14.82	2.56	3.57
t18	Respond to signs and/or symptoms of high or low blood sugar	15.04	2.09	3.74
t19	Reinforce client teaching using an established plan of care	29.98	2.53	3.29
t20	Participate in interdisciplinary client care conferences	56.55	1.71	2.99
t21	Notify appropriate personnel of change in client's condition	7.08	2.68	3.77
t22	Communicate effectively with family, parent, or guardian regarding health care status of client	33.39	2.29	3.46
t23	Give or receive report (e.g., communication log, shift report)	10.66	2.56	3.66
t24	Document client information in accordance with agency policy and procedure	12.25	3.22	3.70
t25	Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)	58.64	1.81	2.96
t26	Documents adverse effects/ side effects of client's medication	15.31	2.24	3.76
t27	Send medication orders to pharmacy	26.36	2.46	3.57
t28	Document client's medication administration according to facility/agency policy	6.64	3.44	3.87
t29	Document medication errors according to facility/agency policy	12.22	1.05	3.81
t30	Use resources to review medication information (e.g., drug book, pharmacist, nurse, information technology)	7.60	2.49	3.70
t31	Take verbal orders for medication	74.68	1.42	3.03
t32	Take telephone orders for medication	81.96	1.13	2.97
t33	Take (receive) written orders for medication	59.41	2.21	3.38
t34	Transcribe orders	70.79	2.01	3.18
t35	Review medication record for order changes	22.44	2.88	3.73
t36	Use knowledge of medical terminology to interpret symbols, common abbreviations, and terminology used in administration of medications	9.18	3.29	3.76
t37	Recognize client's right to refuse medication/treatment	4.45	2.49	3.70

Table 13. Activities Sorted in Survey Order

ID #	Activity Statement	Frequency		Importance
		% NA	Mean	Mean
t38	Report violation of client rights within required time frame	16.51	1.10	3.72
t39	Act/serve as an advocate for the client	33.11	2.16	3.48
t40	Promote client self-advocacy	31.75	2.09	3.43
t41	Provide culturally sensitive care	22.90	2.34	3.49
t42	Report unsafe practice by a health care worker (e.g., improper care, substance abuse, medication theft)	14.95	0.80	3.84
t43	Report client abuse, neglect, injury	13.14	0.81	3.88
t44	Complete incident/accident report according to facility/agency policy	17.82	1.09	3.69
t45	Identify ethical issues affecting staff or client	24.56	1.08	3.42
t46	Maintain confidentiality	1.52	3.56	3.93
t47	Provide for client's privacy	1.78	3.63	3.87
t48	Adhere to basic authorized job duties	4.08	3.60	3.73
t49	Identify if a medication or route is appropriate to administer	6.41	3.25	3.87
t50	Follow agency policy related to HIPAA or FERPA rules	4.94	3.56	3.85
t51	Count controlled substances	12.37	2.73	3.89
t52	Report medication errors according to facility/agency policy	7.42	1.04	3.85
t53	Recognize limitations within scope of practice	10.01	2.63	3.68
t54	Position a client for medication administration	8.71	3.25	3.73
t55	Observe client's responses to medication	3.79	3.38	3.81
t56	Report client's responses to medication	4.04	2.88	3.78
t57	Observe client for adverse effects/side effects of medications	4.65	3.05	3.84
t58	Respond to client's adverse reaction to medication according to facility/agency policy	8.06	1.91	3.80
t59	Withhold medication if necessary	10.45	1.75	3.71
t60	Administer PRN medications	9.33	3.07	3.66
t61	Administer medications by gastric tube (g-tube)	68.35	1.88	3.31
t62	Administer medications by nasogastric (NG) tube	89.10	0.85	3.05
t63	Administer medications by jejunostomy (j-tube)	84.83	1.28	3.12
t64	Administer a subcutaneous medication	72.97	1.96	3.26
t65	Administer an emergency medication (e.g., glucagon, epinephrine (Epi-pen™))	77.55	0.68	3.22
t66	Administer a medication by rectal route	29.86	1.27	3.38
t67	Administer a medication by vaginal route	50.08	0.90	3.26
t68	Administer a medication by intradermal route (e.g., PPD test)	87.78	0.97	3.00
t69	Administer medication by sublingual route	28.97	1.43	3.53
t70	Administer medication by transdermal route (e.g., patch)	19.74	2.14	3.61
t71	Administer medication by a metered dose inhaler	23.18	2.53	3.59
t72	Administer medication by nebulizer	33.52	2.30	3.55
t73	Administer ear medications	16.61	1.58	3.54
t74	Administer eye medications	7.78	2.85	3.64
t75	Administer nasal medication	12.48	2.26	3.58
t76	Administer oral medication	4.35	3.60	3.80
t77	Administer topical medication	12.17	2.63	3.60

Table 13. Activities Sorted in Survey Order

ID #	Activity Statement	Frequency		Importance
		% NA	Mean	Mean
t78	Use the six "rights" when administering medications (right drug, right dose, right client, right time, right route, right documentation)	2.83	3.78	3.96
t79	Checks medications three times before giving	2.57	3.71	3.93
t80	Observe client swallowing oral medications	2.99	3.72	3.93
t81	Follow medication direction and warning labels	2.92	3.73	3.93
t82	Administer medications prepared by self, not others	9.39	3.63	3.89
t83	Identify expiration date prior to administration of medication	5.16	3.47	3.85
t84	Mix insulin from two different vials for client	88.09	1.29	3.17
t85	Administer medication to coincide with lab tests	49.96	2.07	3.53
t86	Prepare medication for administration (e.g., crushing, mixing with food or water)	9.07	3.35	3.77
t87	Provide adequate liquids when administering medication	4.49	3.68	3.83
t88	Review medication orders for completeness (dose, time, route, frequency, name of medication)	4.33	3.65	3.90
t89	Review possible adverse effects/ side effects of medications	5.04	3.08	3.79
t90	Dispose of client's unused or expired medications according to facility/agency policy	23.88	2.35	3.69
t91	Properly store medications	3.83	3.56	3.85
t92	Maintain security of medication storage areas	3.86	3.64	3.89
t93	Maintain security of controlled substances according to legal statutes and facility/agency policy	8.33	3.62	3.91
t94	Maintain clean technique	2.34	3.74	3.87
t95	Follow safety policies/procedures used to prevent incidents and accidents	1.68	3.62	3.87
t96	Monitor for and report client care safety hazards	5.76	2.92	3.77
t97	Check for client allergies (e.g., latex, food/medications/vaccines/ environmental factors)	7.51	3.17	3.83
t98	Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])	1.50	3.87	3.94
t99	Follow facility/agency procedures to verify client identity (e.g., client's name bands, allergy bands)	9.44	3.55	3.87
t100	Access poison control agency when necessary	34.12	0.90	3.69
t101	Recognize life threatening emergencies	6.55	1.68	3.89
t102	Maintain equipment for client care	12.89	2.87	3.71
t103	Maintain clean work environment	1.43	3.62	3.80
t104	Date appropriate medication when first used (e.g., insulin, eye drops)	11.02	2.89	3.80

Applicability of Activities to Practice Setting

Respondents indicated an activity was not applicable to or not performed in their work setting by marking the “NA Not Applicable” response. The activities ranged from 1.43% not performed (just over 1.0% of the respondents reported that the activity was not performed within their work settings) to 89.10% (nearly 9 out of 10 of the respondents reported the activity was not performed within their work setting). The activities that were performed by fewest respondents were “Administer medications by nasogastric (NG) tube” (89.10% not performed) and “Mix insulin from two different vials for client” (88.08% not performed). The activities that were performed by the most respondents were “Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])” (1.50% not performed) and “Maintain clean work environment” (1.43% not performed). Activities sorted by percent not applicable can be found in Appendix E.

Frequency of Activity Performance

Respondents were asked to rate the frequency of performance of all activities that were applicable to their work settings. They reported how frequently they performed the activity in a typical shift on a five point scale: “0 Less Than 1 Time” to “4 Times or More.” Frequency of performance for all activities ranged from an average of 3.87 times in a typical shift to 0.26 times in a typical shift. Those activities which received the lowest total group mean frequency ratings were “Perform Cardiopulmonary Resuscitation (CPR)” (0.26) and “Initiate emergency care for a client who is choking” (0.45). Those activities which received the highest total group mean frequency ratings were “Use six ‘rights’ when administering medications (right drug, right dose, right client, right time, right route, right documentation)” (3.78) and “Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])” (3.87). Activities sorted by mean frequency rating can be found in Appendix F.

Importance of Activity Performance

Respondents were asked to rank the importance of performing each nursing activity considering “safety and/or improving functioning and health status of my client.” Importance ratings were recorded using a four-point scale: “1 Not Important” to “4 Extremely Important.” Importance of performance for all activities ranged from 2.96 to 3.96 on the four-point scale. Those activities with the lowest importance rating were “Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)” (2.96) and “Use restraints according to agency policy” (2.97). Those activities with the highest importance rating were “Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])” (3.94) and “Use the six ‘rights’ when administering medications (right drug, right dose, right client, right time, right route, right documentation)” (3.96). Activities sorted by mean importance rating can be found in Appendix G.

Subgroup Analyses

To ensure practice was consistent across certain parameters, analyses were conducted to determine if practice (activities) was viewed similarly by respondents regardless of years of experience, work setting and location. Importance ratings for all activity statements were calculated based on 24 demographic subgroups. These subgroups were derived from responses to three demographic questions. Average importance ratings were calculated according to years of experience, work setting and geographic region.

Years of Experience Subgroup Analysis

Respondent importance ratings were divided into five subgroups based on responses to Section 1, Question 3 which queried respondents’ years of MA experience. See *Table 14*. Subgroup averages were calculated for all activity statements. In general, the mean importance ratings were similar across years of experience. Mean importance data for subgroup analyses by years of experience can be found in Appendix H.

Work Setting Subgroup Analysis

Importance ratings for all activity statements were calculated for the 15 work setting type response options listed for Section 1, Question 2 of the MA survey instrument. The settings that comprised the 15 subgroups can be found in Table 15 below. The importance ratings for most of the activity statements were similar for the various work settings. Mean importance data for subgroup analyses by work setting can be found in Appendix I.

Table 14. Years of Experience Groups

1	1 Year or Less
2	2 to 5 Years
3	6 to 10 Years
4	11 to 15 Years
5	More than 15 Years

Table 15. Work Setting Groups

Group Name	Abbreviation
Assisted Living Facility	Ast Liv Fac
Community-based or Ambulatory Care Facility / Organization	Com-Amb Care
Correctional Facility	Corr Fac
Daycare (adult or child)	Day Care
Developmental Disabilities Facility	Dev Dis Fac
Group Home	Grp Hme
Home Health	Hme Hlth
Hospice	Hspc
Hospital	Hsptl
Long-Term Care Facility	LTC
Psychiatric or Mental Health Facility	Psych Hlth Fac
Rehabilitation Facility	Rehab
Residential Facility	ResdFac
Schools	Sch
Other (Please specify)	Oth

Table 16. NCSBN Geographic Area Groups

1	Area I
2	Area II
3	Area III
4	Area IV

NCSBN Geographic Area Subgroup Analysis

Importance ratings for all activity statements were calculated for the four geographic areas of the NCSBN member board jurisdictions as shown in Tables 2 and 16. Mean importance ratings of the activity statements were quite consistent based on NCSBN's four geographic areas. Mean importance data for subgroup analyses by NCSBN geographic region can be found in Appendix J.

CONCLUSION

A nonexperimental, descriptive study was conducted to explore the importance and frequency of activities performed by MAs. More than 1,400 MAs responded. In general, importance ratings were comparable across work settings, years of experience and geographic location. Results of this study can be used to determine MA practice across a variety of work settings. In addition, the results of the study can be used to identify core MA activities.

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APPENDIX A: EXTERNAL JOB ANALYSIS METHODOLOGY EXPERTS

Barbara Showers, PhD, is the director of Wisconsin's Department of Regulation and Licensing's Office of Education and Examination. She is nationally recognized as an expert in licensure testing and has substantial experience with regard to the defensibility of licensure tests.

Richard Smith, PhD, is the editor of the *Journal of Applied Measurement* and a well-published scholar who specializes in testing and measurement. He has supervised the development of licensing examinations and is very knowledgeable regarding practice analyses and issues regarding connecting test content to practice.

Jim Fidler, PhD, is the director of testing and competency assurance for the American Medical Technologists. He has more than 15 years of experience working with certification testing and supervises the development of several certification examinations.

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

Matthew Schulz, PhD, worked for American College Testing for many years in several psychometric roles. He is knowledgeable about common practices and industry standards with regard to job analyses and practice analyses. He is also familiar with the NCLEX[®] Examination as he was NCSBN's director of testing in the 1980s.

APPENDIX B: 2006 MEDICATION ASSISTANT SUBJECT MATTER EXPERTS

Panel Members			
Name	Jurisdiction	Setting	Specialty
Mary Calkins, PhD, RN*	Wyoming	Nursing Regulation	Nephrology
Chuck Cumiskey, BSN, RN, MBA	Washington	Nursing Regulation	Health Care Policy
Roxann Hofer, LPN	Montana	Assisted Living	Geriatrics
Patricia Latona, MSN, RN	New Mexico	School Nursing	Pediatrics/Medically Fragile Student Population
Judi Murphy, RN, CDDN	New Mexico	School Nursing/Developmental Disabilities	Developmental Disabilities
Barb Goosic, RN**	Nebraska	Long-Term Care	Geriatrics
Janet Mai, RN	Kansas	Long-Term Care	Staff Education
Gena Munoz, CMA	Kansas	Long-Term Care	Geriatrics
Mary Stassi, RN	Missouri	Long-Term Care	Geriatrics, Geriatric Education
Gail Mallow, MSN, RN**	North Dakota	Long-Term Care	Geriatrics
Angela Cobb, RN	North Carolina	Public Health/Correctional Facility	Correctional Nursing
Martha Holloway, MSHA, BS, RN	Alabama	School Nursing	Pediatric Community Health
Lepaine Sharp-McHenry, RN, MS, FACDONA*	Arkansas	Long-Term Care/Nursing Regulation	Geriatrics, Mental Health
Deborah Churchey, RN	Maryland	Community/Home Health	Developmental Disabilities
Josephine Seinkiewicz, MSN, RN	New Jersey	Home Care/Assisted Living	Home Care
Margaret Walker, MA, RN	New York	Nursing Education	LPN Education

* Practice Regulation and Education Committee Liaison

** Available by telephone conference call

Area I

Liaison: **Mary Calkins, PhD, RN**
Professional Nursing Development Coordinator
Cheyenne Regional Medical Center

Board: Wyoming State Board of Nursing

Setting: Nursing Regulation

Dr. Mary Calkins has been a nurse for more than 30 years, first earning an associate degree in nursing in 1975, followed by a BSN in 1989, an MSN in 1993 and a PhD in 1996. She has 17 years of experience as a staff nurse in medical-surgical, pediatrics, dialysis and critical care. She has taught both undergraduate and graduate nursing at the University of Nebraska in Scottsbluff and the University of Wyoming. She was the Wyoming Board of Nursing's compliance consultant, investigating complaints for two years before accepting the position of assistant executive director and practice and education consultant with the Wyoming Board of Nursing. Dr. Calkins' research has included self-determinism and health-promoting behavior in select sections of the population. Dr. Calkins has been active with NCSBN by holding positions on the Item Review Sub-Committee; Practice, Education and Regulation Committee; and Nominations Committee.

Member: **Chuck Cumiskey, BSN, RN, MBA**

Nurse Practice and Policy Manager for
Health Professions Quality Assurance
Department of Health
Washington State

Board: Washington State, Nursing Care
Quality Assurance Commission

Setting: Nursing Regulation

Cumiskey has 23 years experience in nursing. He is the nurse practice and policy manager for Health Professions Quality Assurance in the Washington State Department of Health and is the leader of the Consumer Safety and Medication Assistance Taskforce in Washington State. Cumiskey has diverse experience in nursing, including working as a major in the U.S. Army, and he has held several management positions. He is a major in the U.S. Army Reserve, a member of the Northwest Organization of Nurse Executives and a member of South Puget Sound Club of Rotary International.

Member: **Roxann Hofer, LPN**

Health Care Manager
Riverside Senior Living

Board: Montana State Board of Nursing

Setting: Assisted Living

Hofer has 10 years in nursing and is the health care manager at Riverside Senior Living. She has several years of experience training qualified CNAs for MAs. She worked as an LPN in Wisconsin and Montana, and developed a medication aide program with best practice as a top priority. She also supervises medication aides and ensures that they receive ongoing training. Hofer recently received state certification through Montana to be an instructor for medication aide training.

Member: **Patricia Latona, MSN, RN**

Special Education Nurse/
Department of Integrated Instructional Services
Alamogordo Public Schools

Board: New Mexico Board of Nursing

Setting: School Nursing

Latona has 34 years of experience in nursing. She is a special education nurse in Alamogordo Public Schools. Latona has worked with medication assistants as a school nurse and in the U.S. Army Nurse Corps. She has a diverse background including school nursing, critical care nursing and burn nursing. She has been published twice in school nursing texts on the subject of burns. Latona has held a variety of positions including director and charge nurse. She has supervised medication administration at various levels and settings. Her background is in the training and integration of paraprofessionals into the health care field. Latona also has multiple experiences in teaching nurses and paraprofessional staff. She is a member of the National Association of Diabetic Educators, American Association of Critical Care Nurses and the National School Nurse Organization.

Member: **Judi Murphy, RN**

Health Care Director
ARCA

Board: New Mexico Board of Nursing

Setting: School Nursing/Developmental Disabilities

Murphy has 38 years in nursing, which includes participating in program writing, teaching and supervision for CMA's. She is currently Health Care Director at ARCA, a not-for-profit organization providing residential and vocational services to people with developmental disabilities. She is a member of New Mexico Board of Nursing's CMA advisory committee since its beginning in 1991. She has experience in nursing management, nursing education and legal consulting. Murphy holds certification as a developmental disabilities nurse, and is active in the New Mexico Developmental Disabilities Nursing Association. She is a member of several task forces on the developmentally disabled and CMA programs in New Mexico including developmental disabilities and schools. Murphy has also written CMA programs for developmental disabilities programs.

Area II

Member: **Barb Goosic, RN, C**

Director of Nursing
Franklin Health Care Center

Board: Nebraska Department of Health and Human Services
Regulation and Licensure

Setting: Long-Term Care and Assisted Living

Goosic has seven years of nursing experience and is the director of nursing at Franklin Health Care Center. She is a certified gerontological nurse, and currently teaches and supervises medication assistants in both long-term care and assisted living settings. Goosic has held a variety of positions in different facilities, including staff nurse, assistant director of nursing and charge nurse. Additionally, she is an EMS member, CPR instructor for Red Cross and ENCARE presenter.

Member: Janet Mai, BSN, RN

Director of Staff Development
St. Joseph Village

Board: Kansas State Board of Nursing

Setting: Long-Term Care

Mai has 25 years of nursing experience with a diverse nursing background, including medical-surgical, public health, home health, hospice and long-term care. She has developed and presented in-services for long-term care and hospital-based organizations. Mai has also taught CNA, CMA, HHA and medication aide updates for local area facilities.

Member: Gena Munoz, CMA

Certified Medication Assistant
St. Joseph Village

Board: Kansas Board of Nursing

Setting: Long-Term Care

Munoz has three years of experience as an MA. She has specialty certification in restorative aid and as a phlebotomy technician. She was given the CNA for Excellence award through the Kansas Association of Homes and Services for the Aging (KAHSA). Munoz is responsible for administering medications and treatments. She functions as residential coordinator facilitating staff and family meetings.

Member: Mary Stassi, RN, C

Health Occupations Coordinator
St. Charles Community College (SCC)

Board: Missouri Board of Nursing

Setting: Long-Term Care

Stassi has 25 years of nursing experience including curriculum development. She is a certified nursing assistant and certified medication technician instructor/examiner. Stassi provides education on state and federal guidelines for health care personnel. She also has certification as a gerontological nurse by the American Nurses Credentialing Center (ANCC). Stassi is experienced in acute care, long-term care, women's health and nursing management. She held an adjunct faculty position teaching pharmacology at SCC and she plans, coordinates and oversees preprofessional health programs and professional development programs at SCC. She is a primary writer for the Missouri CNA, CMT and Home Health Aide curriculum and state exams; a co-writer for Missouri LPN IV Therapy Curriculum; an active textbook author for Elsevier Science; and a national speaker on issues related to long-term care. Additionally, Stassi served as a board member and past president of the Long-Term Care Educators Association as well as a committee member for the Missouri SBN IV Therapy Task Force.

Member: Gail Mallow, MSN, RN

Staff Development Coordinator
Hi-Acres Manor Nursing Center

Board: North Dakota Board of Nursing

Setting: Long-Term Care

Mallow has 34 years in nursing and is currently staff development coordinator at Hi-Acres Manor Nursing Center. She is experienced in a variety of nurse settings and specialties including nursing education, where she taught certified nurse assistant and medication assistant classes. Mallow has served on many committees to further excellence in nursing. She has worked on several publications related to nursing education, research and learning texts, and is a well-established speaker. Mallow is a member of Sigma Theta Tau and received the Excellence in Teaching Award from the Presentation College Nursing Honor Society.

Area III**Member: Angela Cobb, RN**

Nurse Education Director
North Carolina Department of Corrections

Board: North Carolina Board of Nursing

Setting: Public Health/Correctional Facility

Cobb has 23 years of nursing experience and is currently the nurse education director at the North Carolina Department of Corrections. Cobb worked in a variety of staff positions in hospital and long-term care settings, including assistant director of nursing and staff development. She is current advisory member for and served on the Curriculum Committee for the North Carolina Board of Nursing Medication Aide pilot project. She was also pilot project site administrator and instructor at correctional facilities and assisted living facilities.

Member: Martha Holloway, BS, MSHA, RN

Education Administrator
Alabama State Department of Education

Board: Alabama Board of Nursing

Setting: School Nursing

Holloway has 36 years of nursing experience and is currently education administrator/state school nurse consultant at the Division of Instruction, Alabama State Department of Education. She contributed to the Alabama Board of Nursing's medication curriculum for school personnel and has worked in many positions related to school nursing and the health care of children. Holloway is a member of the National Association of State School Nurse Consultants, National Association of School Nurses, Alabama Association of School Nurses, American School Health Association and the Sigma Theta Tau Nursing Honor Society. She is the former treasurer of the Alabama Association of School Nurses and is active in Chi Eta Phi Nursing Sorority. She received the Nurse Practice Award for the Mobile County Nursing Society in 1998. Holloway was appointed to numerous state committees and task forces related to nursing and health care, and has worked in the training and development of medication curriculum for the State Department of Education in conjunction with the Alabama Board of Nursing.

Liaison: Lepaine Sharp-McHenry, RN, MS
FACDONA
Independent Long-Term Care Nursing Consultant

Board: Arkansas Board of Nursing

Setting: Long-Term Care/Nursing Regulation

Sharp-McHenry has worked in various clinical and management positions in long-term care, acute care and psychiatric mental health settings. She has been responsible for financial, personnel, education, material and clinical management in each of these settings. She has developed and presented educational training programs for administrators, managers, nurses and allied health professionals. She has co-authored numerous articles on geriatric care in the long-term care setting and served as an expert panel member in the development of clinical practice guidelines for residents in long-term care facilities. Sharp-McHenry has also conducted research and published in the long-term care field. She is recognized as an expert in geriatric clinical management and nursing administration of long-term care services. She is a licensed nursing home administrator. She is currently a board member for the Arkansas Board of Nursing.

Area IV

Member: Deborah Churchey, RN
Director of Nurses
Arc of Washington County

Board: Maryland Board of Nursing

Setting: Community, Home Health

Churchey has a total of 32 years of nursing experience with 22 years as an LPN and 10 years as an RN in the fields of geriatrics, long-term care and developmental disabilities. She is currently the director of nurses at Arc of Washington County. She has worked as a residential director, assistant director of nurses, community health nurse, home manager, LPN and a nurse aide; volunteered as an instructor for the American Red Cross CPR and First Aid courses. She has also served as a training program and refresher course instructor for the American Heart Association. She assisted nurses from the regional developmental disabilities administration with the development of English comprehension and mathematics pretests and final exams for the medication technicians training program. She assisted regional nurses with final revisions of the medication technicians training program. Additionally, Churchey is a member of the LPN Practice Issues Committee of the Maryland Board of Nurses. She received awards for Outstanding Employee of the Year for Residential Program in 2002, a Special Recognition Award from Arc of Washington County in 1999, and a First Place award from the Washington County Medical Society in 1996.

Member: Josephine Seinkiewicz, MSN, RN
Director of Education and Clinical Practice
Home Care Association of New Jersey

Board: New Jersey Board of Nursing

Setting: Home Care/Assisted Living

Seinkiewicz has 36 years of nursing experience with special expertise in community/home health care, educational program development and delivery, staff development and training. She is the emergency preparedness coordinator for the Home Care Association of New Jersey. She authored several articles for publication and spent several years managing health care professionals and paraprofessionals. Seinkiewicz is a well-established speaker on a variety of topics. She has received a certificate in nursing administration advanced through the American Nurses Association. She is a member of the American Nurses Association, the New Jersey State Nursing Association and Sigma Theta Tau. She has also been nominated for and received numerous nursing awards.

Member: Margaret Walker, MA, RN
Associate Dean of Academics
SUNY Brockport/REOC

Board: New York Board of Nursing

Setting: Nursing Education

Walker has 38 years in nursing and is currently the associate dean of academics at SUNY Brockport/REOC. She has expertise in nursing education at multiple levels and in curriculum development. She co-authored the New York State LPN to RN transition program. She is a member of New York State Board for Nursing and chairperson of the Licensure and Education Committee.

APPENDIX C: 2006 MEDICATION ASSISTANT SURVEY INSTRUMENT

**NATIONAL COUNCIL OF STATE BOARDS OF NURSING (NCSBN®)
MEDICATION ASSISTANT (MA)
PRACTICE ANALYSIS STUDY**

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 practice and fill in the appropriate oval(s). A few questions ask you to write in 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 during a **typical week** or **typical shift**. If you have multiple roles (i.e. CNA), please respond for your Medication Assistant role only.

"Clients" are the same as "residents" or "patients".

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

MARKING INSTRUCTIONS:

- Use a No. 2 pencil only.
- Do not use pens.
- Make heavy dark marks that fill the oval completely.
- If you want to change an answer, erase completely.



SECTION 1: BACKGROUND INFORMATION

1. In which state/territory do you primarily work? (**Select only ONE answer**)

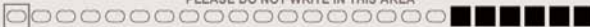
- | | | | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="radio"/> AK | <input type="radio"/> KY | <input type="radio"/> NY | <input type="radio"/> Northern Mariana Islands |
| <input type="radio"/> AL | <input type="radio"/> LA | <input type="radio"/> OH | <input type="radio"/> American Samoa |
| <input type="radio"/> AR | <input type="radio"/> MA | <input type="radio"/> OK | <input type="radio"/> Guam |
| <input type="radio"/> AZ | <input type="radio"/> MD | <input type="radio"/> OR | <input type="radio"/> Virgin Islands |
| <input type="radio"/> CA | <input type="radio"/> ME | <input type="radio"/> PA | <input type="radio"/> Puerto Rico |
| <input type="radio"/> CO | <input type="radio"/> MI | <input type="radio"/> RI | <input type="radio"/> Other (<i>Please specify</i>) _____ |
| <input type="radio"/> CT | <input type="radio"/> MN | <input type="radio"/> SC | |
| <input type="radio"/> DC | <input type="radio"/> MO | <input type="radio"/> SD | |
| <input type="radio"/> DE | <input type="radio"/> MS | <input type="radio"/> TN | |
| <input type="radio"/> FL | <input type="radio"/> MT | <input type="radio"/> TX | |
| <input type="radio"/> GA | <input type="radio"/> NC | <input type="radio"/> UT | |
| <input type="radio"/> HI | <input type="radio"/> ND | <input type="radio"/> VA | |
| <input type="radio"/> IA | <input type="radio"/> NE | <input type="radio"/> VT | |
| <input type="radio"/> ID | <input type="radio"/> NH | <input type="radio"/> WA | |
| <input type="radio"/> IL | <input type="radio"/> NJ | <input type="radio"/> WI | |
| <input type="radio"/> IN | <input type="radio"/> NM | <input type="radio"/> WV | |
| <input type="radio"/> KS | <input type="radio"/> NV | <input type="radio"/> WY | |

2. Which of the following best describes your work setting(s)? (**Select ALL that apply**)

- Assisted Living Facility
- Community-based or Ambulatory Care Facility/Organization
- Correctional Facility
- Daycare (adult or child)
- Developmental Disabilities Facility
- Group Home
- Home Health
- Hospice
- Hospital
- Long-term Care Facility
- Psychiatric or Mental Health Facility
- Rehabilitation Facility
- Residential Facility
- Schools
- Other (*Please specify*) _____

continued →

PLEASE DO NOT WRITE IN THIS AREA



SECTION 1: BACKGROUND INFORMATION (Continued)

3. How many years have you worked as a Medication Assistant?

Example: 8 years is represented as "08"

Example:

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

 Years

Number of years worked

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

 Years

4. How many hours are you actually employed to work per **week** as a Medication Assistant?

Number of hours employed

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

 Hours

5. On **average**, how many hours do you work in a **typical week** as a Medication Assistant?

Number of hours worked

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

 Hours

6. On **average**, how many hours do you work during a **typical shift** as a Medication Assistant?

Number of hours worked

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

 Hours

7. Which of the following **best** describes the ages of the clients to whom you administer medication? (**Select ALL that apply**)

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

8. Which of the following **best** describes the condition of the clients to whom you administer medication? (**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
- Clients with emergency or critical conditions
- Clients at "end of life"
- Clients with behavioral/emotional problems
- Other (**Please specify**) _____

9. On **average**, how many clients do you administer medications to during a **typical shift**?

Number of clients

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

 Clients

10. What is your age in years?

Age in years

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

 Years

11. What is your gender?

- Female
- Male

12. Which of the following best describes your racial/ethnic background? (**Select only ONE answer**)

- Pacific Islander
- Asian Indian
- Asian Other
- African American
- Hispanic
- Native American
- White Not Of Hispanic Origin
- Other (**Please specify**) _____

continued →

SECTION 3: NURSING ACTIVITIES PERFORMED

INSTRUCTIONS: This section contains a list of activities descriptive of Medication Assistant practices in a variety of settings. Some activities may not apply to your position or setting. For each activity, please provide two ratings.

RATING A - FREQUENCY: Mark the oval indicating the approximate total number of times you perform each activity during a typical shift. If the activity is never performed or not applicable to your work setting, mark the oval in the column with the heading, "NA Not Applicable".

RATING B - IMPORTANCE: Considering safety and/or improving functioning and health status of the client, please mark an importance rating for all activities. Mark the oval indicating how important you feel each activity is.

NOTE: Inclusion of an activity on this practice analysis survey does not imply that the activity is or would be included in the MA job description defined by any specific entity.

PROVIDE A FREQUENCY AND IMPORTANCE RATING FOR EACH ACTIVITY	A-FREQUENCY				B-IMPORTANCE					
	NA Not Applicable	0 Less Than 1 Time	1 Time	2 Times	3 Times	4 Times or more	1 Not Important	2 Somewhat Important	3 Important	4 Extremely Important
A. Frequency: If an activity <u>does not apply</u> to your work setting, mark "NA Not Applicable". If an activity is performed in your work setting, mark the oval indicating the appropriate number of times you performed the activity during a <u>typical shift</u> .										
B. Importance: Rate the overall importance of this activity considering client safety with 1 = Not Important, 2 = Somewhat Important, 3 = Important, or 4 = Extremely Important.										
1. Use effective time management skills	()	()	()	()	()	()	()	()	()	()
2. Assist client with activities of daily living (ADLs) (e.g., bathing, feeding, hygiene, toileting)	()	()	()	()	()	()	()	()	()	()
3. Assist client with self-administration of medication	()	()	()	()	()	()	()	()	()	()
4. Perform capillary blood glucose testing	()	()	()	()	()	()	()	()	()	()
5. Provide non-invasive treatments (e.g., basic first aid, use of continuous passive motion (CPM) machine)	()	()	()	()	()	()	()	()	()	()
6. Measure client vital signs (e.g., temperature, pulse, respiration, and blood pressure)	()	()	()	()	()	()	()	()	()	()
7. Perform Cardiopulmonary Resuscitation (CPR)	()	()	()	()	()	()	()	()	()	()
8. Initiate emergency care for client who is choking	()	()	()	()	()	()	()	()	()	()
9. Assist with admission, transfer, and/or discharge of client	()	()	()	()	()	()	()	()	()	()
10. Use cost effective measures when providing client care (e.g., supplies)	()	()	()	()	()	()	()	()	()	()
11. Use restraints according to agency policy	()	()	()	()	()	()	()	()	()	()
12. Identify signs and/or symptoms of high or low blood sugar	()	()	()	()	()	()	()	()	()	()
13. Report signs and/or symptoms of high or low blood sugar	()	()	()	()	()	()	()	()	()	()
14. Administer oxygen as ordered	()	()	()	()	()	()	()	()	()	()
15. Check oxygen saturation percentage using pulse oximetry	()	()	()	()	()	()	()	()	()	()
16. Maintain the supply of medication	()	()	()	()	()	()	()	()	()	()
17. Take client apical pulse	()	()	()	()	()	()	()	()	()	()
18. Respond to signs and/or symptoms of high or low blood sugar	()	()	()	()	()	()	()	()	()	()
19. Reinforce client teaching using an established plan of care	()	()	()	()	()	()	()	()	()	()
20. Participate in interdisciplinary client care conferences	()	()	()	()	()	()	()	()	()	()
21. Notify appropriate personnel of change in client condition	()	()	()	()	()	()	()	()	()	()
22. Communicate effectively with family, parent, or guardian regarding health care status of client	()	()	()	()	()	()	()	()	()	()
23. Give or receive report (e.g., communication log, shift report)	()	()	()	()	()	()	()	()	()	()
24. Document client information in accordance with agency policy and procedure	()	()	()	()	()	()	()	()	()	()
25. Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)	()	()	()	()	()	()	()	()	()	()
26. Document adverse effects/side effects of client medication	()	()	()	()	()	()	()	()	()	()
27. Send medication orders to pharmacy	()	()	()	()	()	()	()	()	()	()
28. Document client medication administration according to facility/agency policy	()	()	()	()	()	()	()	()	()	()
29. Document medication errors according to facility/agency policy	()	()	()	()	()	()	()	()	()	()
30. Use resources to review medication information (e.g., drug book, pharmacist, nurse, information technology)	()	()	()	()	()	()	()	()	()	()
31. Take verbal orders for medication	()	()	()	()	()	()	()	()	()	()
32. Take telephone orders for medication	()	()	()	()	()	()	()	()	()	()
33. Take (receive) written orders for medication	()	()	()	()	()	()	()	()	()	()
34. Transcribe orders	()	()	()	()	()	()	()	()	()	()
35. Review medication record for order changes	()	()	()	()	()	()	()	()	()	()
36. Interpret symbols, common abbreviations, and terminology used in administration of medications	()	()	()	()	()	()	()	()	()	()
37. Recognize client right to refuse medication/treatment	()	()	()	()	()	()	()	()	()	()
38. Report violation of client rights within required time frame	()	()	()	()	()	()	()	()	()	()
39. Act (serve) as an advocate for the client	()	()	()	()	()	()	()	()	()	()
40. Promote client self-advocacy	()	()	()	()	()	()	()	()	()	()
41. Provide culturally sensitive care	()	()	()	()	()	()	()	()	()	()
42. Report unsafe practice by a health care worker (e.g., improper care, substance abuse, medication theft)	()	()	()	()	()	()	()	()	()	()
43. Report client abuse, neglect and injury	()	()	()	()	()	()	()	()	()	()

SECTION 3: NURSING ACTIVITIES PERFORMED (Continued)

PROVIDE A FREQUENCY AND IMPORTANCE RATING FOR EACH ACTIVITY	A-FREQUENCY					B-IMPORTANCE				
	NA Not Applicable	0 Less Than 1 Time	1 Time	2 Times	3 Times	4 Times or more	1 Not Important	2 Somewhat Important	3 Important	4 Extremely Important
A. Frequency: If an activity <u>does not apply</u> to your work setting, mark "NA Not Applicable". If an activity is performed in your work setting, mark the oval indicating the appropriate number of times you performed the activity during a typical shift .										
B. Importance: Rate the overall importance of this activity considering client safety with 1 = Not Important, 2 = Somewhat Important, 3 = Important, or 4 = Extremely Important.										
44. Complete incident/accident report according to facility/agency policy	<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"/>
45. Identify ethical issues affecting staff or client	<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"/>
46. Maintain confidentiality	<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"/>
47. Provide for client privacy	<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"/>
48. Adhere to basic authorized job duties	<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"/>
49. Identify if a medication or route is appropriate to administer	<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"/>
50. Follow agency policy related to HIPPA or FERPA rules	<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"/>
51. Count controlled substances	<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"/>
52. Report medication errors according to facility/agency policy	<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"/>
53. Recognize limitations within scope of practice	<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"/>
54. Position client for medication administration	<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"/>
55. Observe client responses to medication	<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"/>
56. Report client responses to medication	<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"/>
57. Observe client for adverse effects/side effects of medication	<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"/>
58. Respond to client adverse reaction to medication according to facility/agency policy	<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"/>
59. Withhold medication if necessary	<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"/>
60. Administer PRN medications	<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"/>
61. Administer medications by gastric tube (g-tube)	<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"/>
62. Administer medications by nasogastric (NG) tube	<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"/>
63. Administer medications by jejunostomy (j-tube)	<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"/>
64. Administer a subcutaneous medication	<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"/>
65. Administer an emergency medication (e.g., epinephrine (Epi-pen™))	<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"/>
66. Administer a medication by rectal route	<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"/>
67. Administer a medication by vaginal route	<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"/>
68. Administer a medication by intradermal route (e.g., PPD test)	<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"/>
69. Administer medication by sublingual route	<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"/>
70. Administer medication by transdermal route (e.g., patch)	<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"/>
71. Administer medication by a metered dose inhaler	<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"/>
72. Administer medication by a nebulizer	<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"/>
73. Administer ear medication	<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"/>
74. Administer eye medication	<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"/>
75. Administer nasal medication	<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"/>
76. Administer oral medication	<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"/>
77. Administer topical medication	<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"/>
78. Use the six "rights" when administering medications (right drug, right dose, right client, right time, right route, right documentation)	<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"/>
79. Check medications three times before giving	<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"/>
80. Observe client swallowing oral medications	<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"/>
81. Follow medication directions and warning labels	<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"/>
82. Administer medications prepared by self, not others	<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"/>
83. Identify expiration date prior to administration of medication	<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"/>
84. Mix insulin from two different vials for client	<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"/>
85. Administer medication to coincide with lab tests	<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"/>
86. Prepare medication for administration (e.g., crushing, mixing with food or water)	<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"/>
87. Provide adequate liquids when administering medication	<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"/>
88. Review medication orders for completeness (dose, time, route, frequency, name of medication)	<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"/>
89. Review possible adverse effects/side effects of medications	<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"/>
90. Dispose of client unused or expired medications according to facility/agency policy	<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"/>
91. Properly store medications	<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"/>
92. Maintain security of medication storage areas	<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"/>
93. Maintain security of controlled substances according to legal statutes and facility/agency policy	<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"/>
94. Maintain clean technique	<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"/>
95. Follow safety policies/procedures used to prevent incidents and accidents	<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"/>
96. Monitor for and report client care safety hazards	<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"/>
97. Check for client allergies (e.g., latex, food, medications, vaccines, environmental factors)	<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"/>
98. Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment (PPE))	<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"/>
99. Follow facility/agency procedures to verify client identity (e.g., client name bands, allergy bands)	<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"/>
100. Access poison control agency when necessary	<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"/>
101. Recognize life threatening emergencies	<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"/>
102. Maintain equipment for client care	<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"/>
103. Maintain clean work environment	<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"/>
104. Date appropriate medication when first used (e.g., insulin, eye drops)	<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"/>

continued →

APPENDIX D: MAILING CORRESPONDENCES

Cover Letter 1

March 2006



NCSBN

National Council of State Boards of Nursing

Dear Colleague:

You have an invitation and unique opportunity to participate in a nationwide research study on the practice characteristics and activities of Medication Assistants (MA). The study is being conducted by the National Council of State Boards of Nursing (NCSBN™). Your name was selected by a process designed to obtain a representative sample of Medication Assistants from all parts of the country and from all types of educational programs. Your feedback is essential to this process, as it will ensure that the practices of a wide range of Medication Aides are truly represented.

In about a week, you will be receiving a questionnaire in the mail. It consists of questions regarding the activities you perform at work. Because there are so many different types of practice and employment settings, it is extremely important that those selected decide to participate by returning a completed questionnaire. Your decision to participate is voluntary. Responses are completely confidential, and only information that describes groups of participants will be reported.

Please take this opportunity to make a difference and contribute to the nursing profession. In appreciation for your participation, you will receive:

- an opportunity to win one (1) of forty (40) \$100 cash prizes
- a 10% discount on all internet courses offered by NCSBN (access learningext.com to see available courses)
- an opportunity to enter a drawing to win a free internet course
- a letter of recognition that you can submit to your supervisor
- an opportunity to receive a summary of the findings

If you have any questions, please contact NCLEX® information at 866-293-9600 (toll free) or email nclexinfo@ncsbn.org. Thank you in advance for your participation!

Sincerely,

Testing Services Department

National Council of State Boards of Nursing

Cover Letter 2

April 2006



NCSBN

National Council of State Boards of Nursing

Dear Colleague:

About one month ago, the National Council of State Boards of Nursing, Inc. (NCSBN™) sent a questionnaire to you as part of a national study on Medication Assistant (MA) practice. This study will assist NCSBN to describe Medication Assistant practice.

Your name was selected by a process designed to obtain a representative sample of Medication Assistants from all parts of the United States and its territories. Your participation is critical to the outcome of this study. It is vital that we receive surveys describing the practices of MAs from all areas of the country and working in all types of health care agencies and settings.

You recently requested a replacement copy of the questionnaire, which is enclosed. Please complete it as soon as possible — preferably this week — and return it in the enclosed envelope. If you are not currently working in nursing or are not working as a Medication Assistant, please indicate this on question #3 on the questionnaire. All responses will be completely confidential, and only data summarizing groups of participants will be reported.

We hope you take advantage of this unique opportunity to contribute to the nursing profession by completing the questionnaire. Please take the time to make a difference. In appreciation for your participation, you will receive:

- an opportunity to win one (1) of forty (40) \$100 cash prizes
- a 10% discount on all internet courses offered by NCSBN (access learningext.com to see available courses)
- an opportunity to enter a drawing to win a free internet course
- a letter of recognition that you can submit to your supervisor
- an opportunity to receive a summary of the findings

If you have any questions about the study or the questionnaire, please contact NCLEX® information at 866-293-9600 (toll free number) or email nclexinfo@ncsbn.org. We look forward to receiving your completed questionnaire. Please accept our thanks and appreciation for your participation in the study.

Sincerely,

Testing Services Department
National Council of State Boards of Nursing

Postcard Reminder 1



National Council of State Boards of Nursing

Dear Colleague:

Last week the National Council of State Boards of Nursing (NCSBN™) sent you a questionnaire asking for information about your work experiences as a experienced Medication Assistant. If you have already completed and returned the questionnaire, please accept our sincere thanks and disregard this and any future reminders.

If you haven't had a chance to complete it yet, please try to do so in the next few days. Only a small, representative sample of practicing Medication Assistants was selected for participation in this study. Therefore, your input is especially important if NCSBN is to accurately describe the practice of Medication Assistant. If you did not receive the questionnaire or have misplaced it, please contact NCLEX® information at 866-293-9600 (toll free number) or email nclexinfo@ncsbn.org, and you will be sent a replacement.

Testing Services Department

National Council of State Boards of Nursing

Postcard Reminder 2



National Council of State Boards of Nursing

Dear Colleague:

Several weeks ago the National Council of State Boards of Nursing (NCSBN™) sent you a survey about your work as a Medication Assistant. If you have already completed and returned the questionnaire, please accept our sincere thanks and disregard this and any future reminders. If you haven't had a chance to complete it, please try to do so in the next day or two.

You are one of a small group selected to represent many Medication Assistant similar to yourself. Therefore, your participation is crucial to an accurate description of medication aide practice. The information you provide will make a very important contribution to this significant national research study. If you have any questions about the study, please contact NCLEX information at 866-293-9600 (toll free number) or email nclexinfo@ncsbn.org.

Testing Services Department

National Council of State Boards of Nursing

Thank You



(Date)

Dear Colleague,

The National Council of State Boards of Nursing, Inc. (NCSBN™) thank you for your participation in this significant national survey of Medication Assistants (MA). Your participation is essential to ensure a complete and accurate description of the practice patterns of Medication Assistants.

You have made an important contribution to the nursing profession by returning your completed survey on the MA practice analysis. Please share the attached letter of recognition for your participation with your supervisor and employer.

In appreciation of your participation, your name has been entered into a drawing to win a free Internet course offered by NCSBN's Learning Extension. To find out the winners of the drawing, please access the following Internet site, www.ncsbn.org/testing/surveys.asp

As a special "thank you" for your participation we are offering you a coupon for 10% off any online continuing education (CE) course at NCSBN Learning Extension. To redeem this special offer, go to www.learningext.com to register for the course of your choice. Please use coupon code _____ at checkout. The coupon expires on _____.

Once again, thank you for your contribution to the nursing profession.

Sincerely,

Testing Services Department
National Council of State Boards of Nursing, Inc.

APPENDIX E: ACTIVITIES SORTED BY PERCENT NOT APPLICABLE

Appendix E. Activities Sorted by Percent Not Applicable		
ID#	Activity Statement	% NA
t62	Administer medications by nasogastric (NG) tube	89.10
t84	Mix insulin from two different vials for client	88.09
t68	Administer a medication by intradermal route (e.g., PPD test)	87.78
t63	Administer medications by jejunostomy (j-tube)	84.83
t32	Take telephone orders for medication	81.96
t65	Administer an emergency medication (e.g., glucagon, epinephrine (Epi-pen™))	77.55
t31	Take verbal orders for medication	74.68
t64	Administer a subcutaneous medication	72.97
t34	Transcribe orders	70.79
t61	Administer medications by gastric tube (g-tube)	68.35
t33	Take (receive) written orders for medication	59.41
t25	Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)	58.64
t20	Participate in interdisciplinary client care conferences	56.55
t11	Use restraints according to agency policy	55.74
t67	Administer a medication by vaginal route	50.08
t85	Administer medication to coincide with lab tests	49.96
t5	Provide non-invasive treatments (e.g., basic first aid and continuous passive motion (CPM) machine)	44.70
t4	Perform capillary blood glucose testing	43.15
t9	Assist with admission, transfer, and/or discharge of client	37.76
t15	Check oxygen saturation percentage using pulse oximetry	34.77
t7	Perform Cardiopulmonary Resuscitation (CPR)	34.26
t100	Access poison control agency when necessary	34.12
t72	Administer medication by nebulizer	33.52
t22	Communicate effectively with family, parent, or guardian regarding health care status of client	33.39
t39	Act/serve as an advocate for the client	33.11
t40	Promote client self-advocacy	31.75
t19	Reinforce client teaching using an established plan of care	29.98
t66	Administer a medication by rectal route	29.86
t14	Administer oxygen as ordered	29.60
t10	Use cost effective measures when providing client care (e.g., supplies)	29.52
t69	Administer medication by sublingual route	28.97
t27	Send medication orders to pharmacy	26.36
t45	Identify ethical issues affecting staff or client	24.56
t3	Assist client with self-administration of medication	24.11
t90	Dispose of client's unused or expired medications according to facility/agency policy	23.88
t71	Administer medication by a metered dose inhaler	23.18
t41	Provide culturally sensitive care	22.90
t35	Review medication record for order changes	22.44
t8	Initiate emergency care for a client who is choking	20.18
t70	Administer medication by transdermal route (e.g., patch)	19.74

Appendix E. Activities Sorted by Percent Not Applicable

ID#	Activity Statement	% NA
t44	Complete incident/accident report according to facility/agency policy	17.82
t73	Administer ear medications	16.61
t38	Report violation of client rights within required time frame	16.51
t26	Documents adverse effects/ side effects of client's medication	15.31
t2	Assist client with activities of daily living (ADLs) (e.g., bathing, feeding, hygiene, toileting)	15.19
t18	Respond to signs and/or symptoms of high or low blood sugar	15.04
t42	Report unsafe practice by a health care worker (e.g., improper care, substance abuse, medication theft)	14.95
t17	Take client's apical pulse	14.82
t43	Report client abuse, neglect, injury	13.14
t102	Maintain equipment for client care	12.89
t75	Administer nasal medication	12.48
t51	Count controlled substances	12.37
t24	Document client information in accordance with agency policy and procedure	12.25
t12	Identify signs and/or symptoms of high or low blood sugar	12.23
t29	Document medication errors according to facility/agency policy	12.22
t77	Administer topical medication	12.17
t16	Maintain the supply of medication	11.74
t104	Date appropriate medication when first used (e.g., insulin, eye drops)	11.02
t23	Give or receive report (e.g., communication log, shift report)	10.66
t59	Withhold medication if necessary	10.45
t13	Report signs and/or symptoms of high or low blood sugar	10.22
t53	Recognize limitations within scope of practice	10.01
t99	Follow facility/agency procedures to verify client identity (e.g., client's name bands, allergy bands)	9.44
t82	Administer medications prepared by self, not others	9.39
t60	Administer PRN medications	9.33
t36	Use knowledge of medical terminology to interpret symbols, common abbreviations, and terminology used in administration of medications	9.18
t86	Prepare medication for administration (e.g., crushing, mixing with food or water)	9.07
t54	Position a client for medication administration	8.71
t93	Maintain security of controlled substances according to legal statutes and facility/agency policy	8.33
t58	Respond to client's adverse reaction to medication according to facility/agency policy	8.06
t74	Administer eye medications	7.78
t30	Use resources to review medication information (e.g., drug book, pharmacist, nurse, information technology)	7.60
t97	Check for client allergies (e.g., latex, food/medications/vaccines/environmental factors)	7.51
t52	Report medication errors according to facility/agency policy	7.42
t21	Notify appropriate personnel of change in client's condition	7.08
t28	Document client's medication administration according to facility/agency policy	6.64
t101	Recognize life threatening emergencies	6.55
t1	Use effective time management skills	6.49
t49	Identify if a medication or route is appropriate to administer	6.41
t6	Measure client vital signs (e.g., temperature, pulse, respiration, and blood pressure)	5.99
t96	Monitor for and report client care safety hazards	5.76
t83	Identify expiration date prior to administration of medication	5.16

Appendix E. Activities Sorted by Percent Not Applicable

ID#	Activity Statement	% NA
t89	Review possible adverse effects/ side effects of medications	5.04
t50	Follow agency policy related to HIPAA or FERPA rules	4.94
t57	Observe client for adverse effects/side effects of medications	4.65
t87	Provide adequate liquids when administering medication	4.49
t37	Recognize client's right to refuse medication/treatment	4.45
t76	Administer oral medication	4.35
t88	Review medication orders for completeness (dose, time, route, frequency, name of medication)	4.33
t48	Adhere to basic authorized job duties	4.08
t56	Report client's responses to medication	4.04
t92	Maintain security of medication storage areas	3.86
t91	Properly store medications	3.83
t55	Observe client's responses to medication	3.79
t80	Observe client swallowing oral medications	2.99
t81	Follow medication direction and warning labels	2.92
t78	Use the six "rights" when administering medications (right drug, right dose, right client, right time, right route, right documentation)	2.83
t79	Checks medications three times before giving	2.57
t94	Maintain clean technique	2.34
t47	Provide for client's privacy	1.78
t95	Follow safety policies/procedures used to prevent incidents and accidents	1.68
t46	Maintain confidentiality	1.52
t98	Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])	1.50
t103	Maintain clean work environment	1.43

APPENDIX F: ACTIVITIES SORTED BY MEAN FREQUENCY

Appendix F. Activities Sorted by Mean Frequency		
ID#	Activity Statement	Mean Frequency
t7	Perform Cardiopulmonary Resuscitation (CPR)	0.26
t8	Initiate emergency care for a client who is choking	0.45
t65	Administer an emergency medication (e.g., glucagon, epinephrine (Epi-pen™))	0.68
t42	Report unsafe practice by a health care worker (e.g., improper care, substance abuse, medication theft)	0.80
t43	Report client abuse, neglect, injury	0.81
t62	Administer medications by nasogastric (NG) tube	0.85
t100	Access poison control agency when necessary	0.90
t67	Administer a medication by vaginal route	0.90
t68	Administer a medication by intradermal route (e.g., PPD test)	0.97
t52	Report medication errors according to facility/agency policy	1.04
t29	Document medication errors according to facility/agency policy	1.05
t45	Identify ethical issues affecting staff or client	1.08
t44	Complete incident/accident report according to facility/agency policy	1.09
t38	Report violation of client rights within required time frame	1.10
t32	Take telephone orders for medication	1.13
t66	Administer a medication by rectal route	1.27
t63	Administer medications by jejunostomy (j-tube)	1.28
t84	Mix insulin from two different vials for client	1.29
t31	Take verbal orders for medication	1.42
t69	Administer medication by sublingual route	1.43
t73	Administer ear medications	1.58
t9	Assist with admission, transfer, and/or discharge of client	1.64
t101	Recognize life threatening emergencies	1.68
t11	Use restraints according to agency policy	1.70
t20	Participate in interdisciplinary client care conferences	1.71
t59	Withhold medication if necessary	1.75
t5	Provide non-invasive treatments (e.g., basic first aid and continuous passive motion (CPM) machine)	1.78
t25	Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)	1.81
t61	Administer medications by gastric tube (g-tube)	1.88
t58	Respond to client's adverse reaction to medication according to facility/agency policy	1.91
t64	Administer a subcutaneous medication	1.96
t34	Transcribe orders	2.01
t85	Administer medication to coincide with lab tests	2.07
t40	Promote client self-advocacy	2.09
t18	Respond to signs and/or symptoms of high or low blood sugar	2.09
t70	Administer medication by transdermal route (e.g., patch)	2.14
t39	Act/serve as an advocate for the client	2.16
t13	Report signs and/or symptoms of high or low blood sugar	2.18
t33	Take (receive) written orders for medication	2.21

Appendix F. Activities Sorted by Mean Frequency

ID#	Activity Statement	Mean Frequency
t12	Identify signs and/or symptoms of high or low blood sugar	2.22
t26	Documents adverse effects/ side effects of client's medication	2.24
t75	Administer nasal medication	2.26
t14	Administer oxygen as ordered	2.26
t22	Communicate effectively with family, parent, or guardian regarding health care status of client	2.29
t72	Administer medication by nebulizer	2.3
t41	Provide culturally sensitive care	2.34
t90	Dispose of client's unused or expired medications according to facility/agency policy	2.35
t15	Check oxygen saturation percentage using pulse oximetry	2.43
t27	Send medication orders to pharmacy	2.46
t30	Use resources to review medication information (e.g., drug book, pharmacist, nurse, information technology)	2.49
t37	Recognize client's right to refuse medication/treatment	2.49
t19	Reinforce client teaching using an established plan of care	2.53
t71	Administer medication by a metered dose inhaler	2.53
t4	Perform capillary blood glucose testing	2.54
t23	Give or receive report (e.g., communication log, shift report)	2.56
t17	Take client's apical pulse	2.56
t53	Recognize limitations within scope of practice	2.63
T77	Administer topical medication	2.63
t10	Use cost effective measures when providing client care (e.g., supplies)	2.68
t21	Notify appropriate personnel of change in client's condition	2.68
t51	Count controlled substances	2.73
t3	Assist client with self-administration of medication	2.78
t74	Administer eye medications	2.85
t102	Maintain equipment for client care	2.87
t35	Review medication record for order changes	2.88
t56	Report client's responses to medication	2.88
t104	Date appropriate medication when first used (e.g., insulin, eye drops)	2.89
t96	Monitor for and report client care safety hazards	2.92
t2	Assist client with activities of daily living (ADLs) (e.g., bathing, feeding, hygiene, toileting)	2.97
t6	Measure client vital signs (e.g., temperature, pulse, respiration, and blood pressure)	3.04
t57	Observe client for adverse effects/side effects of medications	3.05
t16	Maintain the supply of medication	3.06
t60	Administer PRN medications	3.07
t89	Review possible adverse effects/ side effects of medications	3.08
t97	Check for client allergies (e.g., latex, food/medications/vaccines/environmental factors)	3.17
t24	Document client information in accordance with agency policy and procedure	3.22
t54	Position a client for medication administration	3.25
t49	Identify if a medication or route is appropriate to administer	3.25
t36	Use knowledge of medical terminology to interpret symbols, common abbreviations, and terminology used in administration of medications	3.29
t86	Prepare medication for administration (e.g., crushing, mixing with food or water)	3.35

Appendix F. Activities Sorted by Mean Frequency

ID#	Activity Statement	Mean Frequency
t55	Observe client's responses to medication	3.38
t28	Document client's medication administration according to facility/agency policy	3.44
t83	Identify expiration date prior to administration of medication	3.47
t99	Follow facility/agency procedures to verify client identity (e.g., client's name bands, allergy bands)	3.55
t91	Properly store medications	3.56
t50	Follow agency policy related to HIPAA or FERPA rules	3.56
t46	Maintain confidentiality	3.56
t76	Administer oral medication	3.60
t48	Adhere to basic authorized job duties	3.60
t95	Follow safety policies/procedures used to prevent incidents and accidents	3.62
t93	Maintain security of controlled substances according to legal statutes and facility/agency policy	3.62
t103	Maintain clean work environment	3.62
t82	Administer medications prepared by self, not others	3.63
t47	Provide for client's privacy	3.63
t92	Maintain security of medication storage areas	3.64
t1	Use effective time management skills	3.64
t88	Review medication orders for completeness (dose, time, route, frequency, name of medication)	3.65
t87	Provide adequate liquids when administering medication	3.68
t79	Checks medications three times before giving	3.71
t80	Observe client swallowing oral medications	3.72
t81	Follow medication direction and warning labels	3.73
t94	Maintain clean technique	3.74
t78	Use the six "rights" when administering medications (right drug, right dose, right client, right time, right route, right documentation)	3.78
t98	Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])	3.87

APPENDIX G: ACTIVITIES SORTED BY MEAN IMPORTANCE

Appendix G. Activities Sorted by Mean Importance

ID#	Activity Statement	Mean Importance
t25	Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)	2.96
t11	Use restraints according to agency policy	2.97
t32	Take telephone orders for medication	2.97
t9	Assist with admission, transfer, and/or discharge of client	2.98
t20	Participate in interdisciplinary client care conferences	2.99
t68	Administer a medication by intradermal route (e.g., PPD test)	3.00
t5	Provide non-invasive treatments (e.g., basic first aid and continuous passive motion (CPM) machine)	3.02
t31	Take verbal orders for medication	3.03
t62	Administer medications by nasogastric (NG) tube	3.05
t10	Use cost effective measures when providing client care (e.g., supplies)	3.09
t63	Administer medications by jejunostomy (j-tube)	3.12
t84	Mix insulin from two different vials for client	3.17
t34	Transcribe orders	3.18
t65	Administer an emergency medication (e.g., glucagon, epinephrine (Epi-pen™))	3.22
t67	Administer a medication by vaginal route	3.26
t64	Administer a subcutaneous medication	3.26
t19	Reinforce client teaching using an established plan of care	3.29
t61	Administer medications by gastric tube (g-tube)	3.31
t33	Take (receive) written orders for medication	3.38
t66	Administer a medication by rectal route	3.38
t45	Identify ethical issues affecting staff or client	3.42
t40	Promote client self-advocacy	3.43
t3	Assist client with self-administration of medication	3.43
t2	Assist client with activities of daily living (ADLs) (e.g., bathing, feeding, hygiene, toileting)	3.44
t4	Perform capillary blood glucose testing	3.45
t22	Communicate effectively with family, parent, or guardian regarding health care status of client	3.46
t39	Act/serve as an advocate for the client	3.48
t41	Provide culturally sensitive care	3.49
t15	Check oxygen saturation percentage using pulse oximetry	3.51
t69	Administer medication by sublingual route	3.53
t85	Administer medication to coincide with lab tests	3.53
t73	Administer ear medications	3.54
t72	Administer medication by nebulizer	3.55
t17	Take client's apical pulse	3.57
t27	Send medication orders to pharmacy	3.57
t75	Administer nasal medication	3.58
t71	Administer medication by a metered dose inhaler	3.59
t77	Administer topical medication	3.60
t7	Perform Cardiopulmonary Resuscitation (CPR)	3.60

Appendix G. Activities Sorted by Mean Importance

ID#	Activity Statement	Mean Importance
t70	Administer medication by transdermal route (e.g., patch)	3.61
t14	Administer oxygen as ordered	3.61
t1	Use effective time management skills	3.62
t74	Administer eye medications	3.64
t23	Give or receive report (e.g., communication log, shift report)	3.66
t60	Administer PRN medications	3.66
t6	Measure client vital signs (e.g., temperature, pulse, respiration, and blood pressure)	3.67
t53	Recognize limitations within scope of practice	3.68
t44	Complete incident/accident report according to facility/agency policy	3.69
t100	Access poison control agency when necessary	3.69
t90	Dispose of client's unused or expired medications according to facility/agency policy	3.69
t30	Use resources to review medication information (e.g., drug book, pharmacist, nurse, information technology)	3.70
t37	Recognize client's right to refuse medication/treatment	3.70
t24	Document client information in accordance with agency policy and procedure	3.70
t59	Withhold medication if necessary	3.71
t102	Maintain equipment for client care	3.71
t38	Report violation of client rights within required time frame	3.72
t8	Initiate emergency care for a client who is choking	3.72
t54	Position a client for medication administration	3.73
t35	Review medication record for order changes	3.73
t48	Adhere to basic authorized job duties	3.73
t18	Respond to signs and/or symptoms of high or low blood sugar	3.74
t16	Maintain the supply of medication	3.75
t26	Documents adverse effects/ side effects of client's medication	3.76
t36	Use knowledge of medical terminology to interpret symbols, common abbreviations, and terminology used in administration of medications	3.76
t86	Prepare medication for administration (e.g., crushing, mixing with food or water)	3.77
t96	Monitor for and report client care safety hazards	3.77
t21	Notify appropriate personnel of change in client's condition	3.77
t12	Identify signs and/or symptoms of high or low blood sugar	3.78
t56	Report client's responses to medication	3.78
t89	Review possible adverse effects/ side effects of medications	3.79
t103	Maintain clean work environment	3.80
t76	Administer oral medication	3.80
t104	Date appropriate medication when first used (e.g., insulin, eye drops)	3.80
t58	Respond to client's adverse reaction to medication according to facility/agency policy	3.80
t55	Observe client's responses to medication	3.81
t29	Document medication errors according to facility/agency policy	3.81
t13	Report signs and/or symptoms of high or low blood sugar	3.81
t97	Check for client allergies (e.g., latex, food/medications/vaccines/environmental factors)	3.83
t87	Provide adequate liquids when administering medication	3.83

Appendix G. Activities Sorted by Mean Importance

ID#	Activity Statement	Mean Importance
t42	Report unsafe practice by a health care worker (e.g., improper care, substance abuse, medication theft)	3.84
t57	Observe client for adverse effects/side effects of medications	3.84
t91	Properly store medications	3.85
t50	Follow agency policy related to HIPAA or FERPA rules	3.85
t83	Identify expiration date prior to administration of medication	3.85
t52	Report medication errors according to facility/agency policy	3.85
t28	Document client's medication administration according to facility/agency policy	3.87
t95	Follow safety policies/procedures used to prevent incidents and accidents	3.87
t99	Follow facility/agency procedures to verify client identity (e.g., client's name bands, allergy bands)	3.87
t94	Maintain clean technique	3.87
t49	Identify if a medication or route is appropriate to administer	3.87
t47	Provide for client's privacy	3.87
t43	Report client abuse, neglect, injury	3.88
t51	Count controlled substances	3.89
t82	Administer medications prepared by self, not others	3.89
t92	Maintain security of medication storage areas	3.89
t101	Recognize life threatening emergencies	3.89
t88	Review medication orders for completeness (dose, time, route, frequency, name of medication)	3.90
t93	Maintain security of controlled substances according to legal statutes and facility/agency policy	3.91
t46	Maintain confidentiality	3.93
t80	Observe client swallowing oral medications	3.93
t79	Checks medications three times before giving	3.93
t81	Follow medication direction and warning labels	3.93
t98	Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])	3.94
t78	Use the six "rights" when administering medications (right drug, right dose, right client, right time, right route, right documentation)	3.96

APPENDIX H. SUBGROUP ANALYSIS: MEAN IMPORTANCE BY YEARS OF EXPERIENCE

Appendix H. Subgroup Analysis: Mean Importance by Years of Experience						
ID#	Activity Statement	1 Year or Less Mean	2 to 5 Years Mean	6 to 10 Years Mean	11 to 15 Years Mean	More than 15 Years Mean
t1	Use effective time management skills	3.62	3.64	3.61	3.67	3.54
t2	Assist client with activities of daily living (ADLs) (e.g., bathing, feeding, hygiene, toileting)	3.47	3.39	3.45	3.41	3.48
t3	Assist client with self-administration of medication	3.43	3.42	3.48	3.50	3.35
t4	Perform capillary blood glucose testing	3.43	3.44	3.39	3.50	3.50
t5	Provide non-invasive treatments (e.g., basic first aid and continuous passive motion (CPM) machine)	2.97	2.98	3.10	3.10	3.03
t6	Measure client vital signs (e.g., temperature, pulse, respiration, and blood pressure)	3.60	3.68	3.70	3.67	3.70
t7	Perform Cardiopulmonary Resuscitation (CPR)	3.62	3.58	3.57	3.67	3.51
t8	Initiate emergency care for a client who is choking	3.72	3.74	3.64	3.71	3.77
t9	Assist with admission, transfer, and/or discharge of client	2.92	2.93	2.93	3.07	3.14
t10	Use cost effective measures when providing client care (e.g., supplies)	2.99	3.12	3.04	3.27	3.05
t11	Use restraints according to agency policy	2.86	2.92	2.95	3.19	3.11
t12	Identify signs and/or symptoms of high or low blood sugar	3.73	3.77	3.78	3.81	3.83
t13	Report signs and/or symptoms of high or low blood sugar	3.77	3.80	3.83	3.85	3.83
t14	Administer oxygen as ordered	3.52	3.59	3.63	3.66	3.67
t15	Check oxygen saturation percentage using pulse oximetry	3.46	3.51	3.50	3.54	3.60
t16	Maintain the supply of medication	3.70	3.74	3.76	3.75	3.79
t17	Take client's apical pulse	3.50	3.60	3.53	3.64	3.60
t18	Respond to signs and/or symptoms of high or low blood sugar	3.66	3.73	3.78	3.84	3.76
t19	Reinforce client teaching using an established plan of care	3.24	3.26	3.34	3.39	3.29
t20	Participate in interdisciplinary client care conferences	2.93	2.91	3.03	3.28	2.99
t21	Notify appropriate personnel of change in client's condition	3.80	3.77	3.73	3.82	3.76
t22	Communicate effectively with family, parent, or guardian regarding health care status of client	3.45	3.49	3.47	3.46	3.38
t23	Give or receive report (e.g., communication log, shift report)	3.66	3.66	3.61	3.65	3.65
t24	Document client information in accordance with agency policy and procedure	3.74	3.69	3.69	3.72	3.66
t25	Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)	2.87	3.01	2.93	3.10	2.94
t26	Documents adverse effects/ side effects of client's medication	3.69	3.75	3.77	3.81	3.78
t27	Send medication orders to pharmacy	3.48	3.58	3.54	3.66	3.63
t28	Document client's medication administration according to facility/agency policy	3.83	3.88	3.87	3.86	3.89

Appendix H. Subgroup Analysis: Mean Importance by Years of Experience

ID#	Activity Statement	1 Year or Less Mean	2 to 5 Years Mean	6 to 10 Years Mean	11 to 15 Years Mean	More than 15 Years Mean
t29	Document medication errors according to facility/agency policy	3.76	3.80	3.84	3.85	3.76
t30	Use resources to review medication information (e.g., drug book, pharmacist, nurse, information technology)	3.69	3.68	3.72	3.75	3.71
t31	Take verbal orders for medication	2.87	3.02	3.03	3.22	3.10
t32	Take telephone orders for medication	2.86	2.94	2.94	3.13	3.07
t33	Take (receive) written orders for medication	3.32	3.39	3.35	3.47	3.36
t34	Transcribe orders	3.06	3.15	3.14	3.32	3.28
t35	Review medication record for order changes	3.72	3.74	3.74	3.73	3.73
t36	Use knowledge of medical terminology to interpret symbols, common abbreviations, and terminology used in administration of medications	3.75	3.74	3.79	3.82	3.77
t37	Recognize client's right to refuse medication/treatment	3.71	3.69	3.69	3.85	3.64
t38	Report violation of client rights within required time frame	3.67	3.71	3.73	3.77	3.68
t39	Act/serve as an advocate for the client	3.54	3.44	3.48	3.52	3.41
t40	Promote client self-advocacy	3.54	3.39	3.39	3.41	3.35
t41	Provide culturally sensitive care	3.54	3.46	3.46	3.57	3.49
t42	Report unsafe practice by a health care worker (e.g. improper care, substance abuse, medication theft)	3.83	3.82	3.82	3.90	3.87
t43	Report client abuse, neglect, injury	3.87	3.88	3.87	3.95	3.91
t44	Complete incident/accident report according to facility/agency policy	3.62	3.68	3.68	3.79	3.67
t45	Identify ethical issues affecting staff or client	3.35	3.40	3.44	3.57	3.37
t46	Maintain confidentiality	3.9	3.92	3.95	3.94	3.95
t47	Provide for client's privacy	3.84	3.86	3.90	3.92	3.90
t48	Adhere to basic authorized job duties	3.71	3.71	3.77	3.87	3.69
t49	Identify if a medication or route is appropriate to administer	3.85	3.85	3.87	3.94	3.91
t50	Follow agency policy related to HIPAA or FERPA rules	3.86	3.83	3.84	3.89	3.87
t51	Count controlled substances	3.86	3.87	3.88	3.94	3.91
t52	Report medication errors according to facility/agency policy	3.84	3.85	3.85	3.89	3.86
t53	Recognize limitations within scope of practice	3.67	3.65	3.69	3.74	3.64
t54	Position a client for medication administration	3.68	3.73	3.71	3.81	3.77
t55	Observe client's responses to medication	3.79	3.80	3.76	3.91	3.83
t56	Report client's responses to medication	3.75	3.78	3.77	3.86	3.80
t57	Observe client for adverse effects/side effects of medications	3.81	3.84	3.84	3.84	3.87
t58	Respond to client's adverse reaction to medication according to facility/agency policy	3.77	3.81	3.82	3.77	3.83
t59	Withhold medication if necessary	3.67	3.70	3.73	3.74	3.70
t60	Administer PRN medications	3.63	3.67	3.64	3.72	3.64
t61	Administer medications by gastric tube (g-tube)	3.31	3.24	3.24	3.27	3.48
t62	Administer medications by nasogastric (NG) tube	3.04	2.97	2.96	3.02	3.19

Appendix H. Subgroup Analysis: Mean Importance by Years of Experience						
ID#	Activity Statement	1 Year or Less Mean	2 to 5 Years Mean	6 to 10 Years Mean	11 to 15 Years Mean	More than 15 Years Mean
t63	Administer medications by jejunostomy (j-tube)	3.04	3.02	3.08	3.21	3.29
t64	Administer a subcutaneous medication	3.23	3.19	3.23	3.37	3.23
t65	Administer an emergency medication (e.g., glucagon, epinephrine (Epi-pen™))	3.18	3.18	3.20	3.24	3.24
t66	Administer a medication by rectal route	3.32	3.37	3.43	3.41	3.43
t67	Administer a medication by vaginal route	3.18	3.22	3.27	3.34	3.31
t68	Administer a medication by intradermal route (e.g., PPD test)	2.98	2.93	3.00	3.04	2.99
t69	Administer medication by sublingual route	3.43	3.50	3.57	3.67	3.51
t70	Administer medication by transdermal route (e.g., patch)	3.48	3.63	3.62	3.69	3.62
t71	Administer medication by a metered dose inhaler	3.5	3.59	3.62	3.73	3.54
t72	Administer medication by nebulizer	3.49	3.59	3.51	3.57	3.46
t73	Administer ear medications	3.49	3.54	3.56	3.55	3.50
t74	Administer eye medications	3.57	3.64	3.65	3.73	3.65
t75	Administer nasal medication	3.51	3.59	3.59	3.66	3.52
t76	Administer oral medication	3.73	3.80	3.83	3.84	3.83
t77	Administer topical medication	3.57	3.57	3.62	3.70	3.57
t78	Use the six "rights" when administering medications (right drug, right dose, right client, right time, right route, right documentation)	3.92	3.96	3.98	3.97	3.96
t79	Checks medications three times before giving	3.90	3.93	3.94	3.96	3.94
t80	Observe client swallowing oral medications	3.89	3.94	3.92	3.95	3.96
t81	Follow medication direction and warning labels	3.91	3.94	3.92	3.93	3.96
t82	Administer medications prepared by self, not others	3.87	3.88	3.90	3.93	3.93
t83	Identify expiration date prior to administration of medication	3.80	3.87	3.88	3.89	3.84
t84	Mix insulin from two different vials for client	3.13	3.15	3.11	3.16	3.09
t85	Administer medication to coincide with lab tests	3.37	3.51	3.60	3.60	3.61
t86	Prepare medication for administration (e.g., crushing, mixing with food or water)	3.72	3.78	3.74	3.81	3.81
t87	Provide adequate liquids when administering medication	3.74	3.84	3.85	3.88	3.86
t88	Review medication orders for completeness (dose, time, route, frequency, name of medication)	3.85	3.90	3.90	3.94	3.92
t89	Review possible adverse effects/ side effects of medications	3.74	3.79	3.82	3.80	3.80
t90	Dispose of client's unused or expired medications according to facility/agency policy	3.68	3.70	3.69	3.68	3.67
t91	Properly store medications	3.81	3.86	3.87	3.87	3.82
t92	Maintain security of medication storage areas	3.85	3.90	3.88	3.93	3.89
t93	Maintain security of controlled substances according to legal statutes and facility/agency policy	3.87	3.91	3.91	3.96	3.94
t94	Maintain clean technique	3.84	3.86	3.86	3.93	3.90
t95	Follow safety policies/procedures used to prevent incidents and accidents	3.84	3.86	3.87	3.91	3.89

Appendix H. Subgroup Analysis: Mean Importance by Years of Experience

ID#	Activity Statement	1 Year or Less Mean	2 to 5 Years Mean	6 to 10 Years Mean	11 to 15 Years Mean	More than 15 Years Mean
t96	Monitor for and report client care safety hazards	3.76	3.77	3.76	3.80	3.81
t97	Check for client allergies (e.g., latex, food/medications/vaccines/environmental factors)	3.82	3.80	3.88	3.83	3.83
t98	Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])	3.94	3.94	3.95	3.94	3.97
t99	Follow facility/agency procedures to verify client identity (e.g., client's name bands, allergy bands)	3.81	3.88	3.88	3.85	3.89
t100	Access poison control agency when necessary	3.68	3.67	3.74	3.68	3.64
t101	Recognize life threatening emergencies	3.86	3.89	3.89	3.90	3.91
t102	Maintain equipment for client care	3.69	3.70	3.71	3.77	3.70
t103	Maintain clean work environment	3.77	3.79	3.81	3.85	3.78
t104	Date appropriate medication when first used (e.g., insulin, eye drops)	3.78	3.81	3.80	3.84	3.77

APPENDIX I. SUBGROUP ANALYSIS: MEAN IMPORTANCE BY WORK SETTING

Appendix I. Subgroup Analysis: Mean Importance by Work Setting															
	Ast Liv Fac	Com-Amb Care	Corr Fac	Day Care	Dev Dis Fac	Grp Hme	Hme Hlth	Hspc	Hsptl	LtC	Psych Hlth Fac	Rehab	Resd Fac	Sch	Oth
ID#	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
t1	3.64	3.63	3.63	3.67	3.49	3.52	3.59	3.76	3.64	3.70	3.45	3.77	3.63	3.32	3.67
t2	3.54	3.46	2.69	3.89	3.60	3.64	3.62	3.39	3.50	3.45	3.51	3.34	3.49	3.00	3.63
t3	3.45	3.52	3.26	3.56	3.48	3.51	3.59	3.52	3.46	3.48	3.37	3.50	3.52	3.56	3.49
t4	3.65	3.32	2.80	3.33	3.41	3.10	3.54	3.67	3.44	3.49	3.31	3.29	3.39	3.08	3.45
t5	3.06	3.33	2.79	3.00	3.06	2.94	2.92	3.00	2.86	3.02	2.93	2.91	3.01	3.43	3.02
t6	3.69	3.59	3.45	3.83	3.54	3.57	3.53	3.81	3.63	3.75	3.67	3.75	3.68	3.57	3.72
t7	3.58	3.78	3.48	3.56	3.73	3.49	3.42	3.64	3.66	3.63	3.71	3.61	3.67	3.52	3.69
t8	3.71	3.90	3.59	3.61	3.77	3.74	3.60	3.84	3.65	3.76	3.76	3.82	3.76	3.76	3.84
t9	3.02	3.14	3.11	3.08	2.76	2.81	2.80	3.02	3.28	3.04	3.01	2.92	2.96	2.38	3.12
t10	3.10	3.38	3.25	3.14	2.93	3.02	3.06	3.20	3.13	3.13	2.80	3.21	3.25	2.73	3.29
t11	2.68	2.63	3.29	2.85	2.93	2.52	2.74	3.00	3.29	3.11	3.28	2.99	2.75	2.48	2.95
t12	3.81	3.90	3.52	3.94	3.72	3.62	3.59	3.85	3.61	3.84	3.76	3.83	3.78	3.59	3.69
t13	3.82	3.87	3.74	3.88	3.72	3.62	3.58	3.85	3.58	3.87	3.72	3.84	3.84	3.62	3.69
t14	3.61	3.62	3.38	3.82	3.51	3.29	3.44	3.61	3.55	3.71	3.55	3.58	3.64	3.13	3.57
t15	3.46	3.30	3.00	3.77	3.45	3.13	3.37	3.68	3.39	3.67	3.58	3.64	3.40	3.05	3.28
t16	3.79	3.65	3.66	3.76	3.73	3.68	3.76	3.83	3.61	3.80	3.80	3.81	3.76	3.48	3.63
t17	3.57	3.39	3.29	3.58	3.36	3.31	3.41	3.70	3.48	3.69	3.55	3.73	3.44	3.09	3.51
t18	3.78	3.60	3.80	3.82	3.61	3.61	3.62	3.82	3.53	3.78	3.75	3.73	3.73	3.57	3.65
t19	3.22	3.26	3.44	3.45	3.42	3.47	3.42	3.45	3.18	3.31	3.41	3.32	3.37	3.17	3.52
t20	3.04	3.04	3.05	3.10	3.15	3.19	3.10	2.86	3.08	2.99	3.33	2.89	3.05	2.57	2.88
t21	3.78	3.72	3.82	3.84	3.74	3.67	3.69	3.83	3.79	3.82	3.78	3.90	3.83	3.54	3.77
t22	3.55	3.52	3.27	3.69	3.57	3.45	3.62	3.57	3.55	3.49	3.28	3.43	3.46	3.54	3.55
t23	3.73	3.69	3.89	3.67	3.61	3.69	3.52	3.70	3.68	3.68	3.70	3.68	3.78	3.39	3.59
t24	3.72	3.82	3.83	3.89	3.72	3.69	3.60	3.79	3.59	3.72	3.75	3.76	3.75	3.58	3.69
t25	2.92	3.08	2.95	3.21	3.23	3.09	3.02	2.89	2.90	3.00	3.06	2.95	2.86	2.84	2.76
t26	3.76	3.63	3.78	3.88	3.76	3.69	3.77	3.85	3.76	3.80	3.73	3.81	3.79	3.39	3.85
t27	3.63	3.68	3.48	3.58	3.37	3.39	3.55	3.72	3.56	3.66	3.51	3.70	3.61	2.62	3.67
t28	3.88	3.76	3.97	3.94	3.90	3.83	3.64	3.97	3.72	3.91	3.85	3.91	3.88	3.81	3.90

Appendix I. Subgroup Analysis: Mean Importance by Work Setting

ID#	Ast Liv Fac	Com-Amb Care	Corr Fac	Day Care	Dev Dis Fac	Grp Hme	Hme Hlth	Hspc	Hsptl	LtC	Psych Hlth Fac	Rehab	Resd Fac	Sch	Oth
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
t29	3.83	3.69	3.79	4.00	3.87	3.84	3.60	3.87	3.67	3.85	3.79	3.89	3.79	3.70	3.79
t30	3.69	3.55	3.78	3.78	3.57	3.59	3.69	3.76	3.60	3.77	3.67	3.82	3.65	3.66	3.66
t31	3.16	3.27	2.89	3.31	2.94	2.77	2.93	3.13	3.09	3.12	3.12	2.98	3.18	2.58	3.32
t32	3.09	3.33	2.61	3.33	2.93	2.66	2.96	2.97	3.05	3.07	2.81	2.83	3.10	2.52	3.31
t33	3.45	3.54	3.32	3.54	3.36	3.36	3.35	3.49	3.29	3.41	3.60	3.30	3.35	3.46	3.53
t34	3.29	3.50	2.80	3.33	3.06	2.98	3.20	3.35	3.36	3.27	3.46	2.98	3.07	2.77	3.32
t35	3.77	3.80	3.52	3.63	3.72	3.65	3.61	3.89	3.48	3.80	3.72	3.83	3.67	3.31	3.73
t36	3.76	3.71	3.77	3.81	3.71	3.66	3.62	3.90	3.65	3.85	3.78	3.84	3.72	3.68	3.78
t37	3.71	3.58	3.75	3.76	3.68	3.58	3.62	3.73	3.50	3.72	3.67	3.77	3.62	3.55	3.77
t38	3.72	3.68	3.70	3.88	3.80	3.73	3.63	3.76	3.56	3.77	3.71	3.83	3.72	3.39	3.71
t39	3.43	3.34	3.08	3.75	3.62	3.56	3.48	3.59	3.50	3.54	3.50	3.49	3.42	3.33	3.52
t40	3.37	3.74	2.76	3.57	3.66	3.50	3.45	3.37	3.23	3.47	3.47	3.44	3.50	3.44	3.52
t41	3.43	3.69	3.50	3.63	3.55	3.35	3.48	3.48	3.30	3.55	3.52	3.62	3.34	3.15	3.60
t42	3.84	3.73	3.80	3.94	3.88	3.82	3.73	3.96	3.74	3.89	3.82	3.92	3.84	3.48	3.93
t43	3.86	3.76	3.93	3.94	3.92	3.87	3.79	3.99	3.77	3.93	3.87	3.95	3.90	3.60	3.95
t44	3.75	3.73	3.80	3.82	3.76	3.81	3.56	3.69	3.60	3.66	3.74	3.63	3.76	3.53	3.72
t45	3.44	3.45	3.46	3.38	3.41	3.37	3.34	3.52	3.41	3.45	3.58	3.43	3.41	3.37	3.48
t46	3.91	3.97	3.91	4.00	3.94	3.86	3.88	3.94	3.80	3.95	3.91	3.93	3.91	3.94	3.95
t47	3.87	3.86	3.87	3.94	3.83	3.79	3.86	3.94	3.82	3.91	3.88	3.91	3.82	3.83	3.92
t48	3.70	3.77	3.87	3.76	3.71	3.66	3.63	3.76	3.67	3.78	3.79	3.79	3.76	3.75	3.67
t49	3.86	3.87	3.90	3.94	3.86	3.76	3.81	3.93	3.88	3.91	3.85	3.94	3.76	3.84	3.89
t50	3.80	3.86	3.85	3.94	3.88	3.83	3.72	3.90	3.80	3.89	3.83	3.88	3.85	3.84	3.86
t51	3.87	3.71	3.85	3.94	3.82	3.79	3.85	3.99	3.75	3.94	3.88	3.95	3.86	3.73	3.86
t52	3.86	3.80	3.90	3.89	3.88	3.85	3.76	3.91	3.73	3.88	3.88	3.93	3.85	3.83	3.84
t53	3.65	3.77	3.73	3.81	3.63	3.51	3.61	3.75	3.67	3.71	3.74	3.72	3.65	3.61	3.77
t54	3.68	3.59	3.48	3.87	3.72	3.60	3.62	3.78	3.39	3.83	3.65	3.88	3.65	3.40	3.53
t55	3.78	3.64	3.86	3.94	3.77	3.76	3.73	3.83	3.69	3.85	3.81	3.87	3.83	3.66	3.81
t56	3.77	3.72	3.86	3.89	3.77	3.71	3.74	3.82	3.77	3.84	3.78	3.87	3.83	3.60	3.75
t57	3.82	3.72	3.86	3.94	3.81	3.75	3.85	3.87	3.75	3.90	3.84	3.88	3.83	3.69	3.81

Appendix I. Subgroup Analysis: Mean Importance by Work Setting															
	Ast Liv Fac	Com-Amb Care	Corr Fac	Day Care	Dev Dis Fac	Grp Hme	Hme Hlth	Hspc	Hsptl	LtC	Psych Hlth Fac	Rehab	Resd Fac	Sch	Oth
ID#	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
t58	3.78	3.74	3.94	4.00	3.84	3.76	3.74	3.86	3.79	3.85	3.85	3.85	3.82	3.52	3.85
t59	3.69	3.58	3.54	3.80	3.60	3.65	3.66	3.79	3.63	3.78	3.76	3.79	3.68	3.59	3.74
t60	3.63	3.55	3.59	3.65	3.51	3.49	3.45	3.65	3.58	3.72	3.77	3.72	3.62	3.55	3.67
t61	3.08	3.32	2.88	3.55	3.54	3.07	3.29	3.55	3.24	3.50	3.18	3.44	3.13	3.00	3.03
t62	2.95	3.23	2.71	3.36	3.20	2.95	3.06	3.30	3.17	3.19	3.07	2.93	2.86	2.85	2.85
t63	2.95	3.23	2.71	3.55	3.17	2.92	3.15	3.40	3.13	3.29	3.07	3.08	2.91	2.74	2.97
t64	3.35	3.36	3.00	3.42	3.11	2.95	3.19	3.39	3.30	3.31	3.19	2.95	2.96	2.91	3.49
t65	3.12	3.27	3.33	3.45	3.22	3.08	3.36	3.37	3.35	3.31	3.12	3.06	3.02	3.54	3.22
t66	3.34	3.44	3.30	3.53	3.34	3.15	3.19	3.44	3.30	3.48	3.38	3.45	3.36	3.17	3.24
t67	3.24	3.22	3.1	3.46	3.29	3.09	3.09	3.42	3.22	3.35	3.23	3.12	3.10	3.00	3.23
t68	2.96	3.52	2.88	3.17	3.05	2.85	3.08	2.96	3.13	3.14	3.06	2.83	2.88	2.85	2.97
t69	3.51	3.61	3.32	3.56	3.40	3.24	3.35	3.62	3.31	3.63	3.52	3.59	3.45	3.08	3.60
t70	3.63	3.48	3.31	3.50	3.46	3.32	3.46	3.66	3.40	3.71	3.51	3.64	3.49	3.00	3.70
t71	3.60	3.62	3.36	3.60	3.45	3.41	3.61	3.68	3.43	3.66	3.74	3.66	3.46	3.46	3.67
t72	3.59	3.62	3.44	3.60	3.49	3.36	3.54	3.64	3.23	3.60	3.56	3.49	3.44	3.34	3.60
t73	3.59	3.52	3.57	3.50	3.59	3.56	3.32	3.56	3.50	3.57	3.59	3.52	3.53	3.37	3.54
t74	3.69	3.54	3.61	3.53	3.63	3.58	3.41	3.69	3.55	3.69	3.69	3.66	3.60	3.41	3.64
t75	3.62	3.52	3.56	3.50	3.55	3.51	3.38	3.62	3.48	3.62	3.66	3.63	3.56	3.36	3.60
t76	3.80	3.69	3.93	3.76	3.78	3.72	3.73	3.81	3.78	3.82	3.85	3.83	3.79	3.73	3.87
t77	3.60	3.55	3.56	3.47	3.55	3.48	3.56	3.57	3.75	3.62	3.68	3.59	3.53	3.69	3.43
t78	3.97	3.91	4.00	4.00	3.96	3.99	3.92	3.99	3.88	3.98	3.96	3.99	3.95	3.91	3.98
t79	3.93	3.82	3.90	3.94	3.93	3.96	3.88	3.99	3.88	3.96	3.90	3.96	3.93	3.88	3.95
t80	3.93	3.78	4.00	4.00	3.94	3.97	3.82	3.97	3.85	3.95	3.94	3.95	3.90	3.84	3.93
t81	3.91	3.81	3.97	4.00	3.95	3.96	3.86	3.97	3.82	3.96	3.91	3.96	3.90	3.81	3.93
t82	3.87	3.83	3.72	4.00	3.85	3.92	3.75	3.96	3.59	3.92	3.91	3.88	3.83	3.80	3.96
t83	3.87	3.76	3.76	3.94	3.83	3.93	3.81	3.87	3.68	3.88	3.86	3.94	3.86	3.60	3.87
t84	3.20	3.27	2.83	3.54	3.25	2.71	3.02	3.30	3.10	3.26	3.02	2.80	2.97	2.90	3.28
t85	3.52	3.55	3.29	3.87	3.57	3.33	3.44	3.70	3.50	3.63	3.74	3.52	3.36	3.15	3.57
t86	3.73	3.67	3.67	3.82	3.80	3.69	3.58	3.82	3.59	3.84	3.80	3.86	3.72	3.62	3.71

Appendix I. Subgroup Analysis: Mean Importance by Work Setting

ID#	Ast Liv Fac	Com-Amb Care	Corr Fac	Day Care	Dev Dis Fac	Grp Hme	Hme Hlth	Hspc	Hsptl	LtC	Psych Hlth Fac	Rehab	Resd Fac	Sch	Oth
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
t87	3.82	3.76	3.81	3.76	3.85	3.79	3.87	3.91	3.69	3.87	3.83	3.88	3.78	3.63	3.77
t88	3.89	3.81	3.87	3.89	3.90	3.90	3.83	3.91	3.75	3.92	3.86	3.90	3.83	3.81	3.95
t89	3.78	3.66	3.87	3.67	3.78	3.74	3.69	3.84	3.79	3.82	3.81	3.82	3.81	3.71	3.83
t90	3.68	3.67	3.63	3.75	3.76	3.57	3.58	3.75	3.60	3.74	3.76	3.75	3.65	3.47	3.60
t91	3.87	3.74	3.97	3.89	3.90	3.88	3.80	3.85	3.76	3.85	3.83	3.87	3.83	3.91	3.90
t92	3.87	3.73	3.87	3.89	3.91	3.90	3.74	3.90	3.66	3.91	3.83	3.88	3.86	3.84	3.97
t93	3.91	3.77	3.97	3.94	3.86	3.94	3.76	4.00	3.76	3.94	3.85	3.93	3.89	3.90	3.93
t94	3.85	3.86	3.91	3.79	3.86	3.81	3.84	3.92	3.77	3.89	3.83	3.88	3.83	3.88	3.89
t95	3.87	3.88	3.88	3.94	3.89	3.79	3.85	3.91	3.80	3.88	3.83	3.90	3.86	3.78	3.95
t96	3.75	3.82	3.86	3.78	3.76	3.72	3.77	3.83	3.69	3.79	3.81	3.80	3.80	3.65	3.85
t97	3.81	3.88	3.82	3.87	3.82	3.82	3.73	3.87	3.94	3.87	3.88	3.92	3.82	3.68	3.87
t98	3.94	3.97	3.97	4.00	3.90	3.92	3.96	3.99	3.89	3.95	3.89	3.93	3.91	3.91	3.97
t99	3.85	3.87	3.97	3.94	3.82	3.80	3.62	3.96	3.76	3.92	3.87	3.93	3.86	3.66	3.83
t100	3.66	3.70	3.83	3.69	3.75	3.72	3.70	3.69	3.68	3.73	3.74	3.69	3.68	3.75	3.74
t101	3.87	3.91	3.88	3.83	3.94	3.90	3.92	3.91	3.85	3.91	3.88	3.95	3.91	3.81	3.98
t102	3.66	3.64	3.92	3.78	3.66	3.61	3.75	3.73	3.74	3.75	3.75	3.72	3.71	3.62	3.68
t103	3.79	3.85	3.87	3.74	3.8	3.72	3.81	3.79	3.67	3.81	3.74	3.80	3.80	3.81	3.86
t104	3.83	3.75	3.93	3.81	3.77	3.67	3.75	3.84	3.68	3.84	3.79	3.85	3.76	3.67	3.81

APPENDIX J. SUBGROUP ANALYSIS: MEAN IMPORTANCE BY NCSBN GEOGRAPHIC AREA

Appendix J. Subgroup Analysis by NCSBN Geographic Area					
ID#	Activity Statement	Area I Mean	Area II Mean	Area III Mean	Area IV Mean
t1	Use effective time management skills	3.63	3.63	3.70	3.52
t2	Assist client with activities of daily living (ADLs) (e.g., bathing, feeding, hygiene, toileting)	3.27	3.56	3.41	3.42
t3	Assist client with self-administration of medication	3.47	3.42	3.48	3.35
t4	Perform capillary blood glucose testing	3.36	3.62	3.07	3.48
t5	Provide non-invasive treatments (e.g., basic first aid and continuous passive motion (CPM) machine)	2.90	3.17	2.75	3.08
t6	Measure client vital signs (e.g., temperature, pulse, respiration, and blood pressure)	3.64	3.64	3.77	3.67
t7	Perform Cardiopulmonary Resuscitation (CPR)	3.55	3.68	3.56	3.53
t8	Initiate emergency care for a client who is choking	3.67	3.77	3.75	3.70
t9	Assist with admission, transfer, and/or discharge of client	2.93	3.03	3.02	2.88
t10	Use cost effective measures when providing client care (e.g., supplies)	2.92	3.16	3.20	3.02
t11	Use restraints according to agency policy	2.85	3.07	3.15	2.70
t12	Identify signs and/or symptoms of high or low blood sugar	3.73	3.82	3.78	3.76
t13	Report signs and/or symptoms of high or low blood sugar	3.74	3.86	3.79	3.80
t14	Administer oxygen as ordered	3.61	3.74	3.40	3.48
t15	Check oxygen saturation percentage using pulse oximetry	3.54	3.61	3.42	3.30
t16	Maintain the supply of medication	3.73	3.70	3.80	3.81
t17	Take client's apical pulse	3.60	3.55	3.62	3.48
t18	Respond to signs and/or symptoms of high or low blood sugar	3.68	3.79	3.71	3.77
t19	Reinforce client teaching using an established plan of care	3.28	3.30	3.31	3.26
t20	Participate in interdisciplinary client care conferences	2.89	3.00	3.03	3.08
t21	Notify appropriate personnel of change in client's condition	3.77	3.76	3.83	3.79
t22	Communicate effectively with family, parent, or guardian regarding health care status of client	3.40	3.49	3.44	3.51
t23	Give or receive report (e.g., communication log, shift report)	3.55	3.69	3.64	3.73
t24	Document client information in accordance with agency policy and procedure	3.61	3.75	3.77	3.71
t25	Participate in performance improvement/quality assurance activity (e.g., collecting data, serving on performance improvement committee)	2.79	2.98	3.13	2.98
t26	Documents adverse effects/ side effects of client's medication	3.74	3.76	3.82	3.72
t27	Send medication orders to pharmacy	3.60	3.53	3.59	3.61
t28	Document client's medication administration according to facility/agency policy	3.85	3.86	3.89	3.87
t29	Document medication errors according to facility/agency policy	3.79	3.82	3.81	3.80
t30	Use resources to review medication information (e.g., drug book, pharmacist, nurse, information technology)	3.74	3.67	3.81	3.59
t31	Take verbal orders for medication	2.96	3.15	3.10	2.81
t32	Take telephone orders for medication	2.76	3.11	3.01	2.92
t33	Take (receive) written orders for medication	3.32	3.41	3.31	3.45
t34	Transcribe orders	3.09	3.23	3.12	3.22
t35	Review medication record for order changes	3.72	3.72	3.82	3.73

Appendix J. Subgroup Analysis by NCSBN Geographic Area

ID#	Activity Statement	Area I Mean	Area II Mean	Area III Mean	Area IV Mean
t36	Use knowledge of medical terminology to interpret symbols, common abbreviations, and terminology used in administration of medications	3.75	3.80	3.82	3.66
t37	Recognize client's right to refuse medication/treatment	3.70	3.68	3.76	3.70
t38	Report violation of client rights within required time frame	3.76	3.70	3.78	3.64
t39	Act/serve as an advocate for the client	3.59	3.49	3.40	3.38
t40	Promote client self-advocacy	3.47	3.46	3.41	3.34
t41	Provide culturally sensitive care	3.52	3.52	3.51	3.41
t42	Report unsafe practice by a health care worker (e.g., improper care, substance abuse, medication theft)	3.84	3.85	3.85	3.79
t43	Report client abuse, neglect, injury	3.87	3.90	3.90	3.84
t44	Complete incident/accident report according to facility/agency policy	3.58	3.71	3.69	3.75
t45	Identify ethical issues affecting staff or client	3.37	3.49	3.42	3.36
t46	Maintain confidentiality	3.88	3.95	3.95	3.90
t47	Provide for client's privacy	3.83	3.91	3.92	3.82
t48	Adhere to basic authorized job duties	3.75	3.73	3.76	3.68
t49	Identify if a medication or route is appropriate to administer	3.86	3.88	3.90	3.83
t50	Follow agency policy related to HIPAA or FERPA rules	3.79	3.90	3.88	3.82
t51	Count controlled substance	3.90	3.88	3.94	3.82
t52	Report medication errors according to facility/agency policy	3.84	3.85	3.90	3.85
t53	Recognize limitations within scope of practice	3.70	3.69	3.68	3.62
t54	Position a client for medication administration	3.77	3.71	3.81	3.65
t55	Observe client's responses to medication	3.84	3.78	3.83	3.78
t56	Report client's responses to medication	3.81	3.76	3.80	3.77
t57	Observe client for adverse effects/side effects of medications	3.87	3.83	3.86	3.80
t58	Respond to client's adverse reaction to medication according to facility/agency policy	3.83	3.81	3.83	3.75
t59	Withhold medication if necessary	3.72	3.70	3.76	3.66
t60	Administer PRN medications	3.69	3.66	3.70	3.59
t61	Administer medications by gastric tube (g-tube)	3.47	3.42	3.06	2.87
t62	Administer medications by nasogastric (NG) tube	3.02	3.18	2.97	2.83
t63	Administer medications by jejunostomy (j-tube)	3.09	3.28	3.01	2.77
t64	Administer a subcutaneous medication	3.04	3.40	3.16	3.32
t65	Administer an emergency medication (e.g., glucagon, epinephrine (Epi-pen™))	3.12	3.38	3.17	3.03
t66	Administer a medication by rectal route	3.36	3.46	3.40	3.24
t67	Administer a medication by vaginal route	3.10	3.41	3.31	3.06
t68	Administer a medication by intradermal route (e.g., PPD test)	2.74	3.19	3.10	2.82
t69	Administer medication by sublingual route	3.54	3.61	3.55	3.31
t70	Administer medication by transdermal route (e.g., patch)	3.60	3.65	3.63	3.52
t71	Administer medication by a metered dose inhaler	3.64	3.65	3.46	3.52
t72	Administer medication by nebulizer	3.56	3.58	3.35	3.63
t73	Administer ear medications	3.47	3.55	3.53	3.58
t74	Administer eye medications	3.59	3.67	3.66	3.65

Appendix J. Subgroup Analysis by NCSBN Geographic Area					
ID#	Activity Statement	Area I Mean	Area II Mean	Area III Mean	Area IV Mean
t75	Administer nasal medication	3.53	3.61	3.61	3.56
t76	Administer oral medication	3.78	3.82	3.83	3.78
t77	Administer topical medication	3.55	3.64	3.59	3.59
t78	Use the six "rights" when administering medications (right drug, right dose, right client, right time, right route, right documentation)	3.95	3.96	3.95	3.97
t79	Checks medications three times before giving	3.90	3.93	3.93	3.96
t80	Observe client swallowing oral medications	3.91	3.93	3.95	3.92
t81	Follow medication direction and warning labels	3.92	3.94	3.94	3.91
t82	Administer medications prepared by self, not others	3.82	3.90	3.91	3.90
t83	Identify expiration date prior to administration of medication	3.85	3.83	3.88	3.89
t84	Mix insulin from two different vials for client	3.02	3.35	3.12	2.97
t85	Administer medication to coincide with lab tests	3.54	3.60	3.54	3.34
t86	Prepare medication for administration (e.g., crushing, mixing with food or water)	3.78	3.78	3.81	3.68
t87	Provide adequate liquids when administering medication	3.83	3.84	3.86	3.79
t88	Review medication orders for completeness (dose, time, route, frequency, name of medication)	3.88	3.90	3.90	3.90
t89	Review possible adverse effects/ side effects of medications	3.82	3.79	3.76	3.77
t90	Dispose of client's unused or expired medications according to facility/agency policy	3.71	3.65	3.77	3.67
t91	Properly store medications	3.84	3.86	3.84	3.85
t92	Maintain security of medication storage areas	3.87	3.91	3.88	3.86
t93	Maintain security of controlled substances according to legal statutes and facility/agency policy	3.88	3.93	3.92	3.88
t94	Maintain clean technique	3.85	3.89	3.88	3.85
t95	Follow safety policies/procedures used to prevent incidents and accidents	3.85	3.88	3.88	3.85
t96	Monitor for and report client care safety hazards	3.76	3.78	3.78	3.76
t97	Check for client allergies (e.g., latex, food/medications/vaccines/environmental factors)	3.84	3.83	3.86	3.78
t98	Maintain infection control procedures (e.g., hand washing, standard/universal precautions, personal protective equipment [PPE])	3.94	3.94	3.95	3.93
t99	Follow facility/agency procedures to verify client identity (e.g., client's name bands, allergy bands)	3.86	3.86	3.92	3.83
t100	Access poison control agency when necessary	3.67	3.73	3.71	3.63
t101	Recognize life threatening emergencies	3.92	3.91	3.87	3.85
t102	Maintain equipment for client care	3.70	3.73	3.71	3.67
t103	Maintain clean work environment	3.79	3.79	3.86	3.78
t104	Date appropriate medication when first used (e.g., insulin, eye drops)	3.78	3.80	3.83	3.83