# Practice Analysis of Addictions Nursing (CARN)

**Conducted for the Addictions Nursing Certification Board**
**by**
**Center for Nursing Education and Testing, Inc**

**Prepared by Margery G. Garbin, PhD, RN, President**

**2019**

# Practice Analysis of Addictions Nursing

## Table of Contents

## List of Tables

## List of Appendices

# Practice Analysis of Addictions Nursing

## Introduction

The purpose of the practice analysis was to determine the activities performed by registered nurses (RNs) in addictions nursing, as well as the knowledge, skills, and abilities needed to perform those activities. Analysis of the practice patterns was used to validate the test specifications (blueprint) of the Certified Addictions Registered Nurse (CARN) to help assure that the certification examination accurately reflects current practice. The practice analysis was conducted in two phases; (1) survey development and data collection, and (2) data analysis and interpretation.

**Addictions Nursing Practice Analysis Task Force**.

In 2017, the Addictions Nursing Certification Board (ANCB) appointed a Practice Analysis Task Force of seven experienced nurses from various geographic regions. (See Appendix A.) While five of the members were ANCB members, the others had no previous relationship with the ANCB or its item writing committees. All were subject matter experts (SMEs) in various addictions practice environments across the United States.

The Task Force met in Orlando, Florida in October 2017 to develop the content of a survey for practicing addictions nurses. (See Appendix A - Agenda.) Two C-NET representatives assisted the group with the process--Andrew Karle, BS, and Christina Severs, BA.

At this meeting, the Task Force worked with C-NET representatives to perform the following activities:

1. Define the target practitioners to be surveyed.
2. Develop a set of demographic questions to help describe the practice of addictions nurses.
3. Develop and organize a list of activities performed by addictions nurses in their practice.
4. Develop and organize a list of statements describing the underlying knowledge, skills, and abilities (KSAs) required by addictions nurses to effectively perform the practice activities.
5. Discuss how the survey findings would be used to revise test specifications for the Certified Addictions Registered Nurse (CARN) examination.

## Methodology

The group reviewed the current test specifications, including the list of activities by blueprint areas. (See Appendix B.) To help identify changes since the last practice analysis/role delineation study (2011-2012), the group reviewed the Additions Nursing: Scope and Standards of Practice, 5th ed (2013), The American Society of Addictions Medicine (ASAM) Principles of Addictions Medicine, and various materials from the Substance Abuse and Mental Health Services Administration (SAMHSA). The Task Force discussed the changes in the field of addictions, including improvements in interventions and therapies as well as advances in patient advocacy.

**Demographic Variables**.

The demographic section asked for background characteristics of respondents, e.g., gender, age, educational preparation, length of practice as an RN and years in addictions nursing, state/jurisdiction of practice, and certification and organization membership status (Appendix B). In addition, the Task Force requested specific information about the participant's practice, including:

- Please indicate your primary role. Please select only one. (Twelve settings were listed, plus "Other, please specify.")
- Which of the following describes your employer? Select all that apply. (Nine employers were listed, plus "Other, please specify.")
- Which of the following describes your practice setting? Select all that apply. (Nineteen practice settings were listed, plus "Other, please specify.")
- Does your practice include telehealth? (Yes or No) If so, what percent of your time is spent in telehealth? (Fill in percent)
- Do you spend time providing direct patient care? (Yes or No)
- What percent of your time is spent caring for patients in the following age groups? The total should add to 100%. (Five age ranges listed)
- In the spaces provided, please indicate what percent of your time is spent in the following areas of addictions nursing. The total should add to 100%. (Six areas were listed, plus "Other, please specify.")
- Do your patients have polysubstance use? (Yes or No) If so, what percent? (Fill in percent)
- In the spaces provided, please indicate what percent of your time is spent with the following patient population. The total should add to 100%. (Eight patient populations listed)
- What percentage of your time is spent on patients with co-occurring disorders (medical, psychiatric, developmental, pain)?
- What percentage of your time is spent functioning exclusively as an addictions nurse?
- On average, how many hours per week do you work? How many hours per week do you work as an addictions nurse?
- How many years have you been practicing as an RN? (Include all positions held as RN.)

- How many years have you been practicing in addictions nursing?
- How many years have you been in your current position?
- What certifications do you currently hold? (Five certifications listed, plus "Other, please specify" and "Not Applicable")
- If CARN certified, in what year were you originally certified?
- Are you a member of IntNSA?
- Do you belong to any other addictions-related nursing?
- Do you belong to any general nursing organizations? ...other professional addictions organizations?
- Which of the following best describes the community in which you primarily practice? (Three communities listed)

**Target Practitioners**

The target practitioners for the survey were defined as nurses at various educational levels who were practicing in addictions settings. The primary method to reach these nurses was through the members of IntNSA and the individuals who had taken the CARN examination offered by ANCB.

**Pilot Testing.**

The survey was pilot tested by the Task Force members in April 2018, and the survey was modified and launched in July 2018.

**Sampling Plan**.

In order to reach a large number of nurses in the target populations, permission was requested and obtained to use the email list from a database of International Nurses Society on Addictions (IntNSA). Email invitations to participate in the survey were sent to 2,500 individuals, which included IntNSA members, both certified and non-certified. The sampling plan included sending an invitation (with an embedded link to the survey) in July 2018 when the survey would be ready to launch. The invitation included the incentive of participation in a random drawing for one of four Amazon gift cards. Two follow-up reminders and requests for participation were emailed in August and September, and the survey was closed at the end of September 2018.

**Rating Scales**.

The Task Force discussed the advantages and disadvantages of various rating scales that could be used when responding to activity and KSA statements. The method selected first asked participants if they did NOT perform the activity and, if they did not, to move on to the next statement. If the participant did perform the activity, they were asked to indicate both the frequency and importance of performance, using a four-point Likert-type scale for each. (See Appendix C.). The ratings were later combined, with importance given twice the weight of frequency, to yield an "index" score for each activity. Similarly, respondents were asked to rate the importance of the KSA statements using a four-point Likert-type scale. (See Appendix C).

**Response Rate**.

Email invitations containing the links to both the RN (CARN) and APRN (CARN-AP) surveys were sent to a combined list of 2,500 RNs and APNs. The email had explicit instructions directing the participants to which survey they should take. Email invitations for the survey were sent to a combined list of 2,500 RNs and APNs. Of the 2,500 emails sent, 493 (20%) were opened. Responses were received from 244 (50%) of the 493 who opened the email– 137 CARN and 107 CARN-AP survey respondents. Data were analyzed using IBM SPSS Statistics.

## Results

### Analysis of Demographics Data

**State Where Employed**.

Surveys were returned by 137 RNs practicing in addictions settings in 30 states and Canada (Table 1). The states with seven or more respondents included Massachusetts (25), Colorado (10), Florida (9), New York (9), Pennsylvania (9), New Jersey (7), and Ohio (7). The 76 participants from these seven states made up 55% of the total sample.

**Gender, Ethnicity, and Age**.

Tables 2 through 4 provide information about the gender, ethnicity, and age ranges of respondents. The sample was overwhelmingly female (89.05%) and white, not of Hispanic origin (89.05%), with the majority (68%) of respondents between the ages of 45 and 69 with an estimated mean of 52.6 years.

**Highest Education Level Attained and Country of Nursing Education.**

As shown in Table 5, the largest group (65 or 47.5%) of all 137 respondents held baccalaureate degrees in nursing, while 34 (24.8%) held associate degrees in nursing, 11 (8.0%) held diplomas in nursing, and 22 (16.1%) held a master's degree. Four respondents held a post-master's certificate, and one held a doctorate.

The majority of respondents received their nursing education in the United States (96.35%). Only four received their nursing education in Canada, and one in New Zealand. (Table 6)

**Years of Experience, Work Environment, and Practice Setting**.

As reported in Table 7, the number of years as an RN ranged from less than one to 54, with a mean of 22.77 years (SD=13.59). The number of years reported in addictions nursing ranged from less than one to 45, with a mean of 13.32 (SD=10.72). The number of years in the respondents' current position ranged from less than one to 45, with a mean of 7.94 (SD=8.78)

Respondents were asked to indicate their type of employer, and could choose more than one type. Table 8 shows that 41.6% of respondents reported working in a hospital/medical center, while 28.5% of the respondents reported working in a treatment center. About 11% reported working for a government agency, and private practice and college/university were both selected by 8%, each. Insurance company, self-employed, corporate vendor, and pharmaceutical company were all selected by less than 4% of respondents. Twelve percent chose "other," citing: Community health center - 6, Community mental health center - 2, Health Authority - 1, Mille Lacs Band of Ojbwe - 1, Non-profit health education or human services - 4, Psychiatric hospital - 2, Stated education grant administered by professional nursing organization - 1.

The participants were asked about the community in which they primarily practice . Table 9 shows the majority of respondents (50.4%) work in an urban community, while 29.9% work in a suburban community, and 19.7% work in a rural community.

Respondents could select multiple practice settings (from a list of 19 settings) in which they spent at least one-third of their time (Table 10-a). Just over one-third of respondents (34.3%) reported working in an outpatient treatment center, while the next highest number (25.5%) reported working in an inpatient acute treatment center. Thirty-two respondents (23.4%) reported working in an inpatient residential treatment center, while 30 respondents (21.9%) reported working in a hospital. Twenty respondents (14.6%) reported working in a mental health facility/clinic. Both the substance use outreach setting and the community health center setting were each chosen by about 8% of respondents while less than ten respondents chose academia, private practice, telehealth, or military. The rest of the settings were chosen by less than 4% of respondents.

Of the 30 respondents who reported working in a hospital setting, 14 reported working on a psychiatric/behavioral health unit, while four worked on an addictions/chemical dependency unit, four worked in detoxification/intake, and three worked in the ICU. The rest of the hospital settings were reported by 1 person, each. (Table 10-b)

**Nursing Position and Practice Roles**.

The largest group, about one-third of the respondents (*n*=45 or 32.9%), reported their position as a clinical nurse, followed by direct patient care (*n*=17 or 12.4%) (Table 11). Twelve respondents (8.8%) reported being a nurse manager while another 8% reported being a supervisor/coordinator. Equally, about 7% of respondents reported their role as a case manager and 7% reported their position as director/VP. All other positions were reported by fewer than 7% of respondents.

The vast majority of respondents (*n*=115 or 83.9%) reported that they provide direct patient care. (Table 12-a) Of those respondents, 92% reported that they spend 41.4% of their time working with patients aged 22-40 years old, while about 94% of the group reported spending about 30.5% of their time working with patients 41-60 years old. (Table 12-b)

As shown in Table 13, respondents spent the majority (53.1%) of their time in direct patient care (*SD*=30.52), followed by administration (management, supervision, clerical) (20.2% of time, *SD*=22.99%), and consultation with providers/care coordination (16.5% of time, *SD*=17.68). Respondents spent about 6.4% of their time in community outreach/education (*SD*=14.16). Respondents spent less than 2% of their time in telehealth, marketing, or other activities.

Tables 14-a through 14-c show that 25 (18.2%) of respondents' practices include telehealth. Those 25 respondents reported using telehealth an average of 20% of the time (*SD*=25.2), and 29.6% used teleheath in a rural setting, compared to an urban (17.4%) and suburban (12.2%) setting.

The mean percent of time spent functioning as an addictions nurse was 66.77% of time (*SD*=36.61) (Table 15). Table 16 shows that the mean total hours worked per week is 40.93 (*SD*=9.53), and the mean total hours worked per week as an addictions nurse is 29.73 (*SD*=15.04).

**Patient Problems**.

***This is a critical area of the survey, since "Patient Problems" is suggested as one axis of the CARN test blueprint.*** As expected, the survey results confirmed a shift in the types of patient problems seen by the addictions nurse since the last practice analysis survey from 2012. The 115 respondents reported spending a mean of 40.8% of their time performing direct patient care with patients with opioid use disorder, followed by 27.1% of time spent with patients with alcohol use disorder (Table 17). The group reported that 9.38% of time was spent with patiens with stimulant use disorders - cocaine, amphetamines, caffeine, while 8.5% of time was caring for patients with prescription medication disorders, such as sedatives, hypnotics, anxiolytics, gabapentin, etc. Respondents reported spending less that 6% of time with patients with cannabis use disorders, tobacco use disorders and other substance use. About 1% of time was spent caring for patients with process addictions, such as eating, gambling, sex and internet.

Respondents reported that about 73.4% of their patients have polysubstance use disorder. Polysubstance use disorder is the term used to describe someone who is addicted to two or more substances at one time (Tables 18-a and 18-b). Respondents also reported that about 76.1% of their time was spent caring for patients who have co-occurring psychiatric/comorbid medical disorders (process addictions, infectious diseases, and mental health disorders) (Tables 19-a and 19-b).

**Membership**. Tables 20-a through 20-c refer to membership organizations. About 57% (*n*=78) of respondents reported being IntNSA members, and 15.3% (*n*=21) reported being members of another addictions-related group. Other membership groups cited included: American Psychiatric Nurses Association (APNA) (*n*=8), Association for Medical Education & Research in Substance Abuse (*n*=4), and American Society of Addiction Medicine (ASAM) (*n*=2). Other groups were cited by one person, only.

**Certification.** Respondents were asked if they held any certifications (Table 21-a). More than half (57.7%) reported being a Certified Addictions Registered Nurse (CARN). About 50% reported being RN, board certified. Only four respondents held a CCRN, and one held an APRN. Twenty six respondents reported "other," citing: CARN-AP (*n*=3), Psych/Mental Health-BC (*n*=4), LADC or LAADC (*n*=3), and CCHP (*n*=2). All other certifications were held by one person, only (Table 21-b).

## Analysis of Activity Statements

Participants were given a list of 104 activities that describe the practice of nurses in addictions in a variety of settings. They were first asked if they did **not** perform the activity in their practice; if they did not, they were asked to proceed to the next activity statement. If they did perform the activity, they were asked to rate the frequency with which they performed it, using the following four-point scale:

① - **Monthly or less**
② - **Weekly**
③ - **Daily**
④ - **Several times a day**

Participants were then asked to rate the importance of the activity to successful performance as nurses in their current positions, using the following four-point scale:

① - **Not important** - This activity is ***not an important part*** of my overall practice.
② - **Slightly important** - This is ***among the least important*** activities of my practice.
③ - **Important** - This is ***among the more important*** activities of my practice.
④ - **Very important** - This is ***one of the most critical*** activities of my practice.

The mean frequency ratings of activities ranged from a low of 1.29 (*SD*=1.25) for "Refer for healing touch," to a high of 4.00 (*SD*=0.00) for "Provide appropriate care for the neonate in withdrawal." The overall mean frequency rating was 2.66 (*SD*=0.48). (See Appendix D, Table A.)

The mean importance ratings of activities ranged from a low of 2.19 for "Refer for massage therapy," (*SD*=1.24) to a high of 4.00 (*SD*=0.00) for "Provide appropriate care for the neonate in withdrawal." The overall mean importance rating was 3.37 (*SD*=0.30), which is very high. (See Appendix D, Table B.)

The ratings of frequency and importance were combined, with importance given twice the weight of frequency, to yield an index for each activity statement. The highest possible index for any task was 12 [frequency = 4 + (importance = 4 x 2)]. A mean index was then calculated for each task by summing the indices for all respondents who reported performing the task, then dividing by the number of respondents. The activity statements were then ranked from highest mean index to lowest mean index. Mean index data for all activity statements, in rank order from highest to lowest, appear in Appendix D, Table C.

The mean indices computed for the activity statements ranged from a low of 5.75 (*SD*=1.24) for "Refer for massage therapy," to a high of 12.00 (*SD*=0.00) for "Provide appropriate care for the neonate in withdrawal " The overall mean index was 9.48 (*SD*=1.81).

**Highest Mean Indices**. The activity with the highest mean index (12.00) was, "Provide appropriate care for the neonate in withdrawal," closely followed by "Maintain confidential information in accordance with legal standards (CFR-42)" (11.34). Many of the highest rated activities were related to administering medication or providing care for patients in withdrawal.

**Ten Activity Statements with Highest Mean Index Ratings**
**(*N* = 137)**

| Rank | Activity Statement | *n* | *M* Freq | *M* Imptce | *M* Index | *SD* |
|---|---|---|---|---|---|---|
| 1 | Provide appropriate care for the neonate in withdrawal. | 2 | 4.00 | 4.00 | **12.00** | 0.00 |
| 2 | Maintain confidential information in accordance with legal standards (CFR-42). | 129 | 3.56 | 3.89 | **11.34** | 1.10 |
| 3 | Administer medication for management of alcohol withdrawal symptoms and monitor response. | 73 | 3.19 | 3.90 | **11.00** | 1.32 |
| 4 | Use therapeutic communication skills to improve patient outcomes. | 118 | 3.57 | 3.69 | **10.96** | 1.54 |
| 5 | Appropriately document all assessment findings. | 121 | 3.36 | 3.77 | **10.89** | 1.49 |
| 6 | Develop and maintain a therapeutic relationship in all aspects of patient treatment. | 115 | 3.44 | 3.70 | **10.85** | 1.54 |
| 7 | Administer medication for management of benzodiazepine withdrawal symptoms and monitor response. | 63 | 3.00 | 3.84 | **10.68** | 1.50 |
| 8 | Use patient-centered care principles to improve patient outcomes. | 118 | 3.44 | 3.60 | **10.64** | 1.54 |
| 9 | Administer medication for management of opioid withdrawal symptoms and monitor response. | 83 | 3.05 | 3.78 | **10.61** | 1.55 |
| 10 | Assess for withdrawal from drugs. | 116 | 2.99 | 3.80 | **10.59** | 1.64 |

**Lowest Mean Indices**. The ten statements with the lowest mean indices appear below. The statement with the lowest mean index (5.75) was, "Refer for massage therapy." Many of these activities were about referring for alternative therapies.

**Ten Activity Statements Ranked Lowest**
**(*N* = 137)**

| Rank | Activity Statement | *n* | *M* Freq | *M* Imptce | *M* Index | *SD* |
|---|---|---|---|---|---|---|
| 95 | Assess for early signs and symptoms of eating disorders. | 51 | 1.98 | 3.14 | **8.25** | 1.95 |
| 96 | Obtain and review relevant radiology reports and initiate appropriate protocol. | 36 | 2.11 | 3.06 | **8.22** | 2.14 |
| 97 | Refer for mindfulness. | 47 | 2.30 | 2.79 | **7.87** | 1.97 |
| 98 | Provide community outreach/resources. | 16 | 1.94 | 2.97 | **7.81** | 2.79 |
| 99 | Evaluate and update health information resources (e.g., materials, web sites) in the area of practice for health literacy and accuracy, readability. | 38 | 1.68 | 2.87 | **7.43** | 2.15 |
| 100 | Refer for aroma therapy. | 9 | 2.22 | 2.56 | **7.33** | 2.40 |
| 101 | Refer for yoga. | 34 | 1.71 | 2.53 | **6.76** | 1.99 |
| 102 | Refer for healing touch | 7 | 1.29 | 2.71 | **6.71** | 1.25 |
| 103 | Refer for acupuncture | 30 | 1.60 | 2.47 | **6.53** | 1.89 |
| 104 | Refer for massage therapy | 16 | 1.38 | 2.19 | **5.75** | 1.24 |

## Analysis of Knowledge, Skill, and Ability (KSA) Statements

Respondents were asked to rate the importance of 71 knowledge, skill, and ability (KSA) statements, using the following four-point rating scale:

1 - **Irrelevant**: This knowledge or ability is ***not required*** for my performance in my current position.

2 - **Useful**: This knowledge or ability is ***required from time to time*** in my current position but my performance could be acceptable without it.

3 - **Important**: This knowledge or ability is ***generally required*** in order for me to perform satisfactorily in my current position. Without it, my performance would be marginal.

4 - **Essential**: This knowledge or ability is ***one of the key requirements*** for my work in my current position.

As with the activity statements, the mean ratings of KSA statements were ranked from highest to lowest. (See Appendix D, Table D.) The highest possible mean rating for KSA statements was 4, since the rating of importance was on a scale from 1 to 4. Ratings of KSA statements ranged from 2.33 to 3.81, with a mean rating of 3.23 (*SD*=0.31). The highest mean rating of 3.81 (*SD*=0.49) was given to "Patient confidentiality," closely followed by "Patient safety" with an overall mean rating of 3.76 (*SD*=0.49). The ten KSA statements ranked highest appear below. The high mean ratings and the relatively small standard deviations reflect the strong agreement among respondents of the importance of activities. The alpha coefficient for KSA ratings was 0.978.

**Ten KSA Statements Ranked Highest**
**(*N* = 137)**

| Rank | KSA Statement | *n* | *M* | *SD* |
|---|---|---|---|---|
| 1 | Patient confidentiality | 137 | 3.81 | 0.49 |
| 2 | Patient safety | 137 | 3.76 | 0.49 |
| *3-tie* | Critical thinking skills | 137 | 3.74 | 0.53 |
| *3-tie* | Communication skills | 137 | 3.74 | 0.50 |
| *5-tie* | Boundaries of the therapeutic/professional relationship | 137 | 3.66 | 0.67 |
| *5-tie* | Measures to treat life-threatening situations | 137 | 3.66 | 0.67 |
| *7-tie* | Clinical decision making | 137 | 3.61 | 0.61 |
| *7-tie* | Quality of practice | 137 | 3.61 | 0.68 |
| *9* | Scope of practice | 137 | 3.59 | 0.67 |
| *10-tie* | Assessment and diagnosis | 137 | 3.57 | 0.63 |
| *10-tie* | Documentation skills | 137 | 3.57 | 0.65 |

The lowest mean rating (2.33) was given to "Taxonomy of eating disorder." The mean index, determined by the Board as the minimum KSA rating to consider including the concept in the CARN test specifications was 2.50. Thus, all but two of the of the 76 KSAs were considered important in the role of the addictions nurse.

**Ten KSA Statements Ranked Lowest**

**(*N*=137)**

| Rank | KSA Statement | *n* | *M* | *SD* |
|---|---|---|---|---|
| *67-tie* | Epidemiology | 137 | 2.80 | 0.82 |
| *67-tie* | Patient spirituality | 137 | 2.80 | 0.81 |
| *67-tie* | Patient workplace problems | 137 | 2.80 | 0.81 |
| *67-tie* | Taxonomy of psychedelic or psychoactive substance use disorder | 137 | 2.80 | 0.91 |
| 71 | Taxonomy of stimulant use disorder | 137 | 2.78 | 0.92 |
| 72 | Taxonomy of nicotine use disorder | 137 | 2.73 | 0.91 |
| 73 | Needs of patients with process addictions | 137 | 2.71 | 0.98 |
| 74 | Needs of patients with eating disorders | 137 | 2.69 | 1.07 |
| 75 | Taxonomy of process addictions (e.g. gambling, sexual, spending/shopping) | 137 | 2.36 | 0.91 |
| 76 | Taxonomy of eating disorder | 137 | 2.33 | 0.99 |

One purpose of including KSA statements is to determine if the highest rated activity statements and the highest rated KSA statements show congruence. Similarities in ratings indicate consistency in the ratings of respondents in the two areas, which adds to the reliability of the survey instrument. Since there were 104 activity statements and only 76 KSA statements in the CARN survey, there is not a perfect 1:1 correspondence between the two parts of the survey. However, in general, there were marked consistencies.

The highest rated activity statements and highest rated KSAs are very similar in content. Both are related to direct patient care, patient confidentiality, communication with patients, and administering medications for withdrawal. Conversely, the lowest rated activity statements and KSAs tend to be about infrequently performed skills, such as referring for massage therapy or mindfulness, or addictions with less urgent interventions needed, such as eating disorders, and process addictions. The highest rated activity statements tended to be related to the highest rated KSA statements, as shown on the following page.

| Rank | Highest Ranked Activity Statements | Rank | Highest Ranked KSA Statements |
|---|---|---|---|
| 1 | Provide appropriate care for the neonate in withdrawal | 5<br>2 | Measures to treat life-threatening situations<br>Patient safety |
| 2 | Maintain confidential information in accordance with legal standards (CFR-42) | 1 | Patient confidentiality |
| 3 | Administer medication for management of alcohol withdrawal symptoms and monitor response | 2<br>16 | Patient safety<br>Pharmacotherapy |
| 4 | Use therapeutic communication skills to improve patient outcomes | 3 | Communication skills |
| 5 | Appropriately document all assessment findings | *10-tie*<br>*10-tie* | Assessment and diagnosis<br>Documentation skills |
| 6 | Develop & maintain a therapeutic relationship in all aspects of patient treatment | 5<br>13 | Boundaries of the therapeutic/professional relationship<br>Ethical principles |
| 7 | Administer medication for management of benzodiazepine withdrawal symptoms and monitor response | 2<br>16 | Patient safety<br>Pharmacotherapy |
| 8 | Use patient-centered care principles to improve patient outcomes | 14 | Planning care to meet patient treatment goals |
| 9 | Administer medication for management of opioid withdrawal symptoms and monitor response | 2<br>16 | Patient safety<br>Pharmacotherapy |
| 10 | Assess for withdrawal from drugs | 10<br>12 | Assessment and diagnosis<br>Needs of patients with substance use disorders |

## CARN Task Force Review of Survey Findings and Decisions Regarding Test Specifications

The CARN Task Force members reviewed the findings of the practice analysis at its meeting in October 2018. The Task Force agreed that the respondents to the survey were representative of nurses working in addictions settings in terms of years of experience, education, and work environment. Overall, the respondents reported a mean of 22.77 years as an RN, but a mean of only 13.32 years in the addictions specialty. Thus, they were seasoned nurses prior to entering the specialty. The greatest number (47.45%) held a baccalaureate degree in nursing as their highest educational credential, while 32.8% had less than a baccalaureate degree, holding an associate degree (24.82%) or a diploma (8.03%) in nursing. Only 16.06 % reported a master's degree in nursing. The Task Force agreed that this is typical of the mix of nursing educational backgrounds seen in addictions settings.

Most respondents reported working in an outpatient treatment center (34.3%), an inpatient acute treatment center (25.5%), an inpatient residential treatment center (23.4%), or a hospital (21.9%). Respondents were asked to select their primary role. The highest percent of respondents reported their primary role as clinical nurse (32.85%), followed by direct patient care (12.41%). Both of these roles are direct patient care roles. Similarly, they reported spending the greatest percent of the practice time (53.14%) in direct patient care, followed by administration (20.17%), and consultation with providers (16.49%).

The Task Force and C-NET prepared an executive summary which was reported to the ANCB members for formal approval in February 2019.

**Test Blueprint Weights**. The current CARN examination blueprint has only one axis, Nursing Process. Currently the weights assigned to each domain are:

1. Assessment - 23%
2. Diagnosis - 10%
3. Identifying outcomes - 12%
4. Planning of care - 17%
5. Implementation of care - 30%
6. Evaluation of care - 8%

The Score Report for candidates who were unsuccessful on the CARN examination includes this breakdown along with the percent of questions the candidate answered correctly in each domain. Candidates complain this information does not sufficiently address where they lack knowledge in the addictions nursing role, and is not helpful for preparing for retest. The Task Force recommended adding the blueprint area Patient Problem for the distribution of test content in the CARN test blueprint. The Task Force redistributed the nine patient problem areas from the survey to the seven areas shown in the following table.

C-NET and the Task Force also redistributed the activities into five Domain of Practice areas and renamed the areas to better describe the activities as they pertain to the addictions nursing role.

**Proposed Distribution of Test Content by Patient Problems**

| Patient Problem | % of Test Content |
|---|---|
| A. Opioid use disorder | 25% |
| B. Alcohol use disorder | 25% |
| C. Medication misuse (sedatives, hypnotics, anxiolytics, gabapentin, etc.) | 15% |
| D. Co-occurring psychiatric/comorbid medical disorders (process addictions, infectious diseases, and mental health disorders) | 15% |
| E. Stimulant use disorders (cocaine, amphetamines, caffeine) | 10% |
| F. Cannabinoids and other hallucinogens | 5% |
| G. Tobacco use disorder (e.g., vaping, nicotine) | 5% |

The Task Force recommended changing the current Nursing Process blueprint axis to the Domains of Nursing axis with the assigned weights:

1. Perform a biopsychosocial SUD assessment - 15%
2. Assess acute care needs of SUD patients - 15%
3. Develop and implement an individualized plan of care - 20%
4. Educate and promote behavioral change - 15%
5. Care management, treatment, and evaluation, throughout the recovery continuum (including special populations) - 35%

The Task Force determined that activities with a mean index of 7.5 or higher could be included in the test specifications (blueprint) if performed by at least one-third ($n$=38) of respondents. Six of the activities did not meet these criteria: "Evaluate and update health information resources (e.g., materials, web sites) in the area of practice for health literacy and accuracy, readability," "Refer for aroma therapy," "Refer for yoga," "Refer or healing touch, "Refer for acupuncture," and "Refer for massage therapy."

The Task Force recommended that the activity statement, "Evaluate and update health information resources (e.g., materials, web sites) in the area of practice for health literacy and accuracy, readability" be deleted from the list of activities.

The Task Force recommended the five activity statements, "Refer for aroma therapy," "Refer for yoga," "Refer or healing touch," "Refer for acupuncture," and "Refer for massage therapy" be combined into one activity, "Provide/refer for alternative therapies, e.g., aroma therapy, yoga, healing touch, etc."

The suggested threshold for determining if content related to a KSA statement should be considered for inclusion in the CARN examination is a rating of 2.5. Two statements fell below that threshold, "Taxonomy of process addictions weighted (e.g. gambling, sexual, spending, shopping)" with a rating of 2.36 (*SD*=0.91) and "Taxonomy of eating disorder" with a rating of 2.33 (*SD*=0.99). The Task Force agreed to include them, based on the addition of the Patient Problem axis, specifically because blueprint area D, "Co-occurring psychiatric/comorbid medical disorders (process addictions, infectious diseases, and mental health disorders)" will likely include questions with this content.

The Task Force recommended to include the two KSA statements rated under the 2.5 threshold, "Taxonomy of process addictions weighted (e.g. gambling, sexual, spending. shopping)" with a rating of 2.36 (*SD*=0.91) and "Taxonomy of eating disorder" with a rating of 2.33 (*SD*=0.99). This was based on the assumption that blueprint area D on the new Patient Problem axis, "Co-occurring psychiatric/comorbid medical disorders (process addictions, infectious diseases, and mental health disorders)" will likely include questions with this content.

Following Board approval of these changes, information about the revised blueprint was made available on the ANCB website. The new test specifications will become operational in the Spring of 2020 with the release of a new test form that matched the new test specifications. The new test specifications (blueprint) and activity lists are as follows.

## Activities by Areas of CARN Practice

| 1. Perform a biopsychosocial SUD assessment | |
|---|---|
| **#** | **Activity** |
| 1 | Appropriately document all assessment findings |
| 2 | Assess physical assessment results, diagnoses, treatment plans, prescriptions, or outcomes |
| 3 | Assess patients' medical and psychosocial histories |
| 4 | Assess comprehensive substance use history |
| 5 | Assess behaviors related to active substance use |
| 6 | Identify and follow protocol regarding child safety |
| 7 | Assess patient's health literacy |
| 8 | Validate assessments with appropriate diagnostic screening tools and resources |
| 9 | Identify the adverse consequences (e.g., legal, relationship, occupational, physical) of substance use for the patient |
| 10 | Assess the effect of interpersonal interactions and social determinants of health (e.g. community, family) on health and illness |
| 11 | Assess for intimate partner violence and trauma history |
| 12 | Assess risk factors for substance use disorder (e.g., spiritual, cultural, environmental, genetic) |
| 13 | Assess for social/legal consequences of process addictions |
| 14 | Assess for social/legal consequences of substance use disorders |
| 15 | Assess protective factors against substance use disorder (e.g., spiritual, cultural, environmental, genetic) |
| 16 | Assess family dynamics and culture related to substance use |
| 17 | Identify and follow protocol in response to impaired professionals |
| 18 | Assess sexual history |
| 19 | Assess for social/legal consequences of eating disorders |
| | **19 activities** ***M*** **= 9.40** ***SD*** **= 1.88** |

| 2. Assess acute care needs of SUD patients | |
|---|---|
| **Rank** | **Activity** |
| 1 | Assess for withdrawal from drugs |
| 2 | Assess severity of substance use disorder |
| 3 | Assess for withdrawal from alcohol |
| 4 | Utilize standardized instruments for screening, assessment, and evaluation (e.g., COWS, CIWA, HAM-A, AUDIT-C) |
| 5 | Assess behaviors related to withdrawal |
| 6 | Assess severity of acute intoxication of substance use |
| 7 | Obtain and review relevant lab and toxicology results and initiate appropriate protocol |
| 8 | Assess for acute/chronic psychiatric effects of substance use disorder |
| 9 | Assess for acute/chronic medical effects of substance use disorders |
| 10 | Assess complications secondary to behaviors related to active substance use |

| | |
|---|---|
| 11 | Obtain and review appropriate point-of-care testing results and initiate appropriate protocol (e.g., urine HCG, PPD, rapid HIV test, HCV, breathalyzer, etc.) |
| 12 | Base assessment techniques/activities on research (evidence-based practice/best practices) |
| 13 | Assess pain management factors in patients with substance use disorders |
| 14 | Assess for acute/chronic psychiatric effects of process addictions |
| 15 | Assess for early signs and symptoms of substance use disorders |
| 16 | Assess for acute/chronic medical effects of process addictions |
| 17 | Assess for acute/chronic medical effects of eating disorders |
| 18 | Assess for early signs and symptoms of process addictions |
| 19 | Assess for acute/chronic psychiatric effects of eating disorders |
| 20 | Assess for early signs and symptoms of eating disorders |
| 21 | Obtain and review relevant radiology reports and initiate appropriate protocol |
| | **21 activities** ***M*** **=9.56** ***SD*** **= 1.84** |

**3. Develop and implement an individualized plan of care**

| Rank | Activity |
|---|---|
| 1 | Maintain confidential information in accordance with legal standards (CFR-42) |
| 2 | Use therapeutic communication skills to improve patient outcomes |
| 3 | Develop and maintain a therapeutic relationship in all aspects of patient treatment |
| 4 | Use patient-centered care principles to improve patient outcomes |
| 5 | Promote a safe environment for implementation of the plan |
| 6 | Collaborate with interdisciplinary team in developing treatment plan |
| 7 | Implement evidence-based practice to improve patient outcomes |
| 8 | Advocate on behalf of the patient/family |
| 9 | Assess risk for relapse |
| 10 | Prioritize patient care based on individualized treatment plan |
| 11 | Tailor treatment plan to accommodate patients' individualized treatment needs (e.g., gender, culture, religious, etc.) |
| 12 | Collaborate with the interdisciplinary team to implement the plan |
| 13 | Facilitate the coordination of integrated patient care services with interdisciplinary care team |
| 14 | Utilize specific ethical principles such as autonomy, shared decision-making, and justice in developing a treatment plan |
| 15 | Refer to self-help/peer support groups (e.g., AA, NA, Smart Recovery, Celebrate Recovery, etc.) |
| 16 | Identify specific interventions with measurable treatment goals rooted in evidence based practice |
| 17 | Refer patient to appropriate community resources to meet goals of treatment plan |
| 18 | Engage the patient and family in the development of the treatment plan |
| 19 | Ensure continuity of care when making referrals to other levels of care |

| | |
|---|---|
| 20 | Refer patients to specific care providers for additional care based upon patient needs (e.g., financial, family, environmental, transportation, etc.) |
| 21 | Provide or refer for complimentary/alternative therapy (e.g., mindfulness, aroma therapy, yoga, healing touch, acupuncture, massage therapy) |
| 22 | Provide community outreach/resources |

**22 activities** ***M*** **= 9.81** ***SD*** **= 1.80**

## 4. Educate and promote behavioral change

| Rank | Activity |
|---|---|
| 1 | Educate patients and family members about expected effects and potential side effects of medications |
| 2 | Offer emotional support to patient and families throughout treatment and recovery continuum |
| 3 | Assess patient's readiness for behavioral change |
| 4 | Utilize motivational interviewing techniques to promote behavioral change |
| 5 | Educate patients and family members about medical and psychiatric comorbidities |
| 6 | Facilitate patient understanding (language, health literacy, etc.) of the agreed upon treatment plan |
| 7 | Educate patients and family members about recovery management and relapse prevention |
| 8 | Educate patients and family members about preventive health measures (harm reduction, protective factors, risk reduction, etc.) |
| 9 | Utilize cognitive behavioral strategies to improve patient outcomes |
| 10 | Educate other health care professionals regarding the specific treatment needs of patients with substance use disorder |
| 11 | Utilize screening and brief interventions (SBIRT) to promote behavioral change |
| 12 | Design health information and patient education appropriate to the patient's developmental level, readiness to learn, and cultural values and beliefs |
| 13 | Utilize evidence-based literature to develop educational programming about eating disorders |
| 14 | Utilize evidence-based literature to develop educational programming about the neurobiological basis of addictions, comorbid conditions, and health maintenance principles |
| 15 | Design health information specific to the needs of special populations (i.e., incarcerated patients, neonates, the elderly, etc.) |
| 16 | Utilize evidence-based literature to develop educational programming about process addictions |

**16 Activities** ***M*** **= 9.35** ***SD*** **= 1.93**

## 5. Care management, treatment, and evaluation throughout the recovery continuum (including special populations)

| Rank | Activity |
|---|---|
| 1 | Provide appropriate care for the neonate in withdrawal |
| 2 | Administer medication for management of alcohol withdrawal symptoms and monitor response |
| 3 | Administer medication for management of benzodiazepine withdrawal symptoms and monitor response |
| 4 | Administer medication for management of opioid withdrawal symptoms and monitor response |

## Activities by Areas of CARN Practice

| | |
|---|---|
| 5 | Evaluate therapeutic and potential adverse effects of pharmacological treatments |
| 6 | Implement standards of care to prevent complications of acute withdrawal |
| 7 | Support the patient through induction, stabilization, and maintenance of medication treatment for opioid use disorder |
| 8 | Manage symptoms of concurrent psychiatric disorders in patients with substance use disorders |
| 9 | Administer medications to reduce cravings and monitor response |
| 10 | Evaluate patient's and family's response to interventions |
| 11 | Offer group counseling for the patient and family |
| 12 | Offer one-to-one counseling for the patient and family |
| 13 | Evaluate therapeutic and potential adverse effects of non-pharmacological treatments |
| 14 | Evaluate effectiveness of staff's intervention implementation |
| 15 | Provide appropriate care for the adolescent in withdrawal |
| 16 | Provide appropriate care for the older adult patient in withdrawal |
| 17 | Revise plan of care in collaboration with an interdisciplinary team as needed |
| 18 | Evaluate transition of patients along continuum of care |
| 19 | Advocate for professionals in recovery |
| | **19 Activities** ***M*** **= 10.02** ***SD*** **= 1.61** |

## CARN Examination Blueprint
## Ideal Distribution of 150-Item Test

| → Domains of Practice<br>Patient problems ↓ | 1<br>Perform a biopsychosocial SUD assessment | 2<br>Assess acute care needs of SUD patients | 3<br>Develop and implement an individualized plan of care | 4<br>Educate and promote behavioral change | 5<br>Care mgmt., treatment, and evaluation, throughout the recovery continuum (including special populations) | TOTAL |
|---|---|---|---|---|---|---|
| **A**<br>**Opioid use disorder** | 5-6 | 5-6 | 7-8 | 5-6 | 13-14 | **25%**<br>**(37-39)** |
| **B**<br>**Alcohol use disorders** | 5-6 | 5-6 | 7-8 | 5-6 | 13-14 | **25%**<br>**(37-39)** |
| **C**<br>**Medication misuse (sedative/hypnotics/anxiolytics, gabapentinoids, etc)** | 3-4 | 3-4 | 4-5 | 3-4 | 8-9 | **15%**<br>**(22-24)** |
| **D**<br>**Co-occurring psychiatric/comorbid medical disorders (process addictions, infectious diseases, and mental health disorders)** | 3-4 | 3-4 | 4-5 | 3-4 | 8-9 | **15%**<br>**(22-24)** |
| **E**<br>**Stimulant use disorders (cocaine, amphetamines, caffeine)** | 2-3 | 2-3 | 3-4 | 2-3 | 5-6 | **10%**<br>**(14-16)** |
| **F**<br>**Cannabinoids and other hallucinogens** | 1-2 | 1-2 | 1-2 | 1-2 | 2-3 | **5%**<br>**(7-9)** |
| **G**<br>**Tobacco use disorder (e.g., vaping, nicotine)** | 1-2 | 1-2 | 1-2 | 1-2 | 2-3 | **5%**<br>**(7-9)** |
| **Total** | **15%**<br>**(22-24)** | **15%**<br>**(22-24)** | **20%**<br>**(29-31)** | **15%**<br>**(22-24)** | **35%**<br>**(52-54)** | **100%**<br>**(150)** |

## Table 1

### State of Residence of Respondents (30 States plus Canada) (*N*=137)

| | | | |
|---|---|---|---|
| **AL-3** | **IA-1** | **MT-1** | **TX-5** |
| **AZ-2** | **ID-1** | **NC-4** | **UT-1** |
| **CA-4** | **IL-2** | **NJ-7** | **VA-4** |
| **CO-10** | **IN-1** | **NY-9** | **WA-1** |
| **CT-3** | **MA-25** | **OH-7** | **WI-5** |
| **FL-9** | **MD-4** | **PA-9** | **WV-1** |
| **GA-3** | **MI-2** | **RI-2** | |
| **HI-1** | **MN-4** | **TN-1** | ***Canada-5*** |

## Table 2

### Gender of Respondents (*N* = 137)

| **Gender** | ***n*** |
|---|---|
| Male | 14 (10.22%) |
| Female | 122 (89.05%) |
| Prefer not to answer | 1 (0.73%) |
| **Total** | **137** |

## Table 3

## Ethnicity of Respondents
## (*N* = 137)

| Ethnicity | *n* |
|---|---|
| **American Indian/Alaska Native** | 2 (1.46%) |
| **Asian (Indian subcontinent)** | 2 (1.46%) |
| **Other Asian (Far East, Southeast Asia)** | 1 (0.73%) |
| **Black or African American** | 5 (3.65%) |
| **Native Hawaiian or Other Pacific Islander** | - - |
| **Hispanic/Latino** | 3 (2.19%) |
| **White** | 122 (89.05%) |
| **Other, please specify** | 1 (0.73%) |
| **Prefer not to answer** | 1 (0.73%) |
| **Total** | **137** |

## Table 4

## Age of Respondents
## (*N* = 137)

| Age | *n* |
|---|---|
| 25 - 29 | 5 (3.6%) |
| 30 - 34 | 7 (5.1%) |
| 35 - 39 | 14 (10.2%) |
| 40 - 44 | 11 (8.0%) |
| 45 - 49 | 17 (12.4%) |
| 50 - 54 | 14 (10.2%) |
| 55 - 59 | 19 (13.9%) |
| 60 - 64 | 27 (19.7%) |
| 65-69 | 16 (11.7%) |
| 70-74 | 6 (4.4%) |
| 75-79 | 1 (0.7%) |
| **Estimated Mean Age** | **52.6** |
| **Total** | **137** |

## Table 5

## Highest Level of Education Attained
## (*N* = 137)

| Highest Education | *n* |
|---|---|
| Diploma | 11 (8.03%) |
| Associate degree | 34 (24.82%) |
| Baccalaureate degree | 65 (47.45%) |
| Master's degree | 22 (16.06%) |
| Post-master's certificate* | 4 (2.92%) |
| Doctorate** | 1 (0.73%) |
| **Total** | **137** |

* Education - 2, Psych/Mental Health – 2
** DNS

## Table 6

## Country of Nursing Education
## (*N* = 137)

| Country | *n* |
|---|---|
| USA | 132 (96.35%) |
| Canada | 4 (2.92%) |
| New Zealand | 1 (0.73%) |
| **Total** | **137** |

## Table 7

## Years of Experience
## (*N* = 137)

| Statistic | Years as RN | Years in Addictions Nursing | Years in Current Position |
|---|---|---|---|
| Mean | 22.77 | 13.32 | 7.94 |
| Std. Deviation | 13.59 | 10.72 | 8.78 |
| Range | 0-54 | 0-45 | 0.45 |

**Table 8**

**Type of Employer**
**(*N* = 137)**

| Type of Employer | *n* |
|---|---|
| Hospital/Medical Center | 57 (41.6%) |
| Treatment Center | 39 (28.5%) |
| Other* | 17 (12.4%) |
| Government agency** | 15 (10.9%) |
| Private Practice | 11 (8.0%) |
| College/University | 11 (8.0%) |
| Insurance company | 5 (3.6%) |
| Self-employed, e.g., Consultant | 3 (2.2%) |
| Corporate Vendor | 1 (0.7%) |
| Pharmaceutical Company | 1 (0.7%) |

*Community health center - 6, Community mental health center - 2, Health Authority - 1, Mille Lacs Band of Ojbwe - 1, Non-profit health education or human services - 4, Psychiatric hospital - 2, Stated education grant administered by professional nursing organization – 1

**VA - 6, State health dept - 3, Dept of human services - 3, Provincial health authority - 1, Community services board - 1, Regulation – 1

**Table 9**

**Community in Which You Primarily Practice**
**(*N* = 137)**

| Practice Setting | *n* |
|---|---|
| Urban | 69 (50.4%) |
| Rural | 27 (19.7%) |
| Suburban | 41 (29.9%) |

**Table 10-a**

**Primary Practice Setting**
**(*N* = 137)**

| **Practice Setting** | ***n*** |
|---|---|
| Outpatient treatment center | 47 (34.3%) |
| Inpatient acute treatment center | 35 (25.5%) |
| Inpatient residential treatment center | 32 (23.4%) |
| Hospital* | 30 (21.9%) |
| Mental health facility/clinic | 20 (14.6%) |
| Substance use outreach | 12 (8.8%) |
| Community health center | 11 (8.0%) |
| Academia/University | 10 (7.3%) |
| Private practice | 7 (5.1%) |
| Telehealth | 6 (4.4%) |
| Military/Veterans | 6 (4.4%) |
| Primary care | 5 (3.6%) |
| Home health care | 2 (1.5%) |
| Skilled nursing facility | 1 (0.7%) |
| Safe injection facility | 1 (0.7%) |
| Employee assistance program | 1 (0.7%) |
| School-based clinic | - - |
| Correctional facility | - - |
| Travel nurse agency | - - |

**Table 10-b**

**Practice Setting-*Hospital**
**(*N* = 30)**

| ***Practice Setting - Hospital** | ***n*** |
|---|---|
| Psychiatric/behavioral health unit | 14 (10.2%) |
| Addictions/Chemical dependency unit | 4 (2.9%) |
| Detoxification/Intake | 4 (2.9%) |
| ICU | 3 (2.2%) |
| Emergency Department | 1 (0.7%) |
| Child & adolescent mental health | 1 (0.7%) |
| Hospital-based clinic | 1 (0.7%) |
| Medical units | 1 (0.7%) |
| Consult in all areas | 1 (0.7%) |
| **Total** | **30 (21.9%)** |

**Table 11**

**Primary Role**
**(*N* = 137)**

| **Primary Role** | ***n*** |
|---|---|
| Clinical nurse | 45 (32.85%) |
| Direct Patient Care | 17 (12.41%) |
| Nurse Manager | 12 (8.76%) |
| Supervisor/Coordinator | 11 (8.03%) |
| Case manager | 10 (7.30%) |
| Director/VP | 10 (7.30%) |
| Other, please specify | 9 (6.57%) |
| Director/Assistant | 8 (5.84%) |
| Academic Educator | 7 (5.11%) |
| Staff Educator | 4 (2.92%) |
| Consultant | 3 (2.19%) |
| Nurse Practitioner | 1 (0.73%) |
| Researcher | - - |
| **Total** | **137** |

## Table 12-a

### Do You Provide Direct Patient Care?
### (*N* = 137)

| Direct Care | *n* |
|---|---|
| Yes | 115 (83.90%) |
| No | 22 (16.10%) |
| **Total** | **137** |

## Table 12-b

### Percent of Direct Care Time by Age of Patients
### (*N* = 115)

| Age of Patients | *n* | M % Time | SD | Range |
|---|---|---|---|---|
| Birth-11 years | 7 | 2.20% | 13.41 | 0-100 |
| 12-21 years | 85 | 12.64% | 19.23 | 0-100 |
| 22-40 years | 106 | 41.38% | 20.63 | 0-90 |
| 41-60 years | 108 | 30.47% | 17.30 | 0-90 |
| 61-79 years | 96 | 10.59% | 9.61 | 0-40 |
| 80 years + | 52 | 2.71% | 9.16 | 0-70 |

## Table 13

### Mean Percent of Time Performing Addictions Nursing Activities
### (*N* = 115)

| Addictions Nursing Activities | M % Time | SD | Range |
|---|---|---|---|
| Direct patient care | 53.14% | 30.52 | 0-100 |
| Administration (management, supervision, clerical) | 20.17% | 22.99 | 0-90 |
| Consultation with providers/Care Coordination | 16.49% | 17.68 | 0-100 |
| Community outreach/Education | 3.37% | 14.16 | 0-90 |
| Other, please specify | 1.52% | 9.87 | 0-100 |
| Telehealth | 1.42% | 5.36 | 0-40 |
| Marketing | 0.89% | 2.30 | 0-10 |

**Table 14-a**

**Does Your Practice Include Telehealth?**
**(*N* = 137)**

| Telehealth? | *n* |
|---|---|
| Yes | 25 (18.2%) |
| No | 112 (81.7%) |

**Table 14-b**

**Mean Percent of Time Using Telehealth**
**(*N* = 25)**

| Statistic | Mean % of Time |
|---|---|
| Mean | 20.0% |
| Std. Deviation | 25.2 |
| Range | 0-100% |

**Table 14-c**

**Community in which You Primarily Practice TELEHEALTH**
**(*N* = 25)**

| Practice Setting | Yes | No | N/A | Total |
|---|---|---|---|---|
| Urban | 12 (17.4%) | 54 | 3 | 69 |
| Rural | 8 (29.6%) | 16 | 3 | 27 |
| Suburban | 5 (12.2%) | 31 | 5 | 41 |
| **Total** | **25** | **101** | **11** | **137** |

## Table 15

## Percent of Time Functioning as an Addictions Nurse
## (*N* = 137)

| Addictions Nurse | *n* | M % Time | SD | Range |
|---|---|---|---|---|
| What percent of your time is spent functioning exclusively as an addictions nurse? | 137 | 66.77% | 36.61 | 0-100% |

## Table 16

## Hours Worked per Week
## (*N* = 135)

| Hours Worked per Week | *n* | M % Time | SD | Range |
|---|---|---|---|---|
| Total hours worked | 135 | 40.93 | 9.53 | 12.75 |
| As an addictions nurse | 135 | 29.73 | 15.04 | 0.60 |

## Table 17

## Mean Percent of Time with Various Patient Problems
## (*N* = 115)

| Patient Problem | M % Time | SD | Range |
|---|---|---|---|
| Opioid use disorders | 40.84% | 25.51 | 0-100% |
| Alcohol use disorder | 27.10% | 18.90 | 0-100% |
| Stimulant use disorders - cocaine, amphetamines, caffeine | 9.38% | 8.37 | 0-50% |
| Prescription medication use disorders -sedative/ hypnoticsanxiolytics, gabapentin, etc. | 8.50% | 8.02 | 0-40% |
| Cannabis use disorder | 5.77% | 9.76 | 0-70% |
| Tobacco use disorder | 5.52% | 7.97 | 0-30% |
| Other substance use - inhalants, designer drugs, hallucinogens, ketamine | 1.82% | 3.23 | 0-20% |
| Process addictions - eating, gambling, sex, internet | 1.07% | 3.60 | 0-30% |

## Table 18-a

## Polysubstance Use
## (*N* = 115)

| Polysubstance Use | *n* | M % Time | SD | Range |
|---|---|---|---|---|
| What percent of your patients have polysubstance use? | 115 | 73.43% | 21.25 | 5-100% |

## Table 18-b

## What Percent of Your Patients have Polysubstance Use Disorder?
## (*N* = 115)

| % of Patient with Polysubstance Use Disorder | *n* |
|---|---|
| 5% | 1 (0.9%) |
| 10% | 1 (0.9%) |
| 20% | 1 (0.9%) |
| 25% | 2 (1.7%) |
| 30% | 2 (1.7%) |
| 35% | 2 (1.7%) |
| 40% | 1 (0.9%) |
| 50% | 12 (10.4%) |
| 60% | 9 (7.8%) |
| 65% | 3 (2.6%) |
| 70% | 5 (4.3%) |
| 75% | 14 (13.0%) |
| 76% | 1 (0.9%) |
| 80% | 19 (16.5%) |
| 85% | 12 (10.4%) |
| 90% | 13 (11.3%) |
| 95% | 6 (5.2%) |
| 98% | 1 (0.9%) |
| 99% | 5 (4.3%) |
| 100% | 5 (4.3%) |
| **Total** | **115 (100%)** |

## Table 19-a

## Co-occurring Disorders
## (*N* = 115)

| Co-occurring Disorders | *n* | M % Time | SD | Range |
|---|---|---|---|---|
| What percentage of your time is spent with patients who have co-occurring disorders, e.g., medical, psychiatric, developmental, pain? | 115 | 76.11% | 26.8 | 0-100% |

## Table 19-b

## What Percent of Your Time is Spent with Patients with Co-occurring Disorders?
## (*N* = 115)

| % of Time Spent with Patients with Co-occurring Disorders | *n* |
|---|---|
| 0% | 1 (0.9%) |
| 4% | 1 (0.9%) |
| 10% | 1 (0.9%) |
| 20% | 4 (3.5%) |
| 25% | 2 (1.7%) |
| 30% | 4 (3.5%) |
| 40% | 2 (1.7%) |
| 45% | 2 (1.7%) |
| 50% | 11 (9.6%) |
| 60% | 6 (5.2%) |
| 65% | 1 (0.9%) |
| 70% | 1 (0.9%) |
| 75% | 7 (6.1%) |
| 80% | 11 (9.6%) |
| 85% | 6 (5.2%) |
| 90% | 9 (7.8%) |
| 95% | 10 (8.7%) |
| **Total** | **115 (100%)** |

**Table 20-a**

**Are You a Member of IntNSA?**
**(*N* = 137)**

| Member? | *n* |
|---|---|
| Yes | 78 (56.9%) |
| No | 59 (43.1%) |

**Table 20-b**

**Are You a Member of Another Addictions-related Group?**
**(*N* = 137)**

| Member? | *n* |
|---|---|
| Yes | 21 (15.3%) |
| No | 116 (84.7%) |

**Table 20-c**

**Other Membership Groups**
**(*N* = 22)**

| Other Membership Groups | *n* |
|---|---|
| American Psychiatric Nurses Association (APNA) | 8 |
| (AMERSA) | 4 |
| American Society of Addiction Medicine (ASAM) | 2 |
| Others - One person only | 8 |

**Table 21-a**

**Certifications Currently Held**

| Certifications Currently Held | *n* |
|---|---|
| CARN | 79 (57.7%) |
| RN, Board Certified | 69 (50.4%) |
| APRN | 1 (0.7%) |
| CCRN | 4 (2.9%) |
| CEN | - - |
| Other certification* | 26 (19.0%) |

**Table 21-b**

***Other Certifications Held**
**(*N* = 30)**

| *Other Certifications Held | *n* |
|---|---|
| CARN-AP | 3 (2.2%) |
| Psych/Mental Health - BC | 4 (2.9%) |
| LADC or LAADC | 3 (2.2%) |
| CCHP | 2 (1.4%) |
| Other - One person only | 14 (10.2%) |

**Table 22**

**Year of CARN Certification**
**(*N* = 79)**

| Year of CARN Certification | *n* |
|---|---|
| 2015-2018 | 27 |
| 2011-2014 | 16 |
| 2007-2010 | 12 |
| 2003-2006 | 9 |
| 1999-2002 | 2 |
| 1995-1998 | 2 |
| 1991-1994 | 3 |
| 1990 and earlier | 8 |
| **Total** | **79** |

# Appendix A

## Practice Analysis
## Task Force

## Agenda
## Task Force Meeting
## October 2017

## ANCB Panel of Experts for CARN Role Delineation Study and Practice Analysis
## October 18, 2017

| Name | Employer Name | City/State | Position Held | Years in Nursing | Years in Specialty | Years Certified | Academic and Certification Credentials |
|---|---|---|---|---|---|---|---|
| Colleen Labelle | Boston Medical Center | Boston, MA | OBAT Program Director | 33 | 14 | 12 | MSN, RN-BC, CARN |
| Justin Alves | Massachusetts General Hospital | Boston, MA | Staff RN | 5 | 4 | 3 | RN, ACRN, CARN |
| Cheryl Rush | Brightview | Cincinnati, OH | Nurse Practitioner | 43 | 37 | 17 | ACNP, MSN, CARN |
| Dana Siewertsen | Brightview | Cincinnati, OH | Nurse Manager | 10 | 10 | 6 | MSN, RN, CARN, LCDCIII, RHIT |
| Jacqueline Perry | Serenity Recovery Detox | Encino, CA | Nurse educator | 28 | 28 | 3 | RN-BC, CARN, MA |
| Rosemary Smentkowski | Georgian Court University | Lakewood, NJ | Adjunct Professor | 43 | 16 | 14 | RN, MSN, CARN |
| Suzan Blacher | Drexel University | Philadelphia, PA | Assistant Professor | 40 | 13 | 13 | MSN, RN, CARN |

**Addictions Nursing Certification Board**
**CARN and CARN-AP Practice Analysis Task Force Meeting**

**Renaissance Orlando at Sea World**
**Atlantis A/B**
**Orlando, FL**
**October 18, 2017**
**8am – 4pm**

**Participants:**

**CARN:**
Justin Alves, BSN, ACRN, CARN
Dana Goller Siewertsen, BSN, RN, CARN
ANCB Board Member: Cheryl Rush, MSN, RN, ACNP-BC, CARN
ANCB Board Member: Colleen LaBelle, MSN, RN-BC, CARN
ANCB Board Member: Jacqueline Perry, RN-BC, CARN
ANCB Board Member: Rosemary Smentkowski, MSN, RN, CARN
ANCB Board Member: Suzan Blacher, MSN, RN, CARN
*C-NET Staff:*
Andrew Karle, BS, Chief Operating Officer
Christina Severs, BA, Manager of Test Development

**CARN-AP:**
Dawn Williamson, RN, MSN, PMHCNS-BC, CARN-AP
Elizabeth Maquire, RN, MSN, PMHNP, CARN-AP
Annie Opuda, MSN, PMHNP, BC, CARN-AP
ANCB Board Member: Virginia Singer, PMHNP-BC, CARN-AP
ANCB Board Member: Elizabeth Fildes, CNE, CPHN-AP, CARN-AP
*C-NET Staff:*
Peg Garbin, PhD, RN, President
Michelle Neumane, BA, Assistant Test Developer

**AGENDA**

A. Introduction of participants for CARN and CARN-AP Practice Analysis Task Force
B. Overview/purpose of the Practice Analysis/Role Delineation Study
C. Review 2012 Practice Analysis/Role Delineation Study & Demographics
D. Review and update Demographic Survey Questions
E. Review and update Blueprint Activities
F. Review and update Knowledge Statements

# APPENDIX B

# CARN Old Test Specifications

## CARN Content Outline

**1. Assessment** *(28 items)*

A. Basic assessment considerations

1. Base assessment techniques on theory, research and best practices
2. Assess the effect of interactions among individuals, family, community, and social systems on health and illness
3. Record patients' health and psychosocial histories
4. Record comprehensive drug and alcohol use history
5. Record physical assessment results, diagnoses, treatment plans, prescriptions, or outcomes
6. Explore relationship of substance use to the functioning of the family
7. Identify personal risk and protective factors for the patient
8. Identify family risk and protective factors for the patient
9. Identify cultural risk and protective factors for the patient
10. Identify environmental risk and protective factors for the patient
11. Identify risk and protective factors related to spirituality for the patient
12. Identify the adverse consequences (e.g., legal, relationship, occupational, physical) of alcohol and drug use for the patient
13. Validate information with patient, other healthcare professionals and/or significant others

B. Observe, interview, and assess patients to identify care needs

1. Assess degree of risk for alcohol or drug misuse
2. Assess degree of risk for relapse
3. Assess degree of intoxication for alcohol use by visualization or field sobriety testing methods
4. Assess degree of intoxication for drugs of abuse
5. Assess stage of withdrawal for alcohol use
6. Assess stage of withdrawal for drugs of abuse
7. Assess factors that affect pain management in the patient with addiction
8. Identify behavioral effects of alcohol use
9. Identify behavioral effects of drug use
10. Recognize early signs and symptoms of alcohol abuse
11. Recognize early signs and symptoms of drug abuse
12. Recognize acute/chronic effects of alcohol use
13. Recognize acute/chronic effects of drug use
14. Recognize acute/chronic effects of nicotine
15. Identify behavioral effects of impulse control disorders
16. Identify associated behaviors of eating disorders
17. Assess patient's readiness for behavioral change
18. Assess patient's health literacy

C. Initiate and interpret diagnostic tests and procedures relevant to the patient's current status

1. Evaluate physiological consequences of substance use
2. Utilize screening tools to assess alcohol use

3. Utilize screening tools to assess drug use
4. Differentiate symptoms related to psychiatric disorders from those related to substance abuse
5. Differentiate symptoms related to medical conditions from those related to substance abuse
6. Utilize standardized instruments for assessment and evaluation

**2. Diagnosis** *(12 items)*

A. Base diagnoses on criteria consistent with accepted classifications

B. Derive and prioritize nursing diagnoses from the assessment data using complex clinical reasoning

C. Actual diagnosis

D. Risk diagnosis

E. Health promotion diagnosis

**3. Identifying outcomes** *(14 items)*

A. Identify expected outcomes that incorporate scientific evidence and are achievable through implementation of evidence-based practices

B. Identify expected outcomes that incorporate cost and clinical effectiveness, patient satisfaction, and continuity and consistency among providers

C. Modify plan of care based on changes in patient's healthcare status

D. Account for the entire wellness-addictions continuum

E. Differentiate outcomes that require care process interventions from those that require system-level interventions

F. Identify assessment strategies, diagnostic strategies, and therapeutic interventions that reflect current evidence, including data, research, literature, and expert clinical knowledge

G. Identify with consideration of the patient's age, ethnicity and socioeconomic and environmental circumstances

**4. Planning of Care** *(20 items)*

A. Collaborate with multidisciplinary team in developing treatment plan

B. Tailor treatment plan to accommodate patients' health needs, beliefs, and practices

C. Include specific interventions with measurable treatment goals rooted in evidence-based practice

D. Engage the patient and family in the development of the treatment plan

E. Integrate gender differences in the development of the treatment plan

F. Integrate ethnic differences in the development of the treatment plan

G. Integrate cultural differences in the development of the treatment plan

H. Present plan to patient in understandable terms

I. Integrate patient's readiness for behavioral change in the development of the treatment plan

J. Integrate identified risk and protective factors for the patient and family into the development of the treatment plan

K. Integrate acute and chronic pain management in the treatment plan

**5. Implementation of Care** *(36 items)*

A. Principles of nursing implementation

1. Use systems, organizations, and community resources to implement the plan
2. Use continuous quality improvement principles to improve patient outcomes
3. Collaborate with nursing and other colleagues to implement the plan
4. Utilize best practices in implementation of the plan
5. Promote a safe environment for implementation of the plan
6. Use therapeutic communication skills to improve patient outcomes
7. Use patient-centered care principles to improve patient outcomes

B. Coordination of care

1. Provide care with consideration of patient's needs and desired outcomes
2. Collaborate with healthcare team to monitor health conditions of patients
3. Lead the coordination of integrated patient care services

C. Health teaching and health promotion

1. Advocate on behalf of the patient/family
2. Educate patients and family members about co-occurring mental health, physical health, and addiction disorders
3. Educate patients and family members about preventive health measures and self care
4. Educate patients and family members about expected effects and potential side effects of medications
5. Educate patients and family members about relapse prevention
6. Utilize motivational enhancement strategies to promote behavioral change
7. Utilize brief interventions to promote behavioral change
8. Utilize evidence-based literature to educate patient and family about the neurobiological basis of addictions
9. Employ learning theory models when designing health information programs
10. Employ behavioral change theories when designing health information programs
11. Design health information and patient education appropriate to the patient's developmental level
12. Design health information and patient education appropriate to the patient's readiness to learn
13. Design health information and patient education appropriate to the patient's cultural values and beliefs
14. Evaluate health information resources (e.g., print materials, web sites) in the area of practice for ccuracy, readability, and comprehensibility to help patients access quality health information
15. Provide anticipatory guidance to individuals, families, groups, and communities to promote health and prevent or reduce the risk of health problems

D. Provide evidence based education related to:

1. Substance use disorders across life span
2. Alcohol use
3. Drug abuse

4. Nicotine use
5. Process addictions

E. Provide evidence based education about:

1. The risks of alcohol use in pregnancy
2. The risks of nicotine use in pregnancy
3. The risks of drug use during pregnancy
4. The risks of eating disorders in pregnancy
5. Risky health behaviors
6. Proper nutrition
7. The importance of regular exercise
8. The biological consequences of substance use
9. The psychosocial consequences of substance use

F. Consultation

1. Facilitate the effectiveness of a consultation by involving the patient and significant others in decision-making
2. Base consultation on mutual respect and defined role responsibility

G. Treatment

1. Ensure safe detox
2. Offer emotional support to patient
3. Provide specialized direct and indirect care to inpatients and outpatients
4. Offer counseling regarding changes in behavior and thinking
5. Offer one-to-one counseling for the patient and family
6. Establish boundaries in treatment with patients
7. Administer medication for management of alcohol withdrawal symptoms
8. Administer medication for management of drug withdrawal symptoms
9. Administer medications to reduce cravings from alcohol
10. Monitor patient's response to medications for management of alcohol withdrawal symptoms
11. Monitor patient's response to medications for management of drug withdrawal symptoms
12. Monitor patient's response to medications to reduce cravings from alcohol
13. Initiate treatment based on vital signs and/or laboratory results for patients with substance use disorders
14. Manage symptoms of concurrent psychiatric disorders in patients with substance use disorders
15. Follow evidence-based protocols to treat patients with addictions
16. Evaluate therapeutic and potential adverse effects of pharmacological treatments
17. Evaluate therapeutic and potential adverse effects of non-pharmacological treatments

H. Psychotherapy and complementary therapy

1. Base therapeutic modalities on needs of the patient
2. Base therapeutic modalities on current theory, research and best practices
3. Utilize cognitive behavioral strategies to improve patient outcomes

I. Referral

1. Ensure continuity of care when making referrals to other levels of care
2. Refer patients to specific care providers for additional care based upon patient needs with consideration for benefits and costs
3. Maintain confidential information in accordance with legal standards

**6. Evaluation of Care** *(10 items)*

A. Evaluate patient's and family's response to interventions

B. Revise diagnoses and plan of care as needed

C. Ensure ongoing evaluation involving other care provider

**Total = 120 items**

# APPENDIX C

# CARN Practice Analysis Survey Instrument

## DEMOGRAPHIC DATA

Please provide background information that will be summarized to describe the group of addictions nurses that complete this questionnaire. ***No individual responses will be reported.***

Please mark the circles that correspond with your answers.

1. Gender Identification: Male _____ Female _____ Other, please specify: _____
   Prefer not to answer _____

2. What is your race/ethnicity?

   1. American Indian or Alaska Native
   2. Asian (Indian Subcontinent)
   3. Other Asian (Far East, Southeast Asia)
   4. Black or African American
   5. Native Hawaiian or Other Pacific Islander
   6. Hispanic/Latino
   7. White
   8. Other, please specify
   9. Prefer not to answer

3. What is your age? (Optional, can leave it blank)
   20-24
   25-29
   30-34
   35-39
   40-44
   45-49
   50-54
   55-59
   60-64
   65-69
   70-74
   75-79
   80 or greater

4. Highest level of ***nursing*** education attained.
   1. Diploma
   2. Associate degree
   3. Bachelor's degree
   4. Master's degree
   5. Post-master's certificate: ➜ Drop-down box (Select: NP, Education, Psychiatric/Mental Health, Administration, Other, please specify
   6. Doctorate (nursing) ➜ Drop-down box (Select: DNP, DNS, PhD, EdD, Other-please specify)
   5. Other, please specify _____

5. Highest level of ***non-nursing*** education attained.
   1. Diploma
   2. Associate degree
   3. Bachelor's degree
   4. Master's degree
   5. Doctorate (non-nursing) ➜ Drop-down box (Select: PhD, EdD, Other-please specify)
   6. Other, please specify _____

6. Was the highest level of education attained in the U.S. or its territories? Yes __ No ____
   If "No", please write the country of nursing education in the space provided.

7. Please indicate your ***primary*** role. Please select only one.
   1. Case Manager
   2. Clinical Nurse
   3. Consultant
   4. Direct Patient Care
   5. Director/Assistant
   6. Director/VP
   7. Staff Educator
   8. Academic Educator
   9. Nurse Manager
   10. Nurse Practitioner
   11. Researcher
   12. Supervisor/Coordinator
   13. Other, please specify _____

8. Which of the following describes your employer? Select all that apply.

   1. Private practice.
   2. College/University.
   3. Hospital/Medical Center.
   4. Treatment center
   5. Corporate vendor.
   6. Pharmaceutical company.
   7. Insurance company.
   8. Self-employed, e.g., consultant.
   9. Government agency ➜ Drop-down box (Select: Veterans Health Administration, State Health Department, Municipal Health Department, Department of Human Services, Other-specify)
   10. Other, please specify

9. Which of the following describes your practice setting? Select all that apply.

1. Inpatient acute treatment center
2. Inpatient residential treatment center
3. Outpatient treatment center
4. Hospital ➜ Drop-down box (Select: Intensive Care Unit, Emergency Department, Obstetrics and Gynecology, Pediatrics, Medical-Surgical, Other, -please specify)
5. School-based clinic
6. Academia/university
7. Private Practice
8. Primary Care
9. Community health center
10. Mental health facility/clinic
11. Correctional facility
12. Military/Veterans
13. Skilled nursing facility
14. Travel nurse agency
15. Home health care
16. Safe injection facility
17. Substance use outreach
18. Employee assistance program
19. Telehealth
20. Other, please specify

10. Does your practice include telehealth? Yes No
If so, what percent of your time is spent in telehealth?___

11. What percent of your time is spent caring for patients in the following age groups? The total should add to 100%.

1. Birth to 11 years.
2. 12 to 21 years.
3. 22 to 40 years.
4. 41 to 60 years.
4. 61 to 79 years.
5. 80 or older

12. In the spaces provided, please indicate what percent of your time is spent in the following areas of addictions nursing. The total should add to 100%.

1. Consultation with providers (coordination of care)
2. Direct patient care
3. Administration (management, supervision, clerical)
4. Community outreach/education
5. Marketing
6. Telehealth
7. Other, please specify

13. In the spaces provided, please indicate what percent of your time is spent with the following patient population. The total should add to 100%.

    1. Alcohol use disorder
    2. Opioid use disorders
    3. Stimulant use disorders (cocaine, amphetamines, caffeine)
    4. Prescription medication use disorders - sedative/hypnotics/anxiolytics, gabapentin, etc.
    5. Tobacco use disorder
    6. Cannabis use disorder
    7. Other substance use - inhalants, designer drugs, hallucinogens, ketamine
    8. Process addictions (eating, gambling, sex, internet)

14. What percentage of your time is spent on patients with co-occurring disorders (medical, psychiatric, developmental, pain)? ____%

15. What percentage of your time is spent functioning exclusively as an addictions nurse? ____%

16. On average, how many hours per week do you work? (2 space grid)

17. On average, how many hours per week do you work as an addictions nurse? (2 space grid)

18. How many years have you been practicing as an RN? (Include all positions held as an RN.) (2 space grid)

19. How many years have you been practicing in addictions nursing? (2 space grid)

20. How many years have you been in your current position? (2 space grid)

21. What certifications do you currently hold?
    1. CARN
    2. RN, Board Certified
    3. APRN, Board Certified - if yes, do you have prescriptive privileges?
    4. CCRN
    5. CEN
    6. Other, please specify

22. If CARN certified, in what year were you originally certified? _____

23. Are you a member of IntNSA? Yes ____ No _____

24. Do you belong to any other addictions-related nursing? Yes ____ No _____
    please specify _____

25. Do you belong to any general nursing organizations? Yes ____ No _____
    please specify _____

26. Do you belong to any other professional addictions organizations? Yes ____ No _____
please specify _____

27. Which of the following best describes the community in which you primarily practice?

Urban
Rural
Suburban

28. PLEASE INDICATE THE STATE/JURISDICTION WHERE YOU ARE EMPLOYED. SELECT ALL THAT APPLY. (Drop-down list)

## ACTIVITIES PERFORMED

**Instructions**: This section contains a list of activities that describe the practice of addictions nurses in a variety of settings. Given the diverse practice of addictions nursing, some activities may not apply to your role or setting. For each activity, three questions are asked. When answering the questions, it may be helpful to think about your activities over the past several weeks. Base your responses on your practice; that is, the activities you perform in your ***current*** position.

**Question A - DO NOT PERFORM**: If you do ***not*** perform this activity in your current position or if the activity does not apply to your setting, click on the check box and skip to the next activity. If you ***do*** perform this activity in your current position, leave the circle in column A blank for this activity and answer questions B and C.

**Question B - FREQUENCY**: Using the following scale, select the response that most closely matches the frequency with which you perform the activity in your ***current*** position:

**Monthly or less**
**Weekly**
**Daily**
**Several times a day**

Click the appropriate circle for each activity that you perform in your ***current*** position to indicate how frequently you do it.

**Question C - IMPORTANCE**: Indicate how important each activity is to your successful performance as a nurse in your **current** position:

**Irrelevant**: This activity is ***not required*** for my performance in my current position.

**Useful**: This activity is ***required from time to time*** in my current position, but my performance could be acceptable without it.

**Important:** This activity is ***generally required*** in order for me to perform satisfactorily in my current position. Without it, my performance would be marginal.

**Essential**: This is ***one of the key requirements*** for my work in my current position.

Click the appropriate circle for each activity you perform to indicate its importance to your successful performance as an addictions nurse.

Please answer question A ***or*** questions B and C for each activity. Examples I and II on the answer form show you how to respond.

**Example I** represents an activity that you do not perform or that does not apply to your setting. The circle under A is blackened. No other responses are made for this activity.

**Example II** represents an activity that you do perform in your **current** position. The response to question B indicates that you usually perform the activity weekly. The response to question C indicates that you consider the activity slightly important to your successful performance as a nurse in addictions.

## CARN Activity Statements (Total of 113 Statements)

**1. Assessment**

A. Basic assessment considerations

1. Base assessment techniques/activities on research (evidence-based practice/best practices)
2. Assess the effect of interpersonal interactions and social determinants of health (e.g. community, family) on health and illness
3. Assess patients' medical and psychosocial histories
4. Assess comprehensive substance use history
5. Assess physical assessment results, diagnoses, treatment plans, prescriptions, or outcomes
6. Assess family dynamics and culture related to substance use
7. Assess risk factors for substance use disorder (e.g., spiritual, cultural, environmental, genetic)
8. Assess sexual history
9. Assess for intimate partner violence and trauma history
10. Assess protective factors against substance use disorder (e.g., spiritual, cultural, environmental, genetic)
11. Identify the adverse consequences (e.g., legal, relationship, occupational, physical) of substance use for the patient
12. Validate assessments with appropriate diagnostic screening tools and resources
13. Appropriately document all assessment findings
14. Identify and follow protocol in response to impaired professionals
15. Identify and follow protocol regarding child safety

B. Observe, interview, and assess patients to identify care needs

1. Assess severity of substance use disorder
2. Assess risk for relapse
3. Assess severity of acute intoxication of substance use
4. Assess for withdrawal from alcohol
5. Assess for withdrawal from drugs
6. Assess pain management factors in patients with substance use disorders
7. Assess behaviors related to active substance use
8. Assess behaviors related to withdrawal
9. Assess for early signs and symptoms of substance use disorders
10. Assess for early signs and symptoms of eating disorders
11. Assess for early signs and symptoms of process addictions
12. Assess for acute/chronic medical effects of substance use disorders
13. Assess for acute/chronic medical effects of eating disorders
14. Assess for acute/chronic medical effects of process addictions
15. Assess for acute/chronic psychiatric effects of substance use disorder
16. Assess for acute/chronic psychiatric effects of eating disorders

17. Assess for acute/chronic psychiatric effects of process addictions
18. Assess for social/legal consequences of substance use disorders
19. Assess for social/legal consequences of eating disorders
20. Assess for social/legal consequences of process addictions
21. Assess patient's readiness for behavioral change
22. Assess patient's health literacy

C. Obtain and review results of diagnostic tests and procedures relevant to the patient's current status, and initiate appropriate protocol

1. Collect specimens and review toxicology results, and initiate appropriate protocol
2. Obtain and review relevant lab results and initiate appropriate protocol
3. Obtain and review relevant radiology reports and initiate appropriate protocol
4. Obtain and review appropriate point-of-care testing results and initiate appropriate protocol (e.g., urine HCG, PPD, rapid HIV test, HCV, breathalyzer, etc.)
5. Utilize standardized instruments for screening, assessment, and evaluation (e.g., COWS, CIWA, HAM-A, AUDIT-C)

**4. Planning of Care**

A. Collaborate with interdisciplinary team in developing treatment plan

B. Tailor treatment plan to accommodate patients' individualized treatment needs (e.g., gender, culture, religious, etc.)

C. Identify specific interventions with measurable treatment goals rooted in evidence-based practice

D. Engage the patient and family in the development of the treatment plan

E. Facilitate patient understanding (language, health literacy, etc.) of the agreed upon treatment plan

F. Utilize specific ethic principles such as autonomy, shared decision-making, and justice in developing a treatment plan

**5. Implementation of Care**

A. Principles of nursing implementation

1. Promote a safe environment for implementation of the plan
2. Use therapeutic communication skills to improve patient outcomes
3. Use patient-centered care principles to improve patient outcomes
4. Implementing evidence-based practice to improve patient outcomes
5. Collaborate with the interdisciplinary team to implement the plan

B. Coordination of care

1. Facilitate the coordination of integrated patient care services with interdisciplinary care team
2. Refer patient to appropriate community resources to meet goals of treatment plan
3. Prioritize patient care based on individualized treatment plan

C. Health teaching and health promotion

1. Advocate on behalf of the patient/family
2. Educate patients and family members about medical and psychiatric comorbidities
3. Educate patients and family members about preventive health measures (harm reduction, protective factors, risk reduction, etc.)
4. Educate patients and family members about expected effects and potential side effects of medications
5. Educate patients and family members about recovery management and relapse prevention
6. Utilize evidence-based literature to develop educational programming about the neurobiological basis of addictions, comorbid conditions, and health maintenance principles
7. Utilize evidence-based literature to develop educational programming about process addictions
8. Utilize evidence-based literature to develop educational programming about eating disorders
9. Design health information and patient education appropriate to the patient's developmental level, readiness to learn, and cultural values and beliefs
10. Design health information specific to the needs of special populations (i.e., incarcerated patients, neonates, the elderly, etc.)
11. Evaluate and update health information resources (e.g., materials, web sites) in the area of practice for health literacy and accuracy, readability
12. Utilize motivational interviewing techniques to promote behavioral change
13. Utilize screening and brief interventions (SBIRT) to promote behavioral change
14. Educate other health care professionals regarding the specific treatment needs of patients with substance use disorder
15. Educate patients and families regarding risks and strategies for overdose prevention and reversal
16. Advocate for professionals in recovery

D. Treatment

1. Implement standards of care to prevent complications of acute withdrawal
2. Offer emotional support to patient and families throughout treatment and recovery continuum
3. Offer one-to-one counseling for the patient and family
4. Offer group counseling for the patient and family

5. Develop and maintain a therapeutic relationship in all aspects of patient treatment
6. Administer medication for management of alcohol withdrawal symptoms and monitor response
7. Administer medication for management of opioid withdrawal symptoms and monitor response
8. Administer medication for management of benzodiazepine withdrawal symptoms and monitor response
9. Administer medications to reduce cravings and monitor response
10. Support the patient through induction, stabilization, and maintenance of medication treatment for opioid use disorder
11. Manage symptoms of concurrent psychiatric disorders in patients with substance use disorders
12. Evaluate therapeutic and potential adverse effects of pharmacological treatments
13. Evaluate therapeutic and potential adverse effects of non-pharmacological treatments
14. Provide appropriate care for the neonate in withdrawal
15. Provide appropriate care for the older adult patient in withdrawal
16. Provide appropriate care for the adolescent in withdrawal

E. Integrative therapy

1. Refer for acupuncture
2. Refer for massage therapy
3. Refer for healing touch
4. Refer for yoga
5. Refer for mindfulness
6. Refer for aroma therapy
7. Provide community outreach/resources
8. Utilize cognitive behavioral strategies to improve patient outcomes

F. Referral

1. Ensure continuity of care when making referrals to other levels of care
2. Refer patients to specific care providers for additional care based upon patient needs (e.g., financial, family, environmental, transportation, etc.)
3. Maintain confidential information in accordance with legal standards (CFR-42)
4. Refer to self-help/peer support groups (e.g., AA, NA, Smart Recovery, Celebrate Recovery, etc.)

**6. Evaluation of Care**

A. Evaluate patient's and family's response to interventions

B. Revise plan of care in collaboration with an interdisciplinary team as needed

C. Evaluate transition of patients along continuum of care

D. Evaluate effectiveness of staff's intervention implementation

## KNOWLEDGE, SKILL, AND ABILITY STATEMENTS

**Using the scale below, indicate how important each knowledge, skill, or ability statement is to your successful performance as a nurse in your *current* position as an addictions nurse:**

① **Irrelevant**: This knowledge or ability is ***not required*** for my performance in my current position.

② **Useful**: This knowledge or ability is ***required from time to time*** in my current position, but my performance could be acceptable without it.

③ **Important**: This knowledge or ability is ***generally required*** in order for me to perform satisfactorily in my current position. Without it, my performance would be marginal.

④ **Essential**: This knowledge or ability is ***one of the key requirements*** for my work in my current position.

Please click on the circle that corresponds to your rating for each knowledge and ability statement.

## CARN Knowledge, Skill, and Ability Statements (KSAs)

## (Total of 76 Statements)

1. Biological risk factors
2. Psychological risk factors
3. Family risk factors
4. Peer risk factors
5. Community/Cultural risk factors

6. Protective/resiliency factors
7. Prevention strategies
8. Intervention strategies
9. Health promotion and disease prevention
10. Epidemiology

11. Taxonomy of alcohol use disorder
12. Taxonomy of stimulant use disorder
13. Taxonomy of opioid use disorder
14. Taxonomy of sedative/hypnotic use disorder
15. Taxonomy of psychedelic or psychoactive substance use disorder

16. Taxonomy of nicotine use disorder
17. Taxonomy of process addictions (e.g. gambling, sexual, spending/shopping)
18. Taxonomy of eating disorders
19. Patient physiological problems
20. Patient psychological problems

21. Patient family dynamics
22. Patient social/Community problems
23. Patient spirituality
24. Patient cognitive ability
25. Patient workplace problems

26. Patient legal problems
27. Biopsychosocial model
28. Assessment and diagnosis
29. Pharmacotherapy
30. Non-pharmacologic treatment

31. Psychotherapy/counseling treatment
32. Needs of patients with substance use disorders
33. Needs of patients with nicotine addiction
34. Needs of patients with eating disorders
35. Needs of patients with process addictions

36. Needs of patients with co-occurring disorders
37. Assessment of relapse potential
38. Relapse prevention techniques
39. Neurobiological basis of addiction and reward
40. Neurochemistry of dependence

41. Continuing education
42. Evidence based practice and research
43. Quality of practice
44. Environmental health
45. Interdisciplinary process

46. Boundaries of the therapeutic/professional relationship
47. Protect public from harm
48. Patient confidentiality
49. Individual/cultural differences (e.g. gender, age, incarcerated populations, GLBT, cultural diversity)
50. Environmental risk factors

51. Trauma (PTSD, sexual, physical, emotional, etc.)
52. Adverse childhood events
53. Ethical principles
54. Scope of practice
55. Concept of Stigma

56. Cultural sensitivity
57. Communication skills
58. Critical thinking skills
59. Spiritual awareness
60. Interdisciplinary participation

61. Clinical decision making
62. Teaching/learning principles
63. Patient safety
64. Planning care to meet patient treatment goals
65. Measures to treat life-threatening situations

66. Referral mechanisms
67. Professional development
68. Time management organizational skills
69. Assessing learning skills
70. Community recourses availability

71. Delegation skills
72. Concepts of growth and development
73. Nursing diagnosis as applied to substance use disorders
74. Recognition of burnout in self and peers
75. Documentation skills
76. Interpretation of diagnostic tests

# Appendix D

**Table A: Mean Frequency Ratings of Activities in Ranked Order**

**Table B: Mean Importance Ratings of Activities in Ranked Order**

**Table C: Mean Activity Indices in Ranked Order**

**Table D: Mean KSA Ratings in Ranked Order**

**Table A**
**CARN Mean Frequencies in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Freq | *SD* | *n* | D-N-P* |
|---|---|---|---|---|---|---|
| 86 | 1 | Provide appropriate care for the neonate in withdrawal | 4.00 | 0.00 | 2 | 135 |
| 50 | 4 | Use therapeutic communication skills to improve patient outcomes | 3.57 | 1.54 | 118 | 19 |
| 99 | 2 | Maintain confidential information in accordance with legal standards (CFR-42) | 3.56 | 1.10 | 129 | 8 |
| 77 | 6 | Develop and maintain a therapeutic relationship in all aspects of patient treatment | 3.44 | 1.54 | 115 | 22 |
| 51 | 8 | Use patient-centered care principles to improve patient outcomes | 3.44 | 1.54 | 118 | 19 |
| 13 | 5 | Appropriately document all assessment findings | 3.36 | 1.49 | 121 | 16 |
| 49 | 11 | Promote a safe environment for implementation of the plan | 3.29 | 1.71 | 103 | 34 |
| 52 | 19 | Implement evidence-based practice to improve patient outcomes | 3.22 | 1.71 | 113 | 24 |
| 84 | 12 | Evaluate therapeutic and potential adverse effects of pharmacological treatments | 3.20 | 1.55 | 105 | 32 |
| 78 | 3 | Administer medication for management of alcohol withdrawal symptoms and monitor response | 3.19 | 1.32 | 73 | 64 |
| 5 | 16 | Assess physical assessment results, diagnoses, treatment plans, prescriptions, or outcomes | 3.16 | 1.82 | 114 | 23 |
| 56 | 33 | Prioritize patient care based on individualized treatment plan | 3.14 | 1.71 | 101 | 36 |
| 74 | *26-tie* | Offer emotional support to patient and families throughout treatment and recovery continuum | 3.11 | 1.77 | 113 | 24 |
| 83 | 22 | Manage symptoms of concurrent psychiatric disorders in patients with substance use disorders | 3.07 | 1.55 | 88 | 49 |
| 68 | *39-tie* | Utilize motivational interviewing techniques to promote behavioral change | 3.05 | 1.84 | 92 | 45 |
| 79 | 9 | Administer medication for management of opioid withdrawal symptoms and monitor response | 3.05 | 1.55 | 83 | 54 |
| 22 | *37-tie* | Assess behaviors related to active substance use | 3.05 | 1.80 | 109 | 28 |
| 60 | *26-tie* | Educate patients and family members about expected effects and potential side effects of medications | 3.05 | 1.76 | 111 | 26 |
| 39 | 28 | Obtain and review relevant lab results and initiate appropriate protocol | 3.04 | 1.78 | 98 | 39 |
| 43 | 17 | Collaborate with interdisciplinary team in developing treatment plan | 3.03 | 1.78 | 115 | 22 |
| 85 | *48-tie* | Evaluate therapeutic and potential adverse effects of non-pharmacological treatments | 3.01 | 1.71 | 77 | 60 |
| 16 | 13 | Assess severity of substance use disorder | 3.01 | 1.67 | 102 | 35 |
| 38 | *23-tie* | Collect specimens and review toxicology results, and initiate appropriate protocol | 3.01 | 1.67 | 102 | 35 |
| 42 | 15 | Utilize standardized instruments for screening, assessment, and evaluation (e.g., COWS, CIWA, HAM-A, AUDIT-C) | 3.01 | 2.03 | 109 | 28 |
| 23 | 20 | Assess behaviors related to withdrawal | 3.01 | 1.75 | 116 | 21 |
| 80 | 7 | Administer medication for management of benzodiazepine withdrawal symptoms and monitor response | 3.00 | 1.50 | 63 | 74 |
| 3 | *23-tie* | Assess patients' medical and psychosocial histories | 2.99 | 1.80 | 119 | 18 |
| 20 | 10 | Assess for withdrawal from drugs | 2.99 | 1.64 | 116 | 21 |
| 53 | *39-tie* | Collaborate with the interdisciplinary team to implement the plan | 2.99 | 2.03 | 114 | 23 |
| 54 | 42 | Facilitate the coordination of integrated patient care services with interdisciplinary care team | 2.97 | 1.76 | 93 | 44 |

***D-N-P = Do Not Perform**

**Table A**
**CARN Mean Frequencies in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Freq | *SD* | *n* | D-N-P* |
|---|---|---|---|---|---|---|
| 57 | *30-tie* | Advocate on behalf of the patient/family | 2.96 | 1.72 | 125 | 12 |
| 30 | 29 | Assess for acute/chronic psychiatric effects of substance use disorder | 2.94 | 1.71 | 108 | 29 |
| 36 | 32 | Assess patient's readiness for behavioral change | 2.94 | 1.76 | 105 | 32 |
| 73 | 18 | Implement standards of care to prevent complications of acute withdrawal | 2.94 | 1.88 | 81 | 56 |
| 17 | *30-tie* | Assess risk for relapse | 2.93 | 1.84 | 91 | 46 |
| 81 | 36 | Administer medications to reduce cravings and monitor response | 2.92 | 1.75 | 78 | 59 |
| 27 | 35 | Assess for acute/chronic medical effects of substance use disorders | 2.92 | 1.84 | 108 | 29 |
| 37 | 57 | Assess patient's health literacy | 2.92 | 1.91 | 96 | 41 |
| 100 | *54-tie* | Refer to self-help/peer support groups (e.g., AA, NA, Smart Recovery, Celebrate Recovery, etc.) | 2.91 | 1.92 | 98 | 39 |
| 82 | 21 | Support the patient through induction, stabilization, and maintenance of medication treatment for opioid use disorder | 2.91 | 1.62 | 86 | 51 |
| 101 | 41 | Evaluate patient's and family's response to interventions | 2.90 | 1.59 | 79 | 58 |
| 44 | *37-tie* | Tailor treatment plan to accommodate patients' individualized treatment needs (e.g., gender, culture, religious, etc.) | 2.89 | 1.90 | 90 | 47 |
| 96 | 63 | Utilize cognitive behavioral strategies to improve patient outcomes | 2.89 | 2.02 | 71 | 66 |
| 1 | *54-tie* | Base assessment techniques/activities on research (evidence-based practice/best practices) | 2.88 | 2.16 | 108 | 29 |
| 48 | 43 | Utilize specific ethical principles such as autonomy, shared decision-making, and justice in developing a treatment plan | 2.87 | 1.76 | 82 | 55 |
| 58 | *44-tie* | Educate patients and family members about medical and psychiatric comorbidities | 2.86 | 1.95 | 108 | 29 |
| 4 | 34 | Assess comprehensive substance use history | 2.84 | 1.84 | 119 | 18 |
| 75 | *48-tie* | Offer one-to-one counseling for the patient and family | 2.84 | 1.92 | 56 | 81 |
| 41 | *46-tie* | Obtain and review appropriate point-of-care testing results and initiate appropriate protocol (e.g., urine HCG, PPD, rapid HIV test, HCV, breathalyzer, etc.) | 2.83 | 1.84 | 89 | 48 |
| 104 | *50-tie* | Evaluate effectiveness of staff's intervention implementation | 2.82 | 1.80 | 72 | 65 |
| 47 | *46-tie* | Facilitate patient understanding (language, health literacy, etc.) of the agreed upon treatment plan | 2.81 | 1.83 | 89 | 48 |
| 11 | 64 | Identify the adverse consequences (e.g., legal, relationship, occupational, physical) of substance use for the patient | 2.79 | 1.84 | 112 | 25 |
| 59 | 60 | Educate patients and family members about preventive health measures (harm reduction, protective factors, risk reduction, etc.) | 2.79 | 1.89 | 112 | 25 |
| 12 | 62 | Validate assessments with appropriate diagnostic screening tools and resources | 2.78 | 2.04 | 95 | 42 |
| 21 | 58 | Assess pain management factors in patients with substance use disorders | 2.77 | 1.84 | 111 | 26 |

***D-N-P = Do Not Perform**

**Table A**
**CARN Mean Frequencies in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Freq | *SD* | *n* | D-N-P* |
|---|---|---|---|---|---|---|
| 2 | 67 | Assess the effect of interpersonal interactions and social determinants of health (e.g. community, family) on health and illness | 2.77 | 2.08 | 101 | 36 |
| 61 | 53 | Educate patients and family members about recovery management and relapse prevention | 2.77 | 1.81 | 98 | 39 |
| 45 | *54-tie* | Identify specific interventions with measurable treatment goals rooted in evidence based practice | 2.74 | 1.90 | 89 | 48 |
| 19 | 14 | Assess for withdrawal from alcohol | 2.73 | 1.84 | 106 | 31 |
| 18 | 25 | Assess severity of acute intoxication of substance use | 2.68 | 1.67 | 100 | 37 |
| | | **Mean = 2.66 *SD* = 0.48** | | | | |
| 69 | *73-tie* | Utilize screening and brief interventions (SBIRT) to promote behavioral change | 2.65 | 2.00 | 55 | 82 |
| 76 | *44-tie* | Offer group counseling for the patient and family | 2.65 | 1.83 | 26 | 111 |
| 32 | 65 | Assess for acute/chronic psychiatric effects of process addictions | 2.65 | 1.60 | 49 | 88 |
| 103 | 70 | Evaluate transition of patients along continuum of care | 2.63 | 1.89 | 62 | 75 |
| 10 | *78-tie* | Assess protective factors against substance use disorder (e.g., spiritual, cultural, environmental, genetic) | 2.62 | 2.04 | 97 | 40 |
| 7 | 76 | Assess risk factors for substance use disorder (e.g., spiritual, cultural, environmental, genetic) | 2.62 | 1.99 | 99 | 38 |
| 9 | 68 | Assess for intimate partner violence and trauma history | 2.58 | 2.02 | 104 | 33 |
| 33 | *78-tie* | Assess for social/legal consequences of substance use disorders | 2.54 | 2.13 | 94 | 43 |
| 46 | 72 | Engage the patient and family in the development of the treatment plan | 2.54 | 1.90 | 78 | 59 |
| 8 | 87 | Assess sexual history | 2.53 | 2.12 | 85 | 52 |
| 102 | 69 | Revise plan of care in collaboration with an interdisciplinary team as needed | 2.53 | 1.78 | 104 | 33 |
| 29 | 80 | Assess for acute/chronic medical effects of process addictions | 2.52 | 1.85 | 54 | 83 |
| 55 | 71 | Refer patient to appropriate community resources to meet goals of treatment plan | 2.51 | 1.87 | 78 | 59 |
| 24 | 66 | Assess for early signs and symptoms of substance use disorders | 2.49 | 2.06 | 73 | 64 |
| 65 | 81 | Design health information and patient education appropriate to the patient's developmental level, readiness to learn, and cultural values and beliefs | 2.47 | 2.16 | 72 | 65 |
| 35 | 77 | Assess for social/legal consequences of process addictions | 2.46 | 1.83 | 41 | 96 |
| 71 | 52 | Educate patients and families regarding risks and strategies for overdose prevention and reversal | 2.46 | 1.81 | 93 | 44 |
| 6 | 82 | Assess family dynamics and culture related to substance use | 2.46 | 1.88 | 96 | 41 |
| 97 | *73-tie* | Ensure continuity of care when making referrals to other levels of care | 2.35 | 1.82 | 82 | 55 |
| 87 | 61 | Provide appropriate care for the older adult patient in withdrawal | 2.35 | 1.68 | 72 | 65 |
| 26 | *89-tie* | Assess for early signs and symptoms of process addictions | 2.30 | 2.29 | 50 | 87 |
| 93 | 97 | Refer for mindfulness | 2.30 | 1.97 | 47 | 90 |

***D-N-P = Do Not Perform**

**Table A**
**CARN Mean Frequencies in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Freq | *SD* | *n* | D-N-P* |
|---|---|---|---|---|---|---|
| 70 | *73-tie* | Educate other health care professionals regarding the specific treatment needs of patients with substance use disorder | 2.25 | 1.98 | 107 | 30 |
| 15 | *50-tie* | Identify and follow protocol regarding child safety | 2.24 | 1.64 | 66 | 71 |
| 94 | 100 | Refer for aroma therapy | 2.22 | 2.40 | 9 | 128 |
| 62 | 88 | Utilize evidence-based literature to develop educational programming about the neurobiological basis of addictions, comorbid conditions, and health maintenance principles | 2.22 | 2.12 | 69 | 68 |
| 98 | 83 | Refer patients to specific care providers for additional care based upon patient needs (e.g., financial, family, environmental, transportation, etc.) | 2.21 | 1.80 | 67 | 70 |
| 88 | 59 | Provide appropriate care for the adolescent in withdrawal | 2.11 | 1.58 | 18 | 119 |
| 40 | 96 | Obtain and review relevant radiology reports and initiate appropriate protocol | 2.11 | 2.14 | 36 | 101 |
| 34 | *89-tie* | Assess for social/legal consequences of eating disorders | 2.11 | 1.67 | 28 | 109 |
| 31 | 92 | Assess for acute/chronic psychiatric effects of eating disorders | 2.08 | 1.47 | 40 | 97 |
| 63 | 94 | Utilize evidence-based literature to develop educational programming about process addictions | 2.05 | 2.02 | 44 | 93 |
| 64 | 85 | Utilize evidence-based literature to develop educational programming about eating disorders | 2.00 | 1.63 | 15 | 122 |
| 25 | 95 | Assess for early signs and symptoms of eating disorders | 1.98 | 1.95 | 51 | 86 |
| 28 | 86 | Assess for acute/chronic medical effects of eating disorders | 1.96 | 1.85 | 45 | 92 |
| 95 | 98 | Provide community outreach/resources | 1.94 | 2.79 | 16 | 121 |
| 72 | 93 | Advocate for professionals in recovery | 1.74 | 1.98 | 68 | 69 |
| 92 | 101 | Refer for yoga | 1.71 | 1.99 | 34 | 103 |
| 67 | 99 | Evaluate and update health information resources (e.g., materials, web sites) in the area of practice for health literacy and accuracy, readability | 1.68 | 2.15 | 38 | 99 |
| 14 | 84 | Identify and follow protocol in response to impaired professionals | 1.64 | 1.74 | 74 | 63 |
| 89 | 103 | Refer for acupuncture | 1.60 | 1.89 | 30 | 107 |
| 90 | 104 | Refer for massage therapy | 1.38 | 1.24 | 16 | 121 |
| 91 | 102 | Refer for healing touch | 1.29 | 1.25 | 7 | 130 |

***D-N-P = Do Not Perform**

**Table B**
**CARN Mean Importance in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Imptce | *SD* | *n* | D-N-P* |
|---|---|---|---|---|---|---|
| 86 | 1 | Provide appropriate care for the neonate in withdrawal | 4.00 | 0.00 | 2 | 135 |
| 78 | 3 | Administer medication for management of alcohol withdrawal symptoms and monitor response | 3.90 | 1.32 | 73 | 64 |
| 99 | 2 | Maintain confidential information in accordance with legal standards (CFR-42) | 3.89 | 1.10 | 129 | 8 |
| 80 | 7 | Administer medication for management of benzodiazepine withdrawal symptoms and monitor response | 3.84 | 1.50 | 63 | 74 |
| 19 | 14 | Assess for withdrawal from alcohol | 3.81 | 1.84 | 106 | 31 |
| 20 | 10 | Assess for withdrawal from drugs | 3.80 | 1.64 | 116 | 21 |
| 79 | 9 | Administer medication for management of opioid withdrawal symptoms and monitor response | 3.78 | 1.55 | 83 | 54 |
| 13 | 5 | Appropriately document all assessment findings | 3.77 | 1.49 | 121 | 16 |
| 15 | *50-tie* | Identify and follow protocol regarding child safety | 3.76 | 1.64 | 66 | 71 |
| 18 | 25 | Assess severity of acute intoxication of substance use | 3.73 | 1.67 | 100 | 37 |
| 88 | 59 | Provide appropriate care for the adolescent in withdrawal | 3.72 | 1.58 | 18 | 119 |
| 77 | 6 | Develop and maintain a therapeutic relationship in all aspects of patient treatment | 3.70 | 1.54 | 115 | 22 |
| 50 | 4 | Use therapeutic communication skills to improve patient outcomes | 3.69 | 1.54 | 118 | 19 |
| 16 | 13 | Assess severity of substance use disorder | 3.69 | 1.67 | 102 | 35 |
| 73 | 18 | Implement standards of care to prevent complications of acute withdrawal | 3.67 | 1.88 | 81 | 56 |
| 42 | 15 | Utilize standardized instruments for screening, assessment, and evaluation (e.g., COWS, CIWA, HAM-A, AUDIT-C) | 3.66 | 2.03 | 109 | 28 |
| 82 | 21 | Support the patient through induction, stabilization, and maintenance of medication treatment for opioid use disorder | 3.65 | 1.62 | 86 | 51 |
| 43 | 17 | Collaborate with interdisciplinary team in developing treatment plan | 3.63 | 1.78 | 115 | 22 |
| 49 | 11 | Promote a safe environment for implementation of the plan | 3.62 | 1.71 | 103 | 34 |
| 23 | 20 | Assess behaviors related to withdrawal | 3.60 | 1.75 | 116 | 21 |
| 71 | 52 | Educate patients and families regarding risks and strategies for overdose prevention and reversal | 3.60 | 1.81 | 93 | 44 |
| 51 | 8 | Use patient-centered care principles to improve patient outcomes | 3.60 | 1.54 | 118 | 19 |
| 84 | 12 | Evaluate therapeutic and potential adverse effects of pharmacological treatments | 3.60 | 1.55 | 105 | 32 |
| 3 | *23-tie* | Assess patients' medical and psychosocial histories | 3.59 | 1.80 | 119 | 18 |
| 30 | 29 | Assess for acute/chronic psychiatric effects of substance use disorder | 3.58 | 1.71 | 108 | 29 |
| 4 | 34 | Assess comprehensive substance use history | 3.58 | 1.84 | 119 | 18 |
| 5 | 16 | Assess physical assessment results, diagnoses, treatment plans, prescriptions, or outcomes | 3.58 | 1.82 | 114 | 23 |
| 38 | *23-tie* | Collect specimens and review toxicology results, and initiate appropriate protocol | 3.58 | 1.67 | 102 | 35 |
| 76 | *44-tie* | Offer group counseling for the patient and family | 3.58 | 1.83 | 26 | 111 |
| 17 | *30-tie* | Assess risk for relapse | 3.57 | 1.84 | 91 | 46 |

***D-N-P = Do Not Perform**

**Table B**
**CARN Mean Importance in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Imptce | *SD* | *n* | D-N-P* |
|---|---|---|---|---|---|---|
| 87 | 61 | Provide appropriate care for the older adult patient in withdrawal | 3.57 | 1.68 | 72 | 65 |
| 83 | 22 | Manage symptoms of concurrent psychiatric disorders in patients with substance use disorders | 3.57 | 1.55 | 88 | 49 |
| 36 | 32 | Assess patient's readiness for behavioral change | 3.56 | 1.76 | 105 | 32 |
| 57 | *30-tie* | Advocate on behalf of the patient/family | 3.56 | 1.72 | 125 | 12 |
| 39 | 28 | Obtain and review relevant lab results and initiate appropriate protocol | 3.54 | 1.78 | 98 | 39 |
| 60 | *26-tie* | Educate patients and family members about expected effects and potential side effects of medications | 3.54 | 1.76 | 111 | 26 |
| 27 | 35 | Assess for acute/chronic medical effects of substance use disorders | 3.54 | 1.84 | 108 | 29 |
| 14 | 84 | Identify and follow protocol in response to impaired professionals | 3.53 | 1.74 | 74 | 63 |
| 81 | 36 | Administer medications to reduce cravings and monitor response | 3.53 | 1.75 | 78 | 59 |
| 44 | *37-tie* | Tailor treatment plan to accommodate patients' individualized treatment needs (e.g., gender, culture, religious, etc.) | 3.52 | 1.90 | 90 | 47 |
| 74 | *26-tie* | Offer emotional support to patient and families throughout treatment and recovery continuum | 3.51 | 1.77 | 113 | 24 |
| 52 | 19 | Implement evidence-based practice to improve patient outcomes | 3.50 | 1.71 | 113 | 24 |
| 47 | *46-tie* | Facilitate patient understanding (language, health literacy, etc.) of the agreed upon treatment plan | 3.48 | 1.83 | 89 | 48 |
| 48 | 43 | Utilize specific ethical principles such as autonomy, shared decision-making, and justice in developing a | 3.48 | 1.76 | 82 | 55 |
| 58 | *44-tie* | Educate patients and family members about medical and psychiatric comorbidities | 3.47 | 1.95 | 108 | 29 |
| 104 | *50-tie* | Evaluate effectiveness of staff's intervention implementation | 3.47 | 1.80 | 72 | 65 |
| 41 | *46-tie* | Obtain and review appropriate point-of-care testing results and initiate appropriate protocol (e.g., urine HCG, PPD, rapid HIV test, HCV, breathalyzer, etc.) | 3.47 | 1.84 | 89 | 48 |
| 53 | *39-tie* | Collaborate with the interdisciplinary team to implement the plan | 3.46 | 2.03 | 114 | 23 |
| 75 | *48-tie* | Offer one-to-one counseling for the patient and family | 3.46 | 1.92 | 56 | 81 |
| 54 | 42 | Facilitate the coordination of integrated patient care services with interdisciplinary care team | 3.45 | 1.76 | 93 | 44 |
| 45 | *54-tie* | Identify specific interventions with measurable treatment goals rooted in evidence based practice | 3.45 | 1.90 | 89 | 48 |
| 61 | 53 | Educate patients and family members about recovery management and relapse prevention | 3.45 | 1.81 | 98 | 39 |
| 22 | *37-tie* | Assess behaviors related to active substance use | 3.44 | 1.80 | 109 | 28 |
| 70 | *73-tie* | substance use disorder | 3.44 | 1.98 | 107 | 30 |
| 56 | 33 | Prioritize patient care based on individualized treatment plan | 3.44 | 1.71 | 101 | 36 |
| 68 | *39-tie* | Utilize motivational interviewing techniques to promote behavioral change | 3.43 | 1.84 | 92 | 45 |
| 24 | 66 | Assess for early signs and symptoms of substance use disorders | 3.42 | 2.06 | 73 | 64 |
| 21 | 58 | Assess pain management factors in patients with substance use disorders | 3.41 | 1.84 | 111 | 26 |
| 97 | *73-tie* | Ensure continuity of care when making referrals to other levels of care | 3.39 | 1.82 | 82 | 55 |

***D-N-P = Do Not Perform**

**Table B**
**CARN Mean Importance in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Imptce | *SD* | *n* | D-N-P* |
|---|---|---|---|---|---|---|
| 102 | 69 | Revise plan of care in collaboration with an interdisciplinary team as needed | 3.38 | 1.78 | 104 | 33 |
| 59 | 60 | Educate patients and family members about preventive health measures (harm reduction, protective factors, risk reduction, etc.) | 3.38 | 1.89 | 112 | 25 |
| 1 | *54-tie* | Base assessment techniques/activities on research (evidence-based practice/best practices) | 3.38 | 2.16 | 108 | 29 |
| 85 | *48-tie* | Evaluate therapeutic and potential adverse effects of non-pharmacological treatments | 3.38 | 1.71 | 77 | 60 |
| 100 | *54-tie* | Refer to self-help/peer support groups (e.g., AA, NA, Smart Recovery, Celebrate Recovery, etc.) | 3.37 | 1.92 | 98 | 39 |
| 9 | 68 | Assess for intimate partner violence and trauma history | 3.37 | 2.02 | 104 | 33 |
| | | **Mean = 3.37 *SD* = 0.30** | | | | |
| 55 | 71 | Refer patient to appropriate community resources to meet goals of treatment plan | 3.36 | 1.87 | 78 | 59 |
| 32 | 65 | Assess for acute/chronic psychiatric effects of process addictions | 3.35 | 1.60 | 49 | 88 |
| 37 | 57 | Assess patient's health literacy | 3.34 | 1.91 | 96 | 41 |
| 101 | 41 | Evaluate patient's and family's response to interventions | 3.34 | 1.59 | 79 | 58 |
| 12 | 62 | Validate assessments with appropriate diagnostic screening tools and resources | 3.34 | 2.04 | 95 | 42 |
| 46 | 72 | Engage the patient and family in the development of the treatment plan | 3.33 | 1.90 | 78 | 59 |
| 64 | 85 | Utilize evidence-based literature to develop educational programming about eating disorders | 3.33 | 1.63 | 15 | 122 |
| 28 | 86 | Assess for acute/chronic medical effects of eating disorders | 3.33 | 1.85 | 45 | 92 |
| 72 | 93 | Advocate for professionals in recovery | 3.32 | 1.98 | 68 | 69 |
| 103 | 70 | Evaluate transition of patients along continuum of care | 3.32 | 1.89 | 62 | 75 |
| 11 | 64 | Identify the adverse consequences (e.g., legal, relationship, occupational, physical) of substance use for | 3.31 | 1.84 | 112 | 25 |
| 2 | 67 | Assess the effect of interpersonal interactions and social determinants of health (e.g. community, family) on health and illness | 3.28 | 2.08 | 101 | 36 |
| 35 | 77 | Assess for social/legal consequences of process addictions | 3.27 | 1.83 | 41 | 96 |
| 96 | 63 | Utilize cognitive behavioral strategies to improve patient outcomes | 3.27 | 2.02 | 71 | 66 |
| 98 | 83 | Refer patients to specific care providers for additional care based upon patient needs (e.g., financial, family, environmental, transportation, etc.) | 3.25 | 1.80 | 67 | 70 |
| 69 | *73-tie* | Utilize screening and brief interventions (SBIRT) to promote behavioral change | 3.24 | 2.00 | 55 | 82 |
| 65 | 81 | Design health information and patient education appropriate to the patient's developmental level, readiness to learn, and cultural values and beliefs | 3.24 | 2.16 | 72 | 65 |
| 29 | 80 | Assess for acute/chronic medical effects of process addictions | 3.22 | 1.85 | 54 | 83 |
| 33 | *78-tie* | Assess for social/legal consequences of substance use disorders | 3.21 | 2.13 | 94 | 43 |

***D-N-P = Do Not Perform**

**Table B**
**CARN Mean Importance in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Imptce | *SD* | *n* | D-N-P* |
|---|---|---|---|---|---|---|
| 7 | 76 | Assess risk factors for substance use disorder (e.g., spiritual, cultural, environmental, genetic) | 3.21 | 1.99 | 99 | 38 |
| 34 | *89-tie* | Assess for social/legal consequences of eating disorders | 3.18 | 1.67 | 28 | 109 |
| 6 | 82 | Assess family dynamics and culture related to substance use | 3.18 | 1.88 | 96 | 41 |
| 10 | *78-tie* | Assess protective factors against substance use disorder (e.g., spiritual, cultural, environmental, genetic) | 3.18 | 2.04 | 97 | 40 |
| 31 | 92 | Assess for acute/chronic psychiatric effects of eating disorders | 3.18 | 1.47 | 40 | 97 |
| 62 | 88 | Utilize evidence-based literature to develop educational programming about the neurobiological basis of addictions, comorbid conditions, and health maintenance principles | 3.16 | 2.12 | 69 | 68 |
| 63 | 94 | Utilize evidence-based literature to develop educational programming about process addictions | 3.16 | 2.02 | 44 | 93 |
| 25 | 95 | Assess for early signs and symptoms of eating disorders | 3.14 | 1.95 | 51 | 86 |
| 26 | *89-tie* | Assess for early signs and symptoms of process addictions | 3.08 | 2.29 | 50 | 87 |
| 40 | 96 | Obtain and review relevant radiology reports and initiate appropriate protocol | 3.06 | 2.14 | 36 | 101 |
| 8 | 87 | Assess sexual history | 3.01 | 2.12 | 85 | 52 |
| 95 | 98 | Provide community outreach/resources | 2.94 | 2.79 | 16 | 121 |
| 67 | 99 | Evaluate and update health information resources (e.g., materials, web sites) in the area of practice for health literacy and accuracy, readability | 2.87 | 2.15 | 38 | 99 |
| 93 | 97 | Refer for mindfulness | 2.79 | 1.97 | 47 | 90 |
| 91 | 102 | Refer for healing touch | 2.71 | 1.25 | 7 | 130 |
| 94 | 100 | Refer for aroma therapy | 2.56 | 2.40 | 9 | 128 |
| 92 | 101 | Refer for yoga | 2.53 | 1.99 | 34 | 103 |
| 89 | 103 | Refer for acupuncture | 2.47 | 1.89 | 30 | 107 |
| 90 | 104 | Refer for massage therapy | 2.19 | 1.24 | 16 | 121 |

***D-N-P = Do Not Perform**

**Table C**
**CARN Mean Activity Indices in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Index | *SD* | *n* | D-N-P* | M Freq | M Imptce |
|---|---|---|---|---|---|---|---|---|
| 86 | 1 | Provide appropriate care for the neonate in withdrawal | 12.00 | 0.00 | 2 | 135 | 4.00 | 4.00 |
| 99 | 2 | Maintain confidential information in accordance with legal standards (CFR-42) | 11.34 | 1.10 | 129 | 8 | 3.56 | 3.89 |
| 78 | 3 | Administer medication for management of alcohol withdrawal symptoms and monitor response | 11.00 | 1.32 | 73 | 64 | 3.19 | 3.90 |
| 50 | 4 | Use therapeutic communication skills to improve patient outcomes | 10.96 | 1.54 | 118 | 19 | 3.57 | 3.69 |
| 13 | 5 | Appropriately document all assessment findings | 10.89 | 1.49 | 121 | 16 | 3.36 | 3.77 |
| 77 | 6 | Develop and maintain a therapeutic relationship in all aspects of patient treatment | 10.85 | 1.54 | 115 | 22 | 3.44 | 3.70 |
| 80 | 7 | Administer medication for management of benzodiazepine withdrawal symptoms and monitor response | 10.68 | 1.50 | 63 | 74 | 3.00 | 3.84 |
| 51 | 8 | Use patient-centered care principles to improve patient outcomes | 10.64 | 1.54 | 118 | 19 | 3.44 | 3.60 |
| 79 | 9 | Administer medication for management of opioid withdrawal symptoms and monitor response | 10.61 | 1.55 | 83 | 54 | 3.05 | 3.78 |
| 20 | 10 | Assess for withdrawal from drugs | 10.59 | 1.64 | 116 | 21 | 2.99 | 3.80 |
| 49 | 11 | Promote a safe environment for implementation of the plan | 10.53 | 1.71 | 103 | 34 | 3.29 | 3.62 |
| 84 | 12 | Evaluate therapeutic and potential adverse effects of pharmacological treatments | 10.40 | 1.55 | 105 | 32 | 3.20 | 3.60 |
| 16 | 13 | Assess severity of substance use disorder | 10.38 | 1.67 | 102 | 35 | 3.01 | 3.69 |
| 19 | 14 | Assess for withdrawal from alcohol | 10.35 | 1.84 | 106 | 31 | 2.73 | 3.81 |
| 42 | 15 | Utilize standardized instruments for screening, assessment, and evaluation (e.g., COWS, CIWA, HAM-A, AUDIT-C) | 10.33 | 2.03 | 109 | 28 | 3.01 | 3.66 |
| 5 | 16 | Assess physical assessment results, diagnoses, treatment plans, prescriptions, or outcomes | 10.32 | 1.82 | 114 | 23 | 3.16 | 3.58 |
| 43 | 17 | Collaborate with interdisciplinary team in developing treatment plan | 10.29 | 1.78 | 115 | 22 | 3.03 | 3.63 |
| 73 | 18 | Implement standards of care to prevent complications of acute withdrawal | 10.27 | 1.88 | 81 | 56 | 2.94 | 3.67 |
| 52 | 19 | Implement evidence-based practice to improve patient outcomes | 10.23 | 1.71 | 113 | 24 | 3.22 | 3.50 |
| 23 | 20 | Assess behaviors related to withdrawal | 10.22 | 1.75 | 116 | 21 | 3.01 | 3.60 |
| 82 | 21 | Support the patient through induction, stabilization, and maintenance of medication treatment for opioid use disorder | 10.21 | 1.62 | 86 | 51 | 2.91 | 3.65 |
| 83 | 22 | Manage symptoms of concurrent psychiatric disorders in patients with substance use disorders | 10.20 | 1.55 | 88 | 49 | 3.07 | 3.57 |
| 3 | *23-tie* | Assess patients' medical and psychosocial histories | 10.17 | 1.80 | 119 | 18 | 2.99 | 3.59 |
| 38 | *23-tie* | Collect specimens and review toxicology results, and initiate appropriate protocol | 10.17 | 1.67 | 102 | 35 | 3.01 | 3.58 |
| 18 | 25 | Assess severity of acute intoxication of substance use | 10.14 | 1.67 | 100 | 37 | 2.68 | 3.73 |

***D-N-P = Do Not Perform**

**Table C**
**CARN Mean Activity Indices in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Index | *SD* | *n* | D-N-P* | M Freq | M Imptce |
|---|---|---|---|---|---|---|---|---|
| 74 | *26-tie* | Offer emotional support to patient and families throughout treatment and recovery continuum | 10.13 | 1.77 | 113 | 24 | 3.11 | 3.51 |
| 60 | *26-tie* | Educate patients and family members about expected effects and potential side effects of medications | 10.13 | 1.76 | 111 | 26 | 3.05 | 3.54 |
| 39 | 28 | Obtain and review relevant lab results and initiate appropriate protocol | 10.12 | 1.78 | 98 | 39 | 3.04 | 3.54 |
| 30 | 29 | Assess for acute/chronic psychiatric effects of substance use disorder | 10.11 | 1.71 | 108 | 29 | 2.94 | 3.58 |
| 57 | *30-tie* | Advocate on behalf of the patient/family | 10.08 | 1.72 | 125 | 12 | 2.96 | 3.56 |
| 17 | *30-tie* | Assess risk for relapse | 10.08 | 1.84 | 91 | 46 | 2.93 | 3.57 |
| 36 | 32 | Assess patient's readiness for behavioral change | 10.07 | 1.76 | 105 | 32 | 2.94 | 3.56 |
| 56 | 33 | Prioritize patient care based on individualized treatment plan | 10.01 | 1.71 | 101 | 36 | 3.14 | 3.44 |
| 4 | 34 | Assess comprehensive substance use history | 10.00 | 1.84 | 119 | 18 | 2.84 | 3.58 |
| 27 | 35 | Assess for acute/chronic medical effects of substance use disorders | 9.99 | 1.84 | 108 | 29 | 2.92 | 3.54 |
| 81 | 36 | Administer medications to reduce cravings and monitor response | 9.97 | 1.75 | 78 | 59 | 2.92 | 3.53 |
| 44 | *37-tie* | Tailor treatment plan to accommodate patients' individualized treatment needs (e.g., gender, culture, religious, etc.) | 9.93 | 1.90 | 90 | 47 | 2.89 | 3.52 |
| 22 | *37-tie* | Assess behaviors related to active substance use | 9.93 | 1.80 | 109 | 28 | 3.05 | 3.44 |
| 68 | *39-tie* | Utilize motivational interviewing techniques to promote behavioral change | 9.92 | 1.84 | 92 | 45 | 3.05 | 3.43 |
| 53 | *39-tie* | Collaborate with the interdisciplinary team to implement the plan | 9.92 | 2.03 | 114 | 23 | 2.99 | 3.46 |
| 101 | 41 | Evaluate patient's and family's response to interventions | 9.89 | 1.59 | 79 | 58 | 2.90 | 3.34 |
| 54 | 42 | Facilitate the coordination of integrated patient care services with interdisciplinary care team | 9.87 | 1.76 | 93 | 44 | 2.97 | 3.45 |
| 48 | 43 | Utilize specific ethical principles such as autonomy, shared decision-making, and justice in developing a treatment plan | 9.82 | 1.76 | 82 | 55 | 2.87 | 3.48 |
| 76 | *44-tie* | Offer group counseling for the patient and family | 9.81 | 1.83 | 26 | 111 | 2.65 | 3.58 |
| 58 | *44-tie* | Educate patients and family members about medical and psychiatric comorbidities | 9.81 | 1.95 | 108 | 29 | 2.86 | 3.47 |
| 41 | *46-tie* | Obtain and review appropriate point-of-care testing results and initiate appropriate protocol (e.g., urine HCG, PPD, rapid HIV test, HCV, breathalyzer, etc.) | 9.78 | 1.84 | 89 | 48 | 2.83 | 3.47 |
| 47 | *46-tie* | Facilitate patient understanding (language, health literacy, etc.) of the agreed upon treatment plan | 9.78 | 1.83 | 89 | 48 | 2.81 | 3.48 |
| 75 | *48-tie* | Offer one-to-one counseling for the patient and family | 9.77 | 1.92 | 56 | 81 | 2.84 | 3.46 |
| 85 | *48-tie* | Evaluate therapeutic and potential adverse effects of non-pharmacological treatments | 9.77 | 1.71 | 77 | 60 | 3.01 | 3.38 |

***D-N-P = Do Not Perform**

**Table C**
**CARN Mean Activity Indices in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Index | *SD* | *n* | D-N-P* | M Freq | M Imptce |
|---|---|---|---|---|---|---|---|---|
| 104 | *50-tie* | Evaluate effectiveness of staff's intervention implementation | 9.76 | 1.80 | 72 | 65 | 2.82 | 3.47 |
| 15 | *50-tie* | Identify and follow protocol regarding child safety | 9.76 | 1.64 | 66 | 71 | 2.24 | 3.76 |
| 71 | 52 | Educate patients and families regarding risks and strategies for overdose prevention and reversal | 9.67 | 1.81 | 93 | 44 | 2.46 | 3.60 |
| 61 | 53 | Educate patients and family members about recovery management and relapse prevention | 9.66 | 1.81 | 98 | 39 | 2.77 | 3.45 |
| 100 | *54-tie* | Refer to self-help/peer support groups (e.g., AA, NA, Smart Recovery, Celebrate Recovery, etc.) | 9.64 | 1.92 | 98 | 39 | 2.91 | 3.37 |
| 45 | *54-tie* | Identify specific interventions with measurable treatment goals rooted in evidence based practice | 9.64 | 1.90 | 89 | 48 | 2.74 | 3.45 |
| 1 | *54-tie* | Base assessment techniques/activities on research (evidence-based practice/best practices) | 9.64 | 2.16 | 108 | 29 | 2.88 | 3.38 |
| 37 | 57 | Assess patient's health literacy | 9.60 | 1.91 | 96 | 41 | 2.92 | 3.34 |
| 21 | 58 | Assess pain management factors in patients with substance use disorders | 9.59 | 1.84 | 111 | 26 | 2.77 | 3.41 |
| 88 | 59 | Provide appropriate care for the adolescent in withdrawal | 9.56 | 1.58 | 18 | 119 | 2.11 | 3.72 |
| 59 | 60 | Educate patients and family members about preventive health measures (harm reduction, protective factors, risk reduction, etc.) | 9.55 | 1.89 | 112 | 25 | 2.79 | 3.38 |
| 87 | 61 | Provide appropriate care for the older adult patient in withdrawal | 9.49 | 1.68 | 72 | 65 | 2.35 | 3.57 |
| | | **Mean Index = 9.48 *SD* = 1.81** | | | | | | |
| 12 | 62 | Validate assessments with appropriate diagnostic screening tools and resources | 9.45 | 2.04 | 95 | 42 | 2.78 | 3.34 |
| 96 | 63 | Utilize cognitive behavioral strategies to improve patient outcomes | 9.42 | 2.02 | 71 | 66 | 2.89 | 3.27 |
| 11 | 64 | Identify the adverse consequences (e.g., legal, relationship, occupational, physical) of substance use for the patient | 9.42 | 1.84 | 112 | 25 | 2.79 | 3.31 |
| 32 | 65 | Assess for acute/chronic psychiatric effects of process addictions | 9.35 | 1.60 | 49 | 88 | 2.65 | 3.35 |
| 24 | 66 | Assess for early signs and symptoms of substance use disorders | 9.34 | 2.06 | 73 | 64 | 2.49 | 3.42 |
| 2 | 67 | Assess the effect of interpersonal interactions and social determinants of health (e.g. community, family) on health and illness | 9.33 | 2.08 | 101 | 36 | 2.77 | 3.28 |
| 9 | 68 | Assess for intimate partner violence and trauma history | 9.31 | 2.02 | 104 | 33 | 2.58 | 3.37 |
| 102 | 69 | Revise plan of care in collaboration with an interdisciplinary team as needed | 9.30 | 1.78 | 104 | 33 | 2.53 | 3.38 |
| 103 | 70 | Evaluate transition of patients along continuum of care | 9.27 | 1.89 | 62 | 75 | 2.63 | 3.32 |
| 55 | 71 | Refer patient to appropriate community resources to meet goals of treatment plan | 9.23 | 1.87 | 78 | 59 | 2.51 | 3.36 |
| 46 | 72 | Engage the patient and family in the development of the treatment plan | 9.21 | 1.90 | 78 | 59 | 2.54 | 3.33 |
| 97 | *73-tie* | Ensure continuity of care when making referrals to other levels of care | 9.13 | 1.82 | 82 | 55 | 2.35 | 3.39 |

***D-N-P = Do Not Perform**

**Table C**
**CARN Mean Activity Indices in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Index | *SD* | *n* | D-N-P* | M Freq | M Imptce |
|---|---|---|---|---|---|---|---|---|
| 70 | *73-tie* | Educate other health care professionals regarding the specific treatment needs of patients with substance use disorder | 9.13 | 1.98 | 107 | 30 | 2.25 | 3.44 |
| 69 | *73-tie* | Utilize screening and brief interventions (SBIRT) to promote behavioral change | 9.13 | 2.00 | 55 | 82 | 2.65 | 3.24 |
| 7 | 76 | Assess risk factors for substance use disorder (e.g., spiritual, cultural, environmental, genetic) | 9.04 | 1.99 | 99 | 38 | 2.62 | 3.21 |
| 35 | 77 | Assess for social/legal consequences of process addictions | 9.00 | 1.83 | 41 | 96 | 2.46 | 3.27 |
| 10 | *78-tie* | Assess protective factors against substance use disorder (e.g., spiritual, cultural, environmental, genetic) | 8.97 | 2.04 | 97 | 40 | 2.62 | 3.18 |
| 33 | *78-tie* | Assess for social/legal consequences of substance use disorders | 8.97 | 2.13 | 94 | 43 | 2.54 | 3.21 |
| 29 | 80 | Assess for acute/chronic medical effects of process addictions | 8.96 | 1.85 | 54 | 83 | 2.52 | 3.22 |
| 65 | 81 | Design health information and patient education appropriate to the patient's developmental level, readiness to learn, and cultural values and beliefs | 8.94 | 2.16 | 72 | 65 | 2.47 | 3.24 |
| 6 | 82 | Assess family dynamics and culture related to substance use | 8.81 | 1.88 | 96 | 41 | 2.46 | 3.18 |
| 98 | 83 | Refer patients to specific care providers for additional care based upon patient needs (e.g., financial, family, environmental, transportation, etc.) | 8.72 | 1.80 | 67 | 70 | 2.21 | 3.25 |
| 14 | 84 | Identify and follow protocol in response to impaired professionals | 8.69 | 1.74 | 74 | 63 | 1.64 | 3.53 |
| 64 | 85 | Utilize evidence-based literature to develop educational programming about eating disorders | 8.67 | 1.63 | 15 | 122 | 2.00 | 3.33 |
| 28 | 86 | Assess for acute/chronic medical effects of eating disorders | 8.62 | 1.85 | 45 | 92 | 1.96 | 3.33 |
| 8 | 87 | Assess sexual history | 8.55 | 2.12 | 85 | 52 | 2.53 | 3.01 |
| 62 | 88 | Utilize evidence-based literature to develop educational programming about the neurobiological basis of addictions, comorbid conditions, and health maintenance principles | 8.54 | 2.12 | 69 | 68 | 2.22 | 3.16 |
| 34 | *89-tie* | Assess for social/legal consequences of eating disorders | 8.46 | 1.67 | 28 | 109 | 2.11 | 3.18 |
| 26 | *89-tie* | Assess for early signs and symptoms of process addictions | 8.46 | 2.29 | 50 | 87 | 2.30 | 3.08 |
| 31 | 92 | Assess for acute/chronic psychiatric effects of eating disorders | 8.43 | 1.47 | 40 | 97 | 2.08 | 3.18 |
| 72 | 93 | Advocate for professionals in recovery | 8.38 | 1.98 | 68 | 69 | 1.74 | 3.32 |
| 63 | 94 | Utilize evidence-based literature to develop educational programming about process addictions | 8.36 | 2.02 | 44 | 93 | 2.05 | 3.16 |
| 25 | 95 | Assess for early signs and symptoms of eating disorders | 8.25 | 1.95 | 51 | 86 | 1.98 | 3.14 |
| 40 | 96 | Obtain and review relevant radiology reports and initiate appropriate protocol | 8.22 | 2.14 | 36 | 101 | 2.11 | 3.06 |
| 93 | 97 | Refer for mindfulness | 7.87 | 1.97 | 47 | 90 | 2.30 | 2.79 |
| 95 | 98 | Provide community outreach/resources | 7.81 | 2.79 | 16 | 121 | 1.94 | 2.94 |

***D-N-P = Do Not Perform**

**Table C**
**CARN Mean Activity Indices in Ranked Order from Highest to Lowest**
**(*N* =137)**

| Survey # | Rank | Activity Statement | M Index | *SD* | *n* | D-N-P* | M Freq | M Imptce |
|---|---|---|---|---|---|---|---|---|
| 67 | 99 | Evaluate and update health information resources (e.g., materials, web sites) in the area of practice for health literacy and accuracy, readability | 7.42 | 2.15 | 38 | 99 | 1.68 | 2.87 |
| 94 | 100 | Refer for aroma therapy | 7.33 | 2.40 | 9 | 128 | 2.22 | 2.56 |
| 92 | 101 | Refer for yoga | 6.76 | 1.99 | 34 | 103 | 1.71 | 2.53 |
| 91 | 102 | Refer for healing touch | 6.71 | 1.25 | 7 | 130 | 1.29 | 2.71 |
| 89 | 103 | Refer for acupuncture | 6.53 | 1.89 | 30 | 107 | 1.60 | 2.47 |
| 90 | 104 | Refer for massage therapy | 5.75 | 1.24 | 16 | 121 | 1.38 | 2.19 |

***D-N-P = Do Not Perform**

**Table D**

**CARN Knowledge, Skills, and Abilities in Ranked Order from Highest to Lowest**

**(*N* =137)**

| Survey # | KSA | *n* | *M* | *SD* |
|---|---|---|---|---|
| 48 | Patient confidentiality | 137 | 3.81 | 0.49 |
| 63 | Patient safety | 137 | 3.76 | 0.49 |
| 58 | Critical thinking skills | 137 | 3.74 | 0.53 |
| 57 | Communication skills | 137 | 3.74 | 0.50 |
| 46 | Boundaries of the therapeutic/professional relationship | 137 | 3.66 | 0.67 |
| 65 | Measures to treat life-threatening situations | 137 | 3.66 | 0.67 |
| 61 | Clinical decision making | 137 | 3.61 | 0.61 |
| 43 | Quality of practice | 137 | 3.61 | 0.68 |
| 54 | Scope of practice | 137 | 3.59 | 0.67 |
| 28 | Assessment and diagnosis | 137 | 3.57 | 0.63 |
| 75 | Documentation skills | 137 | 3.57 | 0.65 |
| 32 | Needs of patients with substance use disorders | 137 | 3.56 | 0.63 |
| 53 | Ethical principles | 137 | 3.50 | 0.72 |
| 60 | Interdisciplinary participation | 137 | 3.48 | 0.65 |
| 64 | Planning care to meet patient treatment goals | 137 | 3.48 | 0.68 |
| 29 | Pharmacotherapy | 137 | 3.47 | 0.68 |
| 51 | Trauma (PTSD, sexual, physical, emotional, etc.) | 137 | 3.46 | 0.70 |
| 8 | Intervention strategies | 137 | 3.45 | 0.64 |
| 20 | Patient psychological problem | 137 | 3.45 | 0.70 |
| 36 | Needs of patients with co-occurring disorders | 137 | 3.42 | 0.72 |
| 62 | Teaching/learning principles | 137 | 3.42 | 0.68 |
| 41 | Continuing education | 137 | 3.41 | 0.74 |
| 47 | Protect public from harm | 137 | 3.41 | 0.73 |
| 67 | Professional development | 137 | 3.40 | 0.64 |
| 37 | Assessment of relapse potential | 137 | 3.39 | 0.77 |
| 45 | Interdisciplinary process | 137 | 3.39 | 0.65 |
| 55 | Concept of Stigma | 137 | 3.39 | 0.74 |
| 42 | Evidence based practice and research | 137 | 3.38 | 0.75 |
| 68 | Time management organizational skills | 137 | 3.38 | 0.72 |
| 19 | Patient physiological problems | 137 | 3.37 | 0.74 |
| 56 | Cultural sensitivity | 137 | 3.36 | 0.71 |
| 9 | Health promotion and disease prevention | 137 | 3.36 | 0.74 |
| 31 | Psychotherapy/counseling treatment | 137 | 3.34 | 0.77 |
| 38 | Relapse prevention techniques | 137 | 3.34 | 0.82 |
| 2 | Psychological risk factors | 137 | 3.33 | 0.69 |
| 24 | Patient cognitive ability | 137 | 3.31 | 0.70 |
| 76 | Interpretation of diagnostic tests | 137 | 3.31 | 0.71 |
| 74 | Recognition of burnout in self and peers | 137 | 3.30 | 0.80 |
| 69 | Assessing learning skills | 137 | 3.26 | 0.76 |
| 49 | Individual/cultural differences (e.g. gender, age, incarcerated populations, GLBT, cultural diversity) | 137 | 3.24 | 0.72 |
| 70 | Community resourse availability | 137 | 3.23 | 0.76 |
| | **Mean = 3.23 *SD* = 0.31** | | | |
| 7 | Prevention strategies | 137 | 3.21 | 0.75 |

**Table D**

**CARN Knowledge, Skills, and Abilities in Ranked Order from Highest to Lowest**

**(*N* =137)**

| Survey # | KSA | *n* | *M* | *SD* |
|---|---|---|---|---|
| 52 | Adverse childhood events | 137 | 3.20 | 0.80 |
| 3 | Family risk factors | 137 | 3.18 | 0.75 |
| 30 | Non-pharmacologic treatment | 137 | 3.18 | 0.71 |
| 27 | Biopsychosocial model | 137 | 3.17 | 0.78 |
| 50 | Environmental risk factor | 137 | 3.17 | 0.68 |
| 39 | Neurobiological basis of addiction and reward | 137 | 3.15 | 0.87 |
| 66 | Referral mechanisms | 137 | 3.15 | 0.77 |
| 59 | Spiritual awarenes | 137 | 3.14 | 0.75 |
| 40 | Neurochemistry of dependence | 137 | 3.13 | 0.87 |
| 6 | Protective/resiliency factors | 137 | 3.12 | 0.76 |
| 21 | Patient family dynamics | 137 | 3.08 | 0.76 |
| 22 | Patient social/Community problems | 137 | 3.08 | 0.75 |
| 44 | Environmental health | 137 | 3.06 | 0.78 |
| 73 | Nursing diagnosis as applied to substance use disorders | 137 | 3.05 | 0.96 |
| 71 | Delegation skill | 137 | 3.04 | 0.80 |
| 72 | Concepts of growth and development | 137 | 3.03 | 0.86 |
| 4 | Peer risk factors | 137 | 3.01 | 0.80 |
| 13 | Taxonomy of opioid use disorder | 137 | 3.01 | 0.91 |
| 33 | Needs of patients with nicotine addiction | 137 | 2.99 | 0.84 |
| 5 | Community/Cultural risk factors | 137 | 2.98 | 0.74 |
| 1 | Biological risk factors | 137 | 2.96 | 0.79 |
| 14 | Taxonomy of sedative/hypnotic use disorder | 137 | 2.88 | 0.92 |
| 11 | Taxonomy of alcohol use disorder | 137 | 2.85 | 0.91 |
| 26 | Patient legal problems | 137 | 2.83 | 0.76 |
| 10 | Epidemiology | 137 | 2.80 | 0.82 |
| 23 | Patient spirituality | 137 | 2.80 | 0.81 |
| 25 | Patient workplace problems | 137 | 2.80 | 0.81 |
| 15 | Taxonomy of psychedelic or psychoactive substance use disorder | 137 | 2.80 | 0.91 |
| 12 | Taxonomy of stimulant use disorder | 137 | 2.78 | 0.92 |
| 16 | Taxonomy of nicotine use disorder | 137 | 2.73 | 0.91 |
| 35 | Needs of patients with process addictions | 137 | 2.71 | 0.98 |
| 34 | Needs of patients with eating disorders | 137 | 2.69 | 1.07 |
| 17 | Taxonomy of process addictions (e.g. gambling, sexual, spending/shopping) | 137 | 2.36 | 0.91 |
| 18 | Taxonomy of eating disorder | 137 | 2.33 | 0.99 |