Executive Summary

for the
Addictions Nursing Certification Board

Practice Analysis/Role Delineation of
Addictions Advanced Practice Nursing (CARN-AP)

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Executive Summary

I. Purpose of the practice analysis.

A. The primary purpose of this practice analysis of addictions advanced practice nursing was to provide evidence to support the validity of the Certified Addictions Registered Nurse - Advanced Practice (CARN-AP) examination. The evidence collected helps to assure that the examination truly reflects current practice, is legally defensible, and is psychometrically sound. The findings of the practice analysis must be reported to the Accreditation Board for Specialty Nursing Certification (ABSNC) for the future reapplication process.

1. The CARN-AP Practice Analysis Task Force developed the 2017-2018 survey form by reviewing and revising the previous (2011-2012) survey form. The survey has three sections: (1) demographic information, (2) 53 activity statements to be rated for frequency and importance, and (3) 53 knowledge/skill/ability (KSA) statements, which were rated for importance, only.

2. The survey collected information from two subgroups of addictions nurses. Those prepared at the generalist level or at the master's degree level or higher, but not working in the advanced practice role completed the RN survey. Those prepared for advanced practice (master's degree or higher) and working in the advanced practice role completed the APN survey. This summary report provides information only for the participants who responded in the APN survey, since the CARN-AP examination is designed for this subgroup.

B. The web-based survey was administered between July and September 2018. Participants could use personal computers (PCs) or mobile devices, e.g., phones or tablets, to complete the survey. The majority (62%) of respondents used PCs or Macintosh computers, while smart phones were used by 31.4% of participants. Only 6.5% of survey participants used an iPad. Respondents were able to take a break and return to finish the survey at a later time by entering an email address and receiving an immediate email that linked to their saved survey responses. The geographic distribution of the sample for the survey is shown in Table 1 below.

Table 1
CARN-AP Survey Respondents (35 States plus Canada)
(*N*=108)

AL-2	FL-5	MD-1	NH-1	OK-1	VT-2
AR-2	GA-2	MA-22	NJ-4	PA-5	VA-2
AZ-1	HI-1	MI-1	NM-1	SC-1	WA-4
CA-3	IL-2	MN-1	NY-6	TN-1	WV-2
CO-3	IN-3	MO-1	NC-8	TX-3	WI-2
CT-2	KY-2	NV-1	OH-7	UT-1	*Canada*-2

II. Analysis of Demographic Data (*N*=108)

A. **Gender**. 88.9% female.

B. **Ethnicity**. 87% white, not of Hispanic origin.

C. **Age and Years of experience**. The age of respondents ranged from 30 to 74 with a mean of 56.1 years (*SD*=10.6). The number of years as an RN ranged from less than one to 53, with a mean of 29.1 years (*SD*=12.6). The number of years reported in addictions nursing ranged from less than one to 40, with a mean of 13.8 (*SD*=11.1). The number of years as an APRN ranged from less than one to 41, with a mean of 15.8 (*SD*=9.6). The number of years in the respondents' current position ranged from less than one to 35, with a mean of 9.3 (*SD*=7.7).

D. **Highest level of education attained**. The largest group (51 or 47.2%) of all 108 respondents held master's degrees in nursing, while 33 (30.6%) held a doctorate in nursing, 14 (13%) held a post-master's certificate, and 10 (9.3%) held a non-nursing doctorate. The majority of nursing doctorates were DNPs (23 or 69.7%), followed by PhDs (5 or 15.2%). The non-nursing doctorates were primarily PhD's and EdDs at 4 or 40% each.

E. **Types of APRN preparation**. Respondents were asked to select their type of APRN preparation and could select all that applied. The largest group (79 or 70.4%) of all 108 respondents were prepared in Psychiatric/Mental Health Nursing, while 20 (18.5%) respondents selected Family. Adult Primary Care was selected by 13 (12%) of the respondents. Adult/Gerontology - Primary Care was selected by 8 (7.4%) of respondents. Fewer than 3% of respondents selected any of the other types, e.g., Pediatric, Women's Health, etc.

D. **National certification, prescriptive authority, and hospital privileges**. Just under three quarters of the respondents (79 or 73.1%) of all 108 respondents were nationally certified as nurse practitioners, while just over one third of respondents (38 or 35.2%) were nationally certified as clinical nurse specialists. Interestingly, 19 (17.6%) of the respondents reported national certification as ***both*** NPs and CNSs. The breakdown of the group of respondents by certification is shown in the box below.

Type of National Certification	**n**	**(%)**
NP only	60	(55.6%)
CNS only	19	(17.6%)
Both NP and CNS	19	(17.6%)
Neither NP nor CNS	10	(9.3%)
Total	**108**	**(100%)**

The majority of the group (88 or 81.5%) reported having prescriptive authority in the states in which they practice. Only about one third of the group (36 or 33.3%), all of whom were NPs, reported having hospital privileges, with a greater number reporting consultation (28) and rounding/follow-up (27) than admitting (24) or discharge (18) privileges.

E. **Practice setting**. Respondents could select multiple practice settings (from a list of 11 settings) in which they practiced. Just under half of respondents (44.4%) reported practicing in an outpatient treatment center, while the next highest number (21.3%) reported "other" settings, all of which were individual answers that were typed in. Nineteen respondents (17.6%) reported practicing in acute care, such as the emergency department or inpatient acute care, while seventeen respondents (15.7%) reported practicing in a psychiatric facility. Fourteen (13%) respondents reported practicing in a residential treatment center and a similar number, thirteen (12%) selected community mental health as their practice setting. Ten respondents (9.3%) reported practicing in public health/community health settings and eight (7.4%) reported their practice setting as a college or university. Seven respondents (6.5%) reported practicing in a methadone clinic. Student health and a correctional facility were selected by one respondent each.

F. **Primary position/role**. The largest group, over half of the respondents (*n*=72 or 66.7%), reported their position as a nurse practitioner, followed by clinical nurse specialist (*n*=18 or 16.7%). Eight respondents (7.4%) reported working as faculty while only four (3.7%) reported working as a manager or administrator. Only one respondent reported a role in each of the other categories, e.g., staff nurse, educator, researcher, or owner of practice.

G. **Time spent performing addictions nursing activities**. Respondents spent the majority (58.7%) of their time in direct patient care (*SD*=30.8), followed by education (patient, staff, students) at 13.2% of their time, *(SD*=16.8%). Less time was spent in care coordination, (6.8% of time, *SD*=10.2), and consultation (6.1% of time, *SD*=11.1). About an equal amount of time was spent performing administration activities, such as management, supervision, and clerical (4.9% of time, *SD*=12.4%), and clinical supervision (peer review, precepting, mentoring) (4.2%, *SD*=6.0). Less than 3% of time was selected for the remaining activities, such as research, quality management, etc.

H. **Performing direct patient care**. The great majority of respondents (*n*=100 or 92.6%) reported that they provide direct patient care. Similar to the CARN survey respondents, the majority reported working with patients between the ages of 22 and 60 years old; 98% reported caring for patients aged 22-40 years old, while about 97% reported caring for patients 41-60 years old. About 13% cared for adolescents 12 to 21 years old, and 7% cared for children from birth to 11 years.

I. **Time spent with various patient problems**. ***This is a critical area of the survey, since "Patient Problems" is suggested as one area of the CARN-AP 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 in 2012. The 108 respondents reported spending a mean of 35.5% (*SD*=25.3) of their time caring for patients with opioid use disorder, followed by 24.7% (*SD*=16.4) of time spent with patients with alcohol use disorder. The group reported that 10.1% (*SD*=12.9) of time was spent with patients with tobacco use disorder, followed by 9.7% (*SD*=9.7) with patients with stimulant use disorders, e.g., cocaine, amphetamines, caffeine. Respondents spent about the same amount of time with patients with cannabis use disorder(8.4%; *SD*=10.0) and with patients with prescription medication disorders, such as sedatives, hypnotics, anxiolytics, gabapentin, etc. (8.2%; SD=7.3). Respondents reported spending less time with patients with process addictions,

such as eating, gambling, sex, and internet (3.0%; *SD*=9.3) and with other substance use, such as inhalants, designer drugs, hallucinogens, ketamine (1.5%; *SD*-3.1). The time spent with various patient problems is shown in Table 2 below.

Table 2
Mean Percent of Time with Various Patient Problems in Ranked Order
(*N*=108)

Patient Problem	Mean % of time	*SD*
Opioid use disorder	35.47%	25.32
Alcohol use disorder	24.66%	16.41
Tobacco use disorder	10.09%	12.93
Stimulant use disorders - e.g., cocaine, amphetamines, caffeine, etc.	6.69%	9.67
Cannabis use disorders	8.38%	9.98
Prescription medication disorders - e.g., sedatives, hypnotics, anxiolytics, gabapentin, etc.	8.20%	7.28
Process addictions - e.g., eating, gambling, sex, internet, etc.	3.02%	9.25
Other substance use - e.g., inhalants, designer drugs, hallucinogens, ketamine, etc.	1.48%	3.07

J. **Time spent with various patient problems**, **continued.** Respondents reported that about 60.85% of their patients have polysubstance use disorder. Unfortunately, "polysubstance use" was not defined in the survey, and has several different connotations. This term was not used in the decisions regarding the test specifications (blueprint).

However, respondents also reported that about 69.1% of their time was spent caring for patients who have co-occurring psychiatric and/or medical disorders, e.g., process addictions, infectious diseases, mental health disorders, etc. This term was used when making decisions about the test blueprint.

RECOMMENDATION 1. The current CARN-AP examination blueprint has only one axis, Nursing Process. Currently the weights assigned to each domain are:

1. Assessment - 26%
2. Diagnosis - 16%
3. Identifying outcomes - 9%
4. Planning of care - 13%
5. Implementation of care - 26%
6. Evaluation of care - 10%

The Score Report for candidates who were unsuccessful on the CARN-AP 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 recommends adding a second dimension to the blueprint, Patient Problem, for the distribution of test content in the CARN-AP test blueprint. The Task Force recommends distributing the test content for the patient problem areas as shown in Table 3.

Table 3
Proposed Distribution of Test Content by Patient Problems

Patient Problem	% of Test Content
A. Opioid use disorder	24%
B. Alcohol use disorder	24%
C. Stimulant use disorder	15%
D. Co-occurring psychiatric/comorbid medical conditions	13%
E. Other use disorders (e.g., prescription drugs, inhalants, hallucinogens, designer drugs, process addictions)	9%
F. Tobacco use disorder - e.g., vaping, nicotine	8%
G. Cannabis use disorder	7%

III. Analysis of Activity Statements.

A. The survey included a list of 53 advanced practice nursing activities. Participants were asked to indicate if they performed each activity. For each activity performed, they were asked to rate: (a) the frequency of performance on a 4-point scale, ranging from "monthly or less" to "several times a day," and (b) the importance of the activity in their current practice on a 4-point scale, ranging from "irrelevant" to "essential." Descriptions were provided for each level of importance.

C. An activity index was calculated by adding frequency plus (importance x 2). Importance was given twice the weight of frequency, since some activities (e.g., CPR) may be critically important, although performed infrequently. The highest possible index was 12, or 4 + (4 x 2). The activity indices ranged from a low of 6.92 for "Participate in grand rounds," to a high of 11.29 for "Prescribe medications-initiate, manage, adjust." The overall mean activity index was 9.18 (*SD*=1.90).

D. The Task Force with the assistance of C-NET redistributed the activities into five Domains of CARN-AP Practice areas and renamed the areas to better describe the activities as they pertain to the addictions nursing advanced practice role.

RECOMMENDATION 2. The Task Force recommends changing the current CARN-AP nursing process content outline to a new nursing activities grouping (Domains of CARN-AP Practice) with the following assigned weights:

1. Assess and diagnose processes and complications of substance-related and addictive disorders. - 30%

2. Prescribe/perform interventions, including treatments, therapies, and procedures consistent with comprehensive care needs of persons with substance-related and addictive disorders.- 30%

3. Educate patient, family, other health professionals and the public about substance-related and addictive conditions. - 25%

4. Consult for and with peers and other health care professionals regarding specific cases. - 10%

5. Participate in practice management and research activities to promote optimal outcomes, e.g., case management, coordination of care, quality improvement.- 5%

The distribution of the 53 survey activities by the Domains of CARN-AP Practice are shown in Tables 4-A, B, C, D, and E that follow. Note that the heading "D-N-P" indicates "Do Not Perform."

Table 4
Activities by Domains of CARN-AP Practice

A. Assess and diagnose processes and complications of substance-related and addictive disorders.						
Survey #	**Rank**	**Activity**	***n***	**D-N-P**	***M* Index**	***SD***
14	1	Derive and prioritize diagnoses from the assessment data.	90	18	10.56	1.66
1	2	Perform a comprehensive psychiatric examination (biopsychosocial assessment), including strengths, needs, abilities, and preferences.	76	32	10.42	1.64
4	3	Perform a differential diagnosis.	89	19	10.33	1.86
11	4	Evaluate patient for complications of medications administered for substance-related and addictive disorders	94	14	10.20	1.84
7	5	Identify risk and protective factors	99	9	10.17	1.80
2	6	Perform a focused substance-related and addictive disorders assessment.	90	18	10.11	1.89
16	7	Assess and integrate patient's readiness for change in treatment planning.	90	18	10.08	1.94
9	8	Evaluate patient for complications of substance-related addictive disorders.	95	13	10.02	1.80
10	9	Evaluate patient for appropriate level of care.	94	14	10.00	1.99
13	10	Use theory, research, and best practices to inform assessment.	102	6	10.00	2.11
3	11	Initiate and interpret laboratory tests and other diagnostic studies	92	16	9.88	1.87
8	12	Initiates and interprets diagnostic tests and procedures relevant to the patients current status.	83	25	9.46	2.13
12	13	Assesses the effect of interactions among individuals, family, community, and social systems on health and illness.	93	15	9.25	2.01
15	14	Differentiates outcomes that require individual interventions from those that require system-level interventions.	85	23	9.24	1.91
6	15	Administer screening tools/assessment scales.	92	16	9.10	2.19
17	16	Complete a spiritual assessment (purpose, meaning, hope, connectedness).	72	36	8.64	2.06
~~5~~	~~17~~	~~Utilize results of imaging studies.~~	~~50~~	~~58~~	~~7.40~~	~~1.94~~

16 Activities ***M* Index = 9.84** ***SD* = 1.92**

B. Prescribe/perform interventions, including treatments, therapies, and procedures consistent with comprehensive care needs of persons with substance-related and addictive disorders.						
Survey #	**Rank**	**Activity**	***n***	**D-N-P**	**M Index**	***SD***
18	1	Prescribe medications--initiate, manage, adjust.	84	24	11.29	1.15
25	2	Use therapeutic communication skills to improve patient outcomes.	103	5	10.83	1.42
19	3	Deprescribe medications - stop medication or reduce dose.	85	23	10.55	1.77
23	4	Collaborate with patient to develop an individualized plan of care.	93	15	10.46	1.89
21	5	Perform follow-up activities as indicated for management of patient's condition.	89	19	10.17	1.80
26	6	Integrate gender, age, ethnicity, sexual orientation, and cultural diversity in treatment planning.	98	10	10.01	1.87
27	7	Use evidence-based treatment modalities in individual and group therapies.	73	35	9.97	2.00
33	8	Mitigate substance-related and addictive cravings.	84	24	9.93	1.85
20	9	Manage withdrawal syndromes.	73	35	9.92	1.77
29	10	Initiate buprenorphine/naloxone (Suboxone) therapy.	51	57	9.78	1.84
24	11	Collaborate with interdisciplinary team to develop an individualized plan of care.	89	19	9.47	2.06
31	12	Integrate recovery-oriented after-care planning.	64	44	9.42	2.02
22	13	Utilize established protocols to ensure standard safe care, e.g., the Clinical Opioid Withdrawal Scale (COWS).	74	34	9.32	2.15
28	14	Develop and implement programs/initiatives to address substance-related and addictive disorders, e.g., tobacco cessation.	64	44	9.06	2.01
32	15	Include family/support system throughout the continuum of care.	81	27	9.01	1.87
30	16	Utilize telehealth in practice, as indicated.*	27	81	7.89	2.21
~~34~~	~~17~~	~~Integrate complementary/alternative treatment modalities, e.g., massage, acupuncture, chiropractic, equine.~~	~~36~~	~~72~~	~~7.42~~	~~2.03~~
		16 Activities ***M*** **= 9.82** ***SD*** **= 1.85**				

***Kept telehealth - growing, very important in rural areas**

C. Educate patient, family, other health professionals and the public about substance-related and addictive conditions.

Survey #	Rank	Activity	*n*	D-N-P	M Index	*SD*
35	1	Teach patient and family the actions and side effects of prescribed and over-the-counter drugs.	94	14	10.38	1.84
36	2	Teach patient and family about pathophysiology, neurobiochemistry, and indicated interventions for substance-related and addictive disorders.	90	18	9.22	1.99
38	3	Teach patient and family about pathophysiology and indicated interventions for substance-related and addictive disorders.	86	22	9.17	2.08
37	4	Teach strategies for primary, secondary, and tertiary prevention of substance-related and addictive disorders.	69	39	8.88	2.10
40	5	Advocate for access to primary, secondary, and tertiary prevention programs for those who have substance-related and addictive disorders.	68	40	8.09	1.81
~~41~~	~~6~~	~~Disseminate translational research outcomes in local, regional, and global venues.~~	~~32~~	~~76~~	~~7.91~~	~~1.65~~
~~39~~	~~7~~	~~Lead communities in comprehensive initiatives to address substance-related and addictive disorders, e.g., policy development related to access to care, risk reduction, coalition building, and diversion programs (drug/mental health court, alternative to disciplinary action for healthcare professionals).~~	~~32~~	~~76~~	~~7.66~~	~~1.93~~
		5 Activities ***M*** **= 9.15** ***SD*** **= 1.96**				

D. Consult for and with peers and other health care professionals regarding specific cases.

Survey #	Rank	Activity	*n*	D-N-P	M Index	*SD*
42	1	Act as a resource for peers and other healthcare professionals.	99	9	8.93	1.97
43	2	Refer patient to other provider(s) for treatment as needed.	99	9	8.77	1.96
45	3	Refer to/collaborate with other providers for pain management of patients with substance-related and addictive disorders.	78	30	8.42	1.85
44	4	Serve as a consultant on issues related to patients with substance-related and addictive disorders.	79	29	8.19	2.14
		4 Activities ***M*** **= 8.58** ***SD*** **= 1.98**				

E. Participate in practice management and research activities to promote optimal outcomes, e.g., case management, coordination of care, quality improvement						
Survey #	**Rank**	**Activity**	***n***	**D-N-P**	**M Index**	***SD***
53	2	Use principles of evidence-based practice to address clinical challenges.	99	9	9.15	2.26
46	3	Perform case management activities to improve coordination of care.	40	68	8.55	2.26
47	8	Participate in quality improvement activities to improve patient outcomes.	62	46	7.90	2.02
~~51~~	4	~~Conduct research as a primary investigator.~~	~~19~~	~~89~~	~~7.53~~	~~2.06~~
50	6	~~Disseminate~~ **Share/educate others about** research findings concerning substance-related and addictive disorders.	63	45	7.33	1.41
49	1	Participate in ~~political aspects of healthcare policy formation~~ **aspects of healthcare policy formation, e.g., Narcan education, expansion of Suboxone waivers.**	39	69	7.26	1.97
~~52~~	~~7~~	~~Participate in research activities.~~	~~36~~	~~72~~	~~7.08~~	~~1.63~~
~~48~~	~~5~~	~~Participate in grand rounds.~~	~~25~~	~~83~~	~~6.92~~	~~2.02~~
		5 Activities ***M*** **= 8.04** ***SD*** **= 1.98**				

E. 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*=36) of respondents. Ten of the activities did ***not*** meet these criteria:

In **Domain A**: "Utilize results of imaging studies."

In **Domain B**:
"Utilize telehealth in practice, as indicated."
"Integrate complementary/alternative treatment modalities, e.g., massage, acupuncture, chiropractic, equine."

In **Domain C**:
"Disseminate translational research outcomes in local, regional venues."
"Lead communities in comprehensive initiatives to address substance-related and addictive disorders, e.g., policy development related to access to care, risk reduction, coalition building, and diversion programs (drug/mental health court, alternative to disciplinary action for healthcare professionals."

In **Domain E**:
"Conduct research as a primary investigator."
"Disseminate research findings concerning substance-related and addictive disorders."
"Participate in political aspects of healthcare policy formation."
"Participate in research activities."
"Participate in grand rounds."

RECOMMENDATION 3. The Task Force recommends that the activity statement, "Utililize results of imaging studies," be deleted from the list of activities in Domain A.

RECOMMENDATION 4. The Task Force recommends that in Domain B, the activity statement, "Utilize telehealth in practice, as indicated," be kept, since this is a growing area, and is especially important in rural areas. (Ask questions about basic telehealth concepts on test.) The Task Force further recommends that the statement, "Integrate complementary/alternative treatment modalities, e.g., massage, acupuncture, chiropractic, equine," be deleted from the list of activities.

RECOMMENDATION 5. The Task Force recommends that in Domain C, the two statements, "Disseminate translational research outcomes in local, regional, and global venues," and "Lead communities in comprehensive initiatives to address substance-related and addictive disorders, e.g., policy development related to access to care, risk reduction, coalition building, and diversion programs (drug/mental health court, alternative to disciplinary action for healthcare professionals," be deleted from the list of activities. Changes suggested in Recommendation 6 should cover these areas.

RECOMMENDATION 6. The Task Force recommends that in Domain E, the three activities, "Conduct research as a primary investigator," "Participate in research activities," and "Participate in grand rounds," be deleted from the list of activities. The Task Force further recommends that the statement, "Disseminate research findings concerning substance-related and addictive disorders," be changed to "Share/educate others about research findings concerning substance-related and

addictive disorders." Similarly, the Task Force recommends that the statement, "Participate in political aspects of healthcare policy formation," be changed to, "Participate in aspects of healthcare policy formation, e.g., Narcan education, expansion of Suboxone waivers."

IV. Analysis of Knowledge, Skill, Ability (KSA) Statements.

A. The survey included 53 KSA statements that represented the underlying knowledge, skills, and abilities needed to perform advanced practice addictions nursing activities competently. Participants were asked to rate the importance of each statement on a 4-point scale, ranging from "Irrelevant" to "Essential," with descriptions of each level of importance similar to those provided for the activity statement ratings. All 108 participants responded to each KSA statement.

B. The KSA statements are shown in Table 5 in order from highest mean rating to lowest mean rating. The highest possible index was 4.00, since the scale ranged from 1 to 4. The mean ratings of KSA statements ranged from a low of 1.96 (*SD*=0.87) for "Use of telehealth," to a high of 3.90 (*SD*=0.48) for "Communication skills," followed by "Knowledge of effects of addictive substances," with a mean rating of 3.22 (*SD*=0.72).

C. The Task Force used the threshold rating of 2.5 for determining if content related to a KSA statement should be considered for inclusion in the CARN-AP examination. Only one statement fell below that threshold, "Use of telemedicine," with a rating of 1.96 (*SD*=0.87). The Task Force recommends including this statement for the same reason it recommended including the corresponding activity on the blueprint.

   It is interesting to note that the knowledge statement, "Complementary and alternative modalities used in treatment," had a rating of 2.70 (*SD*=0.84). Therefore, it can be included as a knowledge area in the test blueprint. (Ask basic concepts on test.)

RECOMMENDATION 7: The Task Force recommends that the statement "Use of telemedicine be included in the CARN-AP test blueprint since it is a growing area of practice and is especially important in rural areas.

Table 5
Mean Importance Ratings of the Knowledge, Skill, & Ability (KSA) Statements
(*N*=108)

Survey #	Rank	KSA Statement	*N*	Mean	*SD*
1	1	Communication skills	108	3.90	0.36
3	2	Knowledge of effects of addictive substances	108	3.81	0.48
5	*3-tie*	Pharmacology/Drug therapy	108	3.80	0.47
7	*3-tie*	Clinical decision making	108	3.80	0.45
2	5	Knowledge of process of substance use disorder	108	3.75	0.58
53	6	Critical thinking skills	108	3.72	0.47
8	7	Interviewing skills	108	3.71	0.58
4	8	Principles of techniques used for substance use disorder management	108	3.65	0.62
12	9	Concepts of mental illness	108	3.64	0.63
11	10	Evidence-based practice	108	3.62	0.65
15	11	Legal and ethical principles	108	3.61	0.62
31	12	Legal scope of practice	108	3.55	0.70
41	13	Recognition of abusive behavior	108	3.54	0.69
44	14	Concept of relapsing	108	3.51	0.70
40	15	Coping skills	108	3.50	0.69
13	16	Documentation skills	108	3.49	0.65
6	*17-tie*	Laboratory and diagnostic study findings	108	3.44	0.63
39	*17-tie*	Separating normal from abnormal physical findings	108	3.44	0.74
22	19	Consultation within scope of practice	108	3.43	0.67
49	20	Effect of substance use and abuse on physical health	108	3.41	0.70
50	21	Educating staff not familiar with substance abuse problems	108	3.40	0.77
21	22	Age appropriate care	108	3.34	0.67
19	23	Cultural competence	108	3.33	0.67
25	*24-tie*	Interprofessional collaboration	108	3.31	0.73
38	*24-tie*	Mandatory reporting	108	3.31	0.83
9	*26-tie*	Community resources	108	3.22	0.71
		***M* =3.22 *SD* = 0.72**			
33	*26-tie*	Prioritization of care	108	3.22	0.80
52	*26-tie*	Methods to protect self and staff from burn-out	108	3.22	0.81
51	29	Recognition of signs of substance abuse in staff	108	3.21	0.88
36	30	Conflict resolution	108	3.19	0.84
18	31	Interrelationship between individual, family and society	108	3.14	0.79
20	32	Learning styles	108	3.12	0.72
10	33	Family dynamics	108	3.10	0.75
16	*34-tie*	Primary, secondary, and tertiary levels of care	108	3.07	0.82
30	*34-tie*	Teaching/learning principles	108	3.07	0.78
23	36	Change theory	108	3.06	0.85
17	*37-tie*	Spiritual awareness	108	3.05	0.85
26	*37-tie*	Growth and development concepts	108	3.05	0.85
45	39-tie	Quality improvement	108	2.94	0.81
46	39-tie	Mentoring skills	108	2.94	0.75
34	41	Referral skills	108	2.91	0.79

Survey #	Rank	KSA Statement	*N*	Mean	*SD*
42	42	Leadership styes	108	2.90	0.81
48	43	Effect of substance abuse disorders on present employment and on future opportunities for employment	108	2.89	0.87
35	44	Pain management skills	108	2.87	0.88
28	45	Evaluation of care methods and tools	108	2.86	0.85
14	46	Delegation skills	108	2.82	0.80
47	47	Effect of substance abuse on economic status	108	2.79	0.83
43	48	Community outreach	108	2.78	0.89
27	*49-tie*	Group therapy skills	108	2.70	0.97
29	*49-tie*	Complementary and alternative modalities used in treatment	108	2.70	0.83
24	51	Policy development	108	2.63	0.84
37	52	Research skills	108	2.48	0.85
32	53	Use of telemedicine	108	1.96	0.87

V. Proposed CARN-A Test Specifications (Blueprint).

The final proposed new CARN-AP Examination Blueprint is shown in Table 6 on the following page.

RECOMMENDATION 8. The Task Force recommends that the revised CARN-AP test specifications be adopted.

Table 7
Proposed Changes to CARN-AP Test Specifications (Blueprint)
Ideal Distribution of 150 Items

APRN Activity → / Patient Problem ↓	1 Assess & Diagnose 30%	2 Prescribe/ Intervene 30%	3 Education 25%	4 Consultation 10%	5 Practice Mgmt & Research 5%	Total 100%
A. Opioid use disorder	10-11	10-11	8-9	3-4	1-2	24% 35-37
B. Alcohol use disorder	10-11	10-11	8-9	3-4	1-2	24% 35-37
C. Stimulant use disorder	6-7	6-7	5-6	2-3	1-2	15% 22-24
D. Co-occurring psychiatric/comorbid medical conditions	5-6	5-6	4-5	2-3	0-1	13% 19-21
E. Other use disorders, e.g., prescription drugs, inhalants, hallucinogens, designer drugs, process addictions	3-4	3-4	2-3	2-3	0-1	9% 13-15
F. Tobacco use disorder	3-4	3-4	3-4	1-2	0-1	8% 11-13
G. Cannabis use disorder	3-4	3-4	2-3	1-2	0-1	7% 10-12
Total	**44-46**	**44-46**	**37-38**	**14-15**	**7-8**	**150**