



**Results of the Job Analysis Study**

**Sexual Assault Nurse Examiner-Adult/Adolescent (SANE-A) Examination**

**November 2017**

Results of the Job Analysis Study for the  
International Association of Forensic Nurses (IAFN)  
Sexual Assault Nurse Examiner-Adult/Adolescent (SANE-A) Examination

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## EXECUTIVE SUMMARY

The International Association of Forensic Nurses (IAFN) is a not-for-profit certifying body for individuals who practice in the field of nursing where the healthcare system and the legal system intersect. The aim of IAFN's Sexual Assault Nurse Examiner-Adult/Adolescent (SANE-A) certification program is to assess an individual's knowledge of the practice of forensic nursing that specializes in sexual assault care of the adolescent and adult population.

In 2017, IAFN conducted an analysis of the practice of forensic nursing to help ensure that the content tested on the SANE-A certification exam reflects current practice. IAFN worked with Castle Worldwide, Inc., a certification and licensure design, development, and administrative service company, to ensure that certificate examinations meet guidelines and standards for examination development (e.g., *Standards for Educational and Psychological Testing*, American Educational Research Association, 2014; *Uniform Guidelines on Employee Selection Procedures*, EEOC, 1978). A summary of the 2017 job analysis is provided below.

### ***Job Analysis Study Methodology***

The job analysis for the certification examination consisted of three phases:

#### *I. Initial Development*

- A seven-member panel of subject matter experts reviewed the performance domains and tasks essential for competent and safe practice in Morrisville, NC on May 1-2, 2017. After discussing the changes in practice since the previous job analysis and reviewing the eligibility requirements for the certification, the panel identified 46 core tasks that were deemed to be an essential part of entry level practice as a SANE-A. These tasks were organized into five broad domains of practice.

#### *II. Validation Survey*

- A sample of professionals reviewed and validated the work of the panel through an online survey
- Respondents were SANE-A certificants
- A total of 1,098 requests for participation were sent
- 266 respondents completed at least 70% of the survey, a response rate of 24%.
- At the time of taking the survey, all of respondents were U.S.-based

#### *III. Development of Test Blueprint*

- Based on the ratings gathered from the full validation study, the test blueprint specifications for the certification examination were developed.
- A relative importance weight was calculated for each task by multiplying each respondent's rating of criticality by their rating of frequency (relative importance=criticality\*frequency).
- A combination of combination of "top-down", "bottom-up", and "SME panel" approaches were used to establish the domain weights for the exam blueprint. Once the domain weights were established, the top-down was used to distribute the task weights accordingly. The top-down

approach assigns task weights based on the domains deemed the most important by the survey respondents.

- The IAFN board reviewed and accepted panel recommendations in October 2017

### ***Summary of the Content Outline Development Process***

Based on the results of the three phases, the SANE-A job analysis study provided a test specification breakdown, also known as the test blueprint. The test blueprint, found in Table 1, below, identifies the percentages assigned to each domain tested by the examination.

**Table 1. Test Blueprint and Specification, IAFN SANE-A Validation Survey 2017**

<b>ID</b>	<b>Description</b>	<b>Percent of Exam</b>
1	Assessment and Documentation	32%
2	Evidence Collection	18%
3	Patient Management	28%
4	Legal Issues and the Judicial Process	10%
5	Professional Practice	12%

## INTRODUCTION

Established in 1992 as an independent not-for-profit organization, the International Association of Forensic Nurses (IAFN) was created as an organization that encompasses the depth and breadth of those who practice nursing where the healthcare system and the legal system intersect. IAFN certified nurses practice in roles as death investigators, correctional nurse specialists, forensic psychiatric nurses, legal nurse consultants, forensic geriatric specialists, nurse attorneys, forensic clinical nurse specialists, forensic gynecology nurses, and those who work in other settings as forensic practice evolves. IAFN serves the public interest by developing, administering, and continually reviewing a certification process that reflects current standards of competent practice in forensic nursing. The aim of IAFN's Sexual Assault Nurse Examiner-Adult/Adolescent (SANE-A) certification program is to assess an individual's knowledge of the practice of forensic nursing that specializes in sexual assault care of the adolescent and adult population.

In 2017, IAFN began the process of reviewing and updating the test blueprint for the SANE-A examination. IAFN worked with Castle Worldwide, Inc., a certification and licensure design, development, and administrative service company, to ensure that the certification examination meets guidelines and standards for examination development (e.g., *Standards for Educational and Psychological Testing*, American Educational Research Association, 2014; *Uniform Guidelines on Employee Selection Procedures*, EEOC, 1978). This report details the 2017 job analysis, which is an update to the 2011 job analysis and was held in Morrisville, NC on May 1-2, 2017.

A practice, or job, analysis study aims to ensure that an examination is content valid. Content validity is the most commonly applied and accepted validation strategy used in establishing certification programs. Validation is the way a developer documents that the competence to be inferred from a test score is actually measured by the examination.

A valid examination appropriately evaluates the knowledge and/or skills required for an individual to function as a competent practitioner in the field. A job analysis study is an integral part of ensuring that the aspects of the profession or professional role covered on the examination reflect the tasks performed in practice settings. For both broad content areas and tasks, a job analysis identifies criticality and frequency. These ratings play an important part in determining the content of the examination.

To qualify for admission to the SANE-A examination, an applicant must comply with all regulations that are in effect at the time the application is filed. To be eligible to sit for the SANE-A certification examination, each candidate must:

1. Hold an active, unrestricted license as a registered nurse (RN) in the United States or a US territory  
**OR**  
Hold an active, unrestricted license as a first-level general nurse (or the equivalent) in the country/jurisdiction of practice;  
**AND**
2. Have practiced nursing for a minimum of two (2) years as an RN  
**OR**  
Have practiced nursing for a minimum of two (2) years as a first-level general nurse (or the equivalent) in the country/jurisdiction of licensure;  
**AND**

3. Have successfully completed an adult/adolescent sexual assault nurse examiner education program that grants a minimum of forty (40) hours of continuing nursing education contact hours from an accredited provider

**OR**

Have successfully completed an adult/adolescent sexual assault nurse examiner education program that comprises a minimum of forty (40) hours of academic coursework or the national equivalent from an accredited educational institution

**OR**

Have successfully completed a combined adult/adolescent and pediatric sexual assault nurse examiner education program that grants a minimum of sixty-four (64) hours of continuing nursing education contact hours from an accredited provider

**OR**

Have successfully completed an adult/adolescent sexual assault nurse examiner education program that comprises a minimum of sixty-four (64) hours of academic coursework or the national equivalent from an accredited educational institution;

**AND**

4. Have successfully completed a sexual assault nurse examiner clinical preceptorship as outlined in the most current edition of the IAFN Sexual Assault Nurse Examiner Education Guidelines;

**AND**

5. Have practiced as a sexual assault nurse examiner and/or have provided clinical instruction for sexual assault nurse examiners for a minimum of 300 hours within the past three (3) years. At least 200 of those 300 hours must comprise SANE-related practice that is focused on the adult patient population.

The 2017 job analysis study for the IAFN SANE-A consisted of three phases:

- I. *Initial Development.* This phase consisted of a panel of subject matter experts who identified the domains and tasks essential to the competent performance of a sexual assault nurse that specializes in the care of the adolescent and adult population.
- II. *Validation Study.* Certificants of SANE-A reviewed and validated the work of the panel.
- III. *Development of Content Outline.* Based on the ratings gathered from the SANE-A certificants the content outline for the certification examination were developed.

Each of these three phases will be described in detail in subsequent sections.

## PHASE I: INITIAL DEVELOPMENT

The first steps in reviewing the role of the SANE-A were the review and modification of the existing test blueprint domains and tasks. To achieve these goals, IAFN contracted with Castle Worldwide to conduct a job analysis study.

In 2017, IAFN assembled a seven-member panel of subject matter experts in the sexual assault nursing field to discuss the role of the SANE-A. Panel members were selected by IAFN to represent a broad range of sexual assault nursing experiences and were also selected in order to reflect a mix of members who supervised, educated, or were recently certified. All panelists were current SANE-A and SANE-P certificants. Appendix A contains the content of the workbook, including the agenda, used for the meeting. A complete listing of the panel members is contained in Appendix B. Appendix C contains a summary of the panel's demographic characteristics.

### ***Changes to the Practice of Sexual Assault Nursing***

The meeting began with a discussion of changes to the field of sexual assault nursing that may have occurred since the 2011 job analysis. The goal of this conversation was to ensure that any changes to the field were captured by the panel in subsequent discussions about the role of the SANE-A and updates to the blueprint. Recent trends were discussed and were kept in mind throughout the meeting as job tasks of a forensic nurse and the knowledge and skills needed to perform those tasks were discussed.

### ***Defining the Target Audience***

The panel initially reviewed the criteria required for taking the SANE-A examination and clarified their understanding of the target audience for the examination. The panel members were reminded that the target audience is composed of individuals that hold an active, unrestricted license as a registered nurse (RN) or first-level general nurse, practiced as a registered nurse (RN) or first-level general nurse for a minimum of two years, have successfully completed an adult/adolescent sexual assault nurse examiner education program, have successfully completed a sexual assault nurse examiner clinical preceptorship, and have practiced as a sexual assault nurse examiner and/or have provided clinical instruction for sexual assault nurse examiners for a minimum of 300 hours within the past three years.

### ***Reviewing and Developing Tasks***

The panel members were then introduced to the idea of what constitutes a task (see Appendix A). Panel members were instructed that it is necessary to include tasks that are important for the safe and competent practice of recently certified SANE-As in an examination program. Panel members were also advised that the tasks for the SANE-A test blueprint should be:

- Critical – Failure to perform the task competently would result in negative consequences for patients, clients, or other stakeholders.
- Frequently performed – The task is performed regularly in entry-level practice. Exceptions can be made for tasks that are performed infrequently but are critical.
- Central – The task is a key part of the job or role and not a supporting task (e.g., marketing, administrative functions).

The panel initially reviewed the existing 43 tasks and modified them for clarity, accuracy, and conciseness. From this process a set of 46 tasks were identified as appropriate to the role of a newly certified SANE-A.

### ***Reviewing and Developing Domains***

These 46 tasks were then grouped into five broad performance domains. A domain was defined as a major area of responsibility or duty that makes up the role of a SANE-A. The five performance domains defined by the panel were:

1. Assessment and Documentation (14 Tasks)
2. Evidence Collection (5 Tasks)
3. Patient Management (15 Tasks)
4. Legal Issues and the Judicial Process (4 Tasks)
5. Professional Practice (8 Tasks)

## PHASE II: SANE-A VALIDATION SURVEY

### **Questionnaire Design and Distribution**

IAFN contracted with Castle Worldwide, Inc. to conduct a validation survey of the domains and tasks. The survey was conducted beginning August 9, 2017 and closed on August 31, 2017. Using the domains and tasks identified by a job analysis panel in conjunction with IAFN staff, Castle Worldwide, Inc. developed an online questionnaire to be completed by SANE-A certificants.

The survey consisted of two parts. The first part asked respondents to rate the tasks and domains in that order. The second part, or demographics section, consisted of a series of questions that asked respondents to provide information about their place of work and working conditions, for example, the type of facility in which they work.

IAFN staff provided Castle with the names and email addresses of the 1,098 recently certified SANE-As. These 1,098 potential respondents were sent an initial email requesting that they complete the survey and evaluate, validate, and provide feedback on the previously identified domains and tasks. Two follow-up emails were sent to those who had not responded or who had started but not completed the survey: one reminder was sent after two weeks and one was sent when only one day was remaining. (See Appendix D for email invitations.)

### **Response Rates**

A total of 266 respondents completed at least 70% of the survey. This represents an overall response rate of 24%. The majority of Castle's clients experience a 25% to 50% response rate on similar surveys, and within the wider community, a 5% to 15% response rate is typical (DeChamplain, Cuddy, & LaDuca, 2007). Of this group, 266 (100%) were U.S.-based.

### **Responses to Demographic Questions**

The SANE-A survey consisted of a number of demographic questions. The responses to these questions are noted below.

#### *Gender*

Respondents were provided three options (Male, Female, and Other). Table 2 provides a breakdown for number of respondents who identified themselves in each category.

**Table 2. Responses by Gender, IAFN SANE-A Validation Survey 2017**

<b>Gender</b>	<b>Percent</b>	<b>Count</b>
Male	1.1%	3
Female	98.9%	258
Other	0.0%	0
<b>Answered question</b>		<b>261</b>
<b>Skipped question</b>		<b>5</b>

### *Birth Year*

Respondents were provided six options to report the year of their birth (1912-1932, 1933-1945, 1946-1964, 1965-1976, 1977-1989, and 1990-present). Table 3 provides a breakdown for number of respondents who identified themselves in each category.

**Table 3. Responses by Age Group, IAFN SANE-A Validation Survey 2017**

<b>Birth Year</b>	<b>Percent</b>	<b>Count</b>
1912-1932	0.0%	0
1933-1945	0.4%	1
1946-1964	38.0%	100
1965-1976	35.0%	92
1977-1989	25.1%	66
1990-present	1.5%	4
<b><i>Answered question</i></b>		<b>263</b>
<b><i>Skipped question</i></b>		<b>3</b>

### *Location*

Respondents asked to report the state/province/territory in which they live. Table 4 provides a breakdown for number of respondents who identified their state of residence.

**Table 4. Responses by Location, IAFN SANE-A Validation Survey 2017**

<b>State/territory</b>	<b>Percent</b>	<b>Count</b>
Alabama	1.6%	4
Alaska	4.5%	11
American Samoa	0.0%	0
Arizona	1.2%	3
Arkansas	0.4%	1
California	3.3%	8
Colorado	4.5%	11
Connecticut	1.2%	3
Delaware	0.4%	1
District Of Columbia	0.4%	1
Florida	4.5%	11
Georgia	2.9%	7
Guam	0.0%	0
Hawaii	0.0%	0
Idaho	1.2%	3
Illinois	3.3%	8
Indiana	2.9%	7
Iowa	0.8%	2
Kansas	2.0%	5
Kentucky	0.8%	2
Louisiana	2.5%	6
Maine	1.2%	3

<b>State/territory</b>	<b>Percent</b>	<b>Count</b>
Maryland	0.8%	2
Massachusetts	0.4%	1
Michigan	4.5%	11
Minnesota	2.9%	7
Mississippi	0.0%	0
Missouri	1.6%	4
Montana	0.8%	2
Nebraska	0.8%	2
Nevada	0.8%	2
New Hampshire	0.4%	1
New Jersey	1.6%	4
New Mexico	1.2%	3
New York	4.1%	10
North Carolina	4.1%	10
North Dakota	0.0%	0
Northern Mariana Islands	0.0%	0
Ohio	2.9%	7
Oklahoma	2.0%	5
Oregon	1.2%	3
Pennsylvania	2.9%	7
Puerto Rico	0.0%	0
Rhode Island	0.0%	0
South Carolina	2.9%	7
South Dakota	1.2%	3
Tennessee	3.3%	8
Texas	7.4%	18
United States Minor Outlying Islands	0.0%	0
Utah	1.6%	4
Vermont	0.8%	2
Virgin Islands	0.0%	0
Virginia	4.1%	10
Washington	1.2%	3
West Virginia	0.0%	0
Wisconsin	4.5%	11
Wyoming	0.0%	0
<b><i>Answered question</i></b>		<b>244</b>
<b><i>Skipped question</i></b>		<b>22</b>

#### *Education at Entry*

Respondents were provided four options (Diploma in Nursing, Associate Degree in Nursing, Bachelor's in Nursing, and Other). Table 5 provides a breakdown for number of respondents who identified themselves in each category.

**Table 5. Responses by Education at Entry, IAFN SANE-A Validation Survey 2017**

<b>Entry-Level Education</b>	<b>Percent</b>	<b>Count</b>
Diploma in Nursing	13.2%	34
Associate Degree in Nursing	35.7%	92
Bachelor's in Nursing	45.3%	117
Other	5.8%	15
<b><i>Answered question</i></b>		<b>258</b>
<b><i>Skipped question</i></b>		<b>8</b>

*Highest Level of Education*

Respondents were provided six options (Diploma in Nursing, Associate Degree in Nursing, Bachelor's in Nursing, Master's on Nursing, Doctorate in Nursing, and Other). Table 6 provides a breakdown of the number of respondents who identified themselves in each category.

**Table 6. Responses by Highest Level of Education, IAFN SANE-A Validation Survey 2017**

<b>Highest Degree</b>	<b>Percent</b>	<b>Count</b>
Diploma in Nursing	8.0%	21
Associate Degree in Nursing	15.6%	41
Bachelor's in Nursing	39.2%	103
Master's in Nursing	24.7%	65
Doctorate in Nursing (e.g., PhD, DNSc, DNP)	7.6%	20
Other	4.9%	13
<b><i>Answered question</i></b>		<b>263</b>
<b><i>Skipped question</i></b>		<b>3</b>

*Experience*

Respondents were provided eight options (Less than 1 year, 1 year, 2 years, 3 years, 4 years, 5 years, 6-10 years, 11 or more years). Table 7 provides a breakdown of the number of respondents who identified themselves in each category.

**Table 7. Responses by Experience, IAFN SANE-A Validation Survey 2017**

<b>Years of Experience</b>	<b>Percent</b>	<b>Count</b>
Less than 1 year	0.0%	0
1 year	0.0%	0
2 years	2.7%	7
3 years	3.8%	10
4 years	6.1%	16
5 years	9.9%	26
6-10 years	28.5%	75
11 or more years	49.0%	129
<b><i>Answered question</i></b>		<b>263</b>
<b><i>Skipped question</i></b>		<b>3</b>

### *Employment Status*

Respondents were asked to select their employment status from a list of seven options (Working full-time, Working part-time, Full-time student, Part-time student, Unemployed, Retired, Other) and were able to select more than one option, if applicable. Several respondents selected two categories, resulting in the total number of responses exceeding the number of individuals who answered the question. Table 8 provides a breakdown of the number of responses received in each category.

**Table 8. Responses by Employment Status, IAFN SANE-A Validation Survey 2017**

<b>Description</b>	<b>Percent</b>	<b>Count</b>
Working full-time (35 hours or more per week)	61.6%	186
Working part-time (less than 35 hours per week)	22.5%	68
Full-time student	4.3%	13
Part-time student	3.6%	11
Unemployed	0.3%	1
Retired	1.7%	5
Other (please specify)	6.0%	18
<b>Total responses</b>		<b>302</b>
<b>Answered question</b>		<b>263</b>
<b>Skipped question</b>		<b>3</b>

### *Practice setting*

Respondents were asked to select the best description of their practice setting from a list of seven options. Table 9 provides a breakdown of the number of respondents who identified themselves in each category.

**Table 9. Responses by Practice Setting, IAFN SANE-A Validation Survey 2017**

<b>Primary Practice Setting</b>	<b>Percent</b>	<b>Count</b>
Hospital-Based	65.3%	171
Community-Based, medical	14.1%	37
Community-Based, non-medical	4.2%	11
Governmental organizations and programs, medical or non-medical	4.6%	12
Educational or industrial settings	1.9%	5
Legal or investigative arenas	1.1%	3
Long-term care, skilled nursing, and rehabilitation settings	0.0%	0
Residential and correctional institutions	0.0%	0
Not currently employed	0.8%	2
Other	8.0%	21
<b>Answered question</b>		<b>262</b>
<b>Skipped question</b>		<b>4</b>

### *Ethnicity*

Respondents were provided eight options to report the year of their ethnicity (American Indian or Alaska Native Asian, Black or African American, Hispanic/Latino of any race, Multi-racial, Native

Hawaiian or Other Pacific Islander, White, Prefer not to answer). Table 10 provides a breakdown of the number of respondents who identified themselves in each category.

**Table 10. Responses by Ethnicity, IAFN SANE-A Validation Survey 2017**

<b>Ethnicity</b>	<b>Percent</b>	<b>Count</b>
American Indian or Alaska Native	1.1%	3
Asian	0.0%	0
Black or African American	1.5%	4
Hispanic/Latino of any race	3.0%	8
Multi-racial	2.3%	6
Native Hawaiian or Other Pacific Islander	0.4%	1
White	87.1%	229
Prefer not to answer	4.6%	12
<b>Answered question</b>		<b>263</b>
<b>Skipped question</b>		<b>3</b>

### ***Evaluation of Domains and Tasks***

The IAFN SANE-A Job Analysis survey respondents were asked to evaluate each performance domain and task, rating each on criticality, frequency, and need at entry. Respondents were asked to rate criticality, frequency, and need at entry based on following scales:

**Criticality:** To what extent would harm (physical, emotional, financial, etc.) result if a SANE-A could not perform this task successfully?

- 1 = No harm
- 2 = Minimal harm
- 3 = Moderate harm
- 4 = Substantial harm
- 5 = Extreme harm

**Frequency:** How frequently would a newly certified SANE-A be expected to perform this task?

- 1 = Never
- 2 = Occasionally
- 3 = Frequently
- 4 = Always

**Need at Entry:** Is the SANE-A expected to be able to perform this task immediately at the point of certification?

- 1 = Yes, they should be able to perform this task within the first few months after being certified.
- 2 = No, this is a task that is generally performed several months or more after the point of certification.

For criticality, frequency, and need at entry respondent ratings were scored, which enabled the development of an appropriate metric for weighting the domains and tasks. For each respondent, a

fourth variable, relative importance, was calculated by multiplying each respondent's criticality by their rating of frequency (relative importance = criticality\*frequency). The relative importance provides an assessment of the relative weight of the domains and tasks used to establish the test blueprint. Thus, tasks rated low in both criticality and frequency will be given a low relative importance weight and tasks rated high in both criticality and frequency will be given a high relative importance weight.

### ***Responses to the Task Statements***

Table 11 provides the mean and standard deviation of frequency, criticality, and relative importance for each of the 46 tasks identified by the job analysis panel.

**Table 11. Task Ratings, IAFN SANE-A Validation Survey 2017**

Domain	Task	Criticality			Frequency			Relative Importance (C x F)		
		N	Mean	SD	N	Mean	SD	N	Mean	SD
1	1	265	4.71	0.55	265	3.78	0.53	265	17.91	3.45
1	2	264	4.11	0.86	266	3.83	0.44	264	15.88	4.14
1	3	266	3.89	0.84	266	3.66	0.55	266	14.41	4.15
1	4	265	3.48	0.91	265	3.85	0.39	265	13.44	3.99
1	5	264	3.69	0.89	265	3.89	0.31	264	14.42	3.83
1	6	266	3.58	0.89	264	3.70	0.50	264	13.40	4.11
1	7	266	3.27	0.89	265	3.67	0.59	265	12.17	4.14
1	8	264	4.05	0.76	265	3.86	0.38	264	15.73	3.64
1	9	265	4.13	0.78	266	3.87	0.36	265	16.07	3.58
1	10	266	3.22	0.93	266	3.71	0.58	266	12.11	4.23
1	11	266	3.80	0.85	266	3.89	0.32	266	14.86	3.69
1	12	266	3.64	0.85	265	3.63	0.56	265	13.37	4.15
1	13	266	3.71	0.96	266	3.63	0.53	266	13.66	4.51
1	14	266	2.84	1.11	266	3.42	0.69	266	10.02	4.89
2	1	265	3.63	0.95	265	3.83	0.37	265	13.98	4.13
2	2	264	3.64	0.97	265	3.81	0.40	264	13.91	4.21
2	3	264	3.02	1.19	265	3.82	0.42	264	11.63	4.97
2	4	265	3.95	0.96	265	3.85	0.36	265	15.28	4.20
2	5	265	3.22	1.07	265	3.71	0.52	265	12.11	4.64
3	1	265	3.90	0.87	265	3.35	0.86	265	13.34	5.14
3	2	264	3.92	0.83	264	3.51	0.70	264	13.99	4.58
3	3	264	3.95	0.86	264	3.81	0.49	263	15.20	4.10
3	4	266	3.85	0.86	266	3.82	0.44	266	14.81	3.99
3	5	263	3.46	0.89	264	3.39	0.79	263	11.96	4.69
3	6	264	3.74	0.88	265	3.78	0.46	264	14.27	3.96
3	7	266	3.80	0.86	265	3.80	0.41	265	14.54	3.86
3	8	266	4.02	0.83	266	3.67	0.57	266	14.92	4.28
3	9	265	4.02	0.82	265	3.76	0.44	264	15.21	3.87
3	10	265	4.00	0.89	265	3.69	0.49	264	14.94	4.25
3	11	264	3.65	0.96	264	3.74	0.50	264	13.76	4.35
3	12	266	4.03	0.90	266	3.51	0.76	266	14.36	4.94
3	13	264	3.72	0.87	265	3.76	0.50	264	14.10	4.08
3	14	263	4.11	0.82	262	3.75	0.52	262	15.51	4.05
3	15	265	3.20	0.99	264	3.02	0.95	264	10.18	5.29
4	1	265	4.38	0.80	265	3.65	0.70	264	16.14	4.57
4	2	264	3.58	1.15	264	3.17	0.92	264	11.71	5.65
4	3	264	3.48	1.09	263	2.89	0.94	263	10.44	5.33
4	4	266	3.73	1.06	266	3.10	0.92	266	11.92	5.61
5	1	263	3.98	0.93	262	3.70	0.63	260	14.96	4.77
5	2	264	4.30	0.80	262	3.90	0.44	262	16.82	3.79
5	3	265	4.09	0.87	265	3.92	0.34	265	16.07	3.84
5	4	265	3.42	0.94	264	3.47	0.71	264	12.18	4.76
5	5	265	2.86	1.10	265	3.15	0.80	265	9.35	4.99
5	6	265	2.94	1.06	265	3.17	0.80	265	9.71	4.97
5	7	265	3.59	0.94	265	3.29	0.77	265	12.16	4.95
5	8	262	3.70	1.02	265	3.67	0.62	262	13.90	4.92

### ***Responses to the Domains***

After rating the tasks respondents were asked to rate the percentage of the exam that should be devoted to each domain. Table 12 shows the average ratings for the domains.

**Table 12. Domain Ratings, IAFN SANE-A Validation Survey 2017**

<b>Domain</b>	<b>N</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Min</b>	<b>Max</b>
1	265	29.03	8.78	15	75
2	265	22.50	7.17	5	50
3	265	21.79	7.50	5	50
4	265	12.91	4.85	0	30
5	265	13.77	5.65	5	30

### PHASE III: TEST BLUEPRINT FOR THE SANE-A EXAMINATION

Test blueprints are designed by assessing the weight respondents give to the domains and tasks. As noted earlier, task weight was calculated by multiplying each respondent's criticality rating by their rating of frequency (relative importance=criticality\*frequency).

The IAFN opted for a combination of the top-down, bottom-up, and SME panel approaches to establish the domain weights for the SANE-A examination. Table 13 provides a breakdown of the domain percentages using the top-down, bottom-up, SME panel as well as the combination method which was used to establish the final percentage of the SANE-A exam devoted to each domain.

**Table 13. SANE-A Domain Weights Using Different Approaches**

Domain	Top-Down %	Bottom-Up %	SME Panel %	Final %
1	29.0	31.3	34.6	32.0
2	22.5	10.6	16.3	18.0
3	21.8	33.5	29.4	28.0
4	12.9	8.0	9.1	10.0
5	13.8	16.7	10.6	12.0

Once the domain percentages were finalized, the top-down approach was used to establish the number of items for each task in each of the blueprints. The top-down approach assigns task weights based on the domains deemed the most important by the survey respondents.

## TEST BLUEPRINT

The test blueprint identifies the percentage of the examination at both the domain and task level in accordance with accepted standards. The blueprint also contains the descriptions of the domains and tasks. The use of percentages allows for the total number of scored items for an examination to alter over the life of the test blueprint.

The final test blueprint was submitted to and approved by the IAFN Commission for Forensic Nursing Certification in October 2017. Forms of the SANE-A examination will be constructed to the domain level; however, recommended task-level item counts and percentages are also provided in Table 14 for use in exam assembly as the item bank permits.

**Table 14. IAFN SANE-A Test Blueprint 2017**

<b>Class</b>	<b>Description</b>	<b>Percentage of Items</b>	<b>Number of Items</b>
<b>0100</b>	<b>Domain 1: Assessment and Documentation</b>	<b>32.0%</b>	<b>48</b>
0101	Identify urgent/emergent medical problems (e.g., strangulation, head injury, wounds, drug/alcohol intoxication) that require medical treatment prior to and/or during the medical forensic examination.	2.9%	4
0102	Assess safety needs of the patient (e.g., bed rails, medical equipment, environment, patient identity) and implement safety measures during the SANE evaluation.	2.5%	4
0103	Identify the acute and long-term emotional and psychological response (e.g., neurobiological, suicidal ideation, post-traumatic stress disorder) to sexual assault.	2.4%	4
0104	Obtain and document the health history (e.g., medical, psychosocial, developmental).	2.1%	3
0105	Obtain and document the sexual assault history.	2.3%	3
0106	Assess the patient for indicators of alcohol- and/or drug-facilitated sexual assault.	2.2%	3
0107	Assess the patient's level of development (e.g., physical, psychological, cognitive).	2.0%	3
0108	Assess the patient for sexually transmitted infections and/or exposure risk.	2.5%	4
0109	Assess the patient for pregnancy and/or pregnancy risk.	2.5%	4
0110	Assess the patient's immunization status (e.g., tetanus, hepatitis B, HPV).	2.0%	3
0111	Conduct a comprehensive head-to-toe physical assessment and document findings (e.g., narrative, diagrammatic).	2.3%	4
0112	Assess orifices involved in the sexual assault for trauma by using appropriate methods or adjuncts (e.g., speculum, anoscope, magnification, toluidine blue dye, catheter technique).	2.2%	3
0113	Distinguish trauma from normal and abnormal physical findings.	2.3%	3
0114	Complete photographic documentation by using principles of forensic photography.	1.7%	3

<b>Class</b>	<b>Description</b>	<b>Percentage of Items</b>	<b>Number of Items</b>
<b>0200</b>	<b>Domain 2: Evidence Collection</b>	<b>18.0%</b>	<b>27</b>
0201	Identify items for evidence collection based on the circumstances or events (e.g., time frame, orifices involved, body contact).	3.7%	6
0202	Collect biological and trace specimens from involved orifices and other body areas of contact by using appropriate methods or adjuncts (e.g., alternate light sources, toxicology kits, sexual assault evidence kits).	3.7%	6
0203	Collect reference samples (e.g., blood, buccal swab) for the patient's DNA.	3.1%	4
0204	Preserve forensic sample integrity (e.g., knowledge of biological degradation, chain of custody).	4.1%	6
0205	Document clothing and biological and trace specimens collected.	3.3%	5
<b>0300</b>	<b>Domain 3: Patient Management</b>	<b>28.0%</b>	<b>42</b>
0301	Utilize appropriate communication resources (e.g., interpreters, technology, translation services) based on the patient's needs.	1.9%	3
0302	Provide crisis intervention to the patient and family members/caregivers.	1.9%	3
0303	Provide the patient with developmentally appropriate control and consent.	1.9%	3
0304	Conduct the medical forensic examination by using trauma-informed care principles.	1.9%	3
0305	Modify and document examination techniques (e.g., positioning) based on the patient's specific needs (e.g., variations in anatomy, physical/cognitive impairments).	1.7%	2
0306	Educate the patient about transmission of sexually transmitted infections.	1.8%	3
0307	Educate the patient about testing, prophylaxis, and treatment for sexually transmitted infections.	1.9%	3
0308	Administer testing, prophylaxis, and treatment for sexually transmitted infections as indicated.	2.0%	3
0309	Educate the patient on pregnancy risks and emergency contraception.	2.0%	3
0310	Administer pregnancy testing and emergency contraception as indicated.	2.0%	3
0311	Educate the patient about actions and side effects of prophylactic medications.	1.8%	3
0312	Consult with or refer to other healthcare providers regarding medical problems identified.	2.0%	3
0313	Refer the patient for follow-up counseling, support, and/or advocacy services.	1.8%	2
0314	Create discharge and safety plans.	2.0%	3

<b>Class</b>	<b>Description</b>	<b>Percentage of Items</b>	<b>Number of Items</b>
0315	Conduct follow-up based on medical forensic needs (e.g., wound healing, photography, lab results).	1.6%	2
<b>0400</b>	<b>Domain 4: Legal Issues and the Judicial Process</b>	<b>10.0%</b>	<b>15</b>
0401	Adhere to applicable mandatory reporting requirements as appropriate (e.g., vulnerable persons, injuries, reportable infections, minors).	2.9%	4
0402	Respond to subpoenas and court orders for judicial proceedings (e.g., civil, criminal, administrative).	2.4%	4
0403	Testify as a fact or expert witness for the prosecution or defense.	2.3%	3
0404	Provide ethical and professional testimony (e.g., objective, evidence-based, accurate).	2.5%	4
<b>0500</b>	<b>Domain 5: Professional Practice</b>	<b>12.0%</b>	<b>18</b>
0501	Implement safety measures (e.g., physical, environmental, equipment) for the safety of the SANE during and after the medical forensic examination.	1.7%	2
0502	Implement principles of confidentiality (e.g., privacy laws, release of information, restricted vs. nonrestricted reporting).	1.8%	3
0503	Implement principles of informed consent and informed refusal.	1.7%	3
0504	Evaluate and utilize current evidence-based practice (e.g., research, professional development, guidelines).	1.4%	2
0505	Participate in peer review, case review, and quality improvement processes.	1.2%	2
0506	Implement strategies to collaborate with interprofessional team members.	1.2%	2
0507	Identify risks, prevention, and interventions for vicarious trauma.	1.5%	2
0508	Incorporate ethical principles in professional practice (i.e., autonomy, beneficence, nonmaleficence, justice).	1.5%	2
	<b>Total:</b>	<b>100.0%</b>	<b>150</b>

## REFERENCES

- American Educational Research Association, American Psychological Association, National Council on Measurement in Education (2014). *Standards for Educational and Psychological Testing*. Washington, D.C.: AERA.
- Cronbach, L. J. (1951). "Coefficient alpha and the internal structure of tests." *Psychometrika*, 16, p. 297–334.
- De Champlain, A.F., Cuddy, M.M., & LaDuca, T. (2007). "Examining Contextual Effects in a Job Analysis: An Application of Dual Scaling." *Educational Measurement: Issues and Practice*, 26(3), p. 3-11.
- Equal Employment Opportunity Commission (EEOC), U.S. Civil Service Commission, U.S. Department of Labor, and U.S. Department of Justice. (1978). "Uniform Guidelines on Employee Selection Procedures." *Federal Register*, 43 (166), p. 38290-38315.

## APPENDIX A: SANE-A JOB ANALYSIS PANEL WORKBOOK

## APPENDIX B: ATTENDEES OF THE SME PANEL MEETING

<b>Name</b>	<b>Leadership or Membership</b>	<b>Location</b>	<b>Credentials</b>	<b>Experience</b>	<b>Practice Setting</b>
Jessica Cannon	Membership	Indiana (MW)	MSN, RN, TNS, SANE-A, SANE-P	Less than 5 years	hospital
Marni Dodd	Leadership (current CFNC Chair)	Georgia (S)	DNP, FNP-BC, SANE-A, SANE-P	Experienced (> 10 years)	hospital/ community/ urban/rural
Tracy Fremming	Membership	Wisconsin (MW)	RN, SANE-A, SANE-P	Less than 5 years	hospital
Tara Henry	Leadership (former CFNC Chair)	Alaska (W)	MSN, FNP-C, SANE-A, SANE-P	Experienced (> 10 years)	hospital/rural/ consulting
Pamela Holtzinger	Membership	Maryland (S)	RN, MSN, CEN, FNE-A/P, SANE-A, SANE-P	Mid-level (5-10 years)	hospital/ community/rural
Stacey Mitchell	Membership	Texas (S)	DNP, MBA, RN, SANE-A, SANE-P	Experienced (> 10 years)	hospital/university
Ashley Smith	Membership	Canada (INTL)	BScPN, RPN, SANE-A, SANE-P (finishing Masters in December)	Mid-level (5-10 years)	hospital/ community/ urban

## APPENDIX C: PANEL MEMBER DEMOGRAPHICS

### 1. What is your age?

Age	Frequency
Under 20	0
20-29	0
30-39	3
40-49	3
50-59	2
Over 59	0

### 2. What is your gender?

Gender	Frequency
Male	0
Female	8

### 3. How many years have you worked in the industry?

Years	Frequency
Less than 1	0
1-2	0
2-5	0
6-10	2
11-15	2
Over 15	4

### 4. What is your current employment status? (Choose all that apply.)

Status	Frequency
Working full time	8
Working part time	1
Studying full time	1
Studying part time	1
Retired	0
Unemployed- looking for work	0

**5. Where do you primarily work? Please indicate city and state, province, or territory.**

**Location**

Anchorage, AK & Bethel, AK  
Rockville, MD  
Frederick County, MD  
Atlanta, GA  
Evansville, IN  
Winnipeg Manitoba Canada, School: Pittsburgh, PA (online Forensic Masters of Nursing)  
Weston, WI  
Houston, TX

**6. What other professional degrees, certificates, and/or designations do you currently hold?  
Please also indicate the year in which you earned each one.**

**Degrees, Certificates, and Designations**

MSN, FNP-C, SANE-A, SANE-P  
BSN, BSJ JD, RN  
MSN, BHA, CEN, FNEAIP, SANE-A, SANE-P  
Doctorate in Nursing Practice in Forensics, Family Nurse Practitioner, Registered Nurse SANE-A, SANE-P  
RN, MSN, SANE-A, SANE-P, TNS  
Bachelor of science of Psychiatric Nursing, SANE-A SANE-P, Masters of Forensic Nursing (in Progress,  
Graduating Dec 2017)  
ADN RN , SANE-A, SANE-P  
DNP, MBA, SANE-A, SANE-P

**7. How would you describe your current workplace setting (e.g., small business, large corporation, government agency, university, etc.)? If retired or unemployed, please indicate your previous workplace setting.**

**Workplace Setting**

Adult- hospital operated stand-alone clinic. Peds- CAC for interviews, hospital for exam  
Association  
Hospital based and Community (Child Advocacy Center)  
Hospital Clinic  
Hospital  
Hospital  
Hospital  
Academia

**8. What is your current job title? (Please write in the space provided.)**

**Job Title**

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Forensic Nurse Examiner and Nurse Practitioner

Certification Director

Program Coordinator Forensic Nurse Services

NP

Staff RN in ER, SANE coordinator

Coordinator, Sexual Assault Nurse Examiner Program

SANE Coordinator

Clinical Associate Professor

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## APPENDIX D: WORKSHOP FEEDBACK

Questions	Mean
I had a clear understanding of the purpose of the meeting.	5.00
The group discussions were productive.	5.00
The time provided for discussions and to complete the assigned tasks was adequate.	5.00
There was equal opportunity for everyone to contribute ideas and opinions.	4.88
I believe this meeting resulted in improvements to the test content outline.	5.00
I am satisfied with the draft test content outline we produced.	5.00
I am confident about the defensibility and appropriateness of the job analysis panel's work.	4.88

**Please describe one or two *specific* changes that would help improve these types of meetings:**

- The meeting was well run. The group work was appropriate. One change- maybe go over the process from job analysis to test delivery first or earlier to put this portion in better context.
- Give an overview on how the actual test questions come to be (the process).
- We probably didn't need quite as much time explaining instructions. Some redundancy.
- n/a
- Sarah needs to come back to the US
- Pre-meeting prep would help with expectations and outcomes.
- Found sending out pre-meeting work to be helpful in jump-starting the process.
- Approve Sarah's visa :)

**Please provide any additional comments:**

- n/a
- Excellent Castle staff! They were super helpful, despite not having SANE knowledge.
- n/a
- Sean & Sarah were great! Both extremely organized and wonderful speakers. Everyone at Castle are very polite and hospitable! I am impressed with how tech savvy everyone is!
- This was an excellent experience overall.
- Thank you for the opportunity to participate! This is fantastic and important work! I am honored to be a part of it.
- Castle staff was great-personable, efficient, kind. Food recommendations were excellent. Sean and Sarah were a great team!
- The online web cam worked very well. No technology problems observed.

## APPENDIX E: EMAIL REQUESTS SENT TO POTENTIAL SURVEY RESPONDENTS

### Initial Email

Dear [NAME]:

We need your help.

The continued success of the International Association of Forensic Nurses (IAFN) Sexual Assault Nurse Examiner - Adult/Adolescent® (SANE-A®) certification program depends on our ability to develop quality certification examinations. To ensure that our exam remains up-to-date and reflects current practice, we are conducting a study of the practice of sexual assault nurse examiners worldwide.

The first step in this process has already been completed: a representative panel of subject matter experts met to identify the essential job tasks performed by SANE-As. The next step is to invite current SANE-As to participate in an online survey that will be used to validate the work of the panel.

IAFN would sincerely appreciate your participation in this survey. It is of the utmost importance that SANE-As like you provide your input into this process, as having a large and representative sample will help ensure the validity of the SANE-A exam. **To thank you for sharing your valuable time and effort, your name will be entered into a drawing to win a \$100 Amazon.com gift card.** The winner of the Amazon.com gift card will be notified by the end of September.

This survey will take approximately 20-30 minutes to complete. It consists of an introductory section that outlines the purpose of the study and provides some background information and terminology that are relevant for the survey. This is then followed by three main tasks:

1. Rating each of the SANE-A job tasks using three different rating scales.
2. Indicating how much weight you think should be given to each major section of the SANE-A exam.
3. Responding to a brief demographic section.

Your assistance with this process is invaluable. It enables us to maintain an effective certification program and continue our efforts to ensure the professional growth of our members while promoting the benefits of certification as a SANE.

Please complete the survey by **August 30, 2017**.

To begin the survey, please click the green "Begin Survey" button below. On the survey Log In page, you will be asked to enter the code that is found immediately above the green button.

This survey is being administered with the assistance of Castle Worldwide, Inc., a company that specializes in the development and validation of high-stakes tests. If you encounter any problems with this survey, please contact the survey administrator at:  
surveyadmin@castleworldwide.com

Thank you in advance for your time and consideration. We sincerely appreciate your assistance with this important project.

Best regards,

Kathleen Maguire, BSN/BS, JD, RN  
Director of Certification  
International Association of Forensic Nurses

## Reminder Email

Dear [NAME]:

Please help.

I recently sent an email requesting your participation in a survey for the International Association of Forensic Nurses (IAFN) Sexual Assault Nurse Examiner - Adult/Adolescent® (SANE-A®) certification program. This survey is a critical step taken approximately every five to seven years by IAFN to help ensure that the SANE-A certification exam is testing the essential, up-to-date knowledge required for SANE-As. I am writing today to ask you to be a part of this important process. Your feedback is instrumental in helping to maintain the validity and effectiveness of the SANE-A examination.

IAFN would sincerely appreciate your participation in this survey. It is of the utmost importance that SANE-As like you provide input into this process. **To thank you for sharing your valuable time and effort, your name will be entered into a drawing to win a \$100 Amazon.com gift card.** The winner of the Amazon.com gift card will be notified by the end of September.

This survey will take approximately 20-30 minutes to complete. It consists of an introductory section that outlines the purpose of the study and provides some background information and terminology that are relevant for the survey. This is then followed by three main tasks:

1. Rating each of the SANE-A job tasks using three different rating scales.
2. Indicating how much weight you think should be given to each major section of the SANE-A exam.
3. Responding to a brief demographic section.

Your assistance with this process is invaluable. It enables us to maintain an effective certification program and continue our efforts to ensure the professional growth of our members while promoting the benefits of certification as a SANE.

Please complete the survey by **August 30, 2017**.

To begin the survey, please click the green "Begin Survey" button below. On the survey Log In page, you will be asked to enter the code that is found immediately above the green button.

Thank you in advance for your time and consideration. We sincerely appreciate your assistance with this important project.

Best regards,

Kathleen Maguire, BSN/BS, JD, RN  
Director of Certification  
International Association of Forensic Nurses

## Final Email Partial Respondents

Dear [NAME]:

Great news! We have extended the survey deadline by one day. You now have until August 31 to complete and submit your responses to the SANE-A job analysis survey!

Our records show that you started the survey, but may not have completed it. Although your input is critical in helping to ensure that the exam is testing the essential, up-to-date knowledge required for competent SANE-A practice, we cannot count your responses unless you complete the entire survey.

Please take a moment to:

- review your survey to ensure all responses are complete, and
- check to be sure you've clicked "Done" at the end to submit your survey.

**To thank you for sharing your valuable time and effort, your name will be entered into a drawing to win a \$100 Amazon.com gift card.** The winner will be notified by the end of September.

As a reminder, this survey takes approximately 20-30 minutes to complete. It consists of an introductory section that outlines the purpose of the study and provides some relevant background information and terminology. This is then followed by three main tasks:

1. Rating each of the SANE-A job tasks using three different rating scales.
2. Indicating how much weight you think should be given to each major section of the SANE-A exam.
3. Responding to a brief demographic section.

Your assistance is invaluable in maintaining an effective professional certification program for nurses who practice as SANEs.

Please complete the survey by **August 31, 2017**.

To begin the survey, please click the green "Begin Survey" button below. On the survey Log In page, you will be asked to enter the code that is found immediately above the green button.

Thank you in advance for your time and consideration. We sincerely appreciate your contribution to this important project.

Best regards,

Kathleen Maguire, JD, BSN, BS, RN  
Director of Certification  
International Association of Forensic Nurses

## Final Email Non-Respondents

Dear [NAME]:

Great news! We have extended the survey deadline by one day. You now have until August 31 to respond to the SANE-A job analysis survey!

The International Association of Forensic Nurses (IAFN) Sexual Assault Nurse Examiner - Adult/Adolescent® (SANE-A®) certification program conducts a job analysis every five to seven years—and this is our year. This survey helps to ensure that the SANE-A certification exam is testing the essential, up-to-date knowledge required for competent SANE-A practice. Your feedback is instrumental in helping to maintain the validity and reliability of the exam.

**To thank you for sharing your valuable time and effort, your name will be entered into a drawing to win a \$100 Amazon.com gift card.** The winner will be notified by the end of September.

The survey takes approximately 20-30 minutes to complete. It consists of an introductory section that outlines the purpose of the study and provides some relevant background information and terminology. This is then followed by three main tasks:

1. Rating each of the SANE-A job tasks using three different rating scales.
2. Indicating how much weight you think should be given to each major section of the SANE-A exam.
3. Responding to a brief demographic section.

Your assistance is invaluable in enabling us to maintain an effective professional certification program for nurses like you who practice as SANEs.

Please complete the survey by **August 31, 2017**.

To begin the survey, please click the green "Begin Survey" button below. On the survey Log In page, you will be asked to enter the code that is found immediately above the green button.

Thank you in advance for your time and consideration. We sincerely appreciate your contribution to this important project.

Best regards,

Kathleen Maguire, JD, BSN, BS, RN  
Director of Certification  
International Association of Forensic Nurses