



Executive Summary of a Practice Analysis Study of the Certified Case Manager

**Conducted for
The American Board for Occupational Health Nurses, Inc. (ABOHN)**

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Introduction

The practice analysis study described in this report was conducted in 2018 at the request of the American Board of Occupational Health Nurses (ABOHN). The purpose of this study was to describe the job activities of occupational health case management nurses in sufficient detail in order to provide a basis for the continued development of a professional, job-related, evidence-based certification examination.

ABOHN appointed an Advisory Committee (AC) to conduct a practice analysis to identify job responsibilities of occupational health case management nurses and develop the examination specifications for the Certified Occupational Health Nurse Specialist/Case Management (COHN-S/CM) exams. The AC was reflective of those who work in occupational health case management in all relevant aspects including geographic area, professional area, years of work experience, educational background, gender, and work setting. The members of the AC were experienced professionals, all thoroughly familiar with the skills and activities of the profession. Listed below in Table 1 are the AC members.

Table 1. Practice Analysis Advisory Committee Members

Name	Location
Lucy Carlson (Chair)	MN
Melinda Cordova	TX
Jean Orchard	OR
Bev Hagar	WA
Daurice Holly	PA
Denise Matthews	DE
Noreen Olson	WA
Wanda Smiling	SC
Pam Swann	FL
Michele Willis	MD

This AC was responsible for guiding the practice analysis for the Certified Occupational Health Nurse Specialist/Case Management (COHN-S/CM) examination. The AC was consulted throughout the practice analysis stages to ensure that expert judgment was available to PSI staff. PSI is grateful to these individuals for their guidance and expertise, as well as the time committed to this project. Without the AC's effort and expertise across various specialty areas, this project would not have been accomplished.

In the next section of this report, the methodology of this study is discussed. In particular, the design of the practice analysis survey instrument is described, including the method of defining tasks, rating scales, and demographic questions. Also discussed in the methodology section is the sampling plan and distribution of the web-based practice analysis survey. The results section of this report discusses the respondent demographics and a summary of the responses. The final section of this report discusses the development of the Examination Specifications based on these data.

Methodology

Committee Responsibilities

Supporting documents were provided by PSI staff regarding both the practice analysis process (and its relationship to the process of developing examination specifications) and ABOHN's role in the development of the certification examination. The Advisory Committee (AC) then considered various resource materials that could be helpful for a better understanding of the job tasks of occupational health case management nurses. Major duties for the practice analysis survey development were initiated and agreed at the first AC meeting in January 2018, and these duties included:

- a. Defining the target practitioner,
- b. Developing a sampling plan for the survey,
- c. Identifying a list of tasks for the survey instrument,
- d. Identifying content areas,
- e. Determining the survey rating scales,
- f. Determining the relevant demographic variables of interest, and
- g. Integrating the tasks, rating scales, and demographics into a survey instrument.

Developing the Practice Analysis Survey

Defining the target practitioner

For the purposes of the survey, the AC adopted the following practitioner definition of a board certified occupational case management nurse:

Occupational Health Nursing is a specialty practice that focuses on preventive healthcare, health promotion, and health restoration within the context of a safe and healthy environment. It includes the prevention of adverse health effects from occupational and environmental hazards and health promotion in general. The practice provides and delivers occupational and environmental health and safety programs and services to clients. The board certified occupational case management (COHN-S/CM) OR (COHN/CM) nurse is a registered nurse who has the expertise and holds the credential of certification in case management.

Developing a sampling plan for the survey

The AC considered various methods of identifying individuals who considered themselves to be occupational health case management nurses, or who would be knowledgeable about the duties of nurses in occupational health case management.

Identifying a list of tasks for the survey instrument

The primary document that served as a basis for the task list was the previous Case Management content outline. The outline was distributed to each AC member; they were instructed to consider the following questions while reviewing the outline and provide the edits to PSI:

1. What is new in the profession in the past 5 years?
2. What is the greatest weakness of the existing test blueprint?
3. Is there anything that is grossly underrepresented or overrepresented in the existing blueprint?
4. Do you agree that the major categories on the blueprint still apply?

PSI incorporated all AC member edits into one document and was a focal point of discussion at the first meeting. In addition, a list of tasks containing comprehensive descriptions of job activities was drafted by PSI staff based on various sources provided by ABOHN, including: job descriptions, research articles, and the Occupational Information Network (O*NET) descriptions of occupational health case management nurses. O*NET, sponsored by the U.S. Department of Labor, defines the key characteristics on almost 1,000 occupations and is the nation's primary source of occupational information. The draft list of tasks was thoroughly discussed during the first AC meeting. Tasks representing individual job responsibilities of occupational health case management nurses were modified, added, and removed based on the meeting discussion. At the conclusion of this meeting, all tasks were verified as being appropriately linked to the associated content area (e.g., Fitness for Work), and the finalized list included 84 tasks performed by occupational health case management nurses. Upon completion of this list, the AC authorized development of the practice analysis survey.

Identifying content areas

The AC identified four content areas, under which the 84 tasks for occupational health case management nurses were categorized:

1. Fitness for Work
2. Occupational Disability
3. Non-Occupational Disability
4. Case Management Concepts

Determining the survey rating scales

The AC assisted in the selection of the rating scale used in the survey. This scale was based on similar scales used by PSI in previous national practice analysis surveys by other professions. A single choice significance scale, including a "Not performed" option, was selected by the AC. This scale was intended to solicit survey respondents' judgments on the significance of tasks after they had considered the extent to which the tasks are necessary to the performance of a case management occupational health nurse. The significance scale adopted by the AC is shown below.

Regardless of how often you may perform the activity, how significant is it to the practice of occupational health nursing?

- 5 = Highest significance
- 4 = Above average significance
- 3 = Average significance
- 2 = Below average significance
- 1 = Lowest significance
- 0 = Not performed

Determining the relevant demographic variables of interest

The demographic section was designed to gather information about the respondents' demographic characteristics. Some demographic questions were primarily used to help the AC evaluate the representativeness of the respondent group. Other demographic questions were included to identify subgroups for further analyses, namely location of practice, years of experience in occupational health nursing, case management certification status, where they report within their organization, and job title.

Integrating the tasks, rating scales, and demographics into a survey instrument

Following the first AC meeting, survey components (demographics, rating scales, 84 case management occupational health nurse tasks) were compiled into a draft survey form. The draft survey was reviewed by the AC for completeness, relevance to the profession, appropriate language, and clarity of instructions, and then it was compiled as a pilot survey to be delivered via the web. The pilot survey was distributed to all AC members for review and comment. The purpose of the pilot study was to determine (1) if the directions were clear, (2) if any important tasks were missing from the survey, (3) if the tasks were clearly worded, and (4) if the rating scale was easy to use and understand. The AC also reviewed comments from the pilot study participants. Any needed modifications to the survey were made prior to the formal survey distribution.

Results

Sample Size

Links to a web-based survey were distributed by email to 7,385 occupational health nurses on March 29, 2018 with a reminder sent on April 27, 2018. The survey officially closed on April 29, 2018. Three hundred seventy-five (375) responses were received to the case management survey. Responses were excluded if they provided ratings for 30% or less of the tasks (n=5). A total of 370 respondents provided usable responses to be included in the analysis. Responses to the demographic questions indicated that there were sufficient numbers from relevant demographic subgroups for subsequent analyses. As is typical of survey research, some respondents did not respond to every survey question; therefore, the number of respondents shown in the following sections is often somewhat less than 370. For those remaining respondents, summaries of the demographic questions are shown in the next section. The number of candidates responding to each question is based on valid responses, i.e., omits are excluded from percentage calculations.

Demographic Information

The following figures and tables present background information collected from the 370 respondents. These demographic data helped describe the sample. Based on discussion with the AC, the demographic data were as expected, and judged to be representative of the profession.

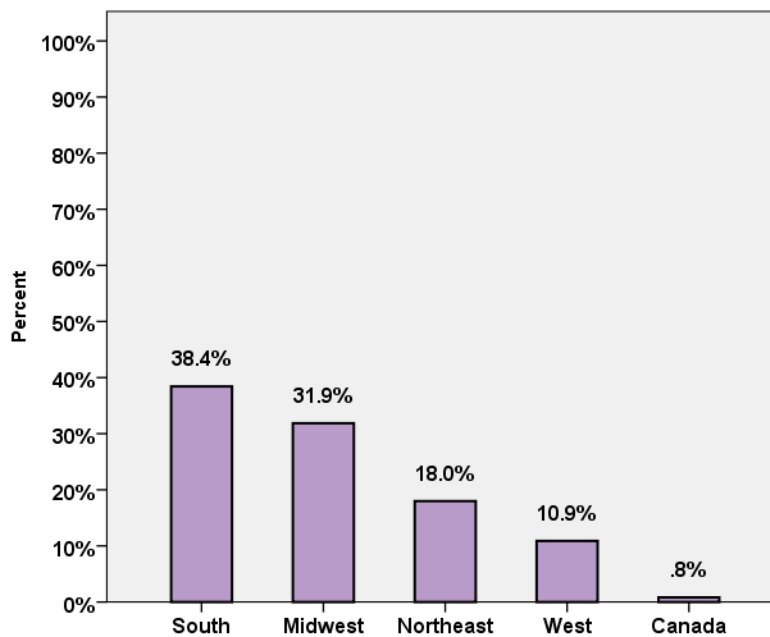


Figure 1. Region of primary practice (n=370)

Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT

Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI

South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, PR, SC, TN, TX, VA, WV

West: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY

Canada: Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Ontario, Prince Edward Island, Quebec, Saskatchewan

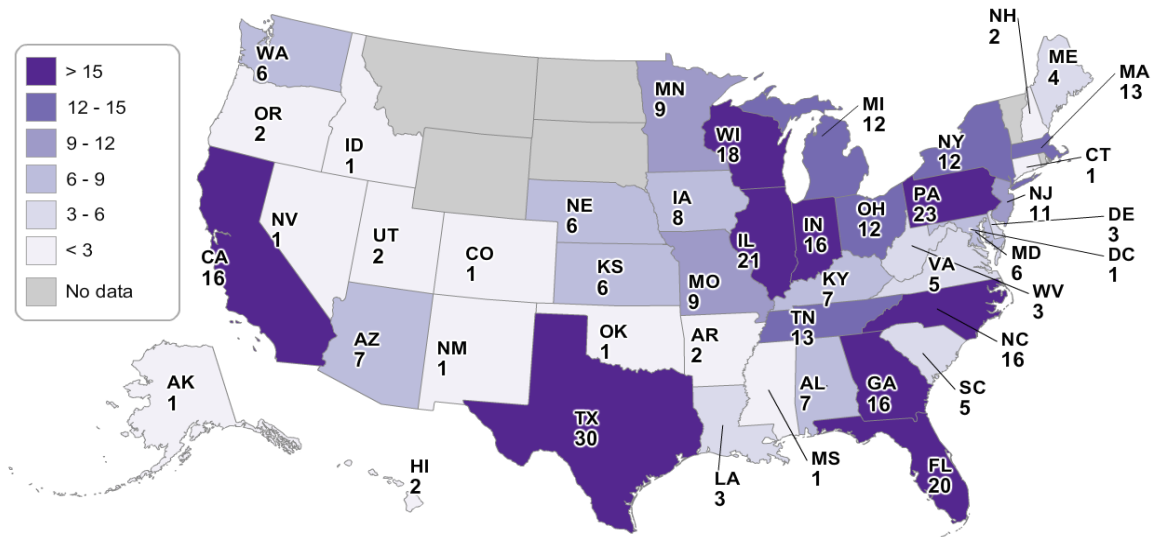


Figure 2. State of primary practice (n=370)

Survey respondents were asked which state/territory they primarily practiced. *Figure 1* shows the states recoded into four main regions. As shown in *Figure 1*, most respondents (38.4%) indicated that they primarily practiced in the South. *Figure 2* is a choropleth of the frequencies across the United States.

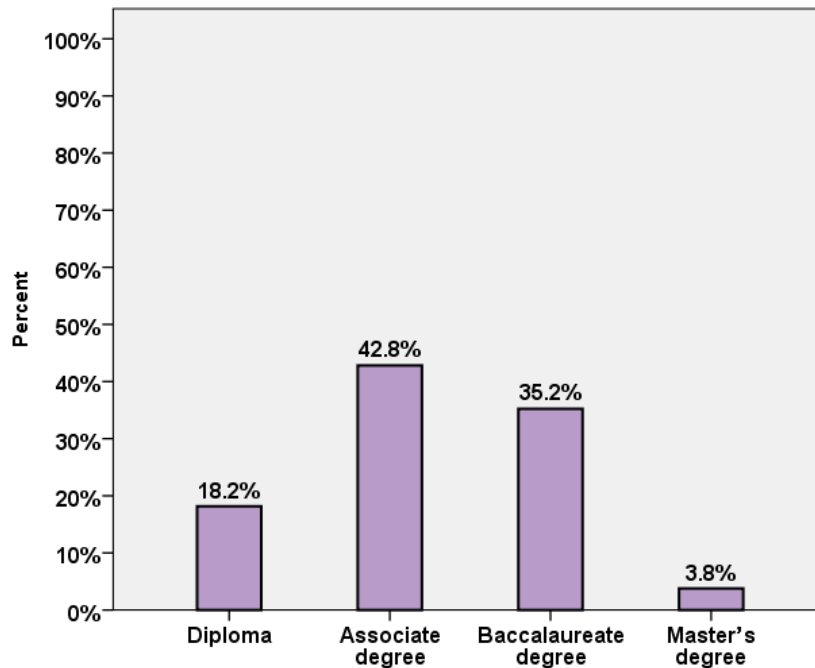


Figure 3. Most basic level of education in nursing (n=370)

Survey respondents were asked to indicate their basic (first) level of education in nursing. *Figure 3* shows that most respondents (42.8%) indicated that an Associate's degree was their basic level of education in nursing.

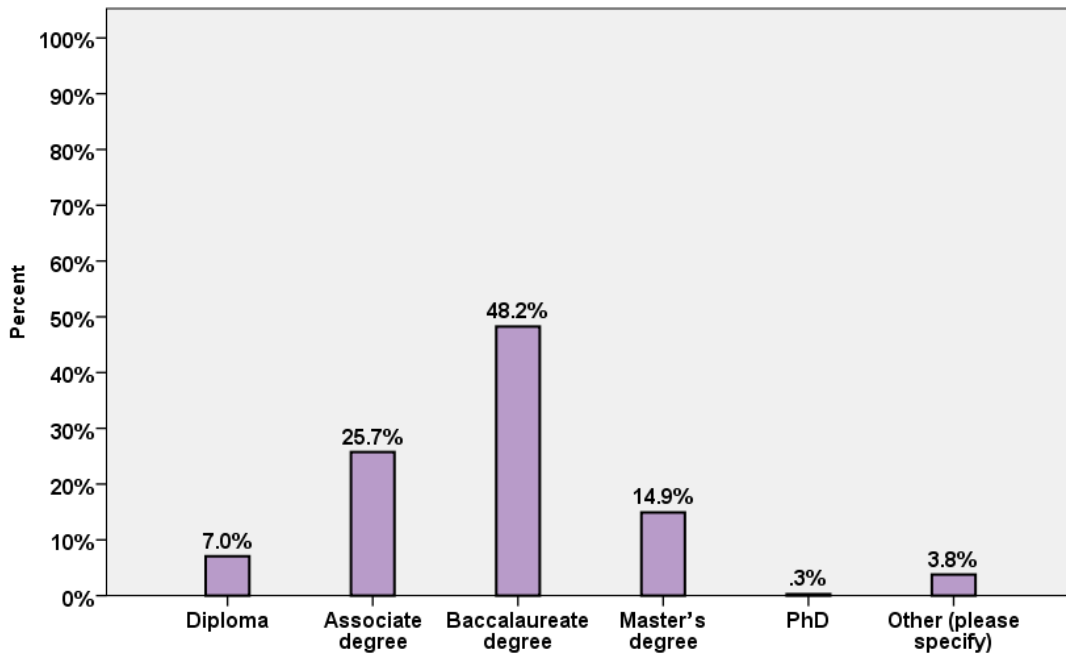


Figure 4. Highest level of education in nursing (n=370)

Survey respondents were asked to indicate their highest level of education in nursing. *Figure 4* shows that most respondents (48.2%) indicated that a Baccalaureate degree was their highest level of education in nursing.

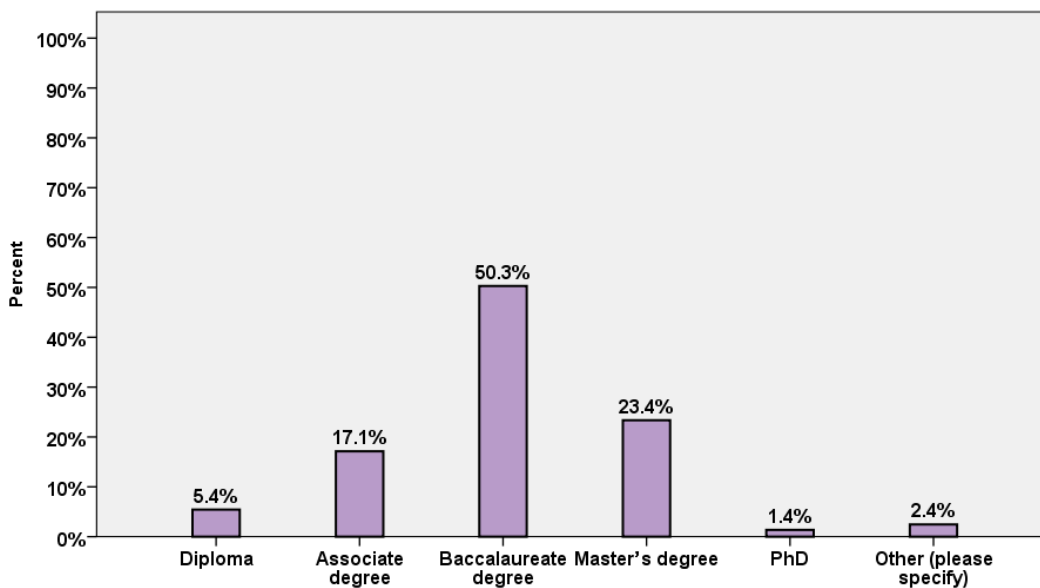


Figure 5. Highest level of education (n=370)

Survey respondents were asked to indicate their highest completed education level. As shown in *Figure 5*, half of respondents (50.3%) indicated that a Baccalaureate degree was their highest completed level of education.

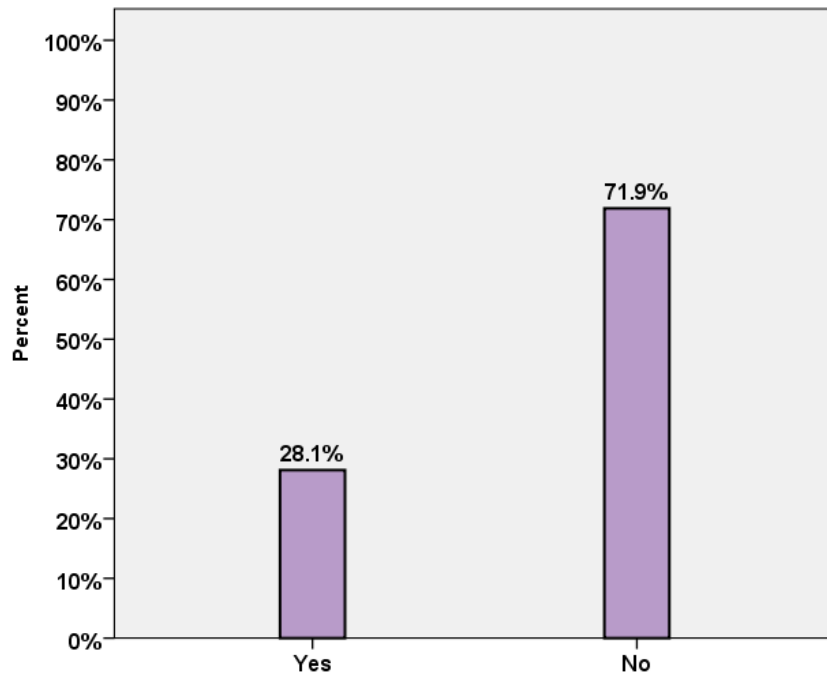


Figure 6. Are you currently certified in occupational health case management nursing (n=104)

Survey respondents were asked to indicate whether they were currently certified in occupational health nursing. Figure 6 shows that the majority of respondents (71.9%) indicated that they are not certified in occupational health nursing.

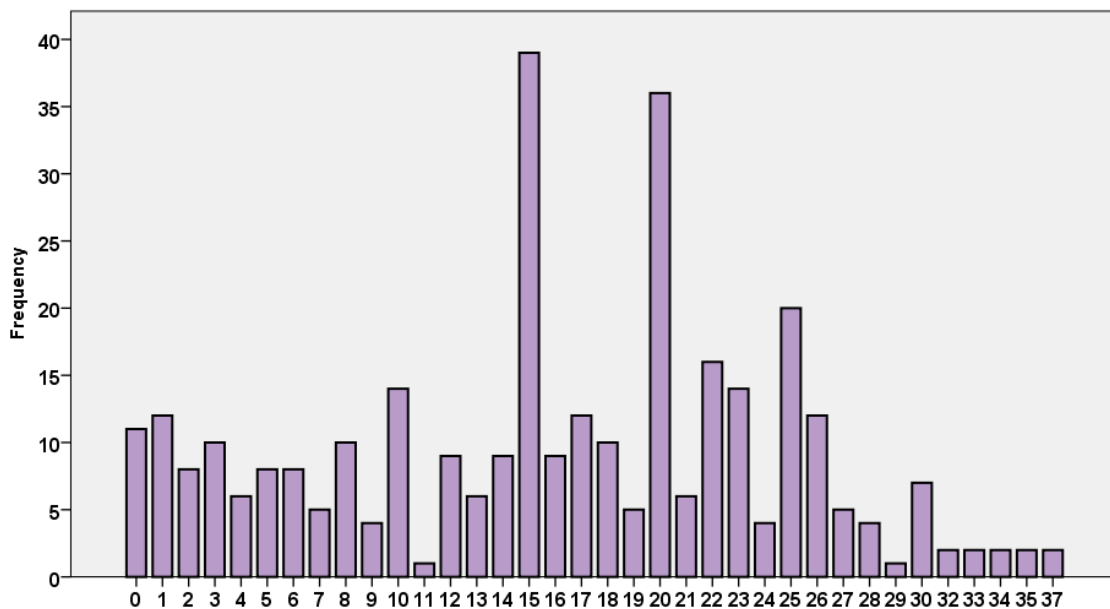


Figure 7. Years certified in occupational health nursing (n=331)

Respondents were asked how many years they had been certified in occupational health nursing. Figure 7 shows the distribution of responses. The average number of years of occupational health nursing certification for respondents was 15.85 years ($SD = 8.65$).

Survey respondents were asked what other occupational health nursing certifications that they held. Table 2 shows that the majority of respondents (60.3%) indicated that they do not hold any of the listed certifications.

Table 2. Other Occupational Health Nursing Certifications

	Frequency	Percent
CCM	71	19.2%
NP or APRN	19	5.1%
COHN (C)	18	4.9%
CSP	5	1.4%
CDMS	2	0.5%
CCRN	2	0.5%
CIH	1	0.3%
None of the above	223	60.3%

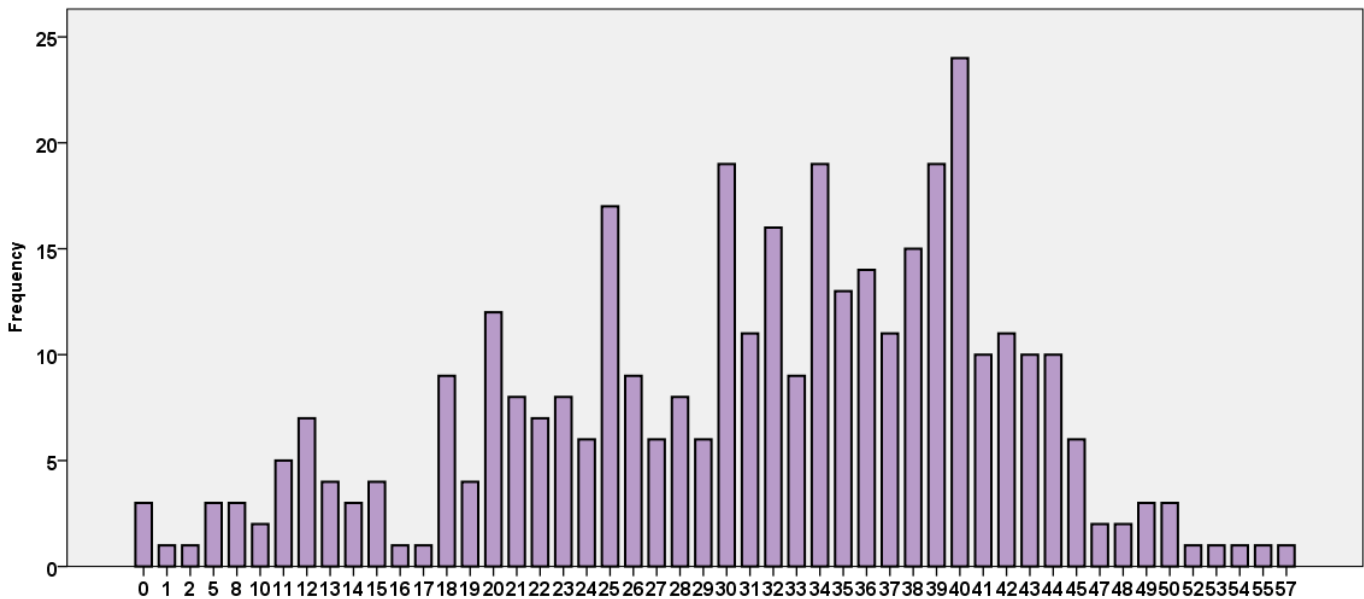


Figure 8. Years working as a registered nurse (n=370)

Respondents were asked how many years of experience they have as a registered nurse. Figure 8 shows the distribution of responses. The average number of years of registered nurse experience for respondents was 31.10 years ($SD = 10.62$).

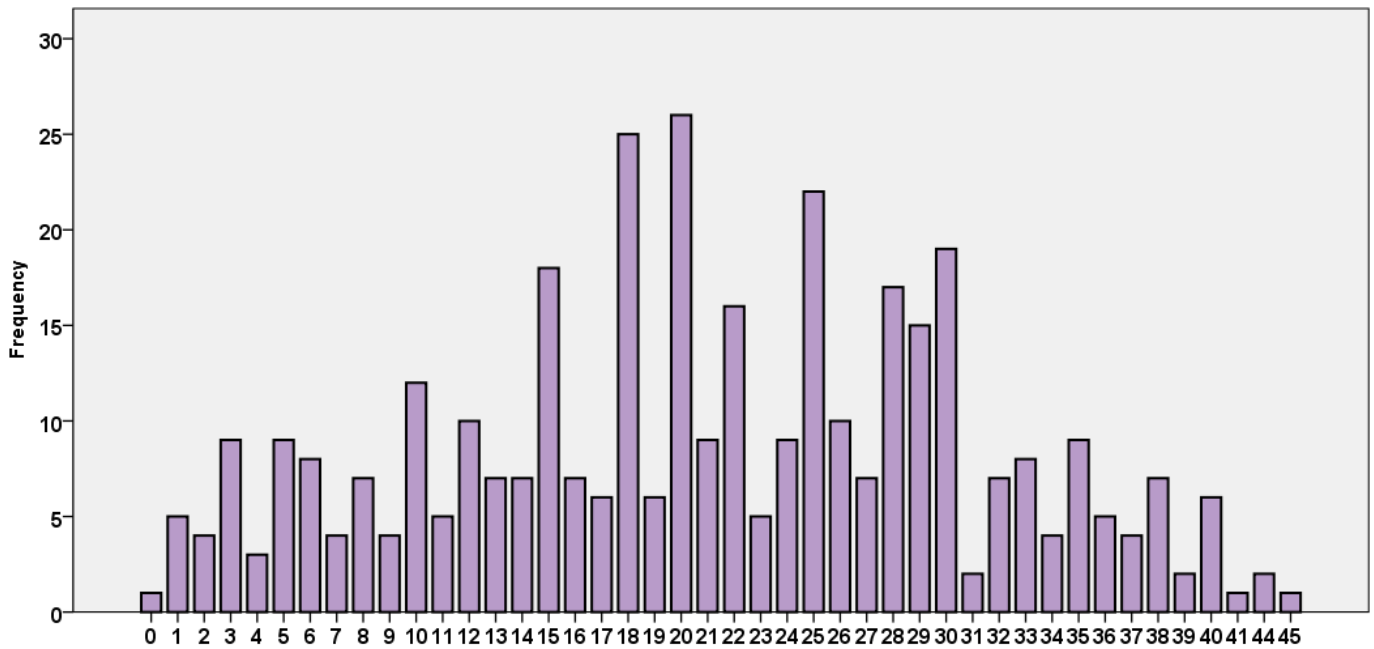


Figure 9. Please indicate the number of years working as an occupational health nurse (n=370)

Respondents were asked how many years of experience they have as an occupational health nurse. Figure 9 shows the distribution of responses. The average number of years of occupational health nurse experience for respondents was 20.96 years ($SD = 10.02$).

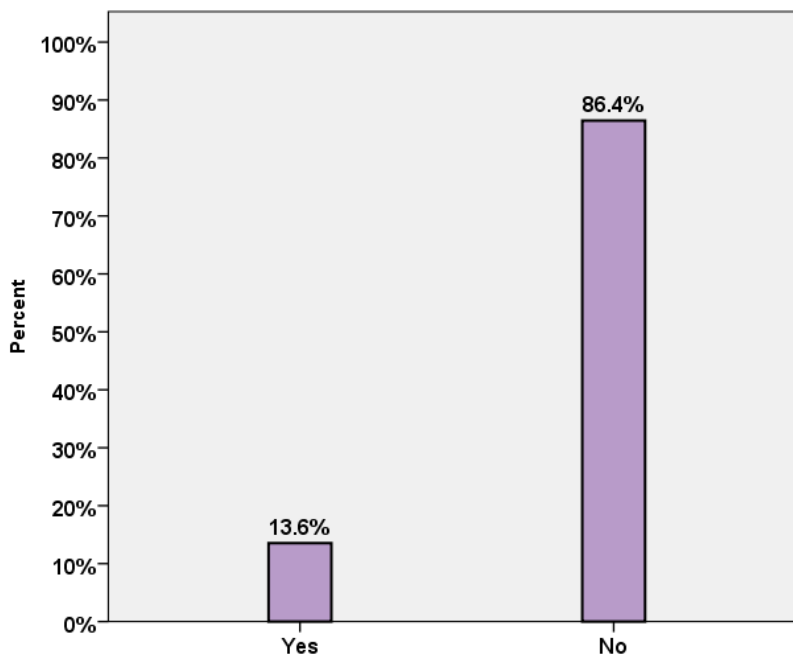


Figure 10. Do you have responsibility for global health services (n=369)

Survey respondents were asked if they have responsibility for global health services. Figure 10 shows that the majority of respondents (86.4%) indicated that they do not have global health services responsibilities.

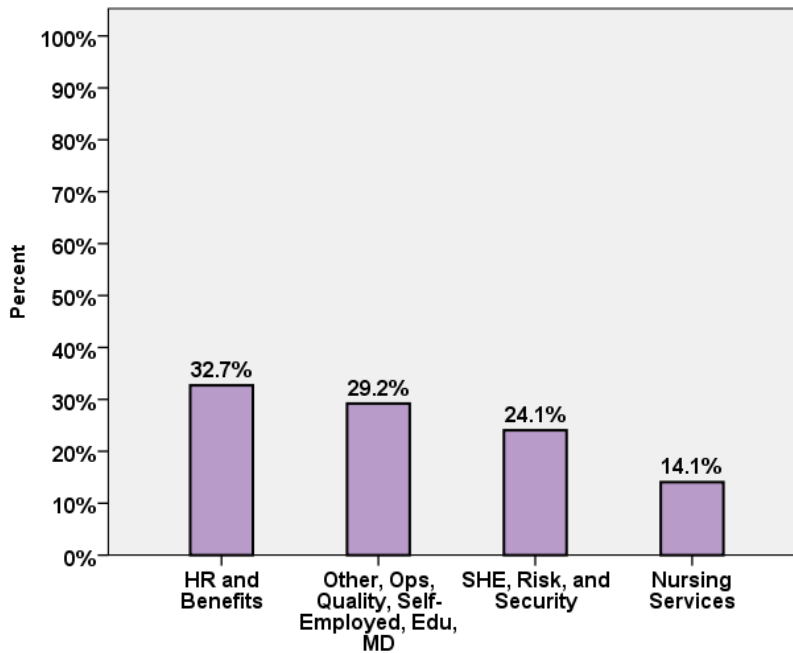


Figure 11. Which department best describes where you report (n=370)

Respondents were asked which option best described where they report within an organization. Figure 11 shows the majority of respondents (32.7%) selected HR and Benefits.

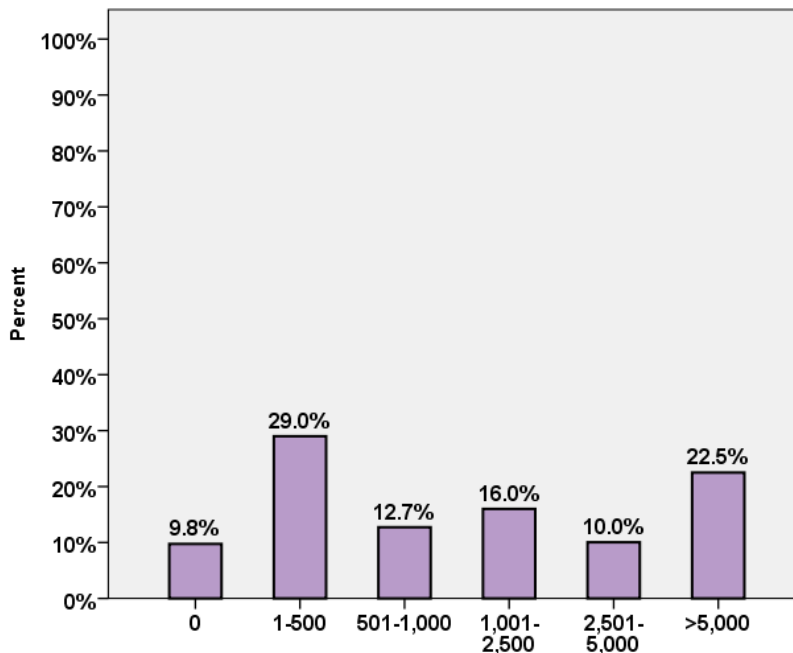


Figure 12. How many employees are you responsible for (n=369)

Survey respondents were asked how many employees they are responsible for providing occupational health case management services. Figure 12 shows that most respondents (29.0%) indicated that they serve between 1 and 500 employees.

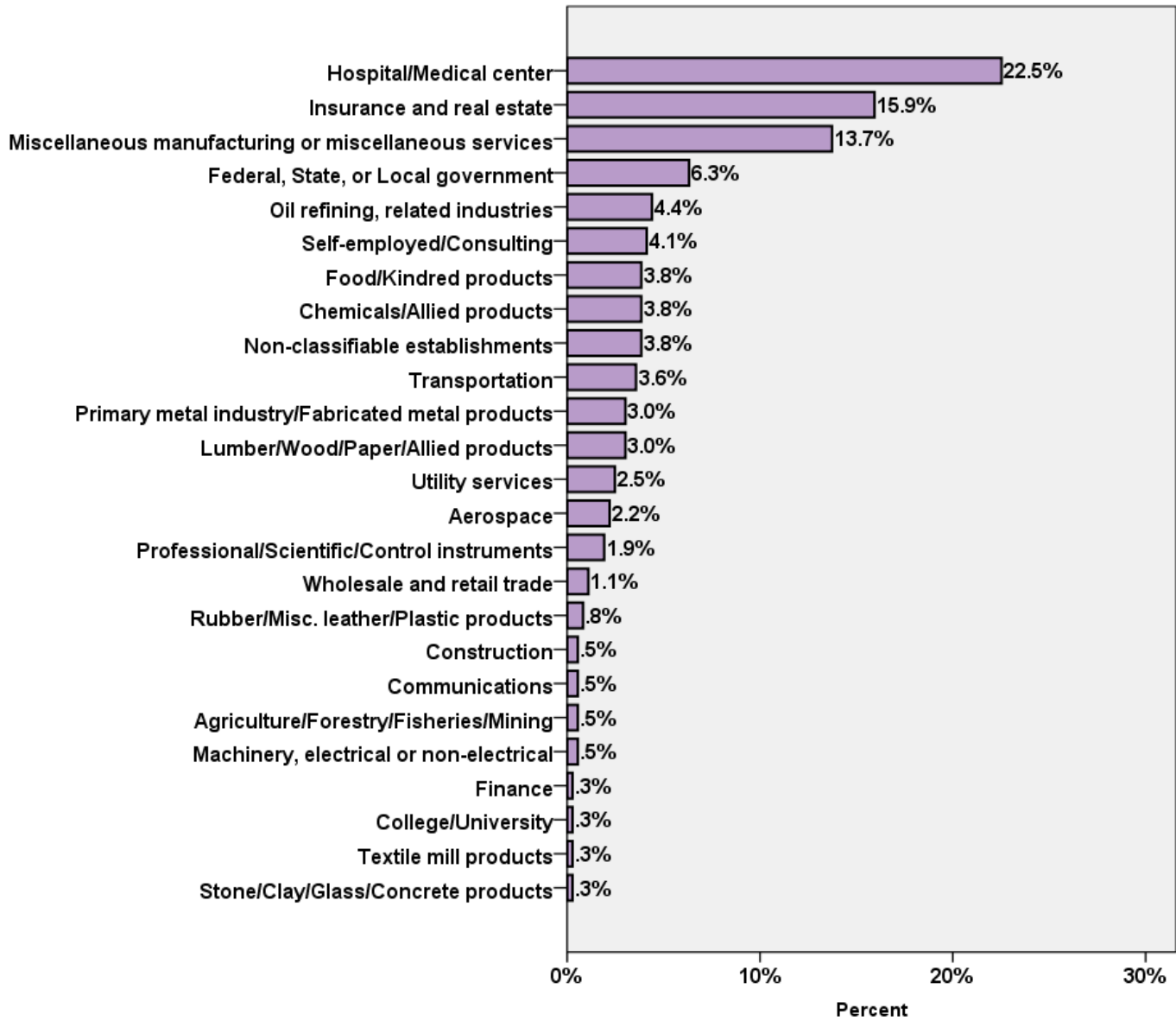


Figure 13. Which of these best describes the type of industry for which you work (n=364)

Survey respondents were asked which option best described the industry that they worked. Figure 13 shows that most respondents (22.5%) indicated that they worked in a Hospital or Medical Center.

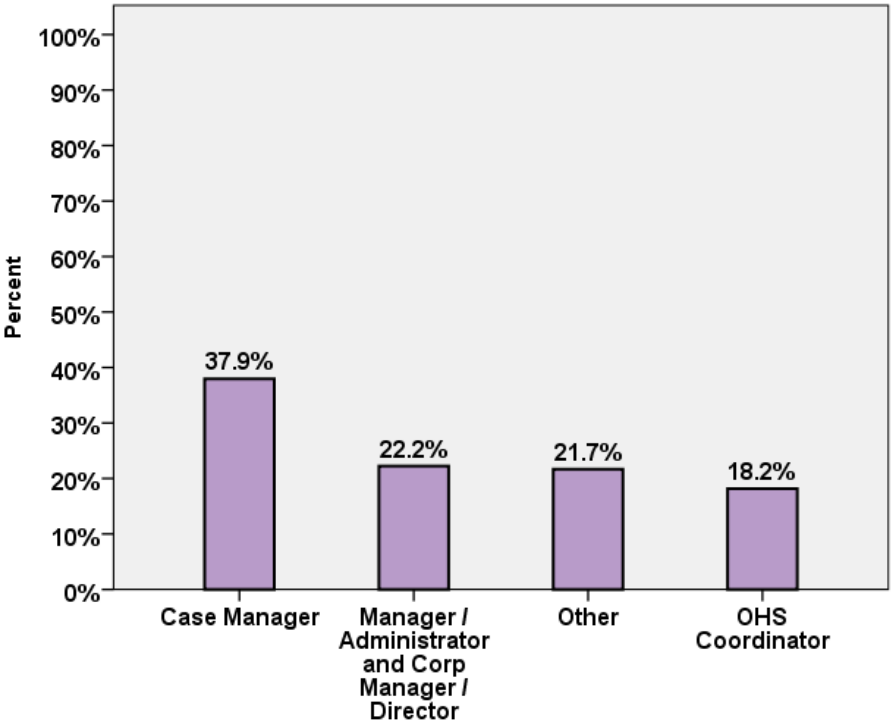


Figure 14. Which job title most closely matches your primary job responsibility (n=369)

Respondents were asked which option best described their primary job responsibility. Figure 14 shows that most respondents (37.9%) selected Case Manager.

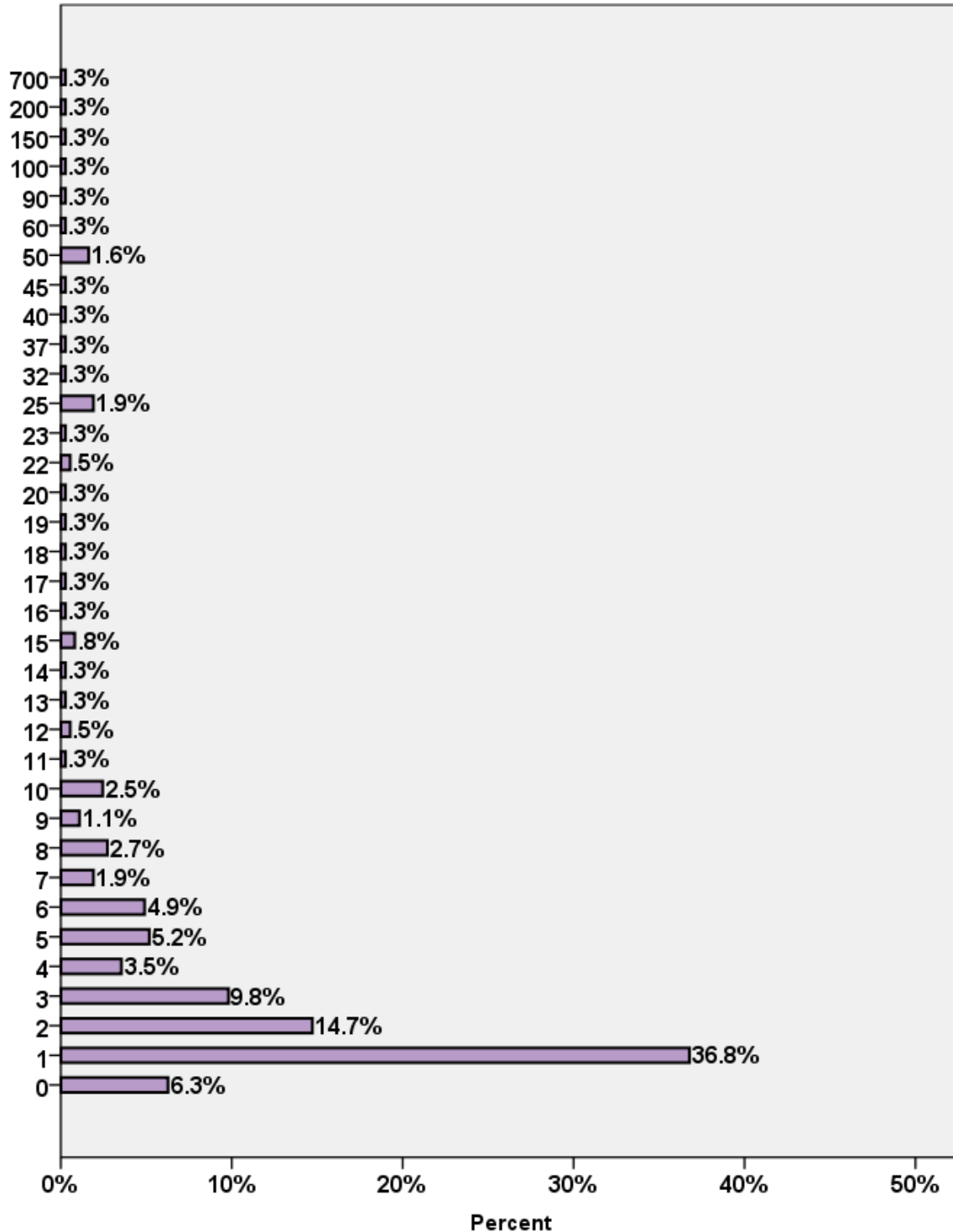


Figure 15. How many occupational health nurses work at your facility (n=367)

Respondents were asked to report how many nurses (including the respondent) work at their facility. Figure 15 shows the majority of respondents (36.8%) report one total occupational health nurses at their location.

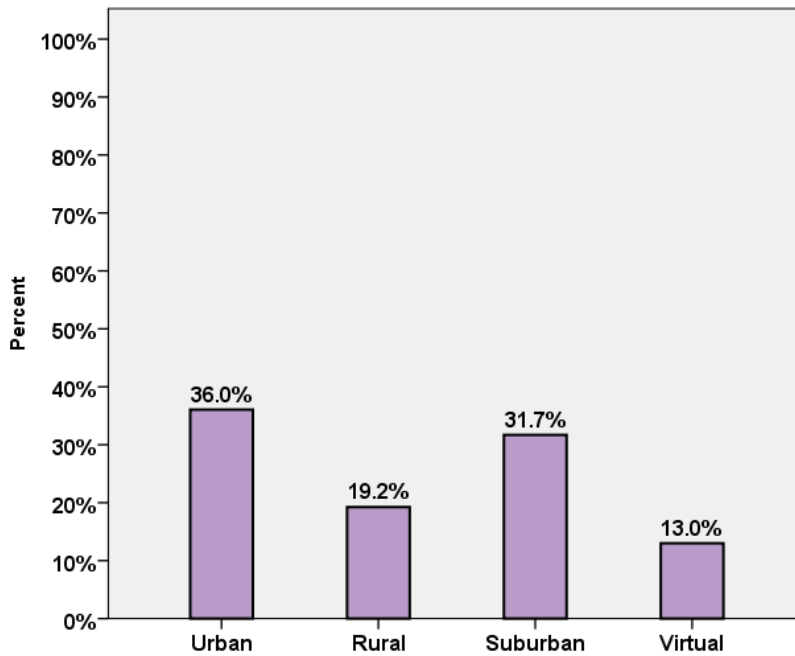


Figure 16. Which best represents the setting of your primary practice (n=369)

Respondents were asked which option best represents their practice setting. Figure 16 shows that most respondents (36.0%) practice in an urban setting.

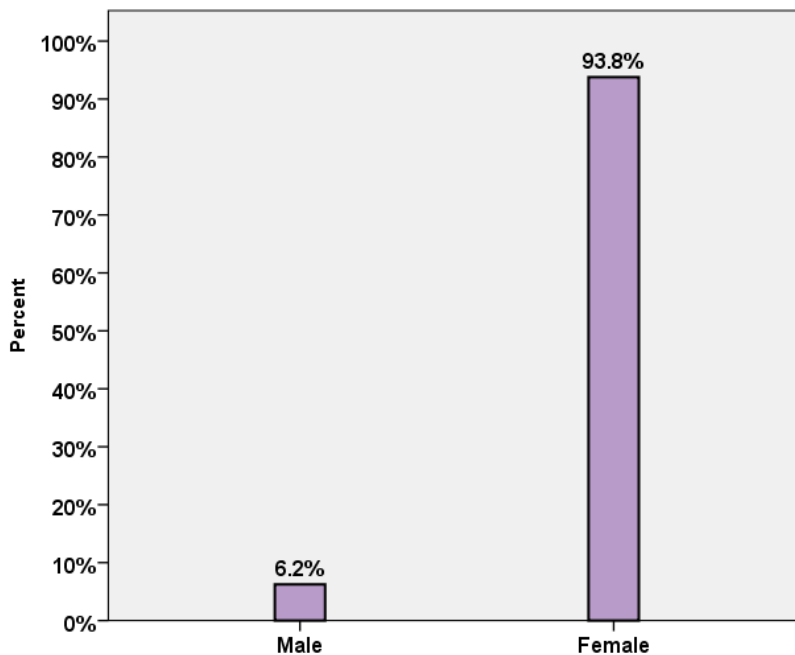


Figure 17. Gender (n=369)

Survey respondents were asked to indicate which gender they identify with. As shown in Figure 17, the majority of respondents (93.8%) indicated they identified themselves as female.

Survey respondents were asked to indicate whether or not they were Hispanic/Latino. As shown in Table 3, the majority of respondents (87.6%) indicated they were Caucasian or White, Non-Hispanic/Latino.

Table 3. Which of the following do you identify as? (Select all that apply.) (n=370)

	Hispanic/Latino		Non-Hispanic/Latino	
	Frequency	Percent	Frequency	Percent
American Indian or Alaskan Native	3	0.8	14	3.8
Asian	0	0	11	3.0
African American or Black	2	0.5	20	5.4
Caucasian or White	21	5.7	324	87.6
Native Hawaiian or Pacific Islander	0	0	8	2.2

In summary, the demographic results from this survey collection were generally as expected. The AC concluded that this information is consistent with the population of occupational health case management nurses, and that a sufficient number of responses in relevant subgroups were received to facilitate subsequent analysis.

Examination Specifications

Application of Decision Rules and Criteria to Tasks

In developing the Detailed Content Outline (DCO) and Examination Specifications, the judgment of AC members must be used to interpret the data gathered through the practice analysis study. For purposes of this report, the Examination Specifications are defined as the confidential documents that are used to guide the examination development process, and include sufficient detail to ensure the development of comparable examination forms. The DCO is defined as a subset of the Examination Specifications; it is a document that includes a detailed listing of content available in outline form for candidates and item writers. When developing the examination, every item must be linked to the DCO as a first step in meeting the Examination Specifications.

Of particular significance to a national certification examination program are that the Examination Specifications must appropriately reflect the task responsibilities of all groups who will participate in the certification program. Therefore, it is important to ensure that the Examination Specifications and its resulting exam forms include tasks that are considered to be important for the target practitioners for whom the examination is intended.

The AC was encouraged to consider how best to limit the examination content to only the broadly performed critical tasks. The AC adopted several decision rules to identify tasks eligible for examination content (Table 4). Tasks would be judged as *eligible* if they were performed by the majority of the practitioners and found important enough by the entire sample of respondents and resulting subgroups. Tasks, considered *ineligible* for examination based on these rules or did not pass unanimous voting for inclusion by the AC members, should therefore be excluded from the Examination Specifications and DCO.

The decision rules adopted by the AC, the order in which they were applied are summarized in Table 4. Applying the decision rules ensures that the resulting examination content reflects the tasks of occupational health case management nurses, as judged by a demographically representative group of occupational health case management nurses.

Table 4. Decision Rules

1. Keep only tasks performed by at least 66% of the practitioners.
2. Keep only tasks rated with a mean significance rating of at least 3.25.
3. Keep only tasks rated with a mean significance rating of at least 3.00 by 4 of the 5 geographic-region subgroups.
4. Keep only tasks rated with a mean significance rating of at least 3.00 by 4 of the 5 years-working-as-an-occupational-health-nurse subgroups.
5. Keep only tasks rated with a mean significance rating of at least 3.00 by both of the currently-certified-in-occupational-health-nursing subgroups.
6. Keep only tasks rated with a mean significance rating of at least 3.00 by 3 of the 4 best-describes-where-you-report subgroups.
7. Keep only tasks rated with a mean significance rating of at least 3.00 by 3 of the 4 job-title subgroups.

Final Detailed Content Outline and Examination Specifications

The final 84 tasks were organized into the DCO, which may be used by candidates for preparation for the examination. For the examination, a DCO can be defined as a detailed listing of content available in outline form for candidates and item writers. The Examination Specifications remain confidential and are only used for examination development purposes. The Examination Specifications incorporate the details of the DCO, and also include other information needed to ensure the development of comparable examination forms, as discussed in this section.

Survey respondents suggested the percent of exam that should be allocated to the four areas of practice, and this information was used by the AC to determine the number of items for each of the four major areas. The goal was to distribute items in accordance with observed working patterns across the major content areas. Respondent data were used to suggest a starting point for the content experts. The AC discussed the respondents' recommendations and considered their own judgments as to how the items should be distributed. Using the respondent's recommendations for the major categories, and in consideration of the breadth, depth, and significance of the tasks in each major content areas, the AC members independently expressed a judgment about the percentage of the examination that should be allocated to each content area.

The mean of their judgments, which were quite close to the survey respondents, was used as a starting point for a discussion about allocation of content. The AC subsequently unanimously agreed on number of items to be allocated to the content domains on the examination content outline as shown in Table 5.

Table 5. Overview of Examination Specifications

	% of Exam
1. Fitness for Work	26
2. Occupational Disability	31
3. Non-Occupational Disability	21
4. Case Management Concepts	22
Total	100



American Board for Occupational Health Nurses, Inc. (ABOHN) Case Management Detailed Content Outline *

1. Fitness for Work (26%)

A. Assessment (7%)

1. Obtain an occupational and environmental health and medical history
2. Conduct job analyses
3. Assess health needs of worker and worker population(s) (i.e., workplace risks, changing demographics, psychosocial factors)
4. Assess workers with work restrictions or limitations and make appropriate job placement recommendations (i.e., fitness for duty)
5. Recognize cultural beliefs/practices that may impact programs and services
6. Identify physical requirements to fulfill essential job functions
7. Participate in fitness for duty examination

B. Planning (5%)

1. Apply legal and regulatory requirements in decision-making regarding job/work accommodations
2. Develop quality management/improvement program(s) for occupational health and safety (e.g., benchmarking, best practices, evidence-based)
3. Recommend a needs assessment of the company's health and safety programs

C. Implementation (5%)

1. Refer workers for rehabilitation as indicated
2. Participate in the interactive accommodations process
3. Participate in disability management programs
4. Incorporate knowledge of cultural beliefs/practices in management of programs and services
5. Participate in the investigation of workplace risks (e.g., indoor air quality, mold, ergonomics)
6. Participate in audits (e.g., early return to work, disability guidelines)
7. Facilitate worker to achieve optimal health outcomes
8. Establish metrics and key performance indicators (quality, cost-effectiveness, and cost-containment)
9. Coordinate healthcare delivery to workers

D. Evaluation (9%)

1. Interpret results of tests and examinations (e.g., treatment options)
2. Monitor progress of workers in rehabilitation (e.g., work-conditioning programs, early return to work)
3. Evaluate the quality of health care delivery to workers provided by internal and external providers
4. Interpret job analyses
5. Conduct informal research (e.g., examining data to identify trends or other data)
6. Incorporate research findings into practice
7. Evaluate the outcomes, quality, and cost-effectiveness of services and report to stakeholders

- Public -

Effective Date: 03/2020



American Board for Occupational Health Nurses, Inc. (ABOHN) Case Management Detailed Content Outline*

2. Occupational Disability (31%)

A. Assessment (9%)

1. Identify work-related cases that are appropriate for case management
2. Identify legal, labor, and regulatory implications related to case management
3. Assess work-related injury and illness data for trends

B. Planning (8%)

1. Recommend control measures for exposures/hazards
2. Recommend appropriate personal protective equipment
3. Review workplace hazard assessments
4. Obtain management support for occupational health programs
5. Use knowledge of the organization's fiscal status to plan/implement programs and interventions
6. Establish goals and objectives for case management
7. Develop case management protocols using evidence-based guidelines

C. Implementation (10%)

1. Coordinate treatment of work-related injuries or illnesses
2. Apply regulatory standards and guidelines
3. Coordinate drug and alcohol testing as indicated
4. Manage workers' compensation cases (e.g., care and referrals)
5. Prepare and provide testimony or documentation for legal proceedings (e.g., workers' compensation, dismissal, EEOC)
6. Participate in administrative proceedings related to occupational health (e.g., retaliation, company level discrimination complaint)
7. Communicate case management process to key stakeholders
8. Design a plan to remediate hazards
9. Implement evidence-based practice for care protocols and pathways
10. Make recommendations for additional treatment options based on expected outcomes and guidelines (e.g., EAP services, work hardening)
11. Participate in disability management process (e.g., long term disability)
12. Administer or manage a workers' compensation program
13. Participate in interactive accommodations process

D. Evaluation (4%)

1. Analyze workers' compensation data (e.g., quality, cost-containment, lost time)
2. Evaluate metrics and key performance indicators



American Board for Occupational Health Nurses, Inc. (ABOHN) Case Management Detailed Content Outline *

3. Non-Occupational Disability (21%)

A. Assessment (6%)

1. Identify non work-related cases that are appropriate for case management
2. Identify legal, labor, and regulatory implications related to case management

B. Planning (5%)

1. Recommend changes in job/work to accommodate workers' health status
2. Apply legal and regulatory requirements in decision-making regarding job/work accommodations

C. Implementation (6%)

1. Coordinate care for non-work related illnesses and injuries for workers
2. Manage integrated absence management (e.g., short-term or long-term disability cases)
3. Educate and train workers about basic health and wellness (e.g., self-care, complementary/alternative medicine, stress management)
4. Coordinate programs for chronic disease management
5. Make recommendations for additional treatment options based on expected outcomes and guidelines (e.g., EAP services, work hardening)
6. Participate in disability management process (e.g., long term disability)
7. Participate in interactive accommodations process

D. Evaluation (4%)

1. Evaluate the integrated absence management program
2. Evaluate metrics and key performance indicators (e.g., analyze aggregate claims data to develop future health promotion programs)

4. Case Management Concepts (22%)

A. Assessment (6%)


1. Monitor developments related to emerging health care issues (e.g., psychosocial issues, cultural competence)
2. Monitor changes in federal, state, and local regulations that may impact case management practice
3. Identify quality care and cost containment strategies

B. Planning (5%)

1. Develop case management plans for individuals
2. Develop and/or coordinate a network of resources for case management
3. Develop a multidisciplinary plan of care in collaboration with the worker and his/her support systems
4. Select teaching methods and content based on the characteristics of learners (e.g., apply adult learning principles, cultural differences)

- Public -

Effective Date: 03/2020

	American Board for Occupational Health Nurses, Inc. (ABOHN) Case Management Detailed Content Outline *
C. Implementation (6%)	
<ol style="list-style-type: none">1. Incorporate technology into management practices2. Participate in clinical case reviews and quality improvement efforts3. Use software applications for health information management (i.e., informatics)4. Recognize and respond to ethical issues in practice5. Implement individualized case management plans6. Provide individual counseling services and/or refer workers to an employee assistance program7. Coordinate administration of case management with vendors and community resources8. Collaborate with other disciplines to protect and promote worker health and safety9. Assure confidentiality of personal health information and comply with established codes of ethics and legal or regulatory requirements	
D. Evaluation (5%)	
<ol style="list-style-type: none">1. Monitor laws and regulations affecting nursing practice (e.g., licensure, practice acts)2. Conduct cost benefit analysis (e.g., return on investment by balancing quality care with its cost)3. Identify quality care and treatment outcomes4. Identify gaps in health services for workers	

* Percentages may be approximate due to rounding.



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