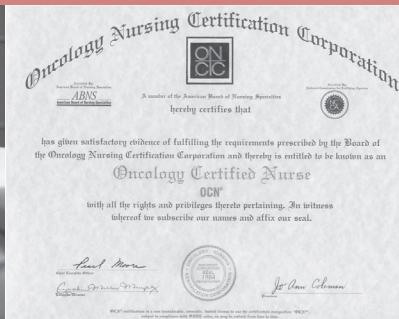




ONCOLOGY NURSING
CERTIFICATION CORPORATION

Ensuring Confidence in Your Credential

An Overview of the ONCC Certification Process



- Accreditation
- Computer-Based Testing
- Role Delineation Studies
- Item Writing
- Item Analysis
- Test Development
- Validity
- Scoring
- Reliability
- Test Security
- Measuring Competency

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The Mission of the Oncology Nursing Certification Corporation is to promote and provide oncology nursing certification for the enhancement of patient care and professional practice.

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Introduction

The *ONCC News* published a special issue in November 1997 to explain to oncology nurses the processes and care taken to produce the OCN® and AOCN® examinations. Much has happened within ONCC since that time. The Oncology Nursing Certification Points Renewal Option (ONC-PRO) became a reality, pediatric certification was incorporated into the ONCC family, computer-based testing became available, and role specific advanced practice examinations were developed. The value of certification continues to rise as employers and patients alike recognize that oncology is a diverse and challenging specialty requiring highly knowledgeable and motivated nurses, typified by those who hold ONCC credentials.

Since the first OCN® examination in 1986, oncology nursing has become more complex and oncology nurses are more responsible and autonomous. To reflect the changes in oncology nursing practice, the credentialing process has changed as well. Maintaining the currency of the ONCC examinations requires continuous effort on the part of the national staff and the committed

volunteers who serve as Board and committee members. Their goal is to ensure that the ONCC credentials represent objective, psychometrically sound, and legally defensible measures of knowledge in oncology nursing. The complex procedures necessary to design, maintain, administer, and evaluate the examinations involve oncology nurses, researchers, statisticians, and psychometric consultants.

This booklet is designed to help test candidates understand the processes by which the examination is developed, analyzed, and scored. In addition, it can be used to answer questions about certification posed by employers, physicians, and healthcare consumers. The authors who contributed to this issue are all experts who have taken part in the processes they explain. By understanding the steps taken to provide the highest-quality certification examinations, all candidates can be assured that attaining an ONCC credential verifies their knowledge of oncology nursing and demonstrates their value to patients and employers.

Accreditation Assures Nurses That ONCC Credentials Meet Quality Standards

Nurses who are certified by ONCC, as well as their employers and healthcare consumers, can be confident that the ONCC certifications are sound and of high quality. ONCC has attained accreditation by both the National Commission for Certifying Agencies (NCCA) and the American Board of Nursing Specialties (ABNS). Just as certification demonstrates that an individual nurse has met the high standards set by the certifying body, accreditation by NCCA and ABNS demonstrates that the ONCC certification programs meet the high standards set by these accrediting organizations.

NCCA is an independent organization that has identified the essential components of a national certification program and determines whether certification organizations meet established standards based on those components. These standards are nationally

recognized principles used by a variety of certification organizations for certification programs in diverse professions. ONCC was awarded NCCA accreditation in 2000. The accreditation is valid for five years, at which time ONCC will apply for reaccreditation.

ABNS is the only accrediting body specifically for nursing certification. ABNS was developed from the need for uniformity in nursing certification and to increase public awareness of the value of quality certification to health care. ABNS advocates for consumer protection through the establishment of standards and peer review of nursing certification organizations that strive to meet those standards. ABNS-accredited nursing-certification organizations collectively represent more than 400,000 certified nurses. ONCC first achieved ABNS accreditation in 1994 and was reaccredited in 1999 and 2004.

Computer-Based Testing Brings State-of-the-Art Technology to Certification Tests

In July 2003 the ONCC certification examinations were offered for the first time in a computer-based format at more than 300 testing centers. ONCC has offered its computer-based examinations in a linear format, rather than the adaptive format utilized by the National Registered Nurse Licensure Examination (NCLEX). This means that candidates are able to mark questions for review, move back and forth freely through all questions, and change answers as often as desired.

Computer-based testing (CBT) allows test candidates much greater flexibility in scheduling than the paper-and-pencil system. Candidates are able to schedule an ONCC certification examination during twelve-day testing windows offered each quarter. CBT is available nationwide at more than 300 testing centers. The hours of operation at each individual testing site vary, but most centers have evening and weekend hours in addition to weekday hours. The state-of-the-art test centers provide three-sided carrels containing individual workstations that ensure candidate privacy throughout the examination. Rules concerning privacy and noise levels are strictly enforced at all test centers. Because the security of the test is a major concern for ONCC, all examinations are proctored carefully.

To apply for a computer-based test, candidates submit an application to ONCC documenting their eligibility for the examination. Once ONCC staff have received and processed candidates' application forms and fees, eligible CBT candidates receive an "Authorization to Test" (ATT), which provides candidates with all of the information needed to schedule an appointment at a testing center. Candidates must have the ATT to schedule an appointment for testing. Candidates must call to schedule the examination within a limited time

period from receipt of the ATT. Candidates who fail to schedule their examination within the specified time period will forfeit the application fee and must reapply to test at a future time.

Candidates for CBT do not need to have typing skills or prior computer experience to use this testing format. At the beginning of the testing session, each candidate completes an introductory tutorial that explains how to use the computer to select answers, mark questions for review, move back and forth among the questions, and change answers to previously completed questions. This tutorial allows candidates to practice using all of the navigating features that are present in this testing format before beginning the test. Candidates also answer a series of practice questions before the beginning of the actual certification examination, so that they can become comfortable with the testing procedures. Test candidates use the computer's mouse to "point and click" on their selected answers. Selected answers will be highlighted, and the candidate will be asked to confirm the selected responses. Test center staff members will be available to answer any computer-related questions.

During a testing session, all responses to questions are saved in real time as the response is entered. This means that if a power failure were to occur, the test would resume where it left off once the power was restored. An additional benefit of CBT is that candidates receive a preliminary score (pass or fail) prior to leaving the test center. Computer-based testing is the current state of the art in certification testing, in nursing as well as in many other fields. ONCC has the vision and commitment to ensure that the process of oncology nursing certification will reap the benefits of this innovative and improved form of testing.

Role Delineation Studies Form the Basis of Test Blueprints

Role delineation studies are conducted to validate a competency examination. Validity is an essential characteristic of any examination. Decisions about the validity of an examination are based on evidence that the examination measures what the developers believe it should measure. There are a number of steps in assuring the validity of a competency examination such as the OCN® Examination. However, the first and most important step in the process of developing or revising a certification examination is the implementation of a role delineation study.

How does a role delineation study support validity? We begin with the philosophy that the certification examination must reflect oncology nursing practice. That being the case, how do we know what oncology nursing practice is? The best and safest way to determine what comprises oncology nursing practice is to ask the nurses involved in it. And while it might be tempting to gather a committee together and let them decide what practice is, the results might not reflect the national trends. Oncology nursing practice may vary from state to state and even from setting to setting. So getting a picture of what oncology nursing practice is nationally, across settings, is critical. And further, oncology nursing practice is dynamic, so repeating the role delineation study periodically to capture the oncology nursing practice as it evolves is essential.

To determine what goes into oncology nursing practice, ONCC distributes a survey to a large group of randomly selected certified nurses. The survey is developed by a group of oncology nurses who are considered to be subject-matter experts. Each item

on the survey is a nursing skill or behavior. One approach is to ask about the nursing behavior using two scales; one scale asks how important the behavior is to oncology nursing practice, and the other asks how frequently the behavior is performed. Thus, something like “assess patient’s skill in early detection practices” might score very high on importance and not as high on frequency, while “maintain a safe environment for the patient” would probably score high on both. Frequency is weighted by importance, and the resulting tabulated responses of the national group of nurses would describe their current practice.

At this stage, the subject matter experts meet again and look at the weighted list of nursing behaviors. A description of the knowledge needed by the nurse to implement these nursing behaviors is now needed. For example, what does the nurse need to know to “assess the patient’s hematopoietic immune status”? Thus, a critical step is to link necessary knowledge to each of the identified oncology nursing skills or behaviors. Following this linking of knowledge to nursing behaviors, the knowledge list is reduced into a set of weighted categories that forms the basis for the certification examination, the specific test blueprint.

In summary, the role delineation study is essential to defining the responsibilities necessary for competent performance in oncology nursing. Based on this study, a blueprint for the examination is developed that allows the test-takers to know what is included in the examination and the test-developers to know how to develop it.

Item Writing Is Essential to Developing Sound Examinations

Item writing is the foundation of the test-development process. Based on the test blueprint, the goal of item writers is to develop valid test items for the certification examinations. ONCC conducts item-writing workshops annually or biannually to maintain a sufficient “item bank” of questions to be used on the examinations. Participants in the workshops are certified oncology nurses selected from a pool of applicants and recognized for their expert knowledge in the diverse field of oncology nursing. Workshops usually are conducted over a two-day period. Prior to attending the Item-Writing Workshop, selected participants are asked to indicate the specific content areas of the respective test blueprint about which they would like to write test items. Item writing assignments are made based on participant’s preferences and the inventory of items already in the item bank of a particular examination. The item-writers are taught the basics of developing multiple-choice test items, which include setting the cognitive skill level of the item, constructing the item stem and options, classifying, and referencing the exams.

Mentoring

Item writers are assigned to a specific member of the respective test development committee for mentoring. All test development committee members have extensive experience and a thorough understanding of the item writing process. Mentoring usually begins prior to the workshop when the item writer submits items (at least two) to the mentor for preliminary review. The mentor may contact the item writer prior to the workshop to provide initial feedback. Following the introductory didactic session at the workshop, mentors work very closely with the item writers, providing individualized feedback, as the item writers develop test questions. The item writer and mentor work together throughout the workshop to develop test questions that are clear, concise, and challenging.

Cognitive Levels

ONCC test questions are written at one of two cognitive levels: knowledge or application. The ONCC knowledge level includes both knowledge and comprehension as defined in Bloom’s taxonomy. The ONCC application level includes the application, analysis, synthesis, and evaluation levels in Bloom’s taxonomy.

ONCC knowledge-level items measure a candidate’s command of the basic facts, concepts, principles, and procedures inherent to oncology nursing at the level of the examination. These knowledge-level items require candidates to answer questions by rote recall or by remembering something encountered previously. Knowledge-level items also may measure a candidate’s comprehension of information and ability to recognize the implications of facts or principles.

ONCC application-level items require candidates to move beyond recall or comprehension of general principles or facts and to apply these principles to a unique situation. This higher-level skill requires the complex processes involved in reasoning to a logical conclusion, making judgments and decisions, and deducing answers to clinical questions. Item writers are taught the basics of each cognitive level and how to construct questions at each level. They are challenged to write a greater number of application- than knowledge-level questions, because all ONCC test development committees strive to construct tests with a majority of application-level items. This is challenging because application-level items tend to be more difficult to write than knowledge-level items.

Constructing Clear, Concise Questions

The examinations include only multiple-choice questions. Item writers are taught to develop a clear and concise stem (i.e., the statement or question preceding the four responses), one correct answer, and three plausible, but incorrect, options for each item. Understanding that test time is limited, every effort is made to construct items that are focused, relevant, and void of trivial content and overlapping options. Writers also strive to be sensitive to issues of culture, gender, race, age, disability, socioeconomic status, and stereotyping and to avoid applying an inferior or superior status to any race, person, or group. Item writers are required to classify each item they write according to the specific content area it represents in the test blueprint.

Referencing

Referencing the completed item is another step that is vital to the validity of each item. Despite the experience and expertise of the writer, each item must have a documented and readily accessible reference that appears on the published reference list for the specific examination.

Item Analysis Ensures Test Questions Are Fair and Accurate

Pretesting

All newly written test items proceed through an extensive review and evaluation process prior to being approved for inclusion in an ONCC certification test form. New test items are reviewed by the test development committees for content accuracy and by the testing company for grammar and fairness. When items are determined to have met the review criteria, the items are statistically evaluated to ensure acceptable psychometric performance. This process, called **pretesting**, involves embedding new, or pretest, items in a test to evaluate candidate responses.

Responses to the pretest items do not count toward candidates' test scores. The pretest items are randomly dispersed within the examination so that candidates are unable to differentiate between the scored items and the nonscored, pretest items. Though the candidate's total score is based on only the scored items, candidate responses to the pretest items are analyzed statistically. An item analysis provides statistical information that includes distracter analysis, item difficulty, and item discrimination.

Item Analysis

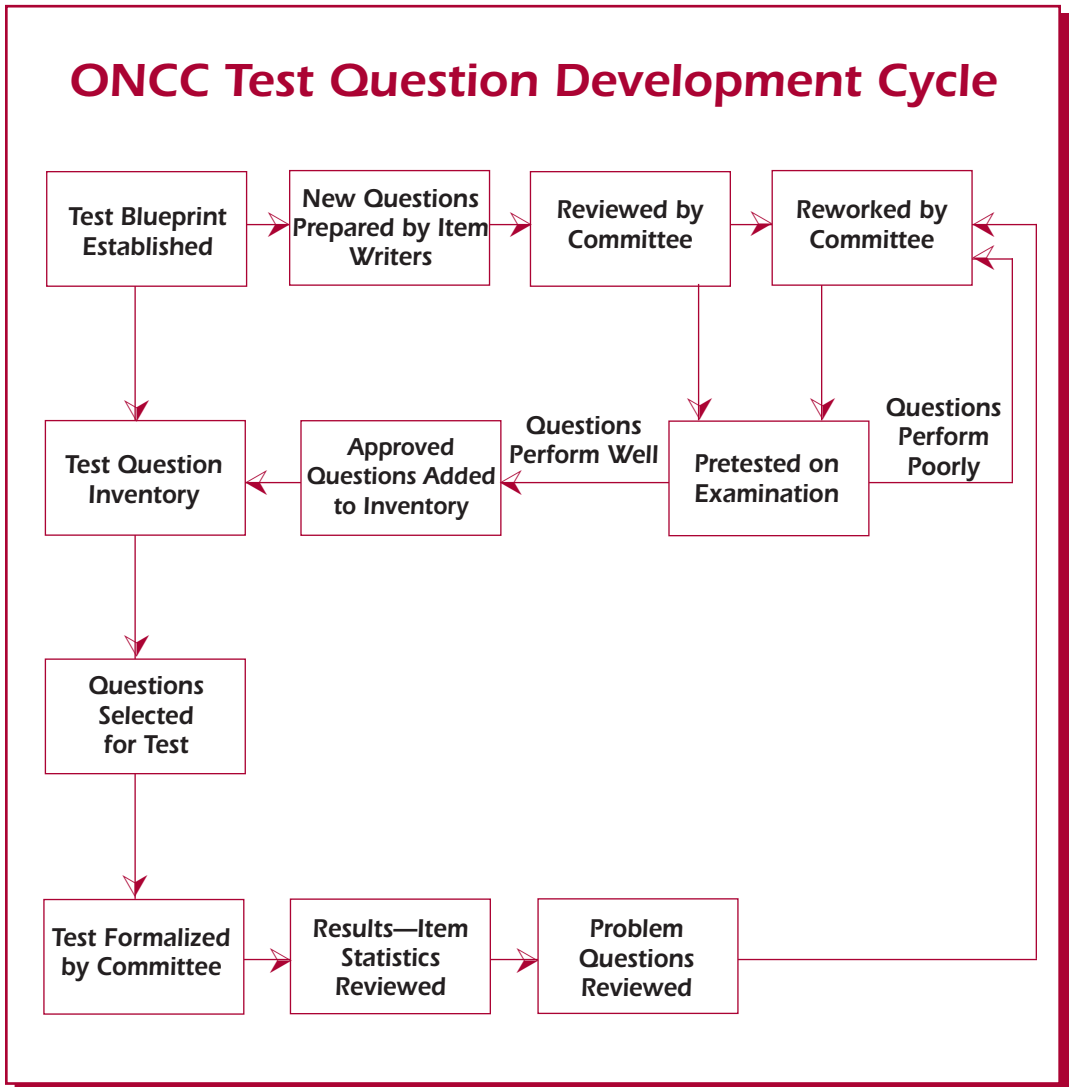
Distracter analysis provides information about the performance of each option in a multiple-choice item, by reporting the percentage of candidates who selected each option. Ideally, each option of a four-option multiple-choice item should be selected as a correct answer, even if only by a few candidates. The intent of having plausible distracters is to discriminate between candidates who perform well on the examination and candidates who do not perform well, and to make the items more difficult. Options that are never selected by any candidate are not considered plausible, indicating that even low-performing candidates know that the answer is obviously wrong. Distracters that are selected by too many candidates may be correct. When items are either too easy or too difficult, the distracter analysis provides the test developer with information about which options are not performing as intended and may need to be revised.

***Item difficulty (p+)** is a statistic that provides information about the percentage of candidates who have answered the item correctly and is interpreted as a measure of the difficulty of the item. If a large percentage of candidates answer the item correctly, the p+ is high and the item is considered easy. Conversely, if a small percentage of candidates answer the item correctly, the p+ is low and the item is considered to be difficult. The p+ is reported in a decimal, ranging from 0 to 1.0. If 70% of the candidate population answers the item correctly, the p+ is 0.70. For the ONCC examinations, the p+ of items is generally between 0.40 and 0.90.

Item discrimination (biserial correlation) is a statistic that provides information about the ability of the item to discriminate between those candidates who have the knowledge and scored high on the examination and those candidates who do not perform well on the examination. The biserial correlation ranges from -1.00 to $+1.00$. Ideally, high-performing candidates are expected to answer items correctly more often than those who are low-performing candidates. When that occurs, the biserial is positive. A biserial greater than or equal to $+0.20$ indicates an acceptable level of discrimination. Biserial correlations that are less than $+0.20$, and especially those that are negative, would indicate that high-performing candidates are selecting a distracter more often than the correct answer to the item.

Conclusion

The item analysis information is an important tool for evaluating item performance and is the final step in item development. After each examination, the test development committee reviews the item analysis and makes decisions about the continued use of all items in future ONCC examinations. Items deemed problematic are either revised or dropped from the item pool. When an item is revised, the item is again pretested in another examination to evaluate the performance of the new item. Items approved for continued use are maintained as active items in the pool and are available for selection in a future examination.



Examination Validity Confirms ONCC Tests Are Accurate Measures of Oncology Nursing Knowledge

Validity indicates the extent to which an examination measures what it is intended to measure. It is an essential component of any certification process and one of the most important considerations in examination development and use. The concept of validity refers to the degree to which conclusions reached, based on examination scores, are meaningful and useful. In other words, does the examination measure what it is intended to measure, so that the results (scores) are meaningful and can be used for an intended purpose? For oncology nursing certification, a passing score means that the certified nurse has the knowledge to practice competently at the level and in the role for which the examination is intended. This inference is valid only if the examination actually measures oncology nursing knowledge as specified by the credential (OCN[®], CPON[®], AOCN[®], AOCNP, AOCNS) and if the passing score is set to measure minimum competence (see “Multi-Step Process Maintains Consistency in Scoring,” p. 10).

Traditionally, validity has been divided into three overlapping areas: content, criterion, and construct. For credentialing examinations, content validity is the most relevant. Content validity determines that the content of the examination, both in terms of individual items and the relative emphasis of the different content areas of the test, is based on the behavioral domain of the occupation involved. An examination has content validity if it measures the area and the level of knowledge it is supposed to measure and if the content of the questions is accurate.

ONCC takes several measures to ensure content validity of its certification examinations. One of the most important measures is to conduct an empirical role delineation study for each examination at least

every five years to ensure that the content of all of the examinations is current and that the relative weighting of the content is linked to actual job responsibilities (see “Role Delineation Studies Form the Basis of Test Blueprints,” p. 5).

ONCC also ensures content validity by selecting experts in oncology nursing who represent various roles, subspecialties, and geographic areas to write examination questions. All nurses who write questions hold the certification for which they are writing questions. Questions are linked directly to the respective test blueprints and coded specifically as to the content each represents. The accuracy of the content of each question is documented through at least one reference. The respective test development committee then reviews each question. Test development committees are composed of experts who hold the respective certification. Committees are balanced with regard to roles, subspecialties, and geographic representation. Committee members review questions for accuracy, appropriateness, and lack of bias.

Content validity also is established through the pre-testing of examination questions (see “Item Analysis Ensures Test Questions Are Accurate and Fair,” p. 7). Those items that do not perform well statistically when pretested are either discarded or revised and again pretested. The final assurance of content validity concerns setting the passing score for the examination at a point that best distinguishes between competent practitioners and those who have yet to demonstrate their competence. ONCC employs sound and widely accepted psychometric methods of setting the passing point for all of its examinations (see “Multi-Step Process Maintains Consistency in Scoring,” p. 10).

Multi-Step Process Maintains Consistency in Scoring

The process of scoring the ONCC examinations involves several steps performed by ONCC and the testing service working with ONCC. This process includes calculating the candidates' raw scores (i.e., the number of questions answered correctly), conducting preliminary item analysis, and determining the passing score.

The testing service completes raw scoring by comparing each candidate's answers to the answer key. As a quality-control measure, following a paper-and-pencil test administration, a preliminary item analysis is conducted to detect any items having questionable statistical performance on the examination. The statistics described in "Item Analysis Ensures Test Questions Are Accurate and Fair" (p. 7) are reviewed by content and testing experts from ONCC and the testing service as well as members of the test development committees so that errors in the answers or ambiguous items can be detected and resolved before final scoring. The preliminary item analysis step is not possible with computer-based testing (CBT) because candidates receive their scores immediately upon completion of the examination. Therefore, only those items that have consistently performed well over time are placed on a computerized test form.

All ONCC examinations are criterion-referenced, meaning they measure test performance against a specific criterion, which is expressed as the minimum passing score. The minimum passing score separates oncology nurses who have the knowledge for competent practice at the basic or advanced level from those who do not possess such knowledge. Nurses who achieve at least the minimum passing score are awarded the credential. The minimum passing score is determined through the comprehensive process of a passing score study. A passing score study is conducted each time a new blueprint is introduced for a specific examination.

Passing Score Study

A task force of 10–12 expert oncology nurses perform the passing score study. These experts are certified in oncology nursing and represent various subspecialties, geographic areas, educational backgrounds, and practice settings. This diversity ensures that the perspective of the group is well balanced and representative of oncology nurses in general. The charge of

the Passing Score Task Force is to determine the level of performance that designates minimally competent oncology nursing practice for a specific examination.

The task force convenes for one to two days to complete the passing-score study. Prior to the meeting, the task force members study information on the passing score process, including methods of determining and evaluating the concept of minimal competence. As a group process, the test blueprint is reviewed and the minimum amount of knowledge that the competent oncology nurse should possess about each section of the outline is determined. Each task force member reviews every test question individually and makes judgments regarding the probability that a minimally competent candidate will answer the specific question correctly. After discussion, two methods of determining the lowest passing score are implemented: the Angoff technique and either the Hofstee or Beuk technique. Each method is based on subjective judgments of the content experts selected to represent the current state of practice of oncology nursing.

The Angoff technique is one of the most commonly used criterion-referenced procedures. With this method, each expert examines every test question and estimates how many candidates, whose level of knowledge is sufficient and acceptable for the specified level of practice, will answer the item correctly. The estimates of all the experts then are summed and averaged. The result is the suggested standard for passing the examination.

The Hofstee and Beuk techniques are standard-setting procedures that often are used to supplement the information provided by the Angoff technique. A component of these techniques requires experts to provide their opinions about acceptable passing scores and failure rates for the examination.

Equating Process

Despite careful construction and statistical analysis of items, various forms of the ONCC examination may vary slightly in difficulty. "Equating is a statistical procedure used to compare the difficulty of alternate forms of a test, such that no matter what form of a test is taken, candidates will be treated fairly and consistently" (Fabrey, 1996, p.37). The statistical adjustment of equating compensates for any unintentional differences

(See next page)

Reliability Ensures Test Scores Are Comparable, Regardless of Test Form

Reliability indicates the degree to which test scores are consistent when different forms of the same examination are administered on different occasions. A score obtained on an ONCC examination on one occasion provides an estimation of an individual's knowledge at that point in time. The estimation, based on only one test score, may or may not be accurate. If an individual took 10 forms of an ONCC examination on 10 different occasions, the 10 scores achieved would vary somewhat. If no variables external to the examination would affect the scores, (e.g. studying, fatigue) the variability would be the result of measurement error.

ONCC takes steps to reduce external sources of test score variability as much as possible. For example, tests are administered under controlled, standardized conditions. ONCC also works to reduce sources of measurement error within the examination. For example, all test forms for a specific certification are comparable because they are all developed from the test blueprint and exactly meet the specific weighting of content. Different forms of the examination also are equated to ensure comparability (see "Multi-Step Process Maintains Consistency in Scoring," p. 10).

The standard error of measurement (SEM) is an estimation of how much a candidate's score would be expected to vary if the candidate repeatedly took the same test, with performance on one occasion not affecting performance on any other occasion. The SEM is calculated from the reliability coefficient and the standard deviation of test scores. The SEM is measured in raw score points rather than scaled score points. Because only pass or fail scores are meaningful for the ONCC examinations, the SEM does not hold a high degree of relevance when scores are well above or well below the minimum score. The SEM is most relevant for scores close to the minimum passing score.

ONCC employs widely accepted methods of classical measurement theory to estimate the reliability and SEM of all of the certification examinations. These measures are reviewed periodically by the ONCC Board of Directors, staff, and test development committees to ensure that they are within an acceptable range. Understanding the interpretation of reliability coefficients and the SEM allows candidates, employers, and others to judge whether certification test scores are sufficiently reliable for their intended uses.

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in test difficulty so that candidates are treated fairly and consistently. Equating is achieved on the ONCC tests by constructing test forms that are to be comparable with a common subset of items that are representative of the overall test content. These common items can be used to determine the relative ability levels of two groups of candidates. The relative difficulty level of the two test forms then can be determined and compared. If the difficulty varies, a candidate's raw score is adjusted via the formula for converting the raw to a scaled score. A lower raw score would be required to achieve the designated scaled passing score on a more difficult form of the test.

Scaled Scores

To keep the passing score consistent across tests, scaled scoring is used. Using specifications set by ONCC, the raw score is converted to a scaled score

using a conversion equation. This process is similar to converting centimeters to inches or pounds to kilograms. However, the formula applied to the raw score is adjusted slightly, based on the equating procedure. Scaled scoring provides a frame of reference based on the standard adopted by ONCC of test performance required for the credentials, without regard to the difficulty of the specific test form taken. A scaled score of at least 55 is required to obtain certification.

Summary

A comprehensive statistical process is used to determine the passing score on the ONCC examinations. The critical expert work performed by the Passing Score Task Force, the review conducted by the test development committees, and the analysis performed by the testing service, serve to maintain the professional standards and consistency of the credentials awarded to those oncology nurses who pass the examination.

Extensive Security Protects Integrity of ONCC Tests

For ONCC and its testing company, Thomson Prometric, high-level security is inherent in all the test development and administration procedures. It is not something to be taken seriously on test day alone, but is a quality ingrained across the full spectrum of activities that make up the certification process.

Thomson Prometric pays rigorous attention to security during development and maintenance of test items at its Princeton, NJ, headquarters. Security procedures include limited access to building areas; the use of a proprietary, highly secure, state-of-the-art item banking system; locked storage areas; and round-the-clock guards—all designed to protect ONCC's valuable test items.

The same diligence is applied to transferring tests to testing centers. Traceable carriers are used to transport paper-and-pencil tests, and secure, encrypted electronic procedures are used to deliver computer-based programs. Strict procedures, including training of proctors, written guidelines and checklists, and unannounced audits, are integral aspects of security at the testing sites. Completed tests and other data are returned to Thomson Prometric in the same way they were sent—by the most secure possible manner. Finally, Thomson Prometric's and ONCC's database systems ensure the security of candidate information and test data.

Security at Thomson Prometric

Access to Thomson Prometric's building is by security badge or admission from a central receptionist during business hours. Staff must wear identification badges at all times, and a member of the staff must accompany guests while on the premises. At all times, all external doors to the building are locked with 24-hour security. Badge-activated keypads restrict entrance to areas of the building where ONCC materials are stored.

Data security is provided by a state-of-the-art software system designed to protect data stored on all types of media. Use of computers is limited to authorized personnel, who have access only to information

that has been explicitly defined by people responsible for its security.

Test Administration

Paper-and-Pencil Testing: Potential test site personnel are interviewed to assess their qualifications. In addition, ONCC ascertains that the test site staff have no potential conflict in administering the examinations, such as having a family member who is taking or is scheduled to take one of the examinations that the proctor would have responsibility for monitoring. Test site staff also must sign a confidentiality agreement.

Thomson Prometric holds proctor training sessions for new proctor orientation. Each proctor receives a *Test Site Administration Manual* that provides detailed instructions for receipt and shipping of test materials, security provisions, test administration, and handling irregularities at the test site.

On the day of the test administration, candidates' identification are checked against an attendance roster, listing only approved eligible candidates registered to take the test that day. Candidates must present an Admission Letter and two forms of identification (one must be a signature-bearing photo ID) to be admitted into the testing room. Cross checking these three documents confirms the candidate's identity and prevents impersonation.

Once the candidate's identity is confirmed, he or she is assigned a seat according to a predetermined seating chart. Candidates are not allowed to choose their own seat and are seated at least five feet apart. No personal belongings such as books, papers, or purses are permitted at the desks.

The sealed test booklets with enclosed answer sheets are distributed to the candidates and cannot be opened until the proctor gives instructions. Candidates also are required to sign a confidentiality agreement on the front of their answer sheets before beginning the test.

During the examination, proctors carefully monitor and walk about the testing room. If a candidate requests to leave the testing room for a restroom break or other approved reason, he or she must turn in the test booklet and answer sheet, sign out, and sign in again upon returning.

At the end of the examination, all test booklets and answer sheets are counted before candidates are dismissed. Once all the testing materials are accounted for, they are returned immediately to Thomson Prometric via secured, traceable carrier.

Computer-Based Testing: Thomson Prometric has developed systems and procedures that ensure the smooth administration of computer-based tests. Maintaining the security and integrity of the ONCC tests and candidate test data is of paramount importance to Thomson Prometric. Because they recognize that security is a vital component of all computer-based programs, developing a comprehensive security system has been one of the most critical components of the center network offered by Thomson Prometric.

The standard admission procedures for the ONCC examinations include positive candidate identification and use of a sign-in log. Candidates are required to provide two forms of identification (photo-bearing and with signature) and their authorization document when they check in at the test center.

Each candidate completes a center log with time, date, test program, printed name, and signed name. The center staff then assigns a testing station to the candidate, with the identifying information displayed on the screen. Each candidate is seated at an individual workstation that is separated by privacy dividers to further ensure security.

Because of the small size of the testing rooms, the position of the viewing window, and the parabolic mirror located on the opposite wall, staff are able to

observe all candidates from the observation station simultaneously.

A video camera is located in each testing room and is monitored continually. In addition to offering real-time monitoring of the testing area, these cameras provide a full sound and motion videotape of each test session.

Prometric also contracts with independent computer security auditors who regularly review systems and security practices. All combined, integrated measures create layer upon layer of security to protect the integrity of ONCC's examinations.

Investigating Security Events

If a question should arise about the security of an examination, Thomson Prometric conducts a thorough investigation, with the help of trained investigators who have years of experience in cases related to candidate misconduct and security violations. These investigators will interview candidates and witnesses and assist ONCC and Thomson Prometric to make decisions about actions. Should misconduct be suspected, Thomson Prometric will utilize all resources, including legal recourse, to resolve the issue.

Conclusion

Maintaining security is a critical requirement for any testing program to ensure that a score obtained by a candidate represents a fair assessment of that candidate's knowledge and skill. Developing the questions used on the ONCC examinations is a comprehensive and costly process and is one of the most significant factors in determining the cost of a certification test. Maintaining strict security of the examination serves the best interests of all and helps to keep the test fees affordable. We encourage every candidate to take security seriously and to notify ONCC of any indications that misconduct has occurred.

Measuring Continued Competency Presents Challenges to Certifying Organizations

Measuring competency, as well as continued competency, in a nursing specialty, is an ongoing challenge for all credentialing boards. The National Council of State Boards of Nursing (1996) defines competence as “the application of knowledge and the interpersonal, decision-making, and psychomotor skills expected for the practice role, within the context of public health, safety, and welfare.” The ONCC Board of Directors supports the use of a written examination to measure both initial and continuing knowledge because the test is a valid, reliable, objective, legally defensible measure. A written test provides information as to whether or not a nurse can use a knowledge base to make appropriate clinical decisions.

Since the inception of the first OCN® Examination in 1986, the ONCC Board of Directors has considered the measurement of continuing competency a priority and discussed this issue during almost every Board meeting. A task force of the ONCC Board of Directors, convened in 1989, conducted an extensive review of certification renewal practices of various subspecialties in nursing, medicine, and other health related professions. Based on this review, and an assessment of the development of new knowledge in the specialty of oncology, the ONCC Board determined that certification should be renewed every four years. This same rationale provides the basis for conducting role delineation studies at least every five years (see “Role Delineation Studies Form the Basis of Test Blueprints,” p. 5). The policy on Continued Competency has been revisited by the ONCC Board of Directors on a regular basis since 1990.

For the first decade of certification renewal, the Board of Directors required that candidates pass the written examination every four years to renew certification. Because examinations can be anxiety-provoking, candidates consistently requested an alternate renewal method.

Following extensive research, debate, and discussion, the decision was made by the Board of Directors to offer renewal of certification through the accrual of points in various professional areas. Although the Board believed the written examination provided the

best measure of a candidate’s competency, it also noted that more than 95% of OCN® renewal candidates consistently passed the examination over a 10-year period. After researching the renewal options of many other certification organizations, the Board developed a system for renewal of certification wherein the certified nurse has the option of providing evidence of professional development through the Oncology Nursing Certification Points Renewal Option (ONC-PRO). Candidates utilizing ONC-PRO are required to submit documentation that they have accrued a minimum number of points through continuing nursing education, continuing medical education, academic education, publications, presentations, precepting students in academic programs, or volunteer service during a specified period of time. (For specific information, please see the booklet *Understanding Your Oncology Certification Renewal Options*, available through ONCC).

The ONCC Board of Directors strongly believes that the accrual of points, through continuing education or other activities, should support specialty certification. Therefore, renewal of certification through ONC-PRO requires that the majority of points accrued be within the specialty of oncology nursing. Continuing education credits also must meet the standards of a recognized accrediting body to maintain the quality of the education. The Board recognizes the stress of retesting as well as the diligence required to obtain ONC-PRO points.

Recertification policies have been reviewed by Board assigned task forces twice since 2000, and both task forces maintained that four years is an appropriate time frame in which to require recertification, the options of retest or ONC-PRO are reasonable alternatives, and that the requirements of 100 ONC-PRO points for basic certification and 125 ONC-PRO points for advanced certification are rigorous, yet attainable requirements.

The Board will continue to keep abreast of new developments in methods to assess continued competence. Maintaining the integrity and legal defensibility of the credentials offered by ONCC while meeting the needs of the certified nurses remain priorities.

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