

Nurses Association of New Brunswick

Licensure Exam Standards Framework

August 13, 2020

Purpose

The Licensure Exam Standards Framework (hereafter, the Framework) sets out the expectations of the Nurses Association of New Brunswick (NANB) for an examination that meets professional measurement standards and the specific needs of NANB as it serves its purpose as a regulator of registered nurses in New Brunswick.

Nurses Association of New Brunswick

Vision: Leadership & Innovation in Nursing Regulation for New Brunswick

Mission: Regulating for safe, competent, and ethical nursing care

Values: Integrity, Competence, Accountability, Innovation

The Nurses Association of New Brunswick is the nursing regulation body in the province of New Brunswick. Two primary responsibilities of NANB are to provide regulatory approval of nursing education programs, and to establish and maintain entry to practice requirements for registered nurses and nurse practitioners in NB. As such, the NANB Board of Directors maintains oversight for selection of the high stakes entry to practice examination used in New Brunswick.

Selection of an entry to practice exam requires careful consideration due to the high stakes status of such an exam. Industry standards exist to guide regulatory bodies in consideration of an entry examination, although there are other significant factors to consider during negotiation and contract development. The entry to practice examination in NB is used by the regulatory body as one measure of eligibility to commence practice in NB as a registered nurse (RN).

This document and the information contained herein is the result of the work of the NANB Board of Directors, staff, and expert consultants. It is intended to inform parties responsible for development and/or administration of an entry examination about the testing standards that are generally necessary for the NANB Board of Directors to consider an exam to meet requirements for an entry examination. This document includes requirements based on specific industry testing standards for entry to practice exams. It does not include regulatory requirements for certain processes or for contractual specifications.

Foundation

This Framework rests on two main sources of information:

1. The needs of NANB as it executes its mandate to regulate safe, competent, and ethical nursing care in New Brunswick.
2. Professional testing standards for bodies offering credentialing programs to persons.

To a great extent, these two foundational elements overlap. More explicitly, one of the prevailing needs of NANB is that the licensing exam used to assess the competence of entry-level nursing graduates be developed and delivered according to professional testing standards. However, NANB also has specific needs as a regulator that are either beyond the scope of the standards or unique to the regulatory environment in New Brunswick. Both sources of information are used to provide the detailed requirements outlined in this Framework.

Professional Testing Standards

Two prevailing sets of testing standards are used in North America that inform the sound practice of bodies that issue credentials to persons. These are:

- ISO/IEC 17024: 2012 (ISO 17024)¹
- National Commission for Certifying Agencies 2014 (NCCA)²

Though there are other standards (such as the AERA/APA/NCME Standards for educational and psychological testing³), these two have widespread adoption and active accreditation processes to recognize bodies that meet standards across multiple disciplines.

Similarities

- Both sets of standards set out requirements for bodies that issue credentials (NANB is an example of such a body).
- Both go beyond addressing examination development and delivery and extend to matters pertaining to the organization as a whole.
- Both use the term “certification,” but with few exceptions the same standards apply to licensure.

Differences

- NCCA is more expansive and prescriptive with respect to examinations.
- NCCA is well-recognized in the U.S. but is less widely used in Canada.
- ISO 17024 has global recognition through the ISO brand and has been built with the consultation of countries around the world.

The interested reader can purchase a copy of the NCCA standards at www.credentialingexcellence.org and the ISO 17024 standards at www.scc.ca.

A challenge of using either ISO 17024 or NCCA as a basis for this Framework is that both are concerned primarily with bodies that issue a credential rather than with providers of examination services. NANB, as the regulator, is accountable for the quality and integrity of the licensing examination used to assess

¹ International Organization for Standardization (2012). *ISO/IEC 17024: 2012 Conformity assessment – General requirements for bodies operating certification of persons*. Geneva: International Organization for Standardization.

² National Commission for Certifying Agencies (2014). *Standards for the accreditation of certification programs*. Washington, DC: Institute for Credentialing Excellence.

³ American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (2014). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.

nursing graduates. Outsourcing examination development and delivery does not change that accountability. It is precisely because of this fact that it is necessary for an examination services provider to follow the standards that are specific to assessments when carrying out its functions.

This Framework delineates the testing standards the examination services provider will be expected to meet. The content of both sets of testing standards is copyright-protected by the issuing bodies and is not reproduced verbatim here. Rather, paraphrased language adapted specifically to the terminology used in Canadian health care regulation is employed to add greater relevance. Further, no effort is made to replicate every element in the standards documents, particularly when the content is not germane to the provision of examination services.

Note: NCCA standards are currently under revision with an updated version expected in late 2020. This revision process is anticipated to have minimal impact on expectations for credential-granting bodies, but rather is being undertaken to refine the language already in place.

Pertinent Legislation

Services relating to the provision of a licensing examination in New Brunswick must be performed in accordance with all prevailing applicable legislation. In particular, the following pieces of legislation are considered to be pertinent to NANB as the regulatory body responsible for RNs in New Brunswick:

- Nurses Act of New Brunswick
- New Brunswick Human Rights Act
- Official Languages Act of New Brunswick

Adherence to legislation is a necessary precursor to consideration of the following set of requirements.

Requirements for a Provider of Licensing Examinations

These requirements follow the general structure of the ISO 17024 standards, with augmentation of content taken from the NCCA standards. For convenience, the examination services provider will be indicated as SP. The SP may have its own vendors, and for clarity these will be called vendors.⁴

Within each subsection of this Framework, relevant paragraphs from ISO 17024 and the NCCA standards are listed for readers wishing to review the underlying standard. Where differences exist between what is provided in the underlying standards document and this Framework, the wording in this Framework will prevail.

⁴ A wide range of organizations and contractual arrangements may be suitable for providing examination development and delivery services. In this Framework, NANB is the client, and the organization providing the licensing exam to NANB is operating as the service provider to NANB (currently this role is filled by the National Council of State Boards of Nursing with respect to the NCLEX-RN). In the case of the NCLEX-RN, NCSBN has procured the services of Pearson VUE as its vendor offering examination delivery services. In that model, Pearson VUE provides services to NCSBN, and NCSBN is responsible for those services in its arrangement with NANB. In this Framework, no stipulation is made with respect to which activities a service provider may perform in-house or outsource; the only stipulation is that the service provider is accountable for the work that any of its vendors performs.

Organizational

ISO 17024 4.1, 4.2, 4.3.1, 4.3.2, 4.3.5, 4.3.6, 4.3.7, 4.3.8, 4.4, 5.1.1, 5.1.2, 5.2.1, 5.2.2, 5.2.3, 6.4, 10.1, 10.2

NCCA 2B, 3A, 4A, 4B, 11A, 11B, 23A, 23B, 23C

Organizational requirements address the structural and financial foundation that supports examination development and delivery. Meeting these requirements provides assurance that the SP has the corporate structure, physical facilities, and financial capacity to build and maintain a defensible licensing examination.

The SP must:

- Be a legal entity that can be held legally responsible for actions and inactions.
- Be able to provide examination services impartially; that is, no factors other than the effective evaluation of nursing competence for regulatory purposes can be permitted. Other interests, such as evaluating academic achievement or meeting the needs of employers, cannot play a role except when in the service of regulatory needs.
- Not limit or allow access of candidates to the examination except as determined by NANB. This is not intended to unduly limit the SP, but rather to ensure fair access to the examination of all candidates meeting the eligibility requirements established by NANB and to prevent content exposure to those who have not met those requirements.
- Have sufficient financial resources to support the ongoing maintenance and delivery of the examination without pressure to reduce quality or favour any interest other than those of NANB.
- Have a management structure in place to allow ongoing adherence to these requirements.
- Have a corrective action process in place, including analysis of reasons for errors or unexpected events and documentation of actions taken.
- Have a preventive action process related to examinations in place that is reviewed at least annually.
- Have policies and procedure in place to actively manage conflicts of interest for all Board members, staff, vendors, panel members, and any other persons who are permitted to view confidential information or influence licensing decisions.
- Have a recusal process written in policy to manage situations whereby persons with a conflict of interest can be absent from information receipt and/or decision-making.
- Document its organizational structure, including vendors, as that structure relates to examination services. Documentation must include listing of primary duties of each staff person and vendor.
- Not favour any candidates based on education, language, country of origin, or any other protected ground.

- Demonstrate separation between all personnel who are engaged in training future RNs and all personnel who are engaged in licensing examination services. If there are any common personnel (whether internal or external), documented policy must be in place for managing this threat to impartiality.
 - In general, those directly involved in the education of future RNs cannot have access to examination content or be involved in scoring decision on candidates.
 - If educators are used in the examination development or delivery process, it must be demonstrated how their involvement could not constitute a real or perceived conflict of interest. Attestation to keep testing content confidential through a confidentiality agreement is not sufficient to demonstrate that no conflict is present.
- Make available sufficient time and physical space for effective examination development and delivery.
- Conduct all examination development and delivery activities in a defensible manner consistent with prevailing testing standards and regulatory requirements.

Personnel

ISO 17024 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.6, 6.1.7, 6.1.8, 6.2.1, 6.2.2, 6.2.3, 6.3.1, 6.3.2, 7.3.2, 9.4.2, 9.4.5
NCCA 2A, 2E, 5A, 5B, 10A, 10B, 10D, 13A, 13B, 13C

Personnel requirements address the competence and availability of persons who are involved in the development and delivery of the examination. Meeting these requirements provides assurance that the SP has qualified people involved at all stages and that those people are sufficiently managed to maintain the level of quality and rigour required by NANB.

The SP must:

- Have an effective organizational structure in place to allow for the management of all staff, vendors, and subject matter experts (SMEs)⁵ involved in the development and delivery of the licensing examination.
- Demonstrate use of suitably qualified staff, vendors, and SMEs in all examination development and delivery processes.
- Make ongoing use of documented procedures across all examination development and delivery processes. These procedures must be of sufficient detail to allow for continuity of quality across different staff members.
- Require all staff, vendors, and SMEs to maintain the confidentiality of all examination and candidate information.
- Maintain and provide a list of all persons having access to confidential materials.
- Have a procedure for identifying and managing conflicts of interest for staff, vendors, and SMEs.
- Require all staff, vendors, and SMEs to remain impartial to examination outcomes, evaluating candidates only on the basis of published and agreed upon processes.
- Require staff, vendors, and SMEs to follow all rules and procedures with respect to examination development and delivery.

⁵ In this Framework, “staff, vendors, and SMEs” includes any persons acting in a paid or volunteer capacity with respect to examination development or delivery. This includes, but is not limited to, internal staff, any vendors with access to examination content or candidate information, persons who sit on panels or committees to evaluate examination content or make decisions related to the examination, and Board members.

- Have a separate process in place to manage situations where staff, vendors, or SMEs are on a path to potentially taking the examination. This same requirement extends to family, friends, and co-workers of staff, vendors, and SMEs.
- Have measures in place to prevent for a period of 24 months persons who have seen examination content from taking the examination or providing education to future examination candidates.
- Ensure that SME panels or committees are made up of a representative sample of the RN population⁶ and prevent any constituency from gaining undue influence.
- Document that SMEs have sufficient expertise in the content of the examinations and have been sufficiently trained on the purpose of the examination and any procedures they are involved in.
- Document that there is appropriate representation of both Francophone and Anglophone RNs in the examination development process.
- Provide documented assurances that translated test items are equally understood in both official languages and are of the same difficulty.
- Maintain an enforceable contract with all vendors.
- Not outsource responsibility for decisions.

Records

ISO 17024 6.1.5, 6.2.3, 7.1.1, 7.1.2, 7.3.3

NCCA 9A, 9B, 9C, 9D, 10C, 10E, 12A, 13D

Records requirements address all matters related to the handling of confidential candidate and examination development information. Meeting these requirements provides assurance that the SP is protecting the confidentiality of candidate information in compliance with NANB specifications and prevailing legislation, and that information is retained in such a manner as to assist in the handling of appeals or other enquiries.

The SP must:

- Document the responsibilities and qualifications of all staff, vendors, and SMEs involved in examination development and delivery.
- Retain up-to-date files on all staff, vendors, and SMEs that document skills, experience, credentials, and any known conflicts of interest.
- Retain records documenting the eligibility of candidates for a period of 1 year after the candidate ceases to be eligible for the examination or for a period of 1 year after the end of the examination appeal period or for a period of 1 year after the candidate successfully completes the examination, whichever is later.

⁶ The nature of representation required will vary depending on the panel or committee. For panels or committees that are developing or making decisions on content appearing on the licensing examination, all members must be licensed as an RN in good standing or have demonstrably comparable knowledge and ability. Importantly, for a panel or committee to be considered representative, the individual members must come from various practice settings, areas of expertise, and geographic locations. Both Francophone and Anglophone RNs should be represented, though not necessarily on the same panel (e.g., it may be more efficacious to have a Francophone panel write test items in French and an Anglophone panel write test items in English). Further, though educators, employers and other non-practising persons may contribute on panels, most representatives should be practising RNs.

- Retain records of all decisions that SME panels make.
- Adhere to applicable legislation in matters related to records retention, release, and destruction.
- Make publicly available its records retention policies.
- Retain item-level examination performance for all candidates for at least 1 year after successful completion of an examination or 1 year after expiration of the exam appeal period.
- Have policies in place to maintain the privacy of candidate information, and a mitigation procedure in case of a breach.
- Have policies for the maintenance and release of information and records, prioritizing protection of candidate information.

Security

ISO 17024 7.4.1, 7.4.2, 7.4.3

NCCA 12B

Security requirements address all matters related to preventing examination misconduct and the exposure of examination content. Meeting these requirements helps provide assurance that the examination result obtained by a candidate is a true reflection of their competence to practise as an RN, and more specifically that a passing result was not obtained using any prohibited aids.

The SP must:

- Have effective policies and procedures in place to safeguard the security of test content throughout the exam development and delivery process.
- Have procedures in place to address security breaches when they do occur.
- Have measures in place to safeguard against the risks associated with item exposure.
- Require candidates to sign a non-disclosure agreement and an agreement to not participate in fraudulent testing practices.
- Administer examinations with an invigilator present.
- Confirm the identity of each candidate using government issued identification and other mechanisms necessary to confirm identity throughout the testing event.
- Monitor the testing environment for unauthorized testing aids.
- Evaluate testing results for evidence of test misconduct.
- Not use the test content for purposes other than those approved by NANB.

Examination – Structure

ISO 17024 8.3, 8.4, 8.5, 9.2.1, 9.2.6

NCCA 15A, 15B, 15C

Examination – Structure requirements address the overall composition of the examination. Meeting these requirements provides assurance that the examination is based on the content necessary for safe patient care and that scores resulting from the examination are sufficient to make pass/fail decisions regarding readiness to become licensed as an RN.

The SP must:

- Document how the examination evaluates specific entry-level competencies of graduate nurses required for safe patient care in the first 6–8 months of practice, as aligned with the outcome of a regularly scheduled practice analysis.
- Demonstrate the basis for including content in the examination (e.g., through a validated testing blueprint and job analysis or competency profile).
- Include representation from various RN stakeholders from New Brunswick in the development of the testing blueprint (see footnote 6 on page 6).
- Verify periodically through a suitable committee the continued adherence of the examination structure and content to the intended purpose of the examination.
- Apply prerequisites for eligibility as defined by NANB.
- Not allow alternate routes to eligibility (e.g., grandfathering, reciprocity agreements, etc.).

Examination – Applications

ISO 17024 4.3.3, 4.3.4, 7.2.2, 7.2.3, 7.2.4, 9.1.1, 9.1.2, 9.1.3

NCCA 1A, 1B, 3B, 6A, 6B, 6C, 6D, 6E, 7E, 7F, 8A, 8B

Examination – Application requirements address the experience the examination candidate has in applying to take the examination. Meeting these requirements provides assurance that the SP is treating all candidates fairly and consistently in accordance with NANB guidelines and prevailing legislation.

The SP must:

- Make publicly available the purpose of the examination and the target audience.
- Make publicly available the process required for candidates to demonstrate eligibility for the examination and the process for taking the examination.
- Make publicly available the structure of the examination, including the examination blueprint.
- Obtain legal agreement from candidates to abide by all policies at the time of their application to take the examination.
- Collect sufficient documentation to support the eligibility of candidates to take the examination.
- Have guidelines in place to manage testing accommodations.
- Follow relevant legislation when implementing approved accommodations.
- Ensure that accommodations do not compromise the interpretation of test scores with respect to the pass mark.
- Have suitably trained staff evaluate applications; decisions on eligibility must be made based only on information provided on the application.
- Have policies and procedures in place to support the fair handling of all applications.

- Not directly or indirectly provide an advantage or disadvantage to any person based on their education pathway, except as defined by NANB in terms of eligibility criteria.
- Not limit eligibility based on unreasonable financial constraints or membership status in an association or group.
- Gain approval of NANB for reciprocity agreements related to any requirements.

Examination – Item and Form Development

ISO 17024 9.2.2, 9.3.1

NCCA 10A, 10B, 10C, 10D, 15A, 15B, 15C, 16A, 16B, 16C

Examination – Item and Form Development requirements address the process of drafting examination questions and the setting of specific test forms to meet a testing blueprint. Meeting these requirements provides assurance that a defensible process using qualified subject matter experts is employed to establish the scope of content to be assessed on the examination and to create the items and forms used to assess candidate competence.

The SP must:

- Assess the competence of nursing graduates to practise.
- Base examination development on a validated competency profile or job analysis document,⁷ unless NANB supplies one. The SP must:
 - Develop the competency profile or job analysis document with a representative sample of RNs from New Brunswick and validate it in part using a widely distributed survey.
 - Issue a public version of the process used to build the competency profile or job analysis document.
 - Derive the testing blueprint directly based on collected survey data and panel judgement.
 - Update the competency profile or job analysis document every 3 years, or more frequently if external events indicate need for revision of scope assessed on the examination.
- Provide a documented examination development plan that ensures consistency across examination forms and over time, and that demonstrates use of trained, qualified SMEs at each stage in item and form development.
- Create testing items that faithfully reflect the testing blueprint, using SMEs who understand the needs of RN practice.
- Validate testing items with an expert and representative panel of SMEs, including RNs nominated by NANB.
- Clearly document how the examination effectively measures the skills and abilities delineated in the competency profile or job analysis document.

⁷ Licensing programs in Canada most often rely on competency profiles to define the required skills of licence holders, whereas job analysis is generally the preferred method in the United States. There are more similarities than difference between the methods and outcomes, and they both serve the same role with respect to providing the foundation for the test blueprint. Regardless of the approach or label on the document, NANB requires that the licensing exam for RNs be based solely on the most frequent and important entry-level competencies for an RN in their first 6–8 months of practice.

- Have a documented form construction plan that ensures equivalence across forms in terms of content coverage and difficulty relative to the pass mark.
 - The English and French versions of the examination must be equivalent in content, and must be constructed to allow for identical interpretation of test scores relative to the pass mark.
- Demonstrate, if using subjectively scored items, how consistency in scoring is achieved.⁸
- Update the examination item bank with new items at least annually to reflect current practice.
- Actively manage the item bank to allow for continued administration of validated test items, including removal of items not meeting established psychometric thresholds.

Examination – Administration

ISO 17024 9.2.5, 9.3.1, 9.3.2, 9.3.3, 9.3.4

NCCA 18A, 18B, 18C, 18D

Examination – Administration requirements address the delivery of the examination to candidates. Meeting these requirements provides assurance that candidates have an equivalent and controlled opportunity to demonstrate their competence so that scores can be interpreted the same way across all candidates.

The SP must:

- Provide a standardized administration so that all candidates have an equivalent and substantially similar opportunity to demonstrate competence.
- Provide testing accommodations to candidates to facilitate equivalent access to the opportunity to demonstrate competence.
- Administer examinations under secure conditions; candidate identity must be verified throughout the testing event and examination content must be protected from theft or copying.
- Have measures in place to prevent examination misconduct and to analyze candidate data for evidence of misconduct.
- Obtain from candidates confirmation of understanding of, and agreement to comply with, the examination rules.
- Use trained invigilators to oversee the administration of each candidate's examination.
- Monitor vendors for adherence to administration procedures.
- Have an effective incident-handling procedure in place.

Examination – Scoring

ISO 17024 9.2.3, 9.2.4, 9.3.5, 9.4.4, 9.4.6

NCCA 6F, 6H, 8A, 17A, 17B, 17C, 19A, 19C, 19D, 19E, 20A, 20B, 21A, 21B, 21C, 21D

Examination – Scoring requirements address the methods used to generate scores for candidates and establish the cut scores used to make the pass/fail decision. Meeting these requirements provides assurance that candidate scores are generated in a consistent manner and that they are assessed against a stable criterion that reflects the level of competence needed for an entry-level RN.

⁸ Note that it is not the intent of NANB to include subjectively scored test item on the licensing examination.

The SP must:

- Use a generally accepted method to set a passing standard that accurately reflects the necessary competence to practise safely and effectively as an RN in New Brunswick.
- Provide a technical report of the standard setting process in sufficient detail to allow for replication of the process.
- Repeat standard setting when there is a change in the test blueprint or when a change in administration protocols makes suspect the comparability of performance levels across administrations.
- Use statistical equating to set equivalent pass marks across examination forms.
 - Each form of the exam must be constructed to facilitate calculation of equated pass marks consistent with the equating model.
 - The French and English forms must be demonstrated to be equivalent in relative difficulty.
- Demonstrate that candidates taking the French and English forms of the examination have equivalent opportunity to demonstrate their competence relative to the same performance threshold. There must be documented evidence sufficient to provide confidence that the language of the test is not a source of variance in test scores.
- Calculate candidate scores as outlined in the testing blueprint.
- Use only examination scores in the pass/fail decision for candidates.
- Issue a pass result only to candidates who have achieved the pass mark for an examination.
- Issue a pass result only to candidates who have completed all eligibility and assessment requirements.
- Issue feedback to failing candidates that includes performance across meaningful domains, relative distance to the pass mark, and description of how to interpret the feedback, including any limitations on interpretation.
- Provide opportunity for retesting of failing candidates.
- Not involve any persons who were involved in the training of candidates in the final pass/fail decision-making.
- Take measures to verify that the scoring of all candidates is performed accurately and without potential or actual bias.
- Provide to NANB a report after each administration window or period that indicates the pass rate and total number of candidates tested, along with other breakdowns of candidate performance data as stipulated by NANB.
- Demonstrate sufficient reliability, decision consistency, and standard errors of measurement for each form of the examination.

- Document and release to NANB evidence supporting the reliability and validity of test scores at least annually through a technical report. This report should include
 - The names, credentials, and other demographic characteristics for persons involved in examination development and scoring.
 - The methods used to construct and score the test forms used during the reporting period, along with demonstration of adherence to the test blueprint specifications.
 - A description of the process followed and the outcomes for any test development activities completed during the reporting period.
 - Evidence for inter-rater consistency and fair application of scoring across all candidates regardless of language, scorer, and location, if subjectively scored items are used. (See also footnote 8 on page 10.)
 - Details of the equating method used, along with key metrics supporting recommended outcomes.
 - Confirmation of a suitable process for final decision-making on items used in scoring and pass mark setting that includes a suitable panel of SMEs.
 - Data on number of candidates, scores, and pass rates by location and language.
 - Form metrics, including reliability, decision consistency, and standard errors of measurement.

Examination – Appeals

ISO 17024 9.4.1, 9.9.1, 9.9.2, 9.9.10

NCCA 6G, 7F

Examination – Appeals requirements address the policies and procedures related to candidate appeals of eligibility decisions and examination results. Meeting these requirements provides assurance that candidates have easy access to a complaints mechanism regarding the handling of their application and examination outcomes.

The SP must:

- Retain sufficient information on candidates to properly evaluate appeals.
- Publish information on the appeals process for easy access by all candidates. Candidates should be able to appeal
 - Decisions made about their eligibility to write the examination,
 - Decisions made about a requested testing accommodation,
 - A failing result on the examination on the grounds of a scoring error,
 - Other substantive decisions of the SP that have adversely affected the candidate.
- Provide failing candidates with the opportunity to have their test performance re-evaluated by a mechanism independent of that originally used to issue the fail result.
- Forward to NANB complaints or appeals about policies established by NANB.