Benchmarking Study on Continuing Certification in Healthcare and Allied Health Fields: Program Variables, Commonalities, and Trends

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Background: Continuing certification refers to the requirements that promote lifelong learning, maintain the currency of professional knowledge, and promote patient safety. The rationale for requiring continuing certification is based on the degradation of the fundamental knowledge and skills required for certification over time. In 2018, the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) conducted a benchmarking study to collect and assess key continuing education variables from certifying organizations representing healthcare and allied health fields. **Purpose:** The aims of the study were (a) to assess whether the model used for the NBCRNA's continuing professional certification program is supported by evidence and (b) to address questions and concerns about the program's validity. **Methods:** The NBCRNA partnered with a credentialing organization consulting firm to gather information on continuing certification practices from the websites of 269 accredited healthcare organizations and 24 member boards of the American Board of Medical Specialties (ABMS). **Results:** Of the 269 allied health and nursing professional certifying organization websites that were studied, 58% certify allied health professionals, 26% registered nurses, and 8% advanced practice registered nurses. Certification was not required for the professions served by 64% of the credentialing programs. The most common certification cycles were 3 to 4 years (36%) and 5 to 6 years (35%). Ninety-seven percent of programs offered continuing education hours followed by re-examination as an option for recertification (52%). Fifty percent of programs offered multiple pathways for maintaining certification. A majority of ABMS member boards have transitioned to longitudinal assessments to assess the knowledge, judgment, and skills of their diplomates. **Conclusion:** Analysis of the data revealed commonalities and trends across a wide spectrum of certifying organizations that can be used to guide the modification of existing and development of new continuing certification programs.

Keywords: Continuing certification, continuing education, CE, certifying organization, re-examination, longitudinal assessment, reentry

Continuing certification refers to the requirements that promote lifelong learning, maintain the currency of professional knowledge, and promote patient safety. The rationale for requiring continuing certification is based on the anticipated degradation of the fundamental knowledge and skills required for certification. For example, certificants may need to be reminded of best practices, learn new gold standards in care, or be taught new technologies to avoid obsolescence (National Commission for Certifying Agencies [NCCA], 2016).

The National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) is the certifying organization for the nurse anesthesia profession. In 2016, the NBCRNA launched the Continued Professional Certification (CPC) Program for Certified Registered Nurse Anesthetists (CRNAs), which replaced the profession's previous "recertification" program. The CPC Program focuses on lifelong learning and "was developed in response to changing accreditation requirements, changing needs within the health care environment, the increasing role of CRNAs in the health care scene, and advances in technology" (NBCRNA, 2021). The program is based on 8-year periods comprised of two 4-year cycles. Each 4-year cycle has a set of components including 60 Class A credits (assessed continuing education [CE]), 40 Class B credits (professional activities), four Core Modules (current literature and evidence-based knowledge), a "2-year Check-in" at the midpoint of each 4-year cycle, and a performance standard assessment every 8 years.

In 2018, 2 years after the CPC Program was introduced, the NBCRNA partnered with SeaCrest, a certification organization consulting firm, to (a) conduct a study of CE variables gathered from 269 continuing certification programs for allied health

professionals, registered nurses, and advanced practice registered nurses; (b) conduct a similar study of the 24 member boards of the American Board of Medical Specialties (ABMS); and (c) benchmark the data to the CPC Program. The purpose of this benchmarking study was to assess the structure, requirements, and process of certifying organizations by comparing the CPC Program with continuing certification programs in other healthcare fields.

Background

In keeping with its mission to promote patient safety through credentialing programs that support lifelong learning (NBCRNA, n.d.), the NBCRNA partnered with the SeaCrest Company on the benchmarking study to assess the practices, models, costs, and other variables of certifying organizations related to continuing certification in the healthcare industry and to compare the data to the CPC Program data. NBCRNA's rationale for conducting this research was two-fold: (1) to assess whether the model used for the CPC Program is supported by evidence and (2) to address questions and concerns within the CRNA community about the program's validity. SeaCrest's report on the findings was funded by and prepared for the NBCRNA.

There are three third-party accreditation standards relevant to this project, including the NCCA (2016) *Standards for Accreditation of Certification Programs* (referred to as the NCCA Standards), the American Board for Specialty Nurse Certification (ABSNC) *Accreditation Standards* (referred to as the ABSNC Standards; ABSNC, 2017), and the International Organization for Standardization (ISO; 2012) *ISO/IEC 17024:2012: Conformity Assessment—General Requirements for Bodies Operating Certification of Persons* (referred to as ISO 17024). The ABMS (2014) has also developed *Standards for the ABMS Program for Maintenance of Certification (MOC)* that serve as the basis for MOC for its 24 member boards.

ABMS MOC

MOC is a program of continuous professional development initiated in 2000 by the ABMS and its 24 member boards (ABMS, 2014).

All MOC programs implemented by the member boards measure the same six competencies within the same four-part framework. The competencies include: (1) Practice-based Learning and Improvement, (2) Patient Care and Procedural Skills, (3) Systems-based Practice, (4) Medical Knowledge, (5) Interpersonal and Communication Skills, and (6) Professionalism. The framework includes Part I: Professional Standing and Professionalism; Part II: Lifelong Learning and Self-Assessment; Part III: Assessment of Knowledge, Skills, and Judgment; and Part IV: Improvement in Medical Practice (ABMS, 2014). While these elements are consistent across all member boards, what may vary, according to a given specialty, is the specific activities the member boards use to measure these competencies. Despite some variation in the activities, they are all built upon evidence-based guidelines, national clinical and quality standards, and specialty best practices.

Other Benchmarking Studies

Three other benchmarking studies of note are the Institute for Credentialing Excellence (ICE) External Stakeholders Working Group report *Value of Certification* (McCorkle, 2019), the ABMS report *Continuing Board Certification* (Vision for the Future Commission, 2019), and the RAND Corporation report *Identification of Alternative Physician Assistant Recertification Models* (Reid, 2018).

ICE Study

In 2016, the ICE sought to attain objective information about the value of certification on behalf of its member organizations, noting that outside the field of information technology, little research existed on the topic. The ICE External Stakeholders Task Force was charged with determining solutions for attaining these data, and one recommendation was to conduct a cross-industry study on the value of certification. A large sample of credential holders (individuals with one or more professional certifications) from four healthcare and two non-healthcare markets were surveyed, generating more than 12,000 responses; data from 9,407 respondents were used (McCorkle, 2019).

The survey's findings revealed that certification was valued by the respondents, although the task force reported it was difficult to equate certification with actual job performance or satisfaction. Nearly 85% of respondents believed certification is valuable, and approximately 78% believed it increases knowledge beyond that which is attained through job experience. Additionally, the respondents strongly believed that certification increased their professional confidence (83.9%), enhanced their confidence during professional interactions (83.7%), and kept them more strongly connected to the profession (82.6%). By comparison, only 61% of respondents believed that recertification is valuable (McCorkle, 2019).

ABMS Study

The goals of the ABMS survey-driven benchmarking study were to (a) foster inclusive, open, collaborative, and candid dialogue across stakeholder groups; (b) consider a range of principles, frameworks, and program models for continuing board certification; (c) be responsive to the needs of those who rely on the credential: patients, hospitals, and medical practices; (d) be relevant, meaningful, and of value to physicians; and (e) create meaningful recommendations for ABMS and its member boards (Vision for the Future Commission, 2019).

Approximately half the physicians who responded to the survey indicated that they see the MOC as being too costly, burdensome, and not a true reflection of their abilities as clinicians. Some respondents indicated that they want continuing certification to focus on practice-relevant CE, self-assessment, open-book examinations, and quality-of-care assessments. Generally, the physician respondents value lifelong learning; vary in their support of CME; view CME-only continuing certification as sufficient; show a preference for formative assessment; sense a perceived loss of trust;

and desire improved resources to support continuing certification (Vision for the Future Commission, 2019).

RAND Study

The study methods used for the RAND Corporation report *Identification of Alternative Physician Assistant Recertification Models* (Reid, 2018) included interviews with health professional certifying organizations, a review of the literature on continuing certification requirements, and a thorough assessment of the continuing certification landscape. The report noted that the National Commission on Certification of Physician Assistants, which funded the study, and most ABMS medical boards had required examinations for continuing certification for years; most APRN certifying organizations have not required examinations; and the American Osteopathic Association specialty boards and the NBCRNA recently instituted required examinations for continuing certification. In the literature, little evidence exists on how physician assistants, APRNs, and osteopathic physicians' continuing certification requirements affect patients and healthcare professionals. However, among the existing evidence, participation in MOC was associated with improvements in some process-based quality measures but not with intermediate outcomes; furthermore, participation had mixed associations with costs of care (Reid, 2018). Additionally, one study, which was limited to internists, addressed the association between high-stakes examination performance with better performance on some (but not all) of the process-based quality measures assessed, with higher patient experience scores and better performance on diabetes intermediate outcomes (Hess, 2012).

RAND interviews with health professional certifying organizations yielded the following common themes: (a) there is a burden on healthcare professionals associated with meeting continuing certification requirements, (b) it is questionable how relevant the requirements are to healthcare professionals' practice, and (c) the use of longitudinal assessments is viewed as a mechanism to enhance formative knowledge, judgment, and skills while providing a summative assessment (Reid, 2018). Longitudinal assessment combines principles of adult learning with technology to promote learning and retention of knowledge. It involves the administration of shorter, reoccurring assessments, typically quarterly (e.g., 10–30 questions per quarter), with immediate feedback and rationales for correct answers. Follow-up assessments are built in to address knowledge gaps (ABMS, 2019). The interviews also showed that emphasis on formative and summative goals of recertification requirements vary, even for organizations using the same types of alternatives to high-stakes, closed-book examinations.

Methods

The benchmarking study included the following methods: (a) develop a data collection tool to identify information that will be collected for each continuing certification program, (b) gather identified data points through review of public access websites for each organization and populate the data collection tool with the data, and (c) review and summarize the data gathered.

Sample Selection

SeaCrest gathered information on continuing certification practices from 269 healthcare certifying organizations that are accredited under the NCCA, ABSNC, or ISO 17024 standards, and on MOC requirements from the 24 member boards of the ABMS. Examples of data collected from the 269 healthcare certifying organizations included licensure requirements, timeline for certification maintenance, pathways for continuing certification, fees, resources offered to certificants, implications for failing to meet continuing certification requirements, and lifetime credentialing and alternate status. For the 24 ABMS member boards, similar data were collected with the addition of requirements to meet each MOC Part I to IV requirements.

The rationale for targeting third-party accredited programs was two-fold. First, accredited programs have demonstrated compliance with established best practices for professional certification programs. Accredited programs are also required to demonstrate ongoing compliance with best practices through surveillance and re-accreditation. Second, targeting accredited programs helped to narrow down the potential pool of applicants to a more manageable number and eliminate outlying information from groups that do not generally follow best practices for certification programs.

Data Collection Tool

An Excel spreadsheet was developed and used to obtain data from the 269 websites of allied health, registered nurse, and advanced practice registered nurse professional organizations (collected on one sheet in Excel) and the websites of the 24 member boards of the ABMS (collected on a second sheet in Excel). Data on certification of licensed vocational nurses (LVNs) and licensed practical nurses (LPNs) were not collected. To better analyze the information gathered and identify trends, SeaCrest used Survey Monkey to compile the data from the 269 allied health and nursing organization websites and 24 ABMS member boards.

Results

Accredited Health and Allied Health Certifying Organizations

Of the 269 certifying organizations included in the benchmarking study, 58% (n = 157) certify allied health professionals, 26% (n = 70) certify registered nurses (RNs), and approximately 8% (n = 22) certify advance practice registered nurses (APRNs). The majority of the programs (77%, n = 207) are currently accredited by the NCCA, approximately 25% (n = 68) by the ABSNC, and 15% (n = 41) under ISO 17024. A limited number of programs hold dual accreditation from the NCCA and ABSNC (n = 38) or the NCCA and ISO 17024 (n = 7) (Table 1). The large number of programs holding NCCA accreditation rather than accreditation from other bodies was expected because the NCCA has been an accreditor of

certification programs in healthcare and allied health fields since its inception in 1987.

Licensure

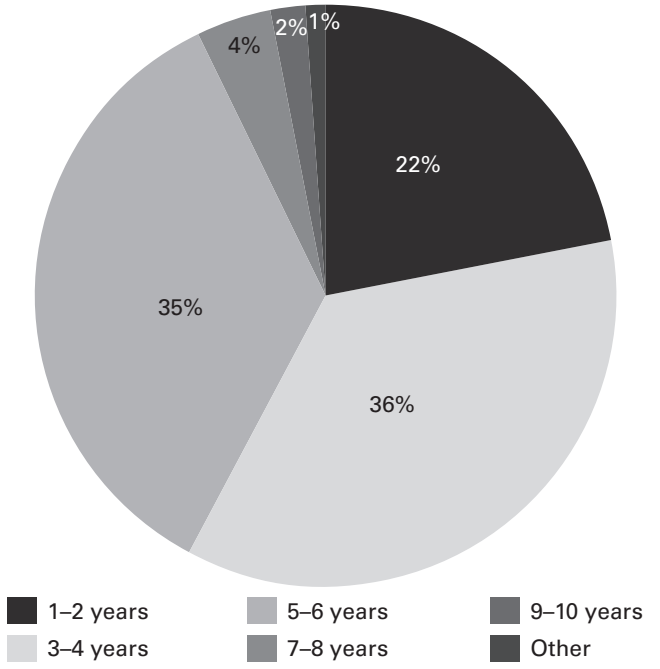
For the majority of the programs reviewed (N = 262), certification is not required for allied health and nursing professionals to practice in their role (64%, n = 167). In cases where certification is required to practice, it is typically linked to state licensing requirements and varies by state. Holding a current, unrestricted license in the field is a renewal requirement for 57% (n = 148) of the programs reviewed. Allied health professionals (non-RNs/APRNs and nonphysicians) generally do not require a license for practice and therefore a current license is not required for renewal. For example, phlebotomy technicians are not licensed in all states and, accordingly, license maintenance is not part of the requirements for initial or continuing certification.

Timeline for Certification Maintenance

There was more variance in the period in which activities to maintain certification must be completed, or the certification period, when compared to other components of the recertification process. The most common certification periods are 3 to 4 years (36%, n = 97) and 5 to 6 years (35%, n = 94). These two ranges combine to make up 71% (n = 191) of the programs reviewed (Figure 1).

FIGURE 1

Certification Periods for Allied Health and Nursing Health Care Organizations' Credentialing Programs (N = 269)



Pathways to Continuing Certification

Most allied health and nursing programs (97%, n = 261) required completion of a specified number of CE hours. There were 141 programs (52%) that offered re-examination, with 57% (n = 81) of these programs requiring re-examination if other requirements were not met (i.e., not meeting CE hour requirement). If re-examination is offered by a certifying organization, certificants typically use the active form of the examination (the same form used for initial certification versus a different or shorter form of the examination). The present study revealed that 50% (n = 133) of programs allow certificants to choose their continuing certification pathway (Table 1). Pathways are typically a combination of CE and the option to choose to complete one or more activities such academic courses, presentations or lectures, publication or research, completion of quality improvement or evidence-based practice projects, preceptorship, professional service, practice or clinical hours, or re-examination (Wound, Ostomy and Continence Nursing Certification Board, 2013; American Nurse Credentialing Center, 2016). No programs for nurses or allied health professionals appeared to offer continuing certification through simulation or longitudinal assessment.

Examples of requirements and options being incorporated into non-ABMS programs by different certifying organizations include the following: (a) Certificants may retake/pass the initial certification examination or pass an examination not previously completed to earn another certification or meet requirements for continuing certification. (b) Renewing certificants may complete self-assessments and quizzes on research related to the profession. (c) Certificants may use a learning pathway questionnaire to focus their professional development goals. (d) Certificants are required to recertify by CE every 5 years and re-examination every 10 years. (e) Continuing certification options offered to certificants include multiple variations involving practice hours, professional development, and/or successful testing, with learning needs assessed through a formalized points system.

Fees

Approximately 33% (n = 87) of the allied health and nursing programs that were examined offer a discount to certificants holding a membership in another organization, most commonly an affiliated membership organization (Table 2). The cost of continuing certification varied among the programs evaluated, ranging from "up to $100" to more than $600. The most common fees were in the $201-$300 range (33%, n = 76) followed by up to $100 (32%, n = 73) and $301-$400 (28%, n = 64).

Resources Offered to Certificants

Programs generally offer some assistance to certificants to maintain their certification. Approximately 63% (n = 135) of programs evaluated provide a list of acceptable or approved CE, and 57% (n = 123) provide suggestions for CE (Table 1). Some allied health and nursing programs also offer a resource listing or webpage with suggestions for meeting requirements (29%, n = 62). For 46% (n = 122)

TABLE 1

Features of Allied Health and Nursing Health Care Organizations' Credentialing Programs (*N* = 269)[a]

Credentialing Programs	*n* (%)
Type of Professional	
Allied health professional	157 (58.4)
Advanced practice RN	22 (8.2)
RN	70 (26.0)
Other	20 (7.4)
Accrediting Body	
NCCA	207 (76.6)
ABSNC	68 (24.9)
ISO 17024	41 (15.2)
Certification Required (n = 262)	95 (36.3)
License Renewal (n = 262)	148 (56.5)
Certificants can choose their recertification pathway (n = 264)	133 (50.4)
Dashboard (n = 267)	122 (45.7)
Assistance (n = 216)	
List of acceptable or approved CE	135 (62.5)
Suggestions for CE	123 (56.9)
Resource listing or webpage	62 (28.7)
Implications of Failure to Recertify (n = 220)	
Grace period	99 (45.0)
Credential expires	121 (55.0)
Lifetime Credential/Grandfathering (n = 267)	
Offered	2 (0.7)
Not offered	196 (73.4)
Unknown	69 (25.8)
Offers Emeritus and/or Retired Status (n = 266)	
Both	4 (1.5)
Emeritus only	10 (3.8)
Retired only	72 (27.1)
Neither	116 (43.6)
Unknown	64 (24.1)
Option for Reentry (n = 264)	221 (83.7)
Process: Expired Credentials (n = 199)[b]	
Begin new application process	99 (49.7)
Retake examination	140 (70.4)
Late fees/penalty	49 (24.6)

Note. RN = registered nurse; NCCA = National Commission for Certifying Agencies; ABSNC = Accreditation Board for Specialty Nursing Certification; ISO = International Organization for Standardization; CE = continuing education.

[a]The number of programs (*n*) varies because not all variables were able to be ascertained from each program's website.

[b]The numbers below vary because most programs (*n* = 88) required certificants to complete more than one these requirements.

of programs, certificants have access to a dashboard or tool to track their progress. However, for 37% (*n* = 99) of programs, it was not clear whether a dashboard is available or what the scope of the tool is because access was limited to individuals with a secure or certificant login. The type of tool ranged from an online system to a hard copy template to download from the website to input CE hours.

Failure to Meet Continuing Certification Requirements

The allied health and nursing programs respond in different ways to certificants who fail to renew; however, 220 have a policy related to failing to meet recertification requirements, which includes the credential expiring and a grace period in which the certificant can submit the required information (Table 1). The grace period ranged from 30 days (13%, *n* = 33) to more than a year (11%, *n* = 28).

Approximately 25% (*n* = 63) of programs have a late fee associated with continuing certification if the application is submitted late (Table 2). Most programs (84%, *n* = 221) have an option for re-entry to the field if the individual fails to renew on time (Table 1). Re-entry is most commonly based on retaking the examination (approximately 70%, *n* = 140). A common offering for certified professionals is to use a one-time "hardship" extension. In this option, the program allows the individual to apply for an extension due to extreme circumstances related to the individual's health or other hardship.

Lifetime Credentialing and Alternate Status

While approximately 73% (*n* = 196) of allied health and nursing programs explicitly do not offer lifetime certification, the status of lifetime certification was not easily confirmable for 26% (*n* = 69) of the programs given the information provided on the websites (Table 1). It is important to note that third-party accreditation standards do not allow for lifetime certification for accredited programs. Approximately 44% (*n* = 116) do not offer a retired or emeritus status, 27% (*n* = 72) offer retired status only, and a limited number (1.5%, *n* = 4) offer both.

ABMS Member Boards

The 24 member boards of the ABMS are required to offer MOC programs. All ABMS boards require diplomates to hold an unrestricted medical license (Part I: Professional Standing and Professionalism) and to complete continuing medical education (CME) hours and in some cases educational modules or self-assessments (Part II: Lifelong Learning and Self-Assessment). The number and type of CME activity varied across the medical boards. For Part III: Assessment of Knowledge, Skills, and Judgement, most ABMS boards have traditionally required diplomates to take a high-stakes, pass-fail, cognitive examination every 10 years; however, a majority of the boards (75%, *n* = 18) have incorporated longitudinal assessment into one or more of their general and subspecialty board certifications as a replacement or alternative to the decennial cognitive examination. Part IV: Improvement in Medical Practice requirements vary greatly by medical board, but some

examples include practice assessment (e.g., participation in a simulation course) or quality improvement activities.

Board certification cycle lengths are 10 years; however, many of the boards require completion of certain MOC activities every 5 years. For example, the American Board of Anesthesiology requires diplomates to complete 125 CME credits every 5 years and another 125 by year 10; to complete 120 longitudinal assessment questions every year (30 questions per quarter); and to earn 25 quality improvement points every 5 years for a total of 50 quality improvement points by the end of the 10-year certification cycle (American Board of Anesthesiology, 2020). Fees per year range from as low as $124/year to as high as $500/year; diplomates holding additional subspecialty certifications may have to pay additional fees. Physician members of professional associations do not receive discounts on certification fees. Board certification is not required for licensure. Candidates applying for board certification are required to participate in their board's MOC program and are granted a time-limited certification. All medical boards allow diplomates certified before a certain date (e.g., before 2000) to hold a "non-time limited" certification, meaning they are not required to meet MOC requirements; however, all medical boards allow non–time-limited diplomates to voluntarily participate in MOC program activities such as longitudinal assessment. Most of the medical boards have a re-entry program (92%, $n = 22$). Nine boards (38%) offer an emeritus or retired status.

TABLE 2

Fees Associated With Allied Health and Nursing Healthcare Organizations' Credentialing Programs ($N = 269$)[a]

Credentialing Programs	*n* (%)
Membership Discount on Certification-Related Fees (n = 265)	
Discount	87 (32.8)
No discount	90 (34.0)
Not applicable	88 (33.2)
Total Costs/Certification Period (n = 229)	
up to $100	73 (31.9)
$101–$200	55 (24.0)
$201–$300	76 (33.2)
$301–$400	64 (27.9)
$401–$500	13 (5.7)
$501–$600	6 (2.6)
$601 or above	11 (4.8)
Late Fee for Late Recertification (n = 250)	63 (25.2)

[a]The number of programs (*n*) varies because not all variables were able to be ascertained from each program's website.

Discussion

There are many ways to maintain a credential. The results of the benchmarking study reinforced the findings of previous studies such as the 2017 ICE reports *Methods for Ensuring Continuing Competence, Part 1* (Research and Development Committee, 2017a) and *Methods for Ensuring Continuing Competence, Part 2* (Research and Development Committee, 2017b) and the 2018 RAND Corporation report *Identification of Alternative Physician Assistant Recertification Models* (Reid, 2018), which identified CE, re-examination, and self-assessment as the most common methods.

These findings confirm that the NBCRNA CPC Program requirements and fees are consistent with a multimodal approach used by most allied health and medical certification boards. Like other APRN certifying organizations, the NBCRNA has a practice requirement, requires completion of self-selected CE hours, and gives CRNAs options to earn credit for professional activities (e.g., clinical teaching, publications, presentations, service activities). Similar to the American Nurse Midwifery Certification Board, the NBCRNA requires completion of modules in core domains of practice (NBCRNA, 2021; American Midwifery Certification Board, 2021).

However, the NBCRNA is one of the few APRN certifying organizations to require that certificants take a performance standard assessment, called the CPC Assessment, once every 8 years. This is a 3-hour, 150-question self-assessment that will be offered in a testing center or by record and review proctoring. CRNAs who do not meet the performance standard in one or more of the four core domains of nurse anesthesia practice will have to take at least one assessed CE credit in each domain they score below the performance standard. Unlike recertification examinations offered by some APRN organizations, this examination assesses knowledge required of an experienced provider rather than using the same examination used for initial certification.

It is important to remember that this benchmarking study consists of data collected at a single point in time. Certifying organizations are continually evolving and implementing changes to their continuing certification programs, and the technology used in these programs is also rapidly changing. Future research could involve conducting another environmental scan to track changes in certification and recertification trends. One trend allied health and nursing certifying boards should closely monitor is how ABMS boards are using longitudinal assessment to promote learning and retention of knowledge (ABMS, 2019). Since completion of this benchmarking study, two allied health boards have begun pilot testing or have rolled out longitudinal assessment platforms for their certificants (National Board for Respiratory Care, n.d.; National Commission on Certification of Physician Assistants, n.d.).

Limitations

The benchmarking study did not include a literature review, although other continuing certification benchmarking studies (ABMS, RAND) conducted literature reviews and the data may be available for examination. Furthermore, the purpose of the present

study was not to evaluate the effectiveness of the models used for continuing certification, though this may be a subject for future research. Finally, only requirements posted on publicly available organization websites were able to be reviewed, which could impact results.

Conclusion

Although the benchmarking study was not designed to capture the future direction of continuing certification across healthcare specialties, analysis of the data revealed commonalities and trends across a wide spectrum of certifying organizations. Such analyses can be used to guide the modification of existing continuing certification programs and the development of new programs.

The data from the benchmarking study revealed that the format and requirements of the CPC Program are consistent with most of the continuing certification programs examined. The NBCRNA was able to use elements of the data collected to evaluate components of the CPC program and make refinements based on best practices utilized by other certifying organizations, such as removal of the pass/fail requirement from the NBCRNA's CPC Assessment in 2019.

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