The Value of Certification—
A Research Journey

Michelle Byrne, RN; Wendy Valentine, RN; Shannon Carter

Patient safety and satisfaction depend on recruitment and retention of outstanding perioperative nurses who exemplify nursing excellence. One measure of nursing excellence is achieving specialty certification. The term certification is defined as a voluntary process, the purpose of which is to provide professional recognition of knowledge, skills, and clinical practice. Many nursing certification programs have been developed to support a standard of care that is recognized outside of the practice field and with the intent to protect the public. Although licensure and registration are granted for meeting minimal professional requirements, certification denotes a more advanced level of knowledge and practice. There currently are more than 50 different nursing certification credentials.

The Certification Board Perioperative Nursing (CBPN) provides specialty certification for perioperative nurses. The organization’s mission is to be the leader in competency credentialing and education that promotes safe, quality patient care in the perioperative arena. Its values are to:

- develop and maintain collaborative endeavors and relationships with those who support the mission,
- enhance and promote the value of the credentials,
- engage in evidence-based quality improvement for all products and services,
- solicit broad-based and diverse constituent input, and
- use innovative and dynamic approaches in the decision-making process.

In a recent survey of certified nurses, 72% of respondents reported one or more benefits of certification, including decreased errors or adverse events. There is a lack of research, however, documenting the benefits received by nurses certified in perioperative nursing and their perceptions related to certification. Congruent with its mission, CBPN’s board of directors initiated a research agenda in 1998 to conduct studies about the needs of and implications for the credentialing environment. This article describes the historical background of the CBPN’s research activities. Current and future research plans also are presented.

HISTORICAL BACKGROUND

The CBPN is an independent organization that was initiated when the House of Delegates of the Association of Operating Room Nurses, now called AORN, voted to provide a voluntary certification program for OR nurses. In

ABSTRACT

- ONE MEASURE OF NURSING EXCELLENCE is achieving specialty certification, which denotes a more advanced level of knowledge and practice.
- THE CERTIFICATION BOARD Perioperative Nursing (CBPN) provides specialty certification for perioperative nurses. The organization’s mission is to be the leader in competency credentialing and education that promotes safe, quality patient care in the perioperative arena.
- THIS ARTICLE PRESENTS study findings regarding the perceived value of and barriers to obtaining certification. AORN J 79 (April 2004) 825-835.
In 1999, the CBPN appointed the first research committee, which met to operationally define the perceived value of certification.

1978, a certification council, which consisted of five AORN members and four members from associated professional nursing organizations, was appointed to develop these programs. In 1979, the council was incorporated as an independent entity to separate certification activities from educational initiatives, and thus, minimize conflicts of interest. Currently, a 10-member board of directors representing education, clinical practice, administration, research, and consumer perspectives governs the CBPN. A variety of volunteer committees (e.g., item review, test specifications, item writers) ensure that the certification examinations reflect current perioperative practice. As of Jan 28, 2004, 28,656 nurses were CNOR certified, and 1,651 RN first assistants were certified (i.e., CRNFA).

The CBPN has been a member of the American Board of Nursing Specialties (ABNS), which is a coalition of nursing specialty certification organizations, since 1998. Members of the ABNS participated in the Nursing Credentialing Research Coalition, which conducted a survey of the certified nursing workforce in 1999. Although the CBPN was represented and supported this endeavor financially, the final survey tool did not contain any items specific to perioperative nursing. The CBPN, however, is interested in finding evidence to describe the value of the CNOR and CRNFA credentials. The board of directors believes strongly that providing a research-based answer to the value of certification will provide meaningful and relevant information to its constituents.

In 1999, as an outcome of board discussions, the CBPN appointed its first research committee. In the summer of 1999, the group met and decided that the first order of business was to operationally define the perceived value of CNOR and CRNFA certification. A review of the literature suggested that the benefits of certification include:

- a broader range of job opportunities,
- challenge,
- commitment to professionalism,
- greater earning potential and eligibility for third-party reimbursement,
- increased job satisfaction,
- personal achievement and satisfaction,
- professional obligation,
- professional prestige or status, and
- validation of knowledge.

The research committee provided direction in developing focus group questions that would provide qualitative data for the CBPN’s research.

The CBPN board members and test development committee members for the CNOR and CRNFA examinations agreed to participate in focus groups conducted by one individual. Focus group participants signed consent forms for the proceedings to be audio-taped and used for the CBPN’s research purposes, including publication. All participants were asked an opening question related to their years of perioperative nursing experience. They were then asked how they personally perceived the value of the CNOR and CRNFA credentials. Next, the participants were asked about the value of the credentials to others. Finally, participants were asked about their beliefs related to the value of the credentials.

Participants in the first focus group were interviewed privately on the premise that some values might not be shared in a group setting. No unique statements resulted from the individual interviews, and, therefore, they were not repeated for subsequent groups. After the fourth focus group was conducted, the research committee determined that the focus group phase of the process was complete because no new or relevant information was emerging.
Initial analysis of the focus group information provided a significant challenge to the members of the first research committee. It was determined that committee members with more advanced research knowledge were needed.

Consistent with the principles of governance, the board required that the strategic issue be addressed. The risk lay in the fact that the board did not know if the research would show whether nurses valued certification or not. They strongly believed, however, that the answer was a cornerstone of their mission, and they were committed to using a scientific, evidence-based process to provide an answer.

The board assigned the process and method to those most suited to the task. A call for willingness to serve on the CBPN research committee was made at AORN’s 2000 Congress. The newly appointed committee developed a proposal to begin instrument development, and the CBPN’s board members committed the funds necessary to perform the research from initial development through analysis. They also authorized the committee and staff members to actualize the defined research agenda.

The contract was awarded to an independent team of nurse research specialists who were not associated with perioperative nursing. They conducted content analysis of the focus group data. A series of value statements that were linked with the concepts identified in the literature emerged from the analysis. Based on those statements, 18 open-ended value statements comprised the research tool for the next phase of the project. A Likert-type scale was developed to elicit a five-point rating (ie, strongly agree, agree, disagree, strongly disagree, no opinion). The committee philosophically supported the necessity of an independent review of the research proposal for human participant protection. After review and approval of the instrument and procedures by the Institutional Review Board (IRB) at Duquesne University in Pittsburgh, a sample of 400 nurses who held a CNOR or CRNFA credential participated in a pilot test of the instrument; the response rate was 61% (n = 239). In addition to the 18 perceived value questions, respondents were given an open-ended format to provide information on perceived values that were missing or to elaborate if they had difficulty answering any item.

After minor changes were made, the instrument was finalized and the CBPN now holds copyright on the instrument, which is called the Perceived Value of Certification Tool (PVCT) (Table 1). This tool has been used in numerous studies supported by the CBPN. All studies have been performed by a survey method. The PVCT has demonstrated excellent reliability and validity.

**Survey Methods**

A series of studies using the PVCT subsequently was undertaken to assess the perceived value of certification among three groups of nurses. The first group included perioperative nurses who were certified (ie, CNOR, CRNFA). It is important to note that a prerequisite to sit for the CRNFA examination is that the nurse currently holds an active CNOR credential. The second group surveyed included perioperative nurses who did not have CNOR or...
**Table 1**

**Perceived Value of Certification Tool (PVCT)**

*Directions: Below are statements that relate to perceived values of certification. Please indicate the degree to which you agree or disagree with the statements by circling SA for strongly agree, A for agree, D for disagree, SD for strongly disagree, or NO for no opinion.*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validates specialized knowledge</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Indicates level of clinical competence</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Indicates attainment of a practice standard</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Enhances professional credibility</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Promotes recognition from peers</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Promotes recognition from other health professionals</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Promotes recognition from employers</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Increases consumer confidence</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Enhances feeling of personal accomplishment</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Enhances personal confidence in clinical abilities</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Provides personal satisfaction</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Provides professional challenge</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Enhances professional autonomy</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Indicates professional growth</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Provides evidence of professional commitment</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Provides evidence of accountability</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Increases marketability</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
<tr>
<td>Increases salary</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
<td>NO</td>
</tr>
</tbody>
</table>

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CRNFA credentials. The third group included perioperative managers and administrators, who may or may not have been certified. An independent IRB reviewed all study plans for the protection of human participants and granted exempt status before any phases of the research began.

The method used to obtain information on the perceived value of certification for the three groups was a survey. The Total Design Method (TDM) for mailed surveys was used to maximize the response rate in all three phases of the research. This method is based on convincing potential respondents that a relevant problem exists and their help is needed to find an answer. The TDM focuses on quantity and quality of survey returns.
The 2003-2004 Research Committee. (Back, from left) Tina Freilichner; Wendy Valentine, RN, MSN, CNOR, CWCN, board liaison; and Kathryn Sapaas, RN, PhD, CNOR, CCRN. (Front, from left) Kathryn Schroeter, RN, MS, MA, CNOR, chair; Jane Leske, RN, PhD; and Michele Byrne, RN, PhD, CNOR.

The initial mailing included a cover letter, the survey instrument, a demographic form, and a self-addressed stamped envelope. The cover letter reflected a basic appeal for the respondents’ help. Hundreds of cover letters were sent to each committee member so that the member could sign each letter to reinforce the personal nature of the request for participation. A reminder postcard was sent to the participants one week after the initial mailing. AORN databases were used in sample selection, so many AORN members were part of the survey process and have participated in different phases of the research.

The CBPN research committee’s work has supported the theoretical direction of the different phases of the research, as well as the dissemination of the findings. Committee members have submitted poster displays to the AORN Congresses in 2002, 2003, and 2004. An article titled “The perceived value of certification by certified perioperative nurses” was published in the December 2003 issue of Nursing Outlook, and a presentation addressing the perceived value of certification was presented during the 2004 AORN Congress. The committee also is actively pursuing other avenues for dissemination of the findings.

**Perceived Value of Certification—Study Findings**

Nurses in this study, regardless of demographic group, valued certification. Responses from study participants were collapsed from five response categories into three categories: agree, disagree, or no opinion. This change simplified communication of the findings. Table 2 presents findings related to the percentage of respondents from the three study groups who agreed with individual value of certification items. More than 90% of respondents from all three groups indicated agreement with statements about the perceived value of certification related to a sense of personal accomplishment and satisfaction. More than 90% of certificants (ie, group one participants) and administrators/managers (ie, group three participants) also indicated agreement with statements related to knowledge, professional growth, and challenge. A lower percentage of noncertified respondents (ie, group two participants) indicated agreement. For each item, a lower percentage of noncertified participants agreed with the statement than was true for the other two groups. Among all groups, the item with the lowest percent agreement was the item related to the perceived value of certification related to salary. Nurses overall did not believe certification increased salary.

Two motivators existed for seeking certification—intrinsic rewards and extrinsic rewards (Table 3). Intrinsic rewards were defined as motivators internal to the individual and linked to values of personal development and self-concept. Extrinsic rewards were external to the individual or were defined by others.

The findings from this research demonstrate that professional commitment is the primary driver for seeking...
certification. It also was found that nurses in this study believe that certification enhances professional credibility. The nurses who were certified believe that certification enhances their marketability. The demographic variables of age and years of experience did not demonstrate differences in the perceptions of the value of certification. Nurses who were more experienced in the workplace, however, were less likely to pursue certification.

Nurses holding one specialty nursing certification were less likely to seek an additional specialty nursing certification. In these samples, both administrators and CRNFAs highly valued certification. It is believed that administrators have the ability to directly affect external rewards offered to nurses and, therefore, also can use those rewards to motivate nurses to become certified.

**PERCEIVED BARRIERS TO CERTIFICATION**

Data also were collected about what factors prevent nurses from becoming certified. The top responses were:

- cost of the examination,
Table 3

Intrinsic and Extrinsic Rewards of Certification

<table>
<thead>
<tr>
<th>Intrinsic rewards</th>
<th>Extrinsic rewards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td>Consumer confidence</td>
</tr>
<tr>
<td>Achievement of a practice standard</td>
<td>Employer recognition</td>
</tr>
<tr>
<td>Clinical competence</td>
<td>Marketability</td>
</tr>
<tr>
<td>Confidence in clinical abilities</td>
<td>Nursing peer recognition</td>
</tr>
<tr>
<td>Personal accomplishment</td>
<td>Recognition from other health care professionals</td>
</tr>
<tr>
<td>Personal satisfaction</td>
<td>Salary</td>
</tr>
<tr>
<td>Professional autonomy</td>
<td></td>
</tr>
<tr>
<td>Professional challenge</td>
<td></td>
</tr>
<tr>
<td>Professional credibility</td>
<td></td>
</tr>
<tr>
<td>Professional growth</td>
<td></td>
</tr>
<tr>
<td>Specialized knowledge</td>
<td></td>
</tr>
</tbody>
</table>

- cost to maintain the credential,
- lack of institutional support,
- lack of institutional reward,
- lack of time to prepare for the examination, and
- lack of access to preparation materials.

Another group of nurses who had been certified but let their certification lapse, cited several reasons for their lapsed certification, including
- lack of recognition,
- lack of compensation,
- cost of renewal fee,
- lack of time for continuing education, and
- personal circumstances.

Lack of compensation for certification in the form of increased salary resulted in low levels of agreement with the perceived value of certification related to salary. These findings are congruent with findings from a 2001 study by the American Association of Critical-Care Nurses. That study found that

while 92% of critical care unit nurse managers encourage their nurses to become certified, less than half of US hospitals provide any financial support to nurses seeking certification or recertification.1(2)

Conclusion

Influences affecting the perceived value of certification are of interest and concern to the CBPN and the perioperative nursing profession. Modification of influences aimed at increasing the perceived value of certification can have an effect on nursing excellence, thereby influencing patient safety and satisfaction. As the knowledge base surrounding the perceived value of certification enlarges, potential links between certification and patient outcomes may be identified.

Michelle Byrne, RN, PhD, CNOR, is an associate professor of nursing at North Georgia College and State University, Dahlonega, Ga.

Wendy Valentine, RN, MS, CNOR, CWCN, is the QI/QA nurse manager at Everett Clinical Ambulatory Surgery Center, Snohomish, Wash.

Shannon Carter, MA, CAE, is the executive director of CBPN, Denver.

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Notes

3. L Docken, C Sanders, “Certification in infection control and epidemiology: A celebration of 15 years!” American Journal of
Examinations Find Unapproved Imported Medications

Large quantities of medications that are not approved by the US Food and Drug Administration (FDA) continue to be exported to the United States from foreign countries, according to a Jan 27, 2004, news release from the FDA. Import blitz examinations conducted by the FDA and the US Customs and Border Protection agency (CBP) found 1,728 unapproved medications, including foreign versions of FDA-approved medications, recalled medications, medications that require special storage conditions or close physician monitoring, addictive controlled substances, and investigationa l products. These illegally imported prescription medications cannot be guaranteed for safety, effectiveness, quality, or purity.

The blitz examinations took place in Buffalo, Dallas, Chicago, and Seattle mail facilities and the Memphis and Cincinnati courier hubs in November 2003. A total of 1,982 parcels that appeared to contain medication products were examined, regardless of the country from which they were sent, and the majority of the parcels were found to contain medications. Approximately 80% of the parcels came from Canada and 16% came from Mexico. The remaining 4% were sent from Japan, the Netherlands, Taiwan, Thailand, and the United Kingdom.

Although the FDA and the CBP do not have the resources to perform comprehensive examinations of all parcels mailed or brought into the United States by commercial couriers, they plan to continue blitz operations on medication imports. The FDA also plans to:

- focus more strategically on foreign sources of imported medications,
- work with commercial shippers to identify the shipping patterns of medication vendors,
- form partnerships with other state, federal, and international regulatory and law enforcement agencies to combat illegal imports, and
- continue to educate the public about the dangers of illegally imported medications.


References