

# Setting the standard: The role of the Australian College of Operating Room Nurses – Part I

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This paper is the first of two. It describes an evaluation of the Australian College of Operating Room Nurses (ACORN) that was conducted in 2003. The fundamental aim of the study was to identify the role of ACORN and determine if it was perceived by perioperative nurses to be an effective organisation<sup>1</sup>. This paper presents the background to the research and reports the results of the first research question about the role of ACORN.

## Introduction

ACORN was formed nearly 3 decades ago. Its focus is on improving and standardising perioperative nursing care, and educating and supporting perioperative nurses. ACORN's mission statement is to "represent perioperative nursing" and the organisation undertakes a range of activities to accomplish its mission. For example, the *ACORN Standards, guidelines and policy statements* (ACORN standards) which were first published in 1980, have been regularly reviewed, revised and updated ever since<sup>2</sup>.

In Australia in 2002, there were 15,257 registered or enrolled nurses (7.6% of the total nursing workforce) employed in the operating suite<sup>3</sup>. Of this number, about 3,000 are members of ACORN via membership of their State or Territory perioperative nursing association. These State and Territory organisations are branches of ACORN but retain their own integrity and independence of action<sup>4</sup>.

Perioperative nurses have a role that many other nurses see as highly technical and task focused. Yet competent, well-educated perioperative nurses are believed crucial for patient care to ensure good surgical outcomes. Further, perioperative nurses in Australia govern their own practice and, as a group of specialist nurses, act to construct knowledge that informs practice on a wider professional level<sup>5</sup>. But still they remain invisible and some doubt exists as to whether perioperative nursing can even be considered nursing<sup>6</sup>. Even patients are often unaware of a nursing presence during surgery<sup>7</sup>.

It has been suggested that perioperative nurses themselves fail to understand their roles<sup>8</sup>. Today many patient care activities, previously the purview of perioperative nurses alone, are increasingly being completed by other categories of health care worker such as technicians<sup>6,9</sup>. However, these technicians, are generally unlicensed and unregulated. Therefore, the significance of a nursing presence during surgery, in terms of nurses' ability to ensure safe outcomes for patients, is being increasingly identified<sup>10</sup>. Further, the disciplined practices and knowledge that guide perioperative nursing practice and which aid patient safety are underpinned by professional standards. These, amongst other things, help distinguish perioperative nurses from other categories of health care workers in the operating room.

## The study of ACORN

The study of ACORN was important for two reasons. Firstly, ACORN purports to represent perioperative nursing. Secondly, there has been no previous attempt to systematically examine ACORN's role. The unpublished, commissioned history *The history of ACORN: from little ACORN's grow* [sic]<sup>2</sup> provides a linear view of the organisation and its growth over time. In contrast, this study sought perioperative nurses' perspectives of the role and effectiveness of the organisation, and tried to identify if there was a perceived relationship between various ACORN activities and the delivery of perioperative nursing care and surgical patient outcomes. In doing so, it attempted to establish the validity of those activities.

The first questions to be answered by this research study were:

- What is the role of ACORN?
- Is ACORN perceived to have an effect on nursing practice in perioperative settings?
- Is ACORN perceived to have an effect on patient outcomes in perioperative settings?

## Research method

The decision to use a formal model of evaluation for the study followed scrutiny of a range of approaches, which are addressed in detail elsewhere<sup>1</sup>. Considered broadly, evaluation is the discovery of the nature and worth or merit of something<sup>11-13</sup>. Given that ACORN was (and remains) an evolving social entity and because the worth, effectiveness and utility of ACORN were the issues of concern in this research, then evaluation as a method to examine ACORN had utility. Additionally, the evaluation method chosen needed to consider a number of factors, not least the nature and context of the organisation studied, as well as the ideas and values expressed in the literature. Consequently, the illuminative model of evaluation<sup>14</sup>, which is eclectic, holistic and adaptable, provided the 'best fit' for a study of ACORN.

Parlett and Hamilton<sup>14</sup> recommend four broad forms of data collection – observation; questionnaires and other objective data; interviews and

focus groups; and examination of documents and other background information. The methods used in this evaluation were interviews, questionnaires and documentary and background information. Table 1 contains each of the methods used and the research question they addressed. It is important to note cause and effect were not examined, rather any relationship between the different variables, such as the production of standards for perioperative nursing practice, and what perioperative nurses do and achieve when they base their practice on these standards.

**Respondents**

Three broad groups of participants were identified:

- All perioperative nurses who had attended one of a series of half-day ACORN competency workshops offered in 2000 and 2001.
- A sample of operating suite nurse managers or nursing unit managers (NUMs) drawn from all States and Territories.
- A much smaller group of current and former ACORN Board members (BM).

The informants surveyed and the methods of selecting them are shown in Table 2.

**The study tools**

The NUM questionnaire had several purposes. It sought to identify the beliefs of this group of participants about the role of ACORN, and their knowledge and use of the ACORN standards<sup>15</sup> and the ACORN *Competency standards for perioperative nurses* (1999) (ACORN competencies)<sup>16</sup>. It sought detailed information about one standard in particular, *A3-counting of accountable items used during surgery* (2002) (the ACORN counting standard). It also sought information about the nature and incidence of miscounts during surgery in respondents' operating suites. These data were necessary in order to answer each of the research questions. Finally, it sought demographic data about the respondents and their organisations. A total of 220 questionnaires were distributed.

The competency questionnaire sought to identify if and how the respondents used the competency standards; if they believed the

**Table 1. How the methods address the research questions.**

Questions addressed	Questionnaire for operating suite nurse managers/ NUMs – the role of ACORN (NUM questionnaire [Q])	Questionnaire for ACORN competency workshop attendees (competency questionnaire)	Interviews with current and former ACORN BMs	Documentary review
What is the role of ACORN?	✓ (Parts A, B & F)		✓	✓
Is ACORN perceived to have an effect on nursing practice in perioperative settings?	✓ (Part C)	✓	✓	✓
Is ACORN perceived to have an effect on patient outcomes in perioperative settings?	✓ (Parts D & E)		✓	✓

**Table 2. Summary of procedures used to contact participants and criteria for selection.**

Informants	Method	Criteria for selection
Operating suite nurse managers & NUMs	ACORN Board (2000-2002) approached for support. Contacted by letter, via their Director of Nursing.	Systematic selection using the Australian hospitals directory (ATA, 2001) to identify hospitals with perioperative settings. It included every fifth organisation and was proportional by State and stratified by setting i.e. public or private hospital (n=220)
ACORN members and other perioperative nurses	ACORN Board (2000-2002) approached for support and a list of ACORN competency workshop attendees. Contacted by letter, sent to their last known place of work.	Must have attended an ACORN competency workshop (n=214)
Current and former ACORN BMs	ACORN Board (2000-2002) approached for support. Contacted by telephone, letter or email. 'Snowballing' - personal contact with current or former BMs, who then recommended others; and via local State or Territory perioperative nursing associations.	Current and former ACORN board members, from across the life span of the organisation, in all roles and representing all States and Territories (n=18).

competencies were useful and effective in their own practice and the practice of other perioperative nurses; if they had a positive effect on the nursing practice in their operative suites; and how else they could be used in the future (e.g. for credentialing). The questionnaire also collected demographic data from the 214 respondents surveyed.

A representative 18 current or former Board members (BMs) (about 20% of the total number of ACORN BMs from across the lifespan of the organisation) were approached for an interview; 17 interviews eventuated. Interviewees were given the opportunity to discuss the activities of ACORN (such as the production of standards) and how the Board functioned during their tenure. As well, they were asked to provide an opinion about the effectiveness of ACORN's activities.

### Ethics

In August 2002, the University of Technology, Sydney (UTS) Human Research Ethics Committee (HREC) gave approval for the research project to proceed. In addition, the 2002-2004 Board of ACORN unanimously supported the research.

### Results

A total of 128 operating suite managers responded from public and private hospitals in all States and Territories out of a total distribution of 247 (54.4%) (this included pilot data). The final, usable response rate was 124 (51.6%), which is considered adequate<sup>17</sup>.

Analysis of the data gathered via the NUM questionnaire used descriptive statistics, and included frequency displays and measures of central tendency related to the numbers of operating rooms, amounts and types of surgery completed, and length of service of the respondents. Nominal data, such as ownership of the standards and the competencies or membership of local State perioperative nursing groups, yielded categories rather than amounts, and frequency distributions were used to describe such data; these were expressed as percentages, or graphically<sup>18</sup>. A number of open ended questions sought opinions from respondents about the use of ACORN standards and competencies, the role of the organisation and issues around the ACORN counting standard; these were subsequently analysed to identify themes. Where appropriate, the results were compared with analyses of data gathered via other methods in this study.

The overall response rate to the survey of 214 perioperative nurses who had attended an ACORN competency workshop was 116 (54.2%). Analysis of the data gathered via the competency questionnaire also used descriptive statistics and included frequency displays and measures of central tendency of items such as years of service of the respondents, and their roles and qualifications. Nominal data, such as knowledge, ownership and use of the competency standards or membership of local State perioperative nursing group, yielded categories; these were expressed as percentages or in graph form<sup>19</sup>. A number of items sought opinions from respondents about the effect of the competencies on nursing practice and asked them to rate their opinion of a series of statements on a five point Likert scale. Frequencies were determined from this data and results were presented as a percentage and graphically. Open-ended comments about the ACORN competencies were analysed for themes. The results were compared to analysis of similar items on the first questionnaire, along with analysis of data generated during interviews that were related to the competencies.

Finally, 17 (mostly former) BMs were interviewed during 2003; only two were BMs at the time of interview. The transcripts of the taped interviews were analysed for key issues. Consequently, similar concepts or clusters of concepts were grouped together, with the themes beginning to emerge from these. A theme in this case was taken to be a common meaning or idea that ran through the data, or a minority idea that captured a particular emotion or factual idea<sup>20</sup>. These themes were also compared for congruence with data from other sources, namely open-ended questions on questionnaires. Issues to do with reliability and validity or, more accurately, the rigour or trustworthiness (of qualitative data) remain crucial<sup>21</sup> and were addressed in detail. They are reported elsewhere<sup>1</sup>.

### Discussion

The results reported here address the role of ACORN. Firstly, the NUM questionnaire data are presented, followed by the results of the BM interview data analysis.

Initial analysis of the NUM questionnaire data revealed 15 constructs. However, this number was reduced by grouping constructs which were associated, that is clustering by conceptual grouping<sup>22</sup> resulting in six themes. Subsequently, these themes coalesced into two broad concepts or domains; the standards and a professional body. These domains are presented in Table 3, which shows the two domains, the themes within each domain, and the various subthemes. The BM data analysis revealed many similarities with the NUM data.

#### NUM domain one: the standards

The standards were frequently the first and the most often cited item when the respondents were asked about ACORN's role. For more than half of the respondents, it was the only aspect of ACORN's role

**Table 3. Domains, themes and subthemes identified by NUM respondents.**

Domain	Theme	Subthemes
NUM domain one: The standards	Developing or setting standards	Standards for practice The competencies
	Perioperative practice	Maintenance of standards or care Enhancement of standards or care
NUM domain two: A professional body	Leadership	Representation of perioperative nursing Provision of guidance Governance or oversight
	Provision of support	Promoting perioperative nursing Supporting perioperative nurses
	A resource	Educational activities Networking and collegiality Research
	Political activities	Providing a voice Informing Influencing



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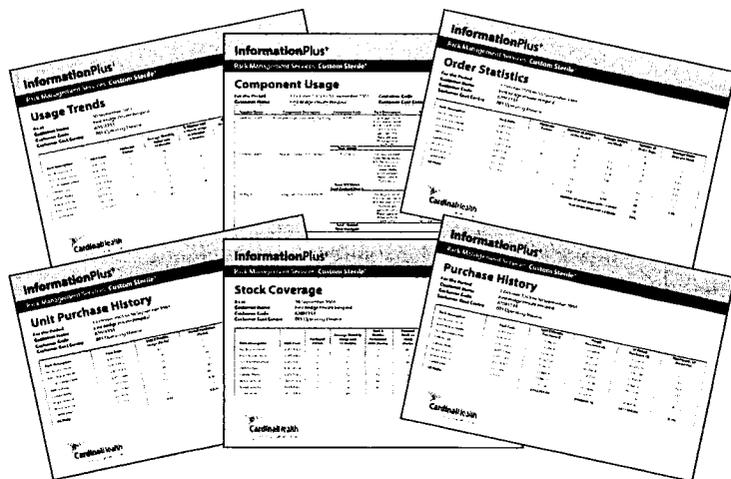
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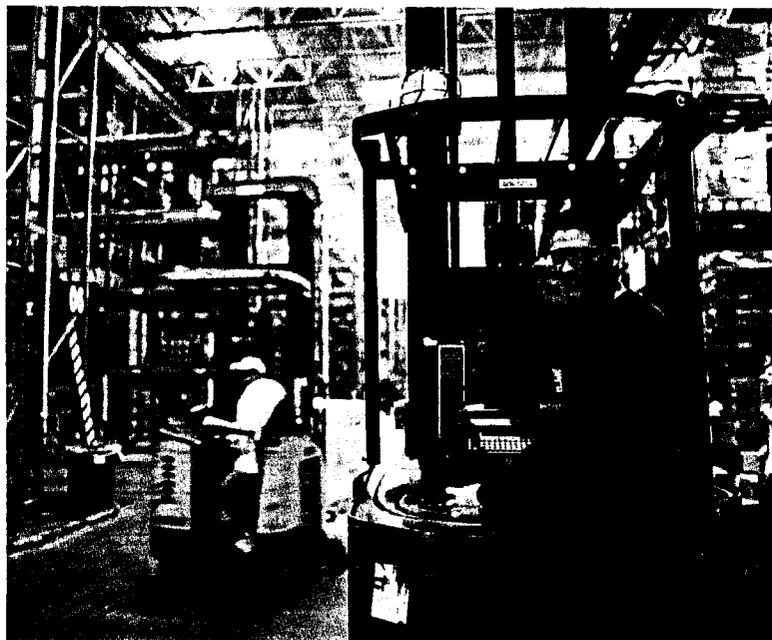
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that was mentioned. A total of 19 NUM respondents (15.3%) did not specifically name the standards.

#### Developing or setting standards

Two themes emerged within the data. Within the first theme of 'developing or setting standards' were two subthemes. The first was about standards for practice in perioperative settings and, in most instances, this was specifically about the ACORN standards. Formulating, revising and updating these standards was the role most respondents readily identified with ACORN, for example: "professional organisation that provides best practice guidelines (our Bible) and policy statements for perioperative settings" (NUM Q:91). Many claimed the standards underpinned or influenced day-to-day nursing practice and education in their operating suites; they were the foundation of local perioperative policies and were used as a reference. However, not all OR staff were motivated to use them. Some commented that their use was limited or they were only used to settle arguments. Sometimes the belief reflected was that "the standards don't apply here".

The second subtheme was the competencies. This term had two meanings. Firstly, this was in relation to the specific ACORN competencies<sup>16</sup>, which was the aspect discussed most often. That ACORN had developed these specialty-specific competencies enhanced the credibility of the competencies and no respondent challenged the validity or usefulness of them. The second meaning referred to the competency of perioperative nursing staff. For many respondents, ACORN's role was to help them develop competent staff. As one stated, "[the role is] guiding/supporting professional competence for OR nurses" (NUM Q:27). The competencies were discussed less frequently than the standards.

#### Perioperative practice

The second theme in this domain was about perioperative practice. Again, a large number of respondents believed ACORN's role was to determine practice in perioperative settings and to guide, maintain, contribute to, enhance and monitor perioperative practice. The ACORN standards were identified as the mechanism by which these activities were achieved, mostly.

This theme had two subthemes; the first was maintenance of standards or care. Most respondents saw the standards as a way to set or maintain perioperative nursing care but there was no 'level' of practice specified. Sometimes, the way this level of care was discussed, it seemed that it was 'a floor', that is, a minimum standard<sup>20</sup>; for example, "a resource body that supports OR nurses and advises minimum standards" (NUM Q:8).

The second subtheme was enhancement of standards or care. Other respondents believed the standards achieved more than a minimum or unspecified level of practice; they believed the standards enhanced or improved practice and care. To these respondents the standards were 'a ceiling', that is, an optimal standard<sup>20</sup>; for example, "to provide guidelines and standards based on current research and best practice on which we base our policies and procedures" (NUM Q:108).

#### NUM domain two: a professional body

The second domain encompassed four themes and several subthemes. The constructs associated with a professional body appeared less

often in the data than those associated with ACORN standards. Thirty respondents made a general statement that ACORN was a professional association without defining this, or defining professionalism, for example, "...a professional body that contributes to operating theatres and standards" (NUM Q:25). The themes identified within this domain were leadership, provision of support, a resource and political activities.

#### Leadership

Although the words lead or leadership were not apparent in the data, the concept was implicit in many comments about ACORN, which was believed to govern, direct, oversee, represent, communicate, guide, influence and identify future goals for perioperative nurses and perioperative nursing. For example, "...to act as a governing body overseeing all issues relating to perioperative nursing i.e. policies, standards, guidelines, competencies" (NUM Q:23).

#### Provision of support

The belief that ACORN's role in the provision of support related mostly to the support of individual perioperative nurses. While there was evidence that some respondents believed it was ACORN's role to support and promote perioperative nursing, they also indicated such promotion was lacking and noted that this was a shortcoming.

#### A resource

As a resource, ACORN provided educational activities, networking and collegiality and, finally, research. The subthemes were often discussed together; for example, "[ACORN's role is] professional Body - Research - Education. Support for OR nurses" (NUM Q:51).

#### Political activities

The final theme in this domain was political activities. Within this there were three subthemes; providing a voice, informing and influencing. These aspects of ACORN's role were discussed much less than others in this domain and the beliefs expressed were mostly parochial.

#### Limitations

In presenting the NUM questionnaire data analysis, it is important to note that 72% of the NUM respondents were ACORN members.

### Analysis

Analysis of the ACORN BM transcripts revealed there were many similarities between the views expressed by the interviewees and the respondents to the NUM questionnaire. The domains, themes and subthemes, which emerged from the interview transcripts, are represented in Table 4. There were different themes and subthemes uncovered in the standards domain. Nonetheless, the standards were central to any discussion by the interviewees when asked about the role of ACORN. The professional body domain also contained some similarities with the NUM respondents' answers but there were differences, too.

However, there was a new domain, ACORN backstage. This new domain will be discussed in more detail. It had two themes, one about the organisation itself and a personal one. The BMs provided a unique insider view of the organisation, which demonstrated how BMs interacted when conducting the business of the organisation.

They reported that individual States or individual members at times dominated the proceedings and set the agenda. Sometimes these powerful figures appeared to operate in secret. The smaller States' representatives and/or less assertive BMs reported that they found themselves unable to make their voices heard. Moreover, they were actively silenced by the way the Board operated, for only the senior councillors could speak at meetings. This did not change until 2001 following a number of earlier unsuccessful attempts by a more progressive president.

Additionally, not all BMs had access to all necessary information. Accountability or, more correctly, lack of accountability, was an issue raised often. Such conduct appears to have occurred, possibly intermittently, across the life span of the organisation. At times, it was claimed, these behaviours had a negative impact on organisational activities and individuals. On a positive note, most interviewees felt privileged to have served on the Board and often made lasting, professional contacts and friendships.

### Conclusion

The common thread through all data collected and analysed in this study about the role and effectiveness of ACORN were the ACORN standards. The majority of respondents to this study, both NUMs and the BM interviewees, believed the standards had a positive effect on nursing practice and patient outcomes. These standards guided the delivery of care in perioperative settings and they were perceived

by the research participants to be the benchmark for perioperative nursing practice. Other themes about the role of ACORN identified it as a professional body.

Thus, the evaluation study showed the value and worth of ACORN, demonstrating it leads perioperative nursing care in Australia. However, the views of many respondents, nearly three-quarters of who were ACORN members, contrasted with those of a handful who were less certain about the value of the standards. A minority of respondents also identified a need for ACORN to be much more proactive, especially in the political arena, and in the areas of undertaking research, providing support and resources. ACORN backstage was a domain with its own unique themes and subthemes. This perspective, from former and (then) current BM interviewees, was about power and where it lay, and about a 'voice' on the Board, who had one and who did not. The impact of this, individually and for the organisation, was noted to be mostly negative.

Part two of this research report, which will be published in the winter edition of the journal, will address the questions about the effect of ACORN on nursing practice and patient outcomes. It will look in more detail at the effect of the ACORN standards and will also reveal shortcomings associated with the ACORN counting standard.

**Table 4. Domains, themes and subthemes identified by BMs.**

Domain	Theme	Subthemes
BM domain one: The standards	The standards	Significance Development of standards Expert opinion
	The competencies	For learners
BM domain two: A professional body	Leadership	Providing a national voice Governance or oversight Representation of perioperative nursing
	Provision of support	Promoting perioperative nursing Supporting perioperative nurses
	Political activities	Interacting with governments and other organisations
	Educational activities	Organising the conference Influencing professionalism Publishing the journal
	BM domain three: ACORN backstage	The organisation
Personalities		Autocratic leaders Development of councillors Time to be a volunteer

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### International Federation of Perioperative Nurses

#### Presidency of IFPN

International Federation of Perioperative Nurses (IFPN) is delighted to announce that James Harrison of Australia is the President Elect with effect from 16 February 2006.

He will assume the Presidency of IFPN at the October 2006 Meeting of IFPN, which will take place in Harrogate, United Kingdom.

James Harrison was a Board Member of IFPN from September 2003 to September 2004, James was a member of the CNR in his capacity as President of ACORN prior to this. James currently works at St Lukes Health in Launceston as Manager of Clinical Services and as a Registered Nurse in the Operating Theatres at the Launceston General Hospital, Tasmania.

He is warmly welcomed into his new position as President Elect, by fellow members of the Board and Member organisations.