

IF YOU BUILD IT THEY WILL COME: GROWTH OF AN ONLINE COMMUNITY FOR INTENSIVE CARE IN AUSTRALIA



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Introduction

- Networking is a process of establishing a mutually beneficial relationship with other professionals^[1,2]. The Law of Weak Ties indicates that you will learn more from those you are in contact with on an irregular basis^[3].
- For the organisation networking professionals from separate organizational units promotes the flow of knowledge and diffusion of innovations leading to improved performance^[4,7].
- For individuals contemporary views of learning, including constructivism, connectivism^[8] and community of practice (CoP)^[9] indicate that learning and professional development is achieved through collective learning within a community or group.
- The world of nursing however is characterized by a lack of networking and professional isolation. This is the result of
 - Isolated working environments and conditions^[10]
 - Indifferent journal reading habits^[11]
 - Limited contact with colleagues^[12].
- This professional isolation may be especially marked in wards with smaller staff establishments with limited access to nurse educators, researchers or clinical nurse consultants.
- Computer mediated communication (CMC) technologies transcend time and geography, enabling clinicians to communicate and interact with a broad range of colleagues continuously thus facilitating the exchange of experiential information and local knowledge^[13]. This contrasts with traditional approaches to networking that rely on limited personal contacts and/or professional events.
- Currently there is limited research however it does suggest that professionals are more likely to join a virtual community where local collegial resources are limited^[14]. In addition members will remain in a virtual community where they find value and a sense of community^[15].

Background

- The NSW Intensive Care Coordination and Monitoring Unit (ICCMU) was established in 2003 to provide the state health department with accurate data regarding the delivery and outcomes of adult intensive care services.
- To overcome the professional isolation voiced by NSW intensive care clinicians ICCMU established the listserv 'ICUConnect'. One hundred and thirty IC clinicians, predominantly senior nursing staff from, then, 43 ICUs, were identified and enrolled in the listserv in December 2003^[16]. Since this time the key sources of knowledge about the listserv have been: 1) from a member; 2) from the ICCMU website^[17]; 3) two conference presentations in 2005^[18] and 2006^[19]; and one peer-reviewed journal publication^[16]. A 2006 member survey indicated that most members who had joined since 2004 had heard about ICUConnect from a colleague^[16].

Methods

Purpose

To examine how the membership profile of ICUConnect has evolved from a NSW-centric nurse-specific network in 2003 to an Australian multi-disciplinary intensive care network in 2009.

Methods

A descriptive exploratory study was undertaken using a de-identified database exported from excel to SPSS. Data was member demographic information from inception to December 31 2009. The study was completed in June 2010 following approval as a 'low risk' study by the Ethics Committee of Nursing, Midwifery and Health faculty of University of Technology, Sydney.

Research question

How has the membership of the listserv evolved over the first six years?

Aims:

Describe core characteristics of listserv membership including:

- Membership numbers
- Professional profile
- Length of membership
- Distribution of members according to geographic location and level or type of ICU

Data Analysis

Analysis included frequencies and proportions of descriptive variables, and chi-square tests for differences in proportions.

Some questions posted on ICUConnect in 2010

Infection control: Yankauer Sucker storage

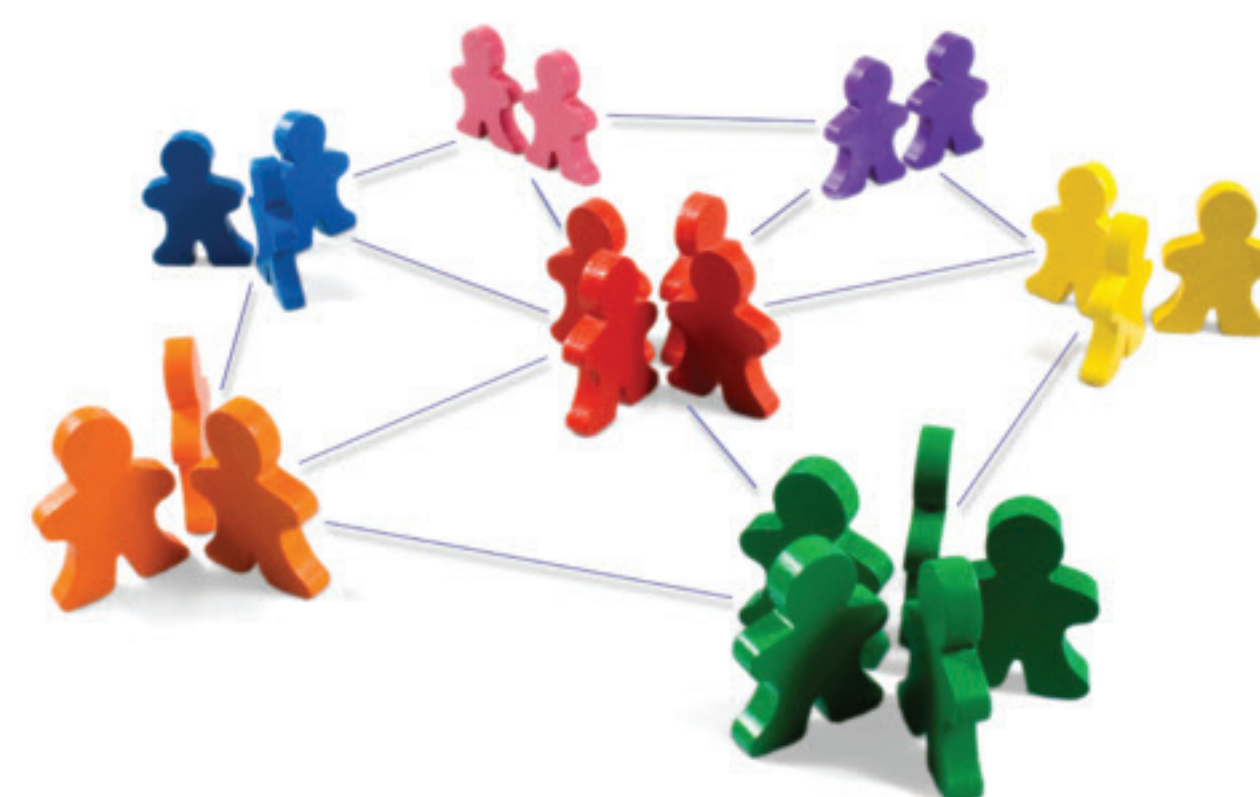
We are currently reviewing the basics in ICU and have revamped the oral care policy. We were wondering what you do for the suction tubing and yankers suckers in between use eg clean with N/Saline, storage, etc. There are several devices out there and we need some direction about which is the most suitable (replies: 11 onlist)

Patient Hygiene: oral care

Currently we are reviewing our mouthcare guidelines for the intubated patient and was wondering if anyone has used Chlorofluor Gel as a medium for tooth brushing (replies: 7 onlist).

Clinical Management: Palliative care teams

Hi, I'm an RN in a smaller city hospital ICU looking to improve our units palliative care practice. I'm wondering how involved Palliative care teams are in other ICUs, if you have check list/guidelines and protocols for withdrawal of treatment/palliative care that are specific to your ICU and how these have worked for your patients/unit? (replies: 17 onlist)



Results

How many members?

At the end of 2009 there were 1040 members on ICUConnect. 1340 had joined and 296 had left (22%) since 2003. 109 of the original 130 remain members. Figure 1 illustrates how membership has changed over time

Professional profile

In 2003 94% of members were nurses but this had fallen to 85% in 2009. The professional profile changed significantly [$\chi^2 11.4$ p=0.04] and the 2009 profile is shown in figure 2

Length of membership

All members – Median 2.66 years (IQR 1.1-2.66). Medical officers have the longest length of membership (median 3.7 yrs; IQR 2.38-5.13) followed by nurses (median 2.68; IQR 1.06-4.55). The differences between the length of membership of professional groups is significant (p=0.033, non-parametric independent samples)

Geographic Location

The geographic location of members has also changed significantly over time when comparing NSW, overseas and international members [$\chi^2 103.3$; degrees of freedom 15; p=0.000]. There were out of state members by late 2004 and in 2005 this group made up 15% of new members. In 2009 only 69% of new members were from NSW with 22% from other states and 9% overseas. At the end of 2009 83% of members were based in NSW. The uptake of membership according to geographic location is shown in figure 3

Place of work

The distribution of members according to place of work [type or level of ICU] has changed over time

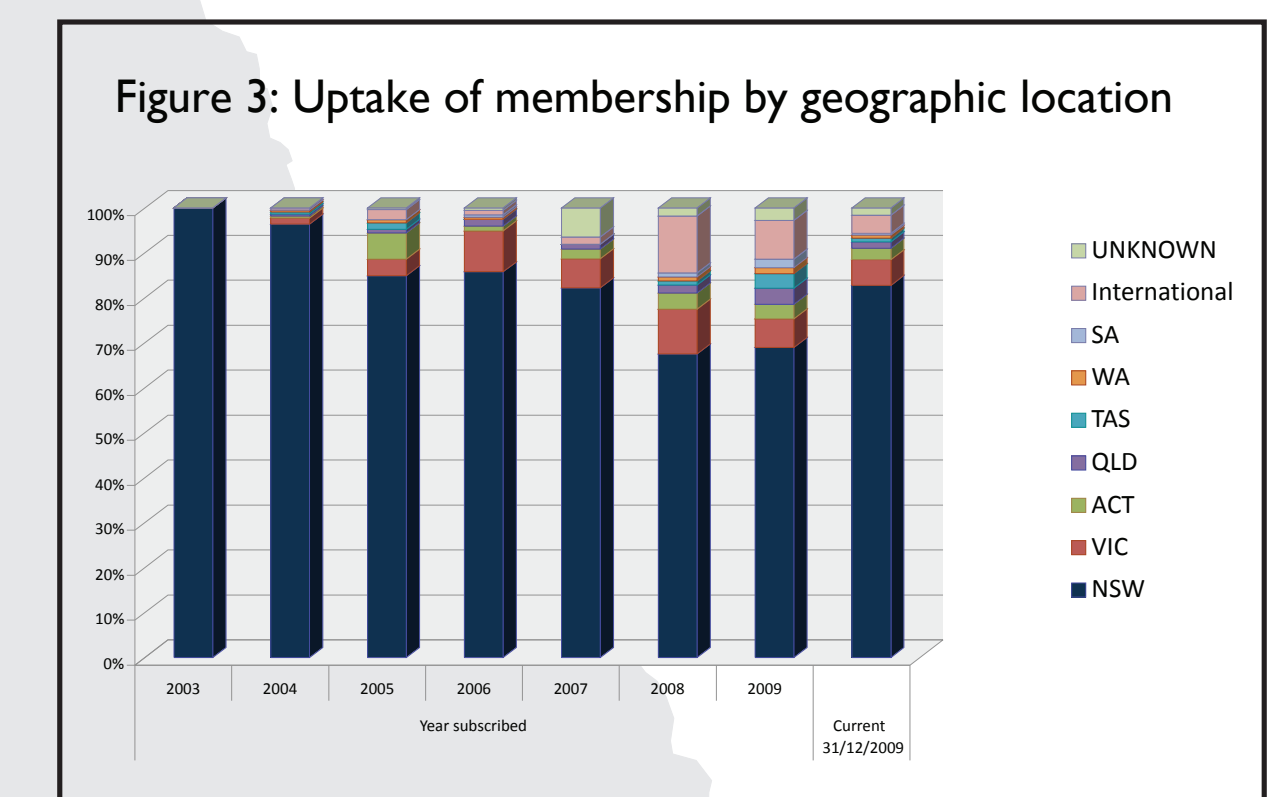
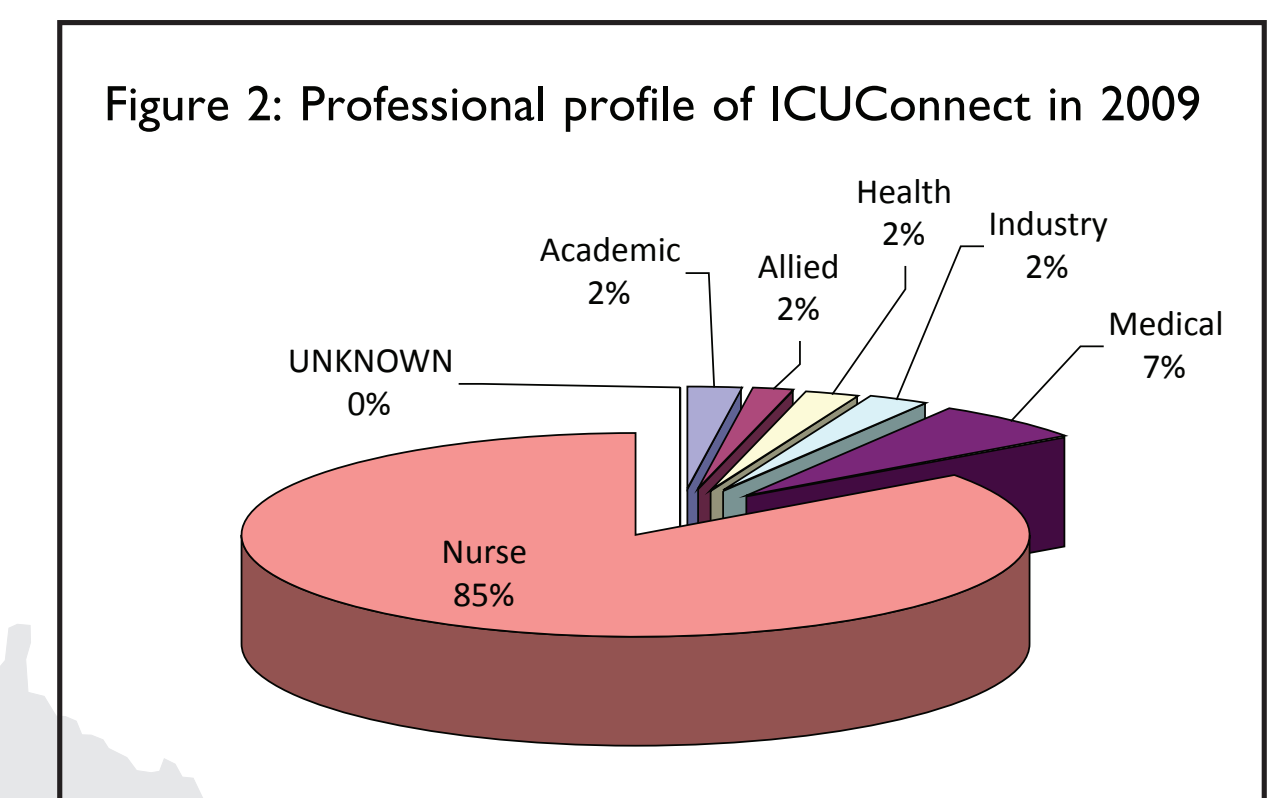
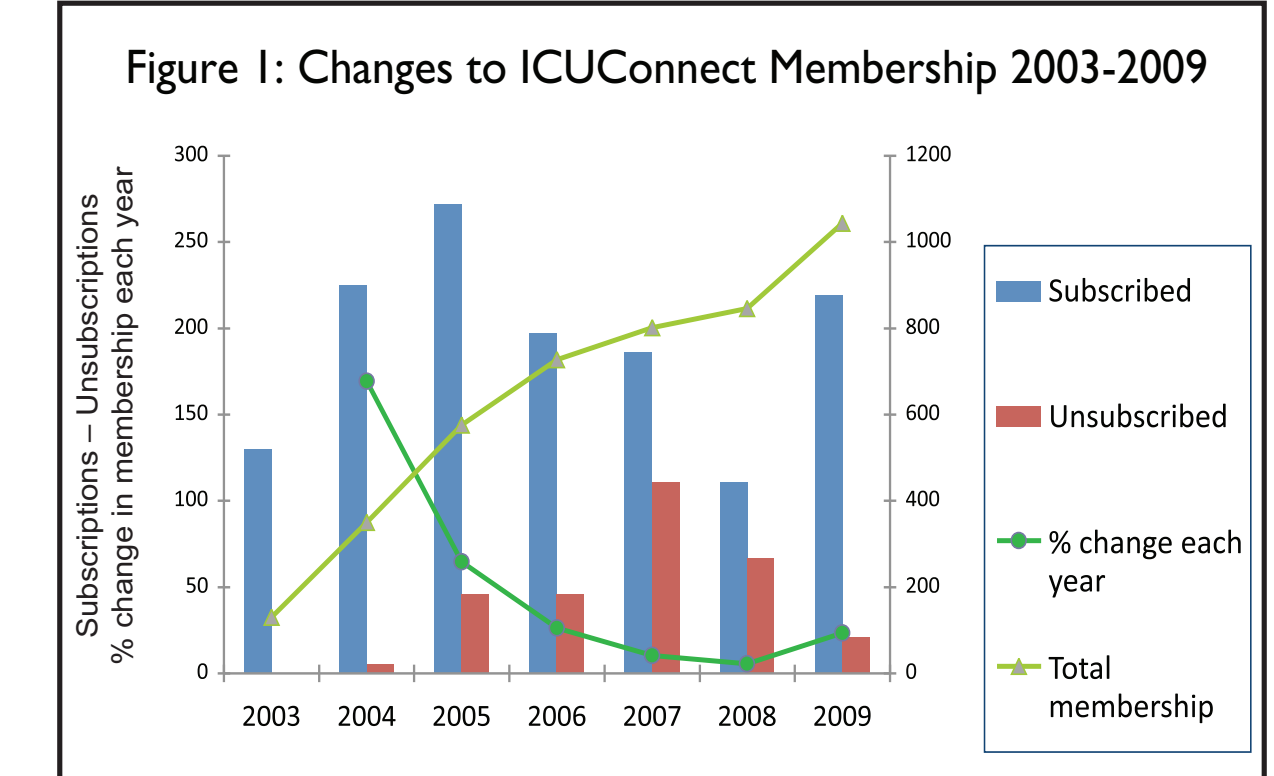
Employed in adult public ICUs: comparing 2003 to 2009 ($\chi^2=7.825$; degrees of freedom=3; p=0.049)

Comparing all workplaces ($\chi^2=31.2$; degrees of freedom=6; p=0.0)

In states outside NSW there are limited numbers in smaller units (level 3-6; level 2-23; level 1-0).

Discussion & Implications

- ICUConnect has evolved significantly from a NSW-centric nurse-specific network in 2003 to an Australian multi-disciplinary intensive care network in 2009.
- The rapid uptake and continuation of listserv membership suggests that:
 - ICUConnect has fulfilled the unmet need of networking for Australian intensive care clinicians especially for NSW clinicians
 - And that there is value in being a member
- The differences between distribution of members between states and across different levels of ICU suggests that
 - Uptake of membership has largely been reliant on personal communication channels (knowing another member) rather than mass communication channels (conference presentations or journal publication).
 - Clinicians in smaller units outside NSW remain professionally isolated with limited intra personal communication channels as they have not taken up membership
- A limitation of this study is that data has not been systematically collected since the beginning of ICUConnect regarding how new members heard about the listserv and why they wish to join. Therefore a clear understanding of these motivations is unknown. However inactive email addresses are regularly removed from the database and on joining members are given instructions on how to close their subscription. This suggests that current members are making active choices to remain on the List. Further research is planned to understand what belonging to ICUConnect means to members.
- ICUConnect is helping to break down the walls of clinical practice silos by creating vital intra-personal communication channels that may contribute to the flow of knowledge across ICUs in Australia.



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Want to know more about ICUConnect & ICCMU?

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