

# Digital communication to support clinical supervision: Considering the human factors

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**Abstract.** During the last three years the School of Nursing and Midwifery at the University of Tasmania has used a needs assessment survey to explore the needs of organizations and nursing professionals that facilitate and clinically supervise Bachelor of Nursing students in the workplace. Findings from the survey indicated that staff at healthcare organizations wanted a communication strategy that was easily accessible by clinicians who supervised students during work integrated learning placements. In particular they wanted to receive timely information related to the role and function of supervisors in practice. The development of the digital strategy to strengthen the development of a community of practice between the University, organizations, facilities and clinical supervisors was identified as the key method of improving communication. Blogging and micro blogging were selected as methods of choice for the implementation of the digital strategy because they were easy to set up, use and enable equity of access to geographically dispersed practitioners in urban and rural areas. Change champions were identified to disseminate information about the strategy within their workplaces. Although clinicians indicated electronic communication as their preferred method, there were a number of human factors at a systems and individual level identified to be challenges when communicating with clinical supervisors who were based off-campus. Information communication technology policies and embedded culture towards social presence were impediments to using this approach in some organizations. Additionally, it was found that it is necessary for this group of clinicians to be educated about using digital methods to undertake their role as clinical supervisors in their varied clinical practice environments.

**Keywords.** Work integrated learning, digital strategies, nursing, clinical supervision, community of practice.

## Introduction

Student nurses must be provided with the opportunity to put into practice newly acquired knowledge, skills and behaviors. Professional experience placement or work integrated learning (WIL) is undertaken to immerse students in the professional culture and to gain an understanding of the diverse roles of the registered nurse within the health care system in Australia. However, there is a need to ensure that students are supported and guided by clinical supervisors who are able to demonstrate competence in their role and in turn feel supported in undertaking this supervisory role.

Consequently, during the last three years the School of Nursing and Midwifery (SNM) at the University of Tasmania explored the needs of organizations and nursing professionals who facilitate and clinically supervise Bachelor of Nursing (BN) students

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in the workplace. To understand the requirements of organizations and individual facilitators a needs assessment survey was conducted. This paper focuses on the findings of the needs assessment survey and the human factors that impacted on the implementation of the digital communication strategy resulting from the survey responses.

## **1. Background**

Health care organizations have recently realised the potential of disseminating information to consumers and connecting with them about health care issues via Web 2.0 technologies [1, 2]. Recently professional bodies involved in health care have begun to embrace the social media platforms as they have realised there is a conversation happening even if they have not engaged with it [3, 4]. The higher education sector has been slower to explore using digital technology to enable connecting and sharing of ideas and information between individuals, professional groups, faculties and universities [5]. Innovative universities have investigated the possibilities of using Web 2.0 technologies and social software to connect with students undertaking their courses [5]. Since 2007 there has been a rapid expansion of Web 2.0 technologies, development of social software and the use of social media [6]. Mason and Rennie [7] stated “Knowledge is created, shared, remixed, repurposed and passed along... Web 2.0 is a research network as well as a learning network”.

The development of a social media policy and guidelines [8, 9] indicated that the University had recognised the potential of engaging with this form of information communication technology (ICT). Additionally, the SNM recognized the need to ensure its students were educationally prepared and work ready at completion of their BN Program. This research was undertaken to develop a strategy to support staff in clinical placement organizations.

## **2. Methodology**

To understand the requirements of organizations and individual facilitators a needs assessment survey was conducted. A convenience sample of data was collected by distribution of surveys for completion anonymously by target group representatives. These respondents were health care facilities’ staff that supported the BN program by supervising any year of undergraduate nursing students involved with learning and teaching of students during semester 2, 2009. The SNM allocated students to 243 placement agencies, and using the University Student Placement Management System (SPMS) database it was identified that 214 of these organizations were out-of-hospital or within the community or community mental health sector.

Surveys were distributed to the identified facilities by hard copy using Australia Post. The surveys collected both quantitative and qualitative information through a range of questions. Closed-ended questions were used to elicit trends and open-ended questions were used to provide opportunities for respondents to offer suggestions about their needs. Data collection was conducted over a period of four months. Analysis of the data was conducted using SPSS version 14.0. A minimal risk ethics application was approved (H11071).

### 3. Results

The response rate to the survey was 47% (n=100). Part of the survey elicited information about preferred methods of communication and respondents indicated the electronic medium was the preferred before, during and after work integrated learning (WIL) with students (69%, 64%, 73%). The telephone was most preferred after email, during WIL (40%). Face to face communication increased to being third preference during WIL (24%). Australia post became more important than the telephone after WIL concluded (23%). Face to face communication was considered to be the least important method of communication after WIL concluded. Of those who responded (42%) indicated they preferred face-to-face meetings to be located at their workplace. Few respondents indicated they would like to attend meetings at any campus of the SNM. Community service based respondents were most likely to not indicate a preference (49%). However, of those who responded 43% indicated they preferred face-to-face meetings to occur at their workplace. The findings of the survey indicated that staff at healthcare organizations wanted a communication strategy that was easily accessible by clinicians. They also wanted pertinent, up-to-date information relating to University or student information or contemporary nursing practice. In response to the 'felt' needs of clinical supervisors and a rapidly changing work environment it was imperative to find efficient ways of communicating, disseminating and sharing information quickly. The respondents indicated they preferred to access information at their workplace, ad hoc in their own time. One respondent summed up their requirements as: "Better feedback & support with ongoing updates or changes / requirements during placement".

The findings from the survey provided the basis for the funded development and implementation of a digital communication strategy that was undertaken with ethics approval (H12527) from the Tasmanian Human Research Ethics Committee.

Stakeholders concurred that the increased use of digital media for communication within healthcare environments could assist with the facilitation of the SNM digital media communication strategy. Key change agents were identified to champion the facilitation, provide support to clinical supervisors, disseminate information and promote cultural change regarding communication methods within their workplaces.

The social software tool *Twitter* was selected as the micro blogging platform to support the digital communication strategy development of a community of practice of clinical supervisors. *Twitter* is based in constructivist theory where expression of knowledge aids its creation and refinement [10]. Furthermore, *Twitter* supports the 'grass-roots' community development approach as it is classless, voluntary and promotes those with ability [11]. Importantly, the limitation to information transfer of 140 characters per interaction makes it useful as a text message on any mobile telephone [12]. These short messages are useful in rural areas where Internet connectivity can be unreliable; slow, or access to a computer is limited. Clinicians can choose to have messages directly pushed to their mobile telephone or accessed at an appropriate time. Alternatively account holders can read or respond to any messages when they log on to their account on-line. Users can browse on the Internet using the information they have been sent.

Depending upon the settings, this software enables the development of private or public communities. Additionally, users can search or follow topics, individuals or organizations of interest and can choose whether to follow any particular conversation, or block any unwanted 'tweets' or messages. They can also disseminate information by

'retweeting' messages to others. Information of interest to the community can be disseminated through this process.

#### **4. Discussion**

There were a number of outcomes that occurred in response to the needs assessment survey and development and implementation of the digital media strategy. With acknowledgement that limitations of the surveys were the less than desirable response rates required to enable generalizations to be made. The needs assessment survey provided baseline evidence that supported and refuted previous anecdotes about communication and provision of resources. This survey provided evidence that staff supervising students at facilities would like dialogue and information sharing with the SNM. Although the type of information required by staff at facilities varied, they indicated they valued the interaction with the SNM. This contact could be through the provision of contemporary documentation, information or educational resources. An adjunct to information transfer and knowledge acquisition appeared to be the desire for reciprocal dialogue from clinical supervisors to academic staff at the SNM about students. Feedback from students to clinical supervisors at facilities about their supervision and the facility's performance as a high quality WIL setting was also sought.

The use of a digital media strategy supporting a community of practice model was one method to strengthen partnerships by information sharing and access to resources between the University, organizations, facilities and clinical supervisors. The implementation of an asynchronous digital methodology enabled feedback or information sharing to occur at the users' convenience. It also enabled clinical supervisors to have access to information such as key dates that previously may have been sent to managers at organizations rather than the clinicians responsible for students. Clinical supervisors were able to access updates about changes within the BN curriculum that may impact on learning and teaching within WIL. Additionally, they were provided with a précis of contemporary clinical supervision information. Most importantly, rather than relying on receiving information via their organization, clinical supervisors now had the opportunity to choose to receive the information directly from the University through the blog or micro blog.

Although respondents to the needs assessment survey had indicated their preference for the development of a digital communication strategy, during the development and implementation of the digital strategy the individual human factors of knowledge, skills and attitudes of clinical supervisors were identified as impeding full engagement. Additionally, systems factors such as current policies and procedures were identified as a major challenge to the sustainability of a community of practice of clinical supervisors using an electronic platform. At a systems level on implementation of the strategy it was found that there were barriers within organizations that discouraged clinical supervisors from being socially present in a community of practice about clinical supervision. Organizational policies at some facilities were not conducive to enabling this communication strategy within their workplaces. There are implications for health policy makers and regulatory bodies to facilitate the use of ehealth and mhealth by the development of policy regarding the use of digital media or mhealth devices within facilities. There is a need for technology planning, enabling education, and fostering cultural change of their staff and empowerment of their

clinical supervisors to enable those organizations that do allow the personal use of mhealth devices to be easily accessible and reliable.

There are generational cohort differences described by Brunetto, Farr-Wharton and Shacklock [13] that may enhance or impede the use of the digital media strategy developed by the SNM. Experienced clinical supervisors were more likely to be Baby Boomers or Generation X clinicians and it has been reported are less likely to use digital technology for communication [13, 14]. Additionally, clinical supervisors need to be educationally prepared with ICT to be able to confidently engage in sharing information. Key change agents were identified and provided with training to facilitate their understanding of the digital strategy. On return to their workplaces they were supported in implementing the digital strategy by an ICT consultant. This approach highlighted the human factors at an individual level. For example, although members of this cohort developed the appropriate ICT skills that they used when they returned to their workplaces, few felt confident to encourage or demonstrate the digital tools provided. The lack of capacity of some change agents to disseminate information sharing reduced opportunity for engagement with the strategy within some workplaces. Another theme that emerged was the 'felt' disapproval by colleagues when clinical supervisors accessed the blog or micro blog while in the work place. Clinical supervisors indicated there was a need for a cultural shift in perceptions for using this methodology while at work.

The blog was hosted by the University of Tasmania and content posted related to information about clinical facilitation, learning and teaching, university information or professional development opportunities. The micro blog data shared by participants was limited to information about clinical facilitation. The digital strategy focused on improving communication flow and enhancing the capacity to increase connectedness about the topic of clinical supervision by clinical supervisors. No personal or sensitive data or information about patients/clients/students was shared using this software platform as discussion relating to personal data was not a focus of the strategy. The security of this data relied on the controls provided and updated by the owners of the digital communication platform. Participants could tailor their own accounts to include a level of privacy control of visibility that suited them. Additionally, participants from this University or its partner organizations were bound by social media guidelines [3, 12, 13] of their organizations that outlined appropriate use and consequences of breaching confidentiality.

Due to the specificity of the local environment and WIL practices there are limitations to the generalizability of this research. However, the issues arising from the research may be reflected in similar circumstances requiring online support for practitioners in practice.

## **5. Conclusion**

In conclusion, the needs assessment survey provided baseline information regarding the communication preferences of staff who undertake supervision of students. Respondents indicated they wanted easy and accessible conduit to enhance communication between the University and the workplace. Clinical supervisors indicated they recognised the need to be contemporary in their nursing practice and they wanted the University to provide appropriate information. It was indicated they valued connectedness with the University regarding WIL, learning and teaching and

student feedback. To ensure information was easily accessible, consistent and timely the development of a digital communication strategy was undertaken by the SNM. The development of a blog and micro blog strategy targeting clinical supervisors was undertaken. Additionally, key change agents were identified and up-skilled in the tools being used. However, on implementation of the strategy it was found that there were systems barriers within organizations that discouraged clinical supervisors from participating in a community of practice related to clinical supervision. Policy development regarding digital communication within healthcare organizations needs to be mindful of the benefits of information sharing within and between groups that work within their facilities. Individual human factors also impeded the opportunity to develop sustainable support and guidance of clinical supervisors. Appropriate educational preparation, including satisfactory confidence levels with using ICT needs to be encouraged as it will enhance opportunities to provide safe, high quality clinical experiences for students.

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