

Operationalising the National Nursing Informatics Position Statement

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Abstract

The need for nurses and midwives to drive the digital transformation of care has been recognised as an important factor in future health care innovation. An Australian Chief Nursing Informatics Officers collaboration is leading the way. They were supported by the three professional organisations who collaboratively developed a National Nursing Informatics position statement.

This paper describes the development and use of the elements described in the statement in operationalising Nursing informatics within individual healthcare organisations and for driving national digital transformation initiatives.

Keywords: Intersectoral Collaboration, Nursing Informatics, leadership.

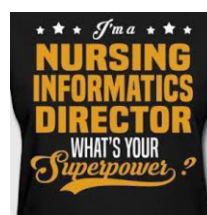
Introduction

There is a dearth of informatics expertise amongst nurses and midwives in Australia. The Nursing Informatics Australia group (NIA) represents a relatively small national community of interest within the Health Informatics Society of Australia (HISA). Early 2017 NIA, HISA partnered with the Australian College of Nursing (ACN) to develop a new Nursing Informatics position statement to advocate for the instrumental role of nurses in digitally transforming healthcare and to make the call to optimise the use of information and technology to enable better patient care. This initiative was a response to the recognition of the pivotal role played by nurses and midwives in the widespread implementation and adoption of digital health technologies throughout the healthcare sector. It is intended as a support for the unique contribution they make to achieve successful planning, implementation, management and sustainability of digital technologies.

Engaging with the nursing profession is critical as many large healthcare organisations are currently planning or have recently implemented major EMR systems. Realising the vision of a fully connected national digital health ecosystem requires national management of a complex change in the way the health industry currently operates. Most organisational health care providers are somewhere along this journey. There are major implications for workflow, documentation and service delivery quality, as these relate to nursing and midwifery practice. In the absence of guidelines for nurses regarding nursing documentation within the EMR systems being implemented. Many nurses and midwives are looking to computerize the familiar paper content and when the design is different to a paper form they are bewildered, anxious, frustrated, or demonstrate resistance.

Nurses and midwives value professional ethical leadership, transparency to motivate an empowered workforce, working with multidisciplinary teams including healthcare consumers and the ability to benefit from evidence based ICT and clinical data analytics. They would like to see the use of informatics in a manner that promotes patient safety and comfort, consumer/patient empowerment and the promotion of health and digital health literacy. The Australian nursing and midwifery profession needs to provide national leadership to ensure that its information needs will at the very least continue to be met and ideally be improved.

New Chief Nursing Informatics positions have been created over the last two years. These positions have been given varied leadership responsibilities. In New South Wales there is only one such position to prepare nurses and midwives working in the public sector for a major digital transformation. Victoria has decided to create one CNIO position in every large public healthcare network. Appointees are highly experienced nurses with strong leadership and nursing credentials and variable limited nursing informatics knowledge and skills. By October 2016 these new appointees had decided to establish a forum to share experiences and support each other. Retired Professor Hovenga, a highly experienced Nurse Informatician, was invited to provide a global perspective. She was subsequently appointed as an honorary CNIO and member of this group.



These CNIOs have now formed a collaborative and developed a 2017-2022 strategic leadership plan. The Victorian based group has recently engaged with the Victorian Metro Health Services senior nurses to explore a future nursing and midwifery informatics plan.

Demand and growth for the CNIO role shows no signs of slowing. The role has evolved into a necessary, well-respected leadership role in the nursing profession offering a satisfying career path that supports patient care as well as an avenue to nurse executive leadership roles. It includes the following knowledge and skills:

- Change management
- Advocacy
- Management and operational know how
- Strategic thinking
- Advanced analysis
- Communication and interpersonal interactions
- Informatics and digital health

The agreed values underpinning these leadership efforts are:

- Transparency
- Professional ethical leadership

- Use of informatics in a manner that promotes patient safety and comfort
- Empowering our workforce and our patients by promoting health and health informatics literacy
- Evidence based use of ICT and clinical data analytics
- Working with multi-disciplines as a team
- Semantic interoperability and data sharing.

This paper is about how the NI positional paper is being operationalised by this CNIO group.

Background

In 2015 there were over 307,100 nurses and midwives employed (of a total regulated population of ~360,000) in Australia, with 90 per cent working in clinical roles [1]. Nursing is the largest profession in the health workforce. There are many national nursing/midwifery organisations representing every possible nursing specialty including NIA, the Australian Nursing and Midwifery Federation (ANMF) and the Australian College of Nursing (ACN). All are members of the Coalition of National Nursing and Midwifery Organisations (CoNNMO), an incorporated group that meets bi-annually. It has over 50 national nursing organisational members.

NIA has a long history that began in Victoria in 1985. This group published a book on Nurses Using Computers based on Australian experiences in 1986 [2]. It includes a chapter on defining nursing information needs that is still relevant today. In 2004 a small NIA taskforce, funded by the Australian Government, developed a strategic paper for a nursing informatics framework [3]. This set out a vision and work program with the aim to ensure effective input from nurse clinicians and nursing informatics specialists to the then National Health- Connect program. It lists 13 recommendations but none were ever implemented.

NIA's October 2016 report to CoNNMO listed its committee meetings and annual conference as significant organisational activities undertaken in the previous 6 months and indicated that there were no issues for CoNNMO members to consider. The HISA NIA's 2015-2016 strategic plan (the latest available) [4] indicates that its leadership consists of the provision of nursing informatics expertise on a State, National and International level and that *NIA will partner with other stakeholder representative groups to articulate and achieve common goals. These activities will support early career preparation and provide opportunity to study nursing informatics.* Its web-based resources are available exclusively to its members.

The Code of Professional Conduct for Nurses in Australia (2003/2017) and the Code of Ethics for Nurses in Australia (2002) are the foundation for the practice of members of the Member Organisations of CoNNMO. Its vision is *'to be an authoritative alliance influencing health care across the lifespan, for the Australian community, through the profession of nursing.'* CONNO had published an approved eHealth position statement in 2007 that was made available via the CoNNMO website but removed in 2015.

The Australian College of Nursing (ACN) has established a Nursing Informatics community of interest. Several teleconferences have been held resulting in a list of possible work areas that are now in the process of being prioritized.

The Australian Nursing and Midwifery Federation (ANMF) has been involved in Nursing Informatics on and off for a very long time. It published a 134 page Practical Guide to the Use of Computers in Nursing in March 1988. The ANMF has published a set of ten national informatics standards for nurses

and midwives in 2015 [5] for three domains, computer literacy, information literacy, and information management. Each standard consists of a high level statement supported by a number of cues describing key generic non-comprehensive and non exhaustive examples of competent performance. These support its policy statement, which states:

Resources should be provided to enable nurses, midwives and assistants in nursing and other health and aged care facility staff to understand the professional and legal implications of nursing and midwifery documentation and to develop the skills necessary for the best possible management of information systems.

The ANMF is of the view that appropriate information technology competence development to meet these standards should be an integral part of all nursing and midwifery education.

The Nursing Informatics Position Paper

This paper [6] was the result of extensive consultation over several months. It consists of seven elements as follows:

1. Education in nursing informatics is essential in all undergraduate and postgraduate nursing programs. Moreover, the workplace must provide education in health informatics to all nursing staff not only at induction but also as part of continuous learning.
2. Nurse Informaticians must participate in national, state and local dialogue on digital healthcare to influence and direct future strategy and investment decisions in the interest of patient focused care and improved health outcomes.
3. Organisations, irrespective of size or setting, transitioning to digital health records should have an appropriately sized team responsible for informatics and nursing engagement that can facilitate partnerships with other disciplines and function as strong advocates for consumers. The team will be primarily responsible for business as usual activity and ongoing governance processes associated with the effective adoption of clinical information systems.
4. Digital health requires Chief Nursing Information Officers (CNIO) or equivalent Nurse Executive Informatics roles to lead the transformation required in the nursing workforce.
5. Nurses as users of clinical information systems must be involved in all stages of decision making from initial planning and procurement through to implementation and ongoing management of clinical information technologies.
6. Nurse informaticians ensure professional standards and contemporary scope of practice requirements are incorporated and delivered within all clinical information systems. Nurses must meet ethical and professional standards of practice and promote a collaborative and inclusive role for patients when making healthcare decisions and when managing patient information.
7. Nurse informaticians insist on the adoption of nationally agreed nursing data standards, data quality standards, and interoperability that allows the exchange of clinical information meaningfully across healthcare systems for improved data integration, information sharing, performance monitoring, data analytics, patient safety and quality.

These elements are described and referenced in some detail in the position statement.

The Victorian Experience.

Public Healthcare service networks are being led by their own CNIO who are leading their digital transformation agenda. The position statement elements were found to be of assistance to communicate with their Information and Management and Technology Division (ICT) regarding the development, implementation and maintenance of clinical information systems requirements and support the documentation of their own strategic plan within the context of each individual organisation's infrastructure. The position statement is proving useful to assist CNIO's describe how actuating the key informatics elements will benefit the health services digital strategic objectives.

The CNIO Collaborative

Prior to the publication of the NI position statement, the CNIO collaborative group had developed their own one page strategic plan based on their vision to collectively:

Lead the transformation of nursing and midwifery care in the digital age to maximize the benefits for the community and advocating for the delivery of excellent per-son centered care.

With this tagline:

Maximising Community Health Benefits in the Digital Age.

The strategy itself is to

- Provide national Nursing Informatics leadership by influencing key nurse leaders and to manage a risk register.
- Grow nursing and midwifery digital health capability
- Align professionally with the Australian College of Nursing
- Influence and inform policy at a national level
- Evaluate system implementations using a standard evaluation framework
- Support nursing informatics research

Some members of the newly established CNIO collaborative had a major influence in the development of the position paper that is now being implemented. Some of the project work identified as required to support the position statements implementation include the need to:

- Reach national agreement on a competency framework and Nursing Informatics career structure based on a skill gap analysis.
- Recommend and adopt the use of standard nursing data.

Discussion

The support provided by individual healthcare organisations for the newly established CNIO role varies. Essentially those occupying these roles are able to lead and develop the application of nursing informatics knowledge and skills in any way they can. CNIOs are trailblazing. The formation of the CNIO collaborative has been very beneficial for sharing experiences and to learn from participants. Collectively this collaborative

is having a major influence in the digital transformation now underway. Time demands, the many national nursing organisations and the continuing NI skill gap amongst the nursing profession and a lack of significant funding are major constraints to progress. The position statement has proven to be a very useful framework. Its authority is assisting individual CNIOs to communicate effectively, argue for positions adopted and gain traction and support within their own organisations to comply with these published principles.

It is critical for the nursing and midwifery professions to collaborate and adopt one voice to significantly influence

the digital transformation now underway in Australia. There is an opportunity to ensure that the digital ecosystem enables the nursing and midwifery professions to lead the adoption of clinical systems and influence the overall public's understanding of the many benefits to be achieved. A template has been developed for the CNIO collaborative to document strategic directions to implement each of the NI position statement elements nationally. It's ability to action this is entirely dependent upon resource availability and support from Governments, high level decision makers and the many individual national nursing organisations. This requires an effective marketing strategy to engage with and convince the many stakeholders that these actions are imperative to successfully achieve an effective digital transformation. The CNIO Collaborative leadership in this environment is critical.

Conclusion

Nursing informatics in Australia began more than 30 years ago. Its promotion and adoption has fluctuated considerably over those years. Many attempts have been made to influence national and local directions with nursing advisory input for various national Health ICT initiatives undertaken in all areas within the health system. The current digital transformations underway are extremely costly and provide an opportunity for greater nursing informatics presence. It is imperative that the nursing and midwifery professions, as the largest user group with strong patient/care recipients engagement, takes a lead to ensure their information and workflow needs are met within the context of facilitating patient journeys to be least interruptive to them and their family's lifestyles, when the provision of healthcare services are needed.

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