

Nursing Informatics Australia

Position Statement

Integration of Nursing Informatics into Nursing Education

“Because nursing is information-intensive as well as information-dependent, the theory and practice of nursing informatics are fundamental to the discipline and the profession”.¹ Informatics skills are essential for patient centred, evidence-based nursing practice. The current nursing shortage has also emphasized the need of preparing more sophisticated, efficient nursing students. Therefore, many developed countries, such as USA and European countries, have integrated courses on nursing informatics into the nursing curriculum.

The use of information technologies (IT) is key to decreasing medical errors and easing the burden of paperwork for nurses. It also enables the use of timely information stored in electronic health records to drive evidence-based decision-making. Information technology is also one of the three identified driving forces for global workforce changes. In the near future, most hospitals, primary and community care centers and other health care provider organizations will utilize IT solutions to facilitate their health care delivery in a certain way. Besides the need for health IT solutions that satisfy nurse’s information needs and fits their work flow, nurses require adequate computer knowledge and skills to participate in the planning, development, implementation and maintenance of health IT systems.

However, one of the critical issues facing the nursing profession is a lack of knowledge of IT and use of evidence based practice. A serious lack of nursing informatics content in the education and training programs is one of the major causes for the above crisis. There is a pressing need for a computer driving license to assist nurses to become competent to use electronic information systems.

To achieve the goal of revolutionizing health care through IT, (or at least stay in pace with it), the leaders in nurse education need to ensure that all newly qualified nurses have the necessary informatics skills. This includes the ability to access, retrieve, manipulate, analyze, report and upload data and effectively utilize the data for clinical decision making. Therefore, it is imperative that informatics knowledge and skill be integrated within nursing practice and education curriculum.

It is the position of the Nursing Informatics Australia that:

1. Nursing education providers should:
 - a. include nursing informatics education within the core curricula of all nursing programs to build the capacity of new nursing graduates to using IT solutions effectively to support consumer centric, evidence-based care;
 - b. maximize workforce capabilities in health informatics by providing students with learning opportunities on the use of informatics tools to promote safety, quality and effective clinical decision making;
 - c. facilitate the development of online learning community;
 - d. increase exposure to IT technology and systems within nursing curricula;

2. Advanced nursing informatics education at postgraduate level should be provided to develop nursing expertise in informatics, including informatics solution planning, development and management;
3. National registration and accreditation of nurses should include competency in nursing informatics as a core examination component;
4. National competency standards for nursing informatics should be established to standardize nursing informatics education and set up guidelines for the assessment of the nurses' informatics competencies;
5. Support should be provided to adequately prepare nursing faculty to teach health informatics.
6. Commonwealth and State Governments should provide funding to support research on effectively teaching informatics to nursing students. The research topics include, but are not limited to:
 - a. What are the essential health informatics competencies that a nurse should have to enable her (or him) to effectively use a health IT application for its stated purpose?
 - b. What are the contents of nursing informatics that should be taught to tertiary nursing students?
 - c. What kind of teaching methods and delivery mode should be used to teach nursing students health informatics?
 - d. What is the best curriculum design for nursing informatics subjects?
 - e. How to measure the outcomes of nursing informatics education programs?
 - f. How to assess the impact of health informatics education on clinical utilization of health information systems?

¹American Nurse Association. Scope and standards of nursing informatics practice. Washington DC, 2001.