Nursing Informatics saving the day

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Introduction

Emerging Health Information Technologies (HITs) are rapidly expanding with the aim to improve the quality of patient care, while reducing costs. Although HITs can improve patient care, they can negatively impact organisational culture, workflow processes, and even cause errors due to poor design. Nurses and midwives specialising in informatics have the knowledge, experience and expertise to lead in the development, customisation, support, and evaluation of HITs to benefit the patient, staff and organisation.

Aim

Using a recent case study, the presenter will illustrate how front line nursing and midwifery leaders can influence information communication technologies (ICT) to provide solutions to support nurses' workflow and processes to benefit the patient, staff and organisation.

Method

A Pre-Employment Health Assessment (PEHA) is an essential pre-requisite to employment with a Health Service Provider. With the opening of a new 783 bed tertiary hospital within WA Health, over 6000 PEHAs needed processing by the Staff Health Team within the Infection Prevention and Management Department (IPM). An ICT solution was identified to assist managing the volume, complexity and reporting requirements of the PEHA's processing.

Any ICT strategy or solution requires the submission of a business case via the WA Health ICT governance structure. The IPM proposed business case was rejected due to financial constraints. An alternative proposed by the ICT support service was deemed unacceptable by the IPM team due to the increased workload to enter data and lack of reporting availability. In the absence of a dedicated ICT solution, and whilst not ideal, the team implemented a process to support the PEHA using a Microsoft Excel spreadsheet.

In early 2016, a pre-accreditation survey as part of the Australian Council of Healthcare Standards (AHCS) identified that the use of an Excel spreadsheet for the management of Staff Health Records would not meet the ACHS standard. With only six months to rectify this issue the Staff Health Team contacted the Nursing Informatics team to discuss ICT solutions that would ensure the ACHS standard could be met.

Following consultation with key stakeholders led by the nursing and midwifery informatics team, a local database driven web application was developed. This database was developed to primarily address the processing of the PEHAs. However, with the IPM nurses and midwives involved in the development, other processes such as staff immunisation where integrated to offer efficiencies and streamline existing processes. The timeframe from the initial requirements conversation to the deployment of the database was ten weeks.

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Results

The database offered a local solution to an issue which was impacting on the workload and efficiency of the IPM team. The successful implementation ensured that the ACHS standard was met. The benefits of the database have been shared with other Health Service Providers who have consequently implemented this within their facility. Feedback to date has been positive with anecdotal evidence indicating that this local solution is better than any commercial product, as it was developed by nurses and midwives who have the knowledge base, expertise and experience to apply this to the development of ICT solutions to benefit the patient, staff and organisation.

Conclusion

It is imperative that nurses and midwives are involved in conversations associated with ICT solutions. The knowledge, expertise and experience of nurses and midwives should be capitalised. Nurse and midwives are ideally placed to be involved in, contribute to and lead ICT solutions and strategies. It is timely that those nursing and midwifery leaders strive to make a difference and influence in the space of ICT for the benefit of the patient, staff and organisation.

Keywords

- Clinical systems development
- Nurse's role in the digital future