

The trial of PDAs in Queensland public hospitals and its effect on patient safety

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Purpose of Study

This study has examined the usage of wireless handheld devices (PDAs – personal digital assistants) in the improvement of nursing decision making within Queensland Health. The research question that this study sought to answer was: ‘will the decision making algorithms that are built on a handheld device improve the clinical decision making analysis by Queensland nurses?’

Methods

Three stages of research were undertaken: (1) focus groups were conducted with key personnel including medical officers and nurses at three QH facilities to identify algorithms for the technology; (2) a laboratory trial was undertaken and tested the algorithms for their functionality; and (3) field testing of the PDAs by nurses in QH, enabling the evaluation of the technology.

Results

The research study highlighted a number of benefits with these primarily revolving around the issue of patient safety. The technology enabled nurses to save time in medication distribution, thus spending more time on patient monitoring. Medication information from MIMS and policies and procedures from QHEPS was made available on the PDAs and nursing staff could access this information in a timely and efficient manner. The technology also assisted in the training of graduate and student nurse training, substantially improving the preceptor/student relationship, and once again increasing patient safety due to information availability for trainee nurses.

Conclusions

Through the inclusion of basic information sources on the PDAs (MIMS and QHEPS), patient safety was increased through the trial of this technology. Information that was also collected through the study and that should be taken into consideration in proceeding with this technology in the future included using other information sources on the PDAs, such as Auslab and TrendCare and linking the PDAs to the hospitals' computer mainframes. Nursing staff who participated in the trial emphasised that this technology has great potential in the future of nursing.

Theme

Technology in Practice

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