

**CREATING AN ENVIRONMENT TO IMPLEMENT AND SUSTAIN
EVIDENCE BASED PRACTICE: A DEVELOPMENTAL PROCESS**

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Abstract

Background: Elements of evidence based practice (EBP) are well described in the literature and achievement of EBP is frequently being cited as an organisational goal. Despite this, the practical processes and resources for achieving EBP are often not readily apparent, available or successful.

Purpose: To describe a multi-dimensional EBP program designed to incorporate evidence into practice to lead to sustainable improvement in patient care and ultimately patient outcome.

Implementation Strategies: A multi-dimensional EBP program incorporating EBP champions and mentors, provision of resources, creation of a culture to foster EBP and use of practical EBP strategies was implemented in a 22-bed intensive care unit (ICU) in a public, tertiary hospital in Brisbane, Australia. The practical EBP strategies included workgroups, journal club and nursing rounds.

Achievements: The multi-dimensional EBP program has been successfully implemented over the past three years. EBP champions and mentors are now active and two EBP workgroups have investigated specific aspects of practice, with one of these resulting in development of an associated research project. Journal club is a routine component of the education days that all ICU nurses attend. Nursing Rounds is now conducted twice a week, with between one and seven short-term issues identified for each patient reviewed in the first twelve months.

Conclusions: A multi-dimensional program of practice change has been implemented in one setting and is providing a forum for discussion of practice-related issues and improvements. Adaptation of these strategies to multiple different health care settings is possible, with the potential for sustained practice change and improvement.

Keywords:

Nursing, evidence based practice, intensive care, nursing rounds, journal club,
implementation strategies

Introduction

Evidence based practice (EBP) is frequently cited as a goal for healthcare organisations; however, the practical processes and resources for achieving EBP may not be readily apparent, available, or successful. The need for sustainable systems to implement EBP has been well documented.^{1,2} As noted by Gawlinski² the discovery of clinically important research findings either not being known or not being used is common. The potential benefits of EBP, as well as the models available to guide EBP, are well described in the literature.³⁻⁷ Despite this, few descriptions of sustainable implementation strategies appear. A number of reports of projects designed to improve care related to one specific aspect of practice are prevalent (for example Burns et al.⁸ and Harrigan et al.⁹) or alternatively to develop relevant knowledge of clinicians.¹⁰ While the goal of EBP is often able to be achieved in the short term,^{8, 11} particularly in the setting of additional resources for a specific project, the practical considerations for ongoing implementation are not clearly articulated.

Various strategies, including both processes and resources, have been identified as potentially facilitating EBP and include involvement of EBP mentors and champions, partnerships between academic and clinical settings, education, use of local opinion leaders, formation of multi-disciplinary committees and provision of sufficient time, resources and support.^{12, 13} Although many of these strategies are widely promulgated, the evidence underpinning the success of any of these strategies is limited.¹³

Many models have been developed to provide guidance for EBP activities, with common themes being critical use of evidence, development of strategies to optimise drivers and overcome barriers related to practice change and the provision of support

through various mechanisms.¹⁴ In this program of activity we chose to use the Advancing Research and Clinical practice through close Collaboration (ARCC) model developed by Melnyk and Fineout-Overholt.⁷ The primary goal of the ARCC model was to enhance integration of research and clinical practice in a range of healthcare settings with some of the specific goals being to promote EBP among nurses, provide mechanisms and people to support and facilitate EBP and disseminate high quality evidence.⁷ Key ingredients for the successful implementation of this model appear to include mentorship and access to expertise, involvement of EBP champions and provision of sufficient resources as well as practical EBP strategies, with the focus of the model being at the departmental or unit level.¹⁵

The ARCC model was used to inform the development of a multi-dimensional program of EBP implementation in a 22-bed intensive care unit (ICU) in a public, tertiary hospital in Brisbane, Australia. Within this ICU there were more than 200 nursing staff who worked both full and part time, with the majority working rotating shifts throughout the 24 hour period. Mentorship in EBP is provided by both the Professor of Critical Care Nursing and a Senior Research Fellow who both hold joint appointments between a local University and the hospital. The hospital where this ICU is located has been Magnet-accredited (American Nurses Credentialing Center) for the past five years. The Magnet model incorporates the components of transformational leadership, structural empowerment, exemplary professional practice, new knowledge, innovation and improvements, and empirical quality results to provide a framework that incorporates structure and function to achieve practice excellence.¹⁶ Key features that caused the ARCC model to be selected to guide our

local EBP program included the central role of mentors, the focus at the unit level and the consistency with Magnet principles.

The purpose of this paper is to describe the implementation of this multi-dimensional EBP program, as well as to critically examine the benefits and challenges of each of the strategies that were implemented.

Implementation Strategies

The goals of the multi-dimensional EBP program included:

- to increase awareness of the potential contribution of evidence to patient care
- to develop a framework for evidence review and practice change
- to provide an opportunity for nurses in ICU to be an active part of the EBP process and to drive practice change in the unit
- to improve consistency and alignment of the nursing care being delivered with best evidence.

While acknowledging Thompson et al's¹³ finding of a lack of evidence regarding effective interventions to increase research use in nursing, the strategies used in this program were selected based on local interest and resources as well as the strategies that Fineout-Overholt and colleagues reported as being successful.¹⁵ Specifically, the strategies implemented in the local EBP program included:

- Development of EBP champions
- Use of EBP mentors
- Provision of resources such as time and money
- Creation of a culture and expectation related to EBP

- Use of practical strategies including EBP workgroups, journal club and Nursing Rounds.

Development of EBP champions: Growth of the role of a number of EBP champions was considered essential to the sustainable implementation of EBP activities within the ICU. EBP champions were self-nominated and were generally experienced clinical staff who provided direct patient care and were team leaders on each shift. Development of this group of staff was through participation in EBP workshops, access to resources such as local workbooks, texts and on-line resources, individual tutorials with the librarian to improve literature searching skills and individual or small group work and support with the EBP mentors. The role of the EBP champions was to lead their peers in the implementation of the practical strategies. The number of EBP champions was flexible and varied based on leave and secondment arrangements, but generally consisted of approximately 15 – 20 nurses.

Use of EBP mentors: While clinicians bring clinical expertise to the team examining practice change, many require development of EBP skills. Consequently access to mentors with both academic preparation and experience in EBP processes was considered essential. Two doctorally prepared researchers with joint appointments in the ICU were available to assist increasing both EBP and research activities. All staff had access to these researchers through both formal and informal activities such as education sessions, rounds, team meetings and ad hoc meetings and discussions.

Provision of resources such as time and money: In addition to academic support and EBP champions, EBP project members required additional support in the form of

resources,¹⁷ including sufficient dedicated time, library access, and computing resources. Occasionally projects required additional resources that were unique to the practice being changed or measurement being undertaken in the audits, for example inclinometers to measure head of bed height. Clinical staff involved in the EBP workgroups and journal clubs were able to negotiate with the Nurse Unit Manager (NUM) for paid time without clinical responsibilities to complete related activities such as critical appraisal of literature. This time was generally limited to four hours every two months and was negotiated on an ad hoc basis.

There is a health library located in the hospital, with multiple librarians available to assist staff. In addition, one librarian joined many of the EBP activities within the ICU and became familiar to all the EBP champions as well as many of the other clinical staff and provided support on an ongoing basis. The ICU where this EBP program was implemented has computer terminals located at every bedside as well as in general spaces such as workrooms; full library access was available via these computer terminals.

Creation of a culture and expectation related to EBP: The processes for care that were in place within the ICU created little opportunity or expectation for the nurses who care for patients to contribute to strategic or long term improvements in care. As part of this program it was considered important to develop a range of strategies that would not only enable nurses to actively participate in care improvement, but to emphasise that this was a responsibility of all nurses practicing within the ICU. Forums for this participation included education sessions, journal club, nursing rounds, various meetings including research, mortality and morbidity and policy

development and through the individual's annual performance review process. These strategies were led by the EBP champions and mentors.

Practical Strategies: The practical strategies included EBP workgroups, journal club, and Nursing Rounds and were implemented with an experienced clinical nurse or nurse researcher responsible for each component. Resources were negotiated with the NUM or, in the case of the Nursing Rounds, specific research funding was gained to enable the collection of project specific data. Each component of the program was evaluated independently according to the specific aims of the activity. For example, evaluation of the impact of practice change activities related to patient positioning undertaken by one EBP workgroup incorporated measurement of head-of-bed elevation (see text box 1), while evaluation of Nursing Rounds assessed what aspects of care were changed and nurses' satisfaction with the Rounds.

EBP workgroups: Small workgroups were formed to investigate and, if appropriate, change practice in specific areas such as positioning of patients and infection surveillance practices. The first of these workgroups was formed in 2006, with a further two groups formed since then. These workgroups had three to five members and were led by an experienced clinical nurse. Importantly the formation of these workgroups was not directed by unit management, but occurred at the instigation of the clinical nurses.

The Iowa Model of Evidence Based Practice to Promote Quality Care¹⁸ was used to provide project structure for the EBP workgroups. The Iowa Model was developed in 1994 and revised in 2001 and can be used as a guide for clinicians as they strive to

improve patient care based on the available evidence.¹⁸ The strengths of the model include its clarity, series of structured decision points, options for progress in the setting of inadequate evidence, and reminder of the need to both pilot and evaluate any change. The systematic approach to practice change consisted of the following:

- participation in two workshops soon after formation of a workgroup, each of four hours duration and open only to the members of each EBP workgroup; the first of these workshops reviewed EBP principles and application, how to develop an answerable clinical question, and how to effectively search and retrieve literature, the second workshop reviewed methods of critical appraisal and processes to implement change in the clinical environment. A workbook has been developed to support learning between and after these workshops.
- selection of a component of practice by the team members to ensure interest and commitment to the topic
- use of a series of clinical audits to document care processes and outcomes prior to and following practice change initiatives
- implementation of multi-dimensional practice change strategies that targeted both short term change and long term maintenance of the new practice
- communication with all members of the ICU team regarding the identified area of practice, the evidence available to support that practice, the expected change in practice, and progressive achievement of the desired change. This communication was conducted by the workgroup members via a range of strategies including group emails, the intranet, relevant unit noticeboards, the ICU newsletter, and unit meetings
- involvement of a mentor experienced in research methodology, practice change initiatives, and related clinical practice.

Personnel from other departments, specialties and disciplines have been included in each of these workgroups as relevant. For example, a project examining the adequacy of surveillance procedures to identify Methicillin-resistant Staphylococcus Aureus (MRSA) in patients transferred from other hospitals involved personnel from both infection control and microbiology.

Journal Club: Journal clubs have been implemented in many different settings as a method to enable clinicians to stay abreast of research developments that have potential application to their patient care and to improve skills required to critically review that literature.^{19, 20} The journal club has been promoted as an effective method of enabling clinicians to discuss recent literature and determine whether practice within their own setting has the potential to improve with implementation of the reported research findings.

This ICU operates a series of more than 40 rostered education days that all nurses are expected to attend throughout the year, with full time nurses normally attending six days annually and an average of 12 – 15 staff participating in each day. Topics include a combination of current clinical issues, information sharing regarding developments within the unit, and competency updates. A journal club has now been integrated into the rostered education framework.

This activity was coordinated by an experienced clinical nurse in the ICU and supported by other clinical nurses with an interest in EBP. Whenever possible the relevant article was selected by the nurse leading the journal club discussion, with

consideration of the topics being reviewed during the education days or current management or research activities within the ICU, to optimise perceptions of relevance and interest. Copies of the journal article were distributed electronically one week prior to each education day to all nurses scheduled to attend. Review involved critical appraisal of the research methodology, and consideration of the results and potential application to clinical practice in the local environment.

Nursing Rounds: In the hospital environment nursing is focused on meeting the immediate care needs of patients, with scant opportunity for collaboration, clinical learning and practice improvement. A mechanism was needed to promote collaborative learning and care planning at the point of care delivery. As a result Nursing Rounds were implemented to provide a forum to achieve this in a collegial environment that benefited from the collective expertise of the nursing team. A full report of this project can be located elsewhere,²¹ however a summary as part of the overall strategy is provided here.

Nursing Rounds were held two days each week and lasted one hour during which time two patients were reviewed. The focus of these Nursing Rounds was on strategic improvement of nursing care and methods for critically examining issues and challenges, considering relevant evidence and optimising care plans. Structural considerations included:

- Nursing Rounds were led by the Clinical Nurse Consultant (CNC) or NUM and supported by the Chair or Senior Research Fellow in Critical Care Nursing

- other participants included the ICU team leader, support nurses, the nurse caring for the patient, and other nursing staff as time and patient needs permitted
- the patient's primary nurse, with support from the CNC, presented the patient details including a brief synopsis of the patient admission, current problems and challenges, and desired goals.

The patient and family, the hospital librarian and additional nursing experts, for example the stomal therapist or trauma CNC, were included in the discussion where appropriate. Staff were encouraged to question and review current and future care, and strategies to improve care were planned, with a team member responsible for implementation of changes identified.

Ethical approval

The overall EBP program did not represent research and as such did not require ethical review. Practice change initiatives undertaken by the EBP workgroups were confirmed by the local Human Research Ethics Committee (HREC) to constitute quality improvement and therefore, did not require ethical review. Projects that did constitute research, for example Nursing Rounds and MRSA swabbing practices, were reviewed as independent projects and approved by both the hospital and university HREC.

Achievements

The multi-dimensional EBP program has been successfully implemented over the past three years. There were a range of benefits and challenges associated with each of the components of the EBP program (Table 1). Common considerations across all the elements of the program included the benefit of building knowledge and skills related to critical appraisal and practice change, while the challenge of ensuring sufficient time, altering the attitude of some clinicians to the relevance of evidence to underpin practice and the ongoing challenge of incorporating these activities into everyday practice was frequently experienced. There were also some specific considerations, particularly related to the EBP workgroups and Nursing Rounds as follows.

EBP workgroups: The first clinical topic examined by members of an EBP workgroup was whether the amount of upright head-of-bed positioning could be improved, with the aim of decreasing the incidence of ventilator associated pneumonia in mechanically ventilated patients. The process of reviewing the evidence and implementing practice change was undertaken over a period of approximately twelve months. Important considerations included not only reviewing the evidence, but developing a range of strategies to achieve the desired practice change; an example of implementation of these change strategies is outlined in Text Box 1. In line with many areas of nursing, and indeed healthcare practice, there was not always sufficient evidence available on which to change practice. The process of responding to a clinical question without sufficient evidence to inform practice is summarised in Text Box 2.

Nursing Rounds: Nursing Rounds provided a forum where relevant evidence could be discussed and implemented into daily practice. This proved particularly useful in relation to the many areas of practice that lack research evidence, as the Rounds provided a forum that drew on the clinical expertise of the many nurses participating in the discussion, enabling sharing of ideas and suggestions for practice. Additionally, if it was considered that the practice issue would benefit from exploration of additional evidence the topic was highlighted for action by the librarian, the ICU research nurses, or members of the EBP workgroups. Practice issues with inadequate evidence were also sometimes considered of sufficient local relevance to prompt development of a research project.

Nursing Rounds prompted changes in patient care. Between one and seven short-term issues were identified for each patient reviewed. These included a range of clinical issues, such as limb splints not ordered, insufficient documentation of a care plan, and the need for additional support for the family. In addition, a range of long-term issues were identified as mechanisms for improving care in the unit, such as an updated policy for patient restraint, improved information about what larger beds are available, and instigation of a sedation audit. The conduct of Nursing Rounds is currently being evaluated in a specific project.

Discussion

Anecdotal review of this EBP program suggests that the synergies that existed between the elements of this multi-dimensional program proved particularly beneficial in building a culture of basing practice on evidence. These interactions occurred between each of the practical strategies incorporated into this program. For example, Nursing Rounds provided a forum where relevant evidence was discussed and implemented into daily practice. Additionally, practice issues raised during Nursing Rounds became topics investigated by EBP workgroups, discussed during journal club or explored through a specific research project (such as the MRSA project outlined in Text Box 2). Similarly, issues raised during journal club discussions were subsequently followed up by an EBP workgroup. Although not overtly acknowledged, interaction between multiple components appears to have been an important element in other reported programs.²

Use of EBP workgroups where clinical nurses were central to the activity was considered an essential component of the program. The active involvement of clinical nurses was important, as they not only deliver the care, but also observe the effect of that care and identify the areas that require further evidence to underpin practice. This central involvement of clinical nurses is consistent with other programs reported in the literature.^{2, 22} Further, the nurse-to-nurse collaboration and associated autonomy that was inherent in the EBP workgroups and journal clubs appeared to be significant in promoting increased research use²³ and have been anecdotally reported by nurses in our ICU as important.

Members of the EBP workgroups identified as beneficial the decision to incorporate a well structured framework such as the Iowa Model of Evidence Based Practice to Promote Quality Care.¹⁸ Although such a framework has limitations, it provides an overall guide for progression from one phase to the next and enables clear development of specific goals and associated timelines for each of the workgroup members. Limitations included the lack of recognition of many of the contextual factors that affect practice change,^{23, 24} as well as the lack of guidance regarding strategies that could be used during each phase of practice change, for example how to 'implement EBP'.

Despite the benefits of using the Iowa Model of Evidence Based Practice to guide practice change, the challenges associated with ensuring sufficient time for clinical nurses to undertake the activities has proved problematic. Although time to work on projects was allocated in advance, if patient numbers necessitated the opening of additional ICU beds clinical care requirements took precedence and project time was lost. Consequently projects would extend over long periods (i.e. up to two years) when it would have been otherwise possible to complete the project in six months. It is important that EBP activities are viewed by all levels of the organisation as a core component of the nursing budget, not as optional extras that can be withdrawn at times of financial constraint. Recommendations to overcome these challenges are proposed (Table 1). Although strategies such as specific funding of practice change personnel has been proposed,⁸ our experience suggests this should only be for individual projects rather than for personnel to remain in an ongoing practice change role, as the benefits of clinicians driving the practice change initiative appeared essential to increased awareness of the benefits of EBP.

As previously identified, this multi-dimension program was informed by the principles outlined in the ARCC model,⁷ while the EBP workgroups specifically followed the process outlined in the Iowa Model of Evidence Based Practice to Promote Quality Care.¹⁸ These activities all occurred in a Magnet-accredited hospital.¹⁶ Although the potential exists for criticism of competing theoretical frameworks the success of the project confirms that providing the frameworks have common principles, a successful program can be implemented.

The philosophies underpinning this EBP program are consistent with the Magnet organisational principles that guide this hospital. Particularly relevant principles include transformational leadership incorporating high quality nursing leadership and new knowledge, innovation and improvement incorporating quality improvement, application of existing evidence and development of new evidence.¹⁶ This alignment of principles optimised the management support that was received, both in terms of philosophical support and provision of sufficient resources to operate the EBP program. These resources have included paid time for education and work within the EBP workgroups, the presence of a research nurse in the ICU who is able to collect audit data, infrastructure such as a well resourced library and association librarian, and clinical leadership personnel including CNC, Clinical Educators, Nurse Unit Manager, a Senior Research Fellow and a Professor of Critical Care Nursing. Despite these resources being currently available ongoing provision is not assured. Given the budget imperatives that most healthcare organisations face, ongoing demonstration of the outcomes of EBP activities, such as those described in this paper, is essential to optimise the likelihood of continued funding.²

Conclusion

Importantly for nursing, the process of developing this multi-dimensional EBP program has achieved benefits. Our experience to date indicates it is possible to implement a multi-dimensional EBP program that results in sustained practice change. In our experience important considerations include having synergies between various elements of a multi-dimensional program, nurses assuming a central role in the EBP program, identification of a well structured framework to guide practice change and adequate mentorship and resources. Adaptation of these strategies to multiple different health care settings is possible and should be tested. As clinical nurses observe, and are integral to, improved processes and outcomes, their ongoing support and participation is gained for future activities.

Text Box 1:**Changing head of bed positioning**

In 2006 a group of five ICU RNs examined the evidence regarding nursing mechanically ventilated patients in a head-up position and the associated incidence of ventilator associated pneumonia (VAP). Four relevant articles were located and critically examined.²⁵⁻²⁸ These articles indicated that the positioning of mechanically ventilated patients at a head up position of 30 degrees or more is likely to contribute to a lower incidence of VAP.

On the basis of the evidence, the EBP team set about implementing practice change. A multi-dimensional change strategy incorporating education, random audits of bed height elevation, prominent reminders, and installation of inclinometers on each bed was implemented. Bed head elevation angles were recorded on all patients in the unit at random times both prior to and after the implementation of the change process. Of 112 patients audited prior to any intervention, only 29% of the mechanically ventilated patients were nursed at a bed head angle of $>30^{\circ}$.

The change strategy commenced with an education campaign incorporated into the rostered education days held in the ICU to educate staff regarding the benefits of nursing mechanically ventilated patients sitting up $>30^{\circ}$. Evidence from the critically appraised articles was provided to the nursing staff, along with the results of the initial audits. Staff were surprised at their limited accuracy when judging the head of bed angle, although this characteristic was consistent with the only other study we could locate on this topic.²⁹ An interim period of audit following the education program and prior to the implementation of other practice change strategies found an improvement

to 44.4% of patients positioned with the head of bed $>30^\circ$, although this was still considered inadequate.

The ICU beds in use did not have any type of tool to measure bed head elevation. In order to change practice more effectively we believed we needed to find a way of measuring bed head elevation angles at each bedside that was simple and easy to use. We achieved this by attaching inexpensive inclinometers to each bed head enabling the measurement of bed head elevation up to 45 degrees. As the inclinometers are attached to the bed, nurses are able to adjust bed head and view the angle simultaneously, thereby removing the need to estimate bed height elevation. A recently published report from the USA has also indicated that placement of simple measuring devices led to improved positioning of patients.³⁰

Other practice change strategies included placement of prominent reminders through the ICU, installation of screen savers reminding staff about head of bed elevation on bedside computers and feedback regarding audit results and ongoing education.

Weekly random audits are now undertaken and demonstrate ongoing maintenance of more than 60% of patients with their head of bed elevated above 30° . Maintenance of this level of bed elevation is excellent when compared with a recently published report of Australian and New Zealand practice that found only 5% of patients were positioned $>45^\circ$ and a further 22% positioned between $30 - 45^\circ$ and similar results reported in a multi-centre European study.^{28, 31}

Text Box 2:

Determining appropriate MRSA surveillance

A group of four ICU registered nurses undertook a literature review examining the evidence regarding physical isolation and surveillance measures to identify Methicillin-resistant *Staphylococcus aureus* (MRSA) in patients transferred from other healthcare facilities. Fifty related articles were retrieved and although repeated support was identified for the isolation and surveillance of multi resistant organisms, expert opinion could be found only for the current practice of obtaining surveillance swabs at two time-points 24 hours apart.

In an effort to determine whether the current practice of two sets of surveillance swabs identified more patients with MRSA than a single swab would, a search of the ICU patient database was undertaken to identify all inter-hospital transfers during the previous three years. This was then matched with the hospital microbiology database. Due to low numbers of inter-hospital transfers (approximately 100 patients per year), low rates of MRSA presence (approximately 3% per year), and inconsistent patterns in which of the swabs identified the presence of MRSA, this quality assurance data was not informative in answering our question.

Consequently, the group identified a need for a higher level of evidence on which to base clinical practice. With the guidance of an experienced nurse researcher the group formulated a project with the primary aim to determine whether a time interval of one hour between two sets of multi-resistant organism surveillance swabs is as effective as 24 hours in identifying MRSA on inter-hospital transfers. A protocol for the study was then drafted with collaboration from the Infection Control and Microbiology

departments and submitted to the relevant Human Research Ethics Committee for approval. Data collection in this study has now been completed.

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Table 1 Analysis of EBP strategies

Activity	Benefits	Challenges	Recommendations
EBP Champions	<ul style="list-style-type: none"> • Development of EBP skills throughout the nursing staff • Builds perception that EBP is not the responsibility of research staff or academics 	<ul style="list-style-type: none"> • Ensuring champions feel adequately equipped for role • Sufficient time • Ensuring champions convey an inclusive attitude to all staff 	<ul style="list-style-type: none"> • Plan appropriate development prior to role commencement • Carefully select initial EBP champions, taking into account both knowledge and interpersonal skills
EBP Mentors	<ul style="list-style-type: none"> • Involvement of academics in practice • Optimises rigour of EBP projects 	<ul style="list-style-type: none"> • Limited time • Limited pool of people with adequate skills in all aspects of the role 	<ul style="list-style-type: none"> • Ensure multiple mentors • Provide mentors with a legitimate role in the clinical environment through a joint or visiting appointment
Provision of resources	<ul style="list-style-type: none"> • Enabled successful conduct of projects • Frequently excellent return on small investment 	<ul style="list-style-type: none"> • Competing priorities in budget 	<ul style="list-style-type: none"> • Ensure projects are consistent with unit goals / priorities so that it is appropriate for budget to be spent in area • Explore all opportunities for external funding of projects
Culture and expectation	<ul style="list-style-type: none"> • Positive attitude towards EBP generally reflects culture that is broadly supportive of all practice improvement activities • Increased number of nurses self-nominated to be part of an EBP group or journal club 	<ul style="list-style-type: none"> • Difficult to quantify culture • Difficult to change attitudes and expectation in more than 200 staff who work 24/7 • Integration of EBP in all aspects of unit activity 	<ul style="list-style-type: none"> • Emphasise the role of key opinion leaders • Implement associated activities, e.g. an active research program to gain synergies
EBP Workgroups	<ul style="list-style-type: none"> • Practice areas were considered relevant by many staff • Excellent opportunity for nurse-nurse collaboration • Use of structured framework provided guide for progression through project 	<ul style="list-style-type: none"> • Sufficient time • Maintaining enthusiasm over long periods • Developing strategies to convey the importance of practice change to all nurses • Incorporating EBP activities into every day practice 	<ul style="list-style-type: none"> • Ensure clinical relevance of each question to be addressed • Use flexible rostering approaches • Make administrative support available • Develop effective links with librarian • Select a framework that is relevant and appropriate for the EBP work being undertaken

Journal Club	<ul style="list-style-type: none"> • Provided a forum for clinicians to examine the link between publications and local practice • Developed skills in critical appraisal 	<ul style="list-style-type: none"> • Clinicians often felt they did not have sufficient skills • Limited time for thorough discussion • Differing levels of rigour in critical appraisal by nurses who led discussion 	<ul style="list-style-type: none"> • Ensure articles are selected that relate to local practice • Provide adequate education and support for journal club leaders
Nursing Rounds	<ul style="list-style-type: none"> • Development of a range of skills in nurses, including presentation, critical thinking, care planning • Provides a forum for care to benefit from collective expertise 	<ul style="list-style-type: none"> • Lack of priority placed on Rounds by some staff • Differing levels of expertise and confidence in presenting key aspects of patient history and care 	<ul style="list-style-type: none"> • Ensure non-threatening environment • Maintain occurrence of Nursing Rounds, even when unit busy to role model the priority of the activity • Document outcome of Nursing Round in patient notes to realise benefit to patient care