Implementing online tools and resources to help nurses apply evidence based care

A global resource can enable nurses to translate healthcare evidence into practice at a local level. A project looked at how it was implemented and evaluated

INTRODUCTION
In May 2007, NHS Quality Improvement Scotland (NHS QIS) negotiated membership of The Joanna Briggs Institute (JBI) for all of NHS Scotland for three years. Membership gives healthcare staff access to a wide range of online tools and resources through the JBI CONNECT portal (Clinical Online Network of Evidence for Care and Therapeutics).

The idea of tools and toolkits to support evidence based practice has grown in recent years. To optimise the potential of CONNECT and to ensure integration with NHS Scotland’s wider policy and practice agenda, a three year project was established to implement and evaluate the impact of introducing the CONNECT tools.

A structured approach was adopted to enable collaborative working between the JBI, NHS QIS and staff across NHS Scotland and increase the likelihood of this resource being used to its full potential.

Both the JBI and NHS QIS are committed to developing, promoting and supporting evidence based care. Recognition of the importance of supporting the implementation of evidence based practice and demonstrating impact were the main factors in the decision to secure national membership of the JBI. Membership offers access to online tools and resources developed by the JBI to support, establish, maintain and evaluate evidence based practice.

This project complements and strengthens policy initiatives to build and facilitate quality improvement and promote the sharing of best practice, such as the Scottish Patient Safety Programme (tinyurl.com/safety-alliance) and Leading Better Care (The Scottish Government, 2008).

Both the JBI and NHS QIS share a strong focus on mechanisms to link evidence based research to care delivery. The philosophy underpinning this is consistent with strategic developments in knowledge and information management across Scotland that NHS Education for Scotland is leading on, through the e-library and e-health initiatives.

OCCUPATIONAL HIGHLIGHTS
Organisations that share a commitment to quality improvement by promoting evidence based healthcare face a number of challenges.

For example, there is a general lack of resources and the familiar challenge of agreeing shared priorities where they are competing priorities.

Other challenges relate to knowledge and attitude; recent research indicates that evidence based practice is still poorly understood by many nurses (Banning, 2005), while many still regard quality improvement as an addition to their workload (Long, 2003).

Embedding the use of tools and resources to promote quality improvement requires active engagement of staff and a greater awareness of the potential of such resources to support their needs.

However, while awareness of the existence of tools and resources is important, this does not equate to them actually being used in practice (Feder et al, 2000).

The local adaptation and implementation of guidelines presents the biggest challenge (Richens et al, 2004; Davenport, 2000). Implementation is a complex, multifaceted process involving a range of individual and organisational issues (Mulhall and Le May, 1999).

Organisational influences are consistently
highlighted as a potential barrier to change and the importance of a supportive environment is well documented. A change agent or local champion is known to be necessary to facilitate implementation, particularly when people have significant links within and outside the organisation (Greenhalgh et al, 2004). Dewing (2008) discussed the role of facilitators in leading practice development activity and highlighted the importance of a cohesive relationship between facilitators and nurse managers. Ongoing communication with nurse directors and local facilitators to ensure local priorities are aligned with wider priorities has been fundamental to the JBI programme.

Staff are more likely to engage in activity to develop practice when they feel ownership of change at a local level and empowered to take improvement activity forward (McCormack et al, 2006). Social psychological theory, as discussed by Kuokkanen and Leino-Kilpi (2000), suggests that support and feedback can contribute to empowerment, while recognising that uncertainty about expectations and contradictory roles have a negative correlation with empowerment. Attention to individual and environmental factors is considered important.

This theory has implications for the JBI programme in terms of clarifying facilitators’ role, providing opportunities for sharing and establishing common goals. Membership of the JBI offers nurses, midwives and allied health professionals opportunities to share expertise and experience locally, nationally and internationally.

Successful implementation strategies should help to turn knowledge and understanding into changes in practice and improvements in care. An increasing number of models and theories attempt to conceptualise the process of putting evidence into practice. Rogers’ (1995) diffusion of innovation theory offers a helpful way of thinking about how to facilitate evidence based practice. It is not enough for practitioners to know about a particular piece of evidence; they have to believe in it and be able to see its relevance to their practice. Diffusion of innovation theory also recognises some of the barriers to changing practice that have been identified earlier, such as organisational and contextual issues. It highlights the value of considering implementation as a process in the same way that behaviour change is a process. More recently, Nutley et al (2007) reinforced the idea of the fluid and dynamic nature of evidence implementation, arguing against the idea of this as a single event.

**PROCES**
The JBI advocates a six step approach (Fig 1) to supporting the delivery of evidence based care.

The JBI tools and resources available to NHS Scotland are accessed through its CONNECT portal, and comprise facilities to search, appraise, use and embed evidence. The steps mirror those of knowledge and information management systems in NHS Scotland. In addition to a search function and an online critical appraisal tool, summarised evidence is available in the form of care bundles and best practice information sheets. An online manual builder allows users to build a context specific, local procedure manual using the JBI care bundles, while an integrated audit and change management tool supports local audit activity.

**SUMMARY OF CONNECT TOOLS**
The following tools can be used:
- Rapid Appraisal Protocol internet database (RAPid);
- Summarised evidence in the form of:
  - Care bundles – evidence based procedures and recommended practice;
  - Best practice information sheets – based on systematic reviews of the evidence;
  - Evidence summaries – based on structured searches of the evidence;
- Online manual builder – supports creation and editing of an online manual that is automatically updated;
- PACES (practical application of clinical evidence systems);
- GRIP (getting research into practice) – an integral audit and change management tool;
- POOL (patient outcomes online).

NHS Scotland staff can access these tools and resources in two ways:
- Directly through The Joanne Briggs Institute website NHS QIS portal http://nhsqis.jbiconnect.org, using NHS board username and password;
- Via the e-library at www.elib.scot.nhs.uk, clicking on JBI CONNECT, then entering NHS Athens usernames and passwords.

**INTEGRATION AND FACILITATION**
Introducing a resource such as JBI CONNECT cannot be done in isolation. An important part of the implementation plan has involved considering how the resource can be used to support both national and local priorities. At the same time, potential
challenges to its use have been identified. Passive dissemination of research findings has been shown to be generally ineffective in changing practice (Freemantle et al, 2002; Grimshaw et al., 2001). Factors that help implementation are: guidance that is seen to be meaningful to practitioners; tools that are developed collaboratively; tools that focus on a specific intervention; the use of a dedicated change agent; and an organisational commitment to change (Bradley et al., 2005). Facilitation is considered important to supporting the implementation and integration of the JBI tools and resources into clinical decision making.

This project has sought to gain support and engagement at strategic and operational levels, recognising that use of the tools and resources depends on developing knowledge and understanding at a local level. Local facilitators, identified by executive nurse directors, have been recruited from every NHS board in Scotland. These staff were already operating in change agent roles, where promoting evidence based practice and quality improvement were a core part of their work, and are familiar with having to balance the competing demands of policy and practice.

The facilitators have received training and support to assist them in promoting access to and use of JBI tools and resources in NHS boards across Scotland. Initial training with all facilitators was carried out over two days, with follow up in their own board areas. The project team has worked with facilitators to identify the best approach for each NHS board area so that activity can focus on complementing existing clinical governance/clinical effectiveness priorities and agendas within each board.

The application of evidence to practice, for example in guideline implementation, requires not only explicit knowledge of the guideline itself but also tacit working knowledge of how to get things done in a particular organisation in a particular context (Nonaka and Takeuchi, 1995). The JBI NHS board facilitators understand that the intricacies of local culture, structure and politics will influence the extent to which an initiative is received and adopted.

Consideration of the national context has been crucial in raising awareness of the JBI and its potential in Scotland. Policy drivers such as the Scottish Patient Safety Programme, Scotland’s patient experience programme (Better Together, tinyurl.com/patient-better) and Leading Better Care (The Scottish Government, 2008) are national priorities competing for the time of nurse directors, local JBI facilitators, senior charge nurses and other clinical staff.

Using the JBI online tools should complement rather than conflict with wider policy and practitioners’ everyday roles, and support them in delivering evidence based care.

Where there is obvious potential for interconnected work streams – for example, with the clinical quality indicators work driven by the Scottish Government Health Department – efforts are being made to secure mutual support across projects. The communication strategy underpinning the project has focused on engaging key stakeholders through a range of approaches including newsletters, flyers, individual presentations and facilitated organisational and national workshops.

**EVALUATION AND IMPACT**

The project team is working with local facilitators to enhance awareness and understanding of local contexts and priorities and support the rollout of the programme to practitioners across Scotland, as well as to consider how the tools available through JBI might complement their work.

Feedback from local facilitators and sharing of experiences takes place through quarterly meetings, individual contact and use of shared space on the e-library. Collating this feedback and reflecting on and monitoring activity in different board areas contributes to ongoing internal evaluation processes that also review figures from the JBI. In addition to these internal processes, an external evaluation has been commissioned to explore the impact of the tools and resources contained within JBI ConNECT across NHS Scotland.

The purpose of resources such as guidelines is not only to summarise the evidence and reinforce good clinical practice, but also, crucially, to support and enable improvements in practice. Using the collaborative and facilitative approach described, this programme is contributing to quality improvement in NHS Scotland.

**REFERENCES**


