

Empowering frontline staff to deliver evidence-based care:

The contribution of nurses in advanced practice roles

Executive summary

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This Executive Summary presents the main findings from a major research study examining the contribution of advanced practice nurses¹ (APNs) to promoting evidence-based practice among frontline staff. The study was commissioned by the Department of Health as part of its Policy Research Programme.

Background

The need for frontline staff to be empowered to deliver a quality service is a major aspect of contemporary healthcare policy. Within the nursing professions this has been supported by the introduction of new advanced practice roles such as consultant nurse and modern matron, to augment the existing clinical nurse specialist, nurse practitioner and practice development nurse roles. Policy guidance on advanced practice roles identifies the need for nurses in such positions to base not only their own practice on research evidence, but also through clinical leadership to act as change agents in promoting evidence-based care amongst frontline staff.

Despite widespread recognition of the need for nursing practice to be based on sound evidence, frontline staff experience considerable challenges to implementing evidence-based care at an individual and organisational level. In particular, frontline nurses have difficulty interpreting research findings and although willing to use research they often lack the skills to do so. A lack of organisational support in the form of unsupportive colleagues and restricted local access to information is also problematic (Bryar et al 2003).

Research examining evidence-based practice identifies the contribution that 'opinion leaders' such as advanced practice nurses make in influencing the practice of frontline staff (Fitzgerald et al 2003). They act as conduits for disseminating evidence-based information (McCaughan et al 2002) and are a resource to frontline staff in clinical decision making (Thompson et al 2001). APNs can also act as 'knowledge brokers' by creating links between different practice communities, in particular acting as intermediaries between the clinical and research communities in facilitating evidence-based practice (Milner et al 2005). However, little is known about the approaches that APNs use to promote evidence-based practice and the impact of this activity on frontline staff, patients and the wider care environment.

¹The term 'advanced practice nurse' referred to nurses who demonstrated expert knowledge and skill while maintaining an element of clinical involvement. As there is considerable diversity in the job titles and role descriptions of nurses occupying such roles, the definition included, but was not restricted to, clinical nurse specialists, clinical educators, community matrons, modern matrons, nurse consultants, nurse practitioners, practice development nurses.

Research aims and approach

The overall aim of the study was to examine the contribution of advanced practice nurses (APNs) to promoting evidence-based practice among frontline staff. More specifically, the study sought

- to identify the various approaches used by APNs to promote evidence-based practice among frontline staff.
- to identify factors which facilitate or inhibit the promotion of evidence-based practice by APNs.
- to examine the impact of APNs in promoting evidence-based practice on staff and patient experiences in the context of an enriched care environment.
- to identify the educational implications for APNs and frontline staff to deliver evidence-based care.

A multi-method research approach was used to examine the research aims. The study had two related stages. The first stage comprised a survey by postal questionnaire of 855 APNs who worked in hospital and primary care settings throughout seven strategic health authorities that existed in England in 2004-06. The second stage involved 23 case studies of APNs and involved a range of other stakeholders, including a broad range of health care professionals, managers, patients and family members with whom the nurses worked. Data were collected by means of interviews with the APNs and the various stakeholders and observation of the APNs' practice.

Key findings from the survey of APNs

The survey provided a broad overview of factors influencing the contribution that APNs make to promoting evidence-based practice amongst frontline staff.

- APNs had a broad understanding of evidence-based practice. Research findings were the main form of evidence used in practice although evidence derived from professional experience and from interactions with patients was also seen as legitimate. Evidence-based practice was valued as a means of providing a rationale for care, promoting high quality care, ensuring consistent standards and improving patient outcomes.
- APNs drew upon different sources of evidence, including that gained experientially through caring for patients and interacting with other APNs and members

'I see myself as a resource for front-line staff in terms of facilitating evidence-based practice. I have the information, the evidence if you like, I make it available to them and I help them apply it in practice. Research can be difficult to understand and so it's about making it more accessible, helping them see the implications for practice, incorporating it into guidelines that they can use.'

Clinical nurse specialist

of the multi-disciplinary team. APNs relied heavily on evidence which had already been processed in some way, for example synthesised into guidelines, transmitted through education programmes or judged by colleagues to be relevant. APNs were less likely to obtain evidence directly from reading journal articles or via the World Wide Web.

- APNs used a range of approaches through which they promoted evidence-based practice among frontline staff. Over two thirds of APNs influenced the care provided by frontline staff through their involvement in direct patient care, by working alongside frontline staff and acting as a resource to solve clinical problems. Many APNs disseminated information to frontline staff through education and training and informally through encounters in the clinical setting.

'She (tissue viability nurse specialist) updates us on the latest guidelines and research so we're developing our knowledge. She's getting us to do presentations to our team. We're developing skills so that we can teach others ... Being a link nurse has been great; it's given me the knowledge about tissue viability and the confidence to share it with others. I take the lead for tissue viability within my team, other team members now refer to me for advice.'

Community staff nurse

- APNs felt that they had a positive impact on the care provided by frontline staff and on the broader care environment. Their direct impact on care delivery was mainly through taking action to prevent or to solve clinical problems. APNs often took corrective action to remedy shortfalls in the standard of care provided by frontline staff. They enhanced care delivery by providing opportunities for frontline staff to further develop their knowledge and skills beyond standard practice. APNs influenced the care environment by developing guidelines and care pathways, through service redesign and by contributing to a culture where frontline staff felt able to question care.
- APNs varied considerably in terms of the skills they possessed to support evidence-based practice. Nurse consultants perceived themselves to be the most knowledgeable, skilled and confident in supporting evidence-based practice and in generating evidence through research.
- APNs had a wide range of educational qualifications and were evenly divided between those with no academic qualification, those with a bachelor degree and those with a masters or higher degree. APNs with a masters degree were significantly more confident in their ability to support evidence-based practice and more likely to consider themselves to be competent or expert in this area.
- The heavy workload of APNs and frontline staff together with a lack of resources were perceived to be the greatest barriers to promoting evidence-based practice.

Key findings from the case studies of APNs

The case studies built upon the survey findings to provide a more in-depth account of the APNs' contribution to promoting evidence-based practice among frontline staff. The main findings in relation to the project aims are summarised below.

Evidence-brokering as an approach to promoting evidence-based practice

APNs assumed an active role in brokering different forms of evidence, making links between the source of the evidence (eg the research community or considered experts) and the practice community of frontline staff. Evidence brokering involved five processes.

- generating evidence – APNs generated different types of evidence including empirical evidence from research, audit and service evaluation, professional expertise, and personal knowledge about patients. New knowledge was generated through blending different types of evidence.
- accumulating evidence – APNs accumulated evidence through actively searching it out, networking and acting as a conduit for organisational evidence.
- translating evidence – APNs engaged in a number of processes including evaluating, interpreting and distilling evidence to make it accessible and understandable to different audiences such as patients, frontline staff and managers.
- disseminating evidence – APNs used a range of formal and informal approaches to disseminating evidence to frontline staff, patients and family members.
- applying evidence – APNs utilised different types of evidence directly, persuasively or conceptually in their own practice and in promoting the use of evidence among frontline staff.

'I wonder if any of the breast care nurses had breast cancer because they seem so knowledgeable about how it really is. They've taken so much from all of their patients, absorbed things that have been said to them and put it together.'

Patient

The impact of APNs through promoting evidence-based practice

The case studies identified how inherently difficult it is to demonstrate the impact that APNs exert through their evidence-based practice activity. Their roles were multi-faceted and complex. Many APNs were part of a wider multi-disciplinary team and worked in different clinical settings and in some cases across organisational boundaries. The more complex the role, the harder it was to be clear about an APN's individual impact.

Despite these difficulties, the case studies identified the overall positive impact that APNs exerted on frontline staff, patients and family members within the context of an enriched care environment. Their impact on the care environment comprised the following dimensions.

- Care giving environment as experienced by frontline staff, patients and family members. Through direct involvement in care giving and developing and implementing evidence-based protocols and pathways APNs were able to enhance the quality of care provided by frontline staff. By means of anticipatory and responsive problem solving they ensured that care standards were maintained and took remedial action to address any shortfalls in the standard of care patients received. Although APNs' impact on patients and family members was often indirect, and channelled through their influence on frontline staff, there were clear examples where APNs exerted a positive impact on the patient and family member's experiences of care. APNs influence on care giving served to increase patients' confidence and ensure the timeliness, safety and continuity of care.

'For all the questions we asked, and we asked a lot, they knew the answer. That's where you get your confidence. Each step has been passed through with reassurance.'

Patient

- Relationship-orientated environment as experienced by frontline staff, patients and family members. Both patients and frontline staff gave examples of how APNs adopted an holistic approach in which patients were seen as individuals within their family context. When a patient was referred to them for a specific problem, APNs took a broad view of the patient's needs rather than focus solely on the reason for referral. Through their evidence brokering activities they were able to mediate and negotiate between individuals where there were differences of opinion or act as an advocate for patients. The relationships that APNs established with patients and other health care professionals were therefore an important aspect of their evidence brokering role.
- Learning environment as experienced by frontline staff and, to a lesser extent, patients and family members. APNs contributed to an enriched learning environment through role modelling, teaching and facilitating the professional development of frontline staff. They empowered frontline staff by developing their competence, confidence and decision making ability. However, a note of caution was voiced about the potential disempowering effect of some APNs who acted as custodians of knowledge and through retaining responsibility for care served to deskill frontline staff.
- Workplace environment as experienced by frontline staff. Whereas the ward manager/team leader was most influential in determining the workplace environment experienced by frontline staff, APNs exerted an impact on the job fulfilment of frontline staff through providing opportunities for personal and professional development.

- Evidence-based environment as experienced by frontline staff and patients. Through their evidence brokering role APNs were able to promote an environment where evidence was used by frontline staff to inform their practice and patients were enabled to make decisions based on appropriate evidence.

In addition to their influence on the care environment, several APNs exerted an impact on the organisation and delivery of services. This included achieving a positive impact on length of hospital stay, admission rates, efficiency of service delivery, shifts in service delivery and changes in policy and practice.

Factors influencing APNs' ability to promote EBP

Factors influencing the ability of APNs to promote evidence-based practice related to the personal attributes of APNs, the nature of their role, the relationships they had with various stakeholders and the organisational context in which they worked.

- The personal attributes of APNs affected their ability to empower frontline staff. Being seen as clinically credible and street-wise, demonstrating a transformational leadership style, political acumen and effective interpersonal skills were all considered important. APNs who sought to complement rather than substitute for frontline staff when providing care were most effective. Conversely, those who acted as custodians of specialist knowledge and were reluctant to 'let go' of patients who had been referred to them by frontline staff ran the risk of disempowering staff.
- Support from senior managers and senior doctors was valuable, especially for APNs with complex roles that spanned one or more organisations. APNs valued the autonomy that senior nurse managers gave them to be creative in developing their role. Conversely, where the support for the role from senior managers was not so forthcoming, APNs encountered more obstacles. Medical 'champions' were often instrumental in gaining the support of their fellow medical colleagues for evidence-based initiatives that APNs were seeking to take forward and they often acted as clinical mentors.
- APNs with clinical responsibilities that brought them into regular contact with frontline staff were more readily able to influence practice than those whose role spanned organisational boundaries. The multiple and sometimes conflicting role expectations of some APNs meant that it was difficult to juggle the various demands placed on them. The heavy workload of many frontline staff detracted from their ability to engage in evidence-based practice activities promoted by APNs.
- Strong organisational commitment towards evidence-based practice led to structures being put in place and resources being allocated to support evidence-based practice.
- Professional networks both within and external to the organisation were used by APNs as a means of accessing relevant evidence, sharing information on evidence-based initiatives and providing peer group support. Networks established by APNs to develop the knowledge and skills of frontline staff, such as link nurse schemes were also beneficial.

'It can be difficult when you know that several things need to change. If you try to push too many things too quickly, you will lose the staff, they won't buy into it. So it is about working with them, building up that relationship so that they respect you and are willing to work with you.'

Modern matron

Key messages to arise from the study

Educational implications for APNs

- APNs need to be equipped with a broad repertoire of knowledge and skills to support their role in promoting evidence-based practice. They need to be able to critically appraise different types of evidence, develop skills to undertake audit, service evaluation and research, together with mastering skills in decision making, change management and information technology.
- In order to be effective evidence brokers, APNs need to develop inter-personal and inter-professional skills in establishing effective relationships with patients, family members and other health care professionals/managers, transformational clinical leadership abilities and the political acumen to work in complex organisations and across professional and organisational boundaries.
- Educational preparation for APNs should be at master's level to enable them to develop proficiency in critical appraisal, analysis and evaluation to support advanced practice and the promotion of evidence-based practice through evidence brokering.

Educational implications for frontline staff

- Frontline staff should be supported to further develop their knowledge and skills in evidence-based practice and critical thinking. The core processes of evidence brokering identified in this study could inform the development of a curriculum for the educational preparation of nurses and other health care practitioners, at both qualifying and post-qualifying levels.
- In recognising that many APNs devoted considerable time to remedying shortfalls in the standard of fundamental aspects of care provided by frontline staff, consideration should be given to further developing the clinical leadership abilities of senior frontline staff to enable APNs to use their specialist expertise more effectively.
- In recognising the impact of effective relationships on enriching the care environment, the educational preparation of nurses and other health care practitioners should include both the acquisition of technical knowledge and skills and the development of the capacity to enter into and sustain relationships with patients/family members and other health care professionals.

The APN's role in empowering frontline staff

- APNs should be encouraged and enabled to develop frontline staff through a range of educational opportunities including formal teaching, active role modelling, and other initiatives such as secondment opportunities and link nurse schemes.
- APNs need to be aware of how their actions can serve to empower or conversely disempower frontline staff. Clinical supervision and appraisal schemes could be used to enable APNs to reflect upon their impact on frontline staff.
- Link nurse schemes were a potentially valuable means of empowering frontline staff although some link nurses lacked the structural power to be able to influence change. Organisations should ensure that these nurses have the knowledge, skills and resources to enable them to carry out this aspect of their role effectively.

'APNs are leaders in their field ... It is about sharing your knowledge in order to empower front-line staff. It is about establishing a working relationship where you enable staff to develop their understanding and their skills. An APN is successful if she has improved the knowledge and skills of the nurses and empowered them, rather than being the expert herself. ... It's giving them the confidence to take ownership themselves.'

Assistant director of nursing

Infrastructure required to support APNs in promoting evidence-based practice

- APNs benefited from having access to specialist expertise and practical assistance in relation to audit, research and evaluation to assist them in assessing the impact of evidence-based initiatives they took forward. Organisations should ensure that such resources are available to support APNs in promoting evidence-based practice.
- Further progress needs to be made to bring information technology closer to the work environment. Ready access to the Internet, a well developed local Intranet and other information resources to support evidence-based practice in clinical areas for APNs and frontline staff are required.

APN role development

- Advanced practice roles need to be developed with realistic consideration of the extent and scope of the post. This study revealed how achievements can be

compromised if the role is too broad in terms of geographical base as well as role expectations and responsibilities.

- APNs who benefited from the support of a local champion (senior managers or senior doctors) were often highly effective in achieving organisational change. In establishing new APN roles consideration should be given to the professional partnerships, collaborations, support and mentorship required.
- Maintaining a strong presence in clinical areas allowed for opportunistic as well as planned interventions to promote evidence-based practice. The responsibilities and workload of APNs should be designed to allow them to spend sufficient time in clinical settings interacting with, and thereby influencing, frontline staff.
- Further research is required to develop an evaluative framework for APN roles which captures the complexity of their role (including evidence-brokering), the clinical significance of their impact on patients/family members and the professional significance of their impact on frontline staff.
- Further research is needed to examine the impact of different APN roles in order to guide service redesign. Whereas some differences were observed between nurse consultants and other APNs, these differences are somewhat tenuous and merit further exploration.

References

- Bryar R, Closs S, Baum G et al (2003) The Yorkshire BARRIERS project: diagnostic analysis of barriers to research utilisation. *International Journal of Nursing Studies*. 40: 73-85.
- Fitzgerald L, Ferlie E and Hawkins C (2003) Innovation in healthcare: how does credible evidence influence professionals? *Health and Social Care in the Community*. 11: 219-228.
- McCaughan D, Thompson C, Cullum N et al (2002) Acute care nurses' perceptions of barriers to using research information in clinical decision making. *Journal of Advanced Nursing*. 39: 46-60.
- Milner M, Estabrooks C and Humphrey C (2005) Clinical nurse educators as agents for change: increasing research utilisation. *International Journal of Nursing Studies*. 42: 899-914.
- Thompson C, McCaughan D, Cullum N et al (2001) The accessibility of research-based knowledge for nurses in United Kingdom acute care settings. *Journal of Advanced Nursing*. 36: 11-22.

Further information

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A copy of this executive summary and the full report of the project can be downloaded from www.shu.ac.uk/hsc/sp-kate-gerrish

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