

## **Executive Summary**

# **An evaluation of the implementation of Advanced Nurse Practitioner (ANP) roles at Barnsley Hospital NHS Foundation Trust**



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## Executive summary

### Background

Acute NHS trusts are facing considerable challenges while the NHS as a whole goes through a period of change which represents the biggest reorganisation of the service since its inception. Trusts are being challenged to drive up quality while at the same time making efficiency savings (DoH 2011). The Department of Health have advocated remodelling and re-engineering clinical teams as a way of achieving patient-focused services (DoH 2008) and the contribution made by nurses to workforce reconfiguration in the context of the advanced practice roles, is an essential part of this process. Modernising Nursing Careers (DoH 2006) provided a strategy to enable nurses to expand their roles and work flexibly to achieve this.

A key imperative for the strategic development of the advanced practitioner role in acute hospital settings has been the implementation of the European Working Time Directive (European Parliament 2000). The adoption of a maximum 48 hour working week for junior doctors, and the reduction in working hours that has resulted, has had huge implications for the provision of patient care, traditionally carried out by this group of professionals in acute NHS Trusts. Individual Trusts have adopted different strategies to address the shortfall in clinical hours at junior doctor level. One approach has been the introduction of Advanced Nurse Practitioners (ANPs).

In 2009, Barnsley Hospital NHS Foundation Trust, made the decision to appoint Advanced Nurse Practitioners (ANPs) to work in acute care areas to undertake some of the skills and tasks traditionally undertaken by junior doctors.

The first cohort of ANPs who undertook the programme while being supernumerary in the clinical area, began the programme in September 2009 and began functioning in their individual roles in December 2010. The second cohort of ANPs began the programme in Sept 2010 and did not have supernumerary status, but undertook their studies on a 'day release' basis while continuing in their current clinical roles.

An external evaluation of the educational programme provided at SHU in terms of its capacity to equip ANPs with the clinical competencies to undertake their roles has already taken place. The current evaluation presented the opportunity to extend this work by exploring any differences in experiences and perceptions of the programme between the first and second cohorts.

However, the major focus of this evaluation was not on the educational preparation of the ANPs, but on the implementation of the role. The models of practice adopted for the first cohort of ANPs in medicine, surgery and orthopaedics varied considerably in terms of clinical casemix, clinical responsibilities, patterns of working and the coordination of ANP roles with existing F1/F2 roles. In order to inform future strategic developments around workforce reconfiguration involving ANP roles, it was necessary to evaluate the roles in practice to enable judgements to be made about the impact of these diverse roles, the economic implications of ANP role development within the organisation and the factors

which influenced the success of role implementation. This formed the major component of this evaluation

### Evaluation aims and approach

In order to explore differences in ANP perceptions of their educational preparation between cohorts, the current evaluation sought to:

- Explore the perceptions of the ANPs on the extent to which their educational programme has prepared them for their role in practice
- Identify perceived differences in student experience or role implementation which are attributable to undertaking the programme on a supernumerary or non-supernumerary basis

To achieve these aims, a focus group discussion was held with the first cohort and individual interviews conducted with members of the second cohort. Interviews focused on the ANPs' experiences of and views on the educational preparation within the university and the training they received within the organisation and the extent to which they felt prepared for advanced practice.

In order to evaluate the impact of the roles in practice, the evaluation sought to:

- Identify the key stakeholders involved in the development and implementation of the ANP roles
- Identify the various meanings of a 'successful ANP role' as defined by these stakeholders
- To identify criteria to judge success based on the above
- To evaluate the overall impact of the ANP roles using the above criteria as a framework
- To identify factors which have been influential in contributing to the success of these roles
- To provide an account of the ANP roles and suggest factors which were most influential in the implementation of the roles
- To explore the economic implications of the ANP roles

In order to achieve these aims, following a review of the literature, a collective case study, comprising three individual case studies was undertaken. Each individual case study represented the clinical area within which the first cohort of ANP roles had been introduced i.e. medicine, surgery and orthopaedics.

Data collection began with interviews with strategic stakeholders within the organisation, followed by each of the three individual case studies. Interviews focused on the impetus for role development, the process of role implementation and the impact of the roles in practice. Each case study involved interviewing the individual ANPs and a range of healthcare staff with whom they worked and patients with whom they had close contact. Interviews focused on the impact of the ANPs on patients and carers, other staff and on the organisation (and how this might be captured). Factors influencing the implementation of the roles were also explored.

Additional evidence on the impact and implications of the roles was collected through a variety of approaches including periods of non-participant observation in the clinical setting, collection of routine data relevant to the ANP roles and collection of documentary evidence e.g. job descriptions.

Routine data already available within the organisation was also accessed to inform the development of a cost offset model to capture both cost vectors and activity data relating to the ANP roles.

## **Key findings**

The key findings from the evaluation that relate to the aims of the evaluation are summarised below:

### ***Role preparation and role development***

There were clear contrasts in the extent to which the two cohorts felt their training in the clinical area had prepared them for ANP practice, due in large part to the difference in their supernumerary status while undertaking training. While the first cohort had been mostly supernumerary in the clinical area and therefore able to rotate around different clinical areas for substantial placements and to an extent adapt their training to suit their individual needs, the second cohort had only enjoyed supernumerary status on odd occasions during their training and had mainly been based in their own clinical areas. This compromised the learning opportunities for ANPs in the second cohort and the opportunity to apply theoretical learning in practice.

The result of this was that while the ANPs from the first cohort still felt that they had much to learn on qualification, they felt that their training had served them well as a solid academic and clinical preparation for practice.

Supernumerary status during training clearly influenced the extent to which the ANPs felt prepared to undertake ANP practice, both in terms of their confidence and the knowledge, skills and competence required for advanced practice.

There was consistency among the strategic stakeholders about the key drivers for role development within the organisation, which were around the EWTD, development of clinical nursing careers and the need to provide high quality, consistent care to patients. There was however, little evidence of a shared vision of how the ANPs would work in practice to achieve this and perhaps as a consequence, the roles had evolved quite differently from the outset within medicine, surgery and orthopaedics. A number of barriers to role implementation were identified, including resistance from some medical staff, initial suspicion from some lead nurses and initial uncertainty as to the exact nature and purpose of the roles in practice. Evidence from the individual case studies demonstrated that overall, any initial negativity about the roles discussed in the strategic stakeholder interviews had disappeared in practice. However, there was ongoing reluctance from some medical consultants to support all elements of ANP practice, in orthopaedics in particular.

Conversely, the support of key champions within nursing and medicine and executive level endorsement were seen as key facilitators to role implementation. The individual

qualities, skills and attributes of the ANPs themselves also came through clearly as a key facilitator of successful role implementation.

### ***Impact of ANP roles***

There is little evidence in the literature relating to the impact of ANP roles which are similar to those developed at Barnsley.

The findings from the three individual case studies demonstrated clearly that the ANPs had a positive impact on patient experience, patient outcomes and patient safety. Similarly the introduction of the ANP posts had a positive impact on other staff within the trust in terms of improving knowledge, skills and competence as well as less tangible indicators such as quality of working life, distribution of workload and teamworking. The final domain of impact was on the organisation. The ANPs contributed to the achievement of organisational priorities and targets and also to the development of policy within the trust.

There was clear overlap between the framework of impact generated in this evaluation and the framework for capturing the impact of nurse consultant roles developed in earlier work by members of the study team (Gerrish et al in press). There were however some differences, with impact on patient safety featuring much more prominently in this evaluation.

The evidence for the impact of the ANP roles came mostly from interviews and observation of practice and although this was endorsed through the collection of a small number of documents and the exploration of some routine data, there was relatively little quantitative evidence of impact available within the Trust. However, it should be noted that this is not an issue which is unique to the roles evaluated here. The impact of all advanced nursing roles is inherently hard to capture for a variety of reasons. These include the fact that the impact of these roles is often indirect (e.g. through upskilling other staff) rather than direct, and may be felt some time after the initial ANP intervention. In addition, there are problems with attributing changes in outcomes to an advanced nursing intervention when these nurses often work in the context of a multi-disciplinary team (McDonnell et al, 2012). This issue is particularly pertinent to the ANP roles in Barnsley. The impact of the roles was not simply a consequence of delegating elements of junior doctors' responsibilities to ANPs, but was as a result of improvements of care through a whole systems approach. Through a variety of mechanisms, the ANPs were able to harness the efforts of the team as a whole to improve care 'across the piece' for the benefit of patients.

The evidence for impact of the ANPs on patients and staff was particularly strong. For patients this not only included impact on patient outcomes and patient safety but also a positive impact of the patients' experience of hospital care, which included the provision of more timely care as well as improved communication and continuity of care.

### ***The future for ANP role development***

By the end of this evaluation, a number of key issues emerged concerning the future development of the roles within the organisation. These included the need to clarify and define the scope and nature of the service provided by the ANPs in each clinical specialty.

Specific issues need to be considered within each clinical specialty. For example in surgery, should the ANPs continue to be used to fill gaps in rotas on an ad hoc basis or should a more strategic approach to role substitution be developed? In orthopaedics, how can the full potential of the roles be realised to extend the impact of the roles beyond patients with fractured neck of femur? In medicine, should the service be expanded to provide cover on a 24/7 basis in order to relieve the pressure on the system on a continuous basis? However, all these issues were underpinned by the need to develop clear strategies in relation to recruitment, retention and ongoing training and support for the ANPs.

Recruitment issues centred around the need to establish a sufficient 'critical mass' of ANPs to deliver a comprehensive service. While the recruitment strategy for the first cohort had delivered a high calibre of trainees who were enthusiastic and motivated and happy to meet the challenges of pioneering new role developments in uncharted waters, it was not clear that that sliding individuals into roles who had not expressed initial enthusiasm for this kind of role was a productive recruitment strategy. The need for a critical mass of ANPs was seen to be important not just to provide a comprehensive service, but also to ensure the ANPs had adequate peer support.

The need to retain and sustain the ANPs in practice was underpinned by concerns around who should provide support and mentoring for the ANPs both from a nursing and medical perspective. There was a strong sense that there was a continuing need for ANP champions within the Trust, but that these champions now needed to provide specific strategic support and direction, including the development of mechanisms for ongoing updating, training and assessment of ANP competencies. The need for appropriate clinical supervision as well as line management was also raised and this again is a recurring theme in the literature on the development of advanced nursing roles. The issue of grading was also raised as was the need to consider whether the ANPs' salaries reflected banding in other organisations. The ANPs at Barnsley hospital are highly trained individuals who have clearly demonstrated their potential to impact on a wide range of indicators relating to patients, staff and organisational priorities and targets. As such they have a skill set which makes them highly marketable in the acute sector. The opportunity cost of losing the ANPs to other institutions would be considerable.

### **Implications and recommendations**

A number of implications and recommendations emerged from the evaluation. These are outlined below.

#### *Training and recruitment:*

- The order in which trainee ANPs access the current masters level modules provided for ANP training should be carefully considered and wherever possible the APACS module undertaken first
- The X ray interpretation module may benefit from revision to fully meet the needs of the ANPs



- While supernumerary status during ANP training may result in increased costs to the organisation, the Trust should weigh these carefully against the benefits which include increased confidence and preparedness for practice
- The current model of training NNPs for ANP roles requires review and may not be fit for purpose in its current form
- Recruitment strategies which rely on ANP trainees 'self-selecting' for the roles as opposed to relying on the organisation singling out candidates are likely to result in the recruitment of ANP trainees with higher levels of drive and motivation

### *Development of the ANP service*

- The nature and scope of the service within each clinical specialty should be defined and planned from a strategic perspective. Specific areas of uncertainty which should be addressed include:
  - whether the ANPs in surgery continue to be used to fill gaps in rotas on an ad hoc basis rather than adopting a more strategic approach to role substitution
  - how the full potential of the roles can be realised in orthopaedics to extend the impact of the ANPs beyond patients with fractured neck of femur
  - whether the service in medicine should be expanded to provide cover on a 24/7 basis
- The contribution of the ANP roles to improvements in terms of patient outcomes, experience and safety, on staff in terms of skills and competence, quality of working life, teamworking and distribution of work, and on the achievement of organisational priorities and targets was well evidenced. However to date, this has been achieved through the impact of a small number of highly driven and motivated individuals within each clinical specialty. Consideration should be given to the numbers of ANPs needed to form a 'critical mass' capable of delivering a comprehensive service which maximises the potential of ANP role development within the organisation

### *Sustainability and retention*

- Consideration should be given to the development of mechanisms to ensure that ANPs within the organisation are supported and developed on an ongoing basis. These should include the following:
  - identification of named individuals to provide clinical supervision which should lie outside line management arrangements
  - joint appraisal of performance between the clinical supervisor and the line manager
  - regular review of job descriptions and competencies in order to keep pace with the pace and scope of role development

### *Evaluating the impact of the roles in practice*

- This evaluation has demonstrated that while there is clear evidence that the ANP roles have an impact in a range of domains, this impact is inherently hard to capture through quantitative outcome measures. Making a case for continued investment in ANP role development is likely to rest to some extent on collecting 'the right data for the right audience'. In order to supplement the positive picture of the roles which emerged with 'hard' data, the trust should consider conducting either 'before and after' or prospective audits of the following:
  - time to clerking and treatment in MAU and SDA
  - throughput on MAU and SDA
  - rates of catheterisation and UTIs for fractured neck of femur patients
  - response times for requests to review deteriorating patients
  - 'failure to rescue' rates
  - quality of documentation for prescriptions, investigation request cards and medical notes
  
- Before and after approaches or prospective audits which compare periods with and without ANP cover may enable impact in relation to the above indicators to be articulated
  
- While the costs of training the ANPs can be clearly calculated, the offsets to these costs through savings which can be achieved elsewhere in the organisation are less straightforward to quantify. By definition, these are also underpinned by a number of assumptions, since outside of the context of rigorously conducted randomised controlled trials they are impossible to attribute with certainty to the impact of the ANPs. However, the cost offset model developed should allow the organisation to explore the impact of these assumptions in order to come to realistic conclusions about the true cost of ANP roles in practice
  
- While some of the benefits of ANP roles are difficult to quantify in monetary terms, some are impossible to quantify in this way. However, these less tangible benefits of ANP roles which include many dimensions of patient experience may represent those elements of care which are of most importance to patients.



## References

- Department of Health (2006) Modernising nursing careers: setting the direction. Department of Health: London.
- Department of Health (2008) Towards a framework for post-registration nursing careers: a national consultation. Department of Health: London.
- Department of Health (2011) Quality governance in the NHS: a guide for provider boards. Department of Health: London.
- Gerrish, K, McDonnell A, Kennedy F. The development of a framework for evaluating the impact of nurse consultant roles in the United Kingdom. *Journal of Advanced nursing*. In press.
- McDonnell A, Gerrish K, Kirshbaum M, Nolan M, Tod A, Guillaume L. The perceived impact of advanced practice nurses (APNs) on promoting evidence-based practice amongst frontline nurses: findings from a collective case study *Journal of Research in Nursing*. Published online 1st June 2012. DOI: 10.1177/1744987112446241.

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