ORIGINAL ARTICLE

Mapping the range and scope of emergency nurse practitioner services in the Northern and Yorkshire Region: a telephone survey

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Objective: To map the range and scope of emergency nurse practitioner (ENP) services in the Northern and Yorkshire Region as part one of a three phased study investigating the developing role of the ENP on a multi-professional context.

Methods: A telephone survey was conducted in the 48 hospital trusts within the region. Semi-structured interviews were arranged with the senior nurses responsible for accident and emergency services in responding departments. Data collection entailed completion of a form comprising 14 open-ended questions designed to elicit information about the range and scope of ENP services (as defined by the Royal College of Nursing). Data were analysed using descriptive statistics.

Results: Interviews were conducted at 35 (73%) of the sites, 22 (63%) of which had an ENP service as defined above. Wide variation was found in the range of services in relation to: hours/days of availability; age range and sources of referrals of patients accessing the service; clinical caseloads of ENPs and the referral pathways to other services.

Conclusion: The findings from the survey highlight the organic, context specific nature of ENP role developments in response to national government initiatives, professional agendas, and local service needs.

Provision of accident and emergency services in the UK is undergoing transformation, with new models of service delivery.¹ One of the initiatives is the development of emergency nurse practitioner (ENP) roles.² A number of political, professional, and local issues have combined to accelerate the development of these roles. These include national government agendas such as the Audit Commission, which recognised the increase in numbers of patients attending accident and emergency (A&E) departments, problems with waiting times, reduction in doctors' hours, and shortage of doctors in A&E departments.³ The report highlighted the need for reconfiguration of existing services and an increased role for nurses. In the Accident and Emergency Modernisation Programme Interim Report⁴ the government announced a £15 million investment in modernising A&E departments. As well as improvement in the physical resources, the programme aimed to identify and disseminate examples of good practice and new ways of working to ensure that the organisation of A&E services, and the environment in which they are provided, give the maximum benefit to patients and staff. However, according to a recent report there is still a long way to go to reform emergency care throughout the country.¹

Changes in professional role boundaries between doctors and nurses have allowed nurses to extend their role in diverse and challenging ways and move away from medically orientated nursing practice.⁵ This coupled with reduction in junior doctors' hours has led to the development of ENP roles.⁶ Tye suggests the current professional and economic climate is conducive to this type of role development.⁷

Finally, local agendas that restructure services to meet local needs by using available resources differently. For instance, the introduction of minor injuries units in large urban areas and peripheral nurse led units in rural areas paved the way for the development of ENP roles.

The introduction of ENP roles can be controversial creating inter-professional tensions between doctors and nurses over care parameters.²⁻⁸ In this context calls for the introduction of

the ENP role are often accompanied by demands for evidence of clinical effectiveness, particularly when compared with doctors. In the biggest UK study to date 1453 patients were randomly allocated to either an ENP (n=704) or SHO (n=749).⁹ A research registrar blind to patient allocation assessed all treatment plans for adequacy of care. No significant differences were found between the two for errors, accuracy of examination, planned follow up, or radiology requests. The study concluded that ENPs working within their set guidelines could provide patient care that was equal to and in some aspects better than SHOs. Similar findings have been found in other less rigorous comparative studies.¹⁰⁻¹²

Although there is increasing evidence of the benefits of ENP roles and to date no evidence that they are detrimental to patient care, Walsh points out there are several issues for further discussion and evaluation, for example professional/legal issues, education and training issues, role parameters, and role development.¹³ Local anecdotal evidence suggests that reluctance to accept nurse referral by some members of the multi-professional team outside of the A&E department is one of the obstacles to ENP role development. These tensions may have an impact on the quality of patient care.

The absence of an accurate picture of existing ENP service provision in the Northern and Yorkshire region provided the impetus for the study reported here; the first phase of a three phased study investigating the developing role of the ENP in a multi-professional context. This phase maps the range and scope of ENP services in the Northern and Yorkshire region in order to inform the development of the next two phases. The aim of this part of the study is to use the findings to provide a basis upon which to carry out a systematic comparison of the impact on patients of nurse to doctor and doctor to doctor referral. The findings and experiences of the larger study will be used regionally to develop a more strategic and evidence based approach to ENP development and its evaluation.

Figure 1 Availability of ENP services.

METHODS

A telephone survey was conducted to identify the range and scope of ENP services in all NHS hospital trusts in the Northern and Yorkshire Region ($n=48$) between February 2001 and May 2001. The senior nurse in charge of A&E services in each hospital trust was identified from the British Accident and Emergency Medicine Directory¹⁴ and contacted by telephone by a member of the research team. An explanation of the background and aims of the study was given and respondents were asked if they were interested in being involved in this mapping exercise, entailing a booked telephone interview lasting about 20 minutes to be held at a date and time convenient to the senior nurse. Data collection entailed completion of a form comprising 14 open-ended questions designed to elicit information about the full range and scope of ENP services in the trust.

Those who consented (35) were contacted at the pre-arranged time. The first four questions sought information about the respondent (name, job title, and address of A&E department) and whether an ENP service existed in the department (either a dedicated ENP service or one ENP working among other staff). For the purposes of the study an ENP service was defined as a nurse led service:

- Directly available to the public
- Where nurses
 - work as autonomous practitioners
 - assess, diagnose, treat, and discharge patients without reference to a doctor but within pre-arranged guidelines (for example, sign radiology forms, prescribe within protocols)

- are able to make independent referrals to other health professionals¹⁵

Those who indicated they worked with an ENP service corresponding with the above definition were asked a further 10 questions covering such issues as days/hours service available, educational preparation of nurses, patterns of referrals, and caseloads.

The mapping exercise was broken down into services for patients and educational preparation of ENPs.

RESULTS

Of the 48 sites in the Northern and Yorkshire region, 35 responded to the telephone interview. Twenty two sites had an ENP service as defined within this project. In addition, three sites were currently setting up an ENP service and one site had a nurse consultant service within the A&E department. The remaining nine sites had no defined ENP service, although they may have nurse led activity in relation to the treatment of minor injuries.

The mapping of provision within the defined ENP services has revealed wide variation in the nature of the service across sites. The range of service provision is presented in relation to hours and days of service availability; patient access to services; clinical caseload and referral from the ENP service.

Hours and days of service availability

Variation was found in the availability of ENP services across 24 hours and seven days a week (fig 1).

Hours of ENP service availability varied greatly, from those services that offered 24 hour cover, to those offering day/evening cover only. Twenty four hour cover was made available in 10 sites. This was achieved in a number of ways, for example

- Nurse attends from the ward when a patient arrives during the evening
- Dependent on nurse shift patterns
- Nurses sometimes rostered as A&E nurses and sometimes in ENP roles
- ENP has role as hospital night sister

The provision of daytime/evening ENP services took place at 14 sites in the study. In these cases, the hours of service commencement varied between 0700 and 1100 and of service closure between 1600 and 2300.

Patient access to services—age range

There was variation in the age range of patients that would be accepted by the ENP services across the region (see table 1). It was apparent that it is usual for age restrictions to be set for an ENP service, although in two instances the study found acknowledgement of ENP discretion in taking patients, irrespective of their age but dependent on presentation, the type of injury, and nurse experience.

Table 1 Age range of patients accepted by the ENP services across the Northern and Yorkshire Region

Age restriction	Comments	Number of sites
No age restriction given	Some services added limits to this: <ul style="list-style-type: none"> • protocol dependent (1 site) • medical advice if under 5 y (2 sites) • individual nurse decision in relation to scope of practice (1 site) • radiographs only over 3 y (1 site) • radiographs only over 5 y (1 site) • Under 16 y seen but not admitted (1 site) 	11
12 y +	Although in this case, a paediatric unit nurse will see younger children with minor injuries.	1
10 y +	Rationale is that children under 10 y have more complex presentation.	1
5 y +	1 site mentioned nurse discretion—accepting patient will depend on presentation, complaint and nurse experience.	6
3 y +	No rationale given	1
2 y +	No rationale given	2

Table 2 Sources of referral to ENP services

Source of referral to the ENP service	Number of sites
Self referral	14
Referral through A&E (11 sites via triage, 3 not identified as via triage)	14
GP referral	9
Ambulance service (999)	7
Occupational health	4
NHS direct	1
Other agency (not specified)	1

Patient access to services—sources of referral to ENP services

Patients gained access to ENP services in a number of ways, with 13 sites (56%) having more than one source of referral to the ENP service. At the remaining 10 sites (44%), referral to the ENP service was only through the A&E department, with all but one site identifying the triage nurse as the point of referral. Table 2 illustrates the sources of referral to ENP services that were found from the study. Only one site mentioned patient preference as a factor in referral to the ENP service from the A&E department.

Clinical caseload

Most sites used “minor injuries” as a parameter for the clinical range of the service. Sometimes sites used euphemisms such as “walking wounded” to describe the minor injuries that were accepted as suitable for referral to the caseload for the ENP service. The interpretation of minor injuries varied, with the following being examples of the presenting conditions covered:

- Limb injuries, including cuts and lacerations, sprains and strains
 - below knee/below elbow
 - hands and wrists
 - shoulder
- Minor head injuries
- Bites and stings
- ENT and eyes—foreign bodies

Only one site, with a primary care walk-in centre specifically mentioned minor illness within the caseload, and described this caseload as “primary health care problems”, such as chest infections, urinary tract infections, and abdominal pain. This site also offered an emergency contraception service.

The ENP role in referring for, and interpreting radiographs was mentioned by five sites and nurse prescribing (using protocols) at three sites.

Referrals from the ENP service

Referrals were made from ENPs to a wide variety of other services. These included:

- A&E services, including review clinics and fracture clinics
- Primary health care (GPs, district nurses, health visitors, school nurses, practice nurses, community psychiatric nurses)
- Hospital based specialties
- ENT
 - Ophthalmics
 - Medicine
 - Plastics
 - Orthopaedics
 - Maxillofacial
- Radiology
- Physiotherapy
- Social services
- Child protection services

Figure 2 Educational preparation of ENPs.

Six sites said that the ENP service could refer to “all specialties”. On most sites, there was direct referral from the ENP to other services, but two sites claimed the referral is only made after discussion with a doctor (either GP or A&E based).

Educational preparation of ENPs

There were 35 sites that commented on the training and education of ENPs (fig 2). Nine sites stated they had no ENP service although three of them were hoping to in the future and two of these were already training ENPs to develop a minor injuries service.

On analysis it was evident there were variations in the training and education of ENPs. In-house training being the most common form (11 sites). Five of these in-house courses were held in collaboration with universities leading to accreditation of level 2 or level 3 CAT points. Other in-house courses issued with certificates while others gave no recognition at all. Three sites asked for specific criteria before training their ENPs, one site asked for five years experience in A&E nursing and two sites asked for two years experience in minor injuries. The duration of in-house courses varied throughout the region and although the data were not specific the programmes mainly consisted of time for theory, supervised practice, and assessment of practice. The A&E consultant was identified as the person to take a lead role in the programme although a nurse consultant led the programme in two of the sites. The differences between the in-house courses may be a reflection of the diverse nature of the ENP services provided.

The second most common form of training was through nurse practitioner courses (eight sites). These included ENB A33 Developing Autonomous Practice and BSc (Hons) Nurse Practitioner but again there were differences noted in the courses. One site stated ENPs that took the nurse practitioner course in one university were able to diagnose and treat minor injuries and those that took it at a nearby university were not.

Three sites identified training was taken through the Accreditation of Work Based Learning (AWBL) route. It was recognised that three sites that used AWBL did so with one university. An additional site identified that they are considering the AWBL route as an option for training their ENPs.

One site identified their ENP received training but was not specific about the detail of it and interestingly only one site identified that no training was given at all.

DISCUSSION

The findings from this study show considerable variation in the provision of ENP services and the educational preparation of ENPs across the Northern and Yorkshire Region. Overall provision is high compared with other studies. Read *et al* found only 6% of A&E departments had ENP services,¹⁶ Tye *et al* found 36% of A&E departments had ENP services,¹⁷ Cooper *et al* found 47% of nurses were practising as ENPs in Scottish A&E departments,¹⁸ while the Audit Commission found only 5% of A&E departments in England and Wales had ENPs who see a significant number of patients.³ This compares with our finding of 77%, however in our study we did not exclude departments offering only a limited service.

There is growing evidence of the effectiveness of ENP services^{9-10,12} and no evidence of harm befalling patients as a result of these services, providing they conform to established protocols and guidelines.² In the light of this evidence the Audit Commission are calling for an increase in ENP services to meet growing demand.³ The need for greater standardisation in role parameters and educational preparation has been recognised by the Royal College of Nursing A&E Association, which has recently launched the Faculty of Emergency Nursing.¹⁹ This aims to promote a national educational and competency framework for nurses specialising in emergency care.

Our evidence highlights the organic, context specific development of ENP roles in response to local needs, circumstances, and resources giving rise to considerable diversity in service provision. This finding reflects findings from previous studies into the development of practice.²⁰⁻²² Increasing ENP services in A&E departments requires the development of local initiatives to solve the problems identified locally in taking these services forward.²³ These problems may include ambivalence among key local stakeholders such as consultants and managers who may be concerned about blurring role boundaries and value for money.⁸

Developing an evidence base for ENP practice is clearly an important priority given the current emphasis on modernising A&E services. However, the organic, fragmented nature of service development makes systematic studies difficult to execute in this area and considerably limits the generalisability of the results. The implementation of new practices and services despite a limited evidence base is not confined to ENP roles. Similar findings were presented by Macintyre and her colleagues reviewing the evidence base for policies designed to reduce health inequalities,²⁴ an area that has experienced considerable research investment. Macintyre *et al* note how cautious researchers in this field are in interpreting data in contrast with their readiness to make recommendations for policy with very little evidence of effectiveness in practice. Many of the policies reviewed lacked an empirical evidence base and Macintyre *et al* suggest criteria that may be useful for assessing the evidence base for policy implementation. Senior managers and clinicians considering the introduction or development of ENP roles may be well advised to apply similar criteria to a systematic review of the literature in the context of their local setting, taking into account some of the ambivalent views that might be held by key staff locally.

In conclusion, this descriptive study looked at the development of the ENP role across the Northern and Yorkshire Region using semi-structured telephone interviews with senior nurses in each department consenting to participate. The data were analysed thematically and where appropriate presented numerically. In keeping with qualitative methodologies no attempt is made to interpret the findings in the context of therapeutic aims or outcomes. Rather the findings are presented as a snapshot of the situation at the time of data collection. The findings from this study indicate that the development of the ENP role seems to be caught between the calls for standardisation required by the need to establish a safe and rigorous evidence base for practice on the one hand,

and the realities of practice and service development that give rise to innovation and diversity in service provision. Within this context local diversity becomes a problem to be solved rather than a forum for human creativity and innovation. Rather than seeing diversity as a problem we suggest that developing an evidence base for ENP practice requires an alignment between the introduction of ENPs in diverse service settings and the development of explicit pre-determined empirically derived criteria for effectiveness, similar to those devised by Macintyre and her colleagues. These could be tailored to the context within which the service is being developed. This approach would enable the development of a cumulative evidence base that can simultaneously accommodate diversity.

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