Scope of emergency nurse practitioner practice: where to beyond clinical practice guidelines?

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ABSTRACT

Aim
The aim of this paper is to discuss some of the issues around continuing development of the Emergency Nurse Practitioner (ENP) role in a Victorian metropolitan Emergency Department (ED) setting. More specifically the discussion will consider the evolving clinical practice of the ENP in relation to clinical practice guidelines (CPG) and optimal utilisation of ENP skills and expertise.

Background
Internationally the mainstay of ENP practice is predominantly minor injury/minor illness models of care. This trend reflects traditional areas of need, or service gap. It is recognised however, that for a service to be sustainable and effective, it must be flexible, dynamic and prepared for future challenges.

The development of CPGs to inform 'scope of practice', has become contentious. The restrictive nature of ENP specific guidelines has become evident over time, and together with the labour intensive nature of their development, continuing use is questionable. The trend towards the use of multidisciplinary clinical practice guidelines that utilise existing clinical protocols has gained support for future nurse practitioner (NP) role development. These guidelines are generally of a robust, evidence based nature, with regular review and update and don't apply to any specific clinician group.

Method
An exploration of the progression of the ENP role and service model at a large metropolitan hospital ED was undertaken. An examination of the ongoing changes in demand for ENP service within this organisation was carried out together with the strategies in place, or required, for ENP role expansion and flexibility.

Setting
The setting for this discussion is a large metropolitan Emergency and Trauma centre in Melbourne, Victoria, Australia. The ENP team consists of endorsed ENP and those in training, generally referred to as Emergency Nurse Practitioner Candidates (ENPC). This ENP/C team is employed and cover sixteen hours per day, seven days per week, primarily in the 'fast-track' area of the department. 'Fast-track' is an area within the ED specifically treating patients presenting with minor injury and minor illness deemed likely to be seen, treated and discharged within a four hour time frame.

Conclusion
The ENP model of care at this organisation confirms ongoing evolvement and expansion of the role in terms of increasing numbers of ENP/C. Questions continue as to the most efficient utilisation of the role to best benefit the ED as a whole and more specifically, patient outcomes. The need for a continued, cooperative and collaborative approach by stakeholders to inform role progression and continuing clinical practice expansion is paramount for continuing department improvements and better patient outcomes.

INTRODUCTION

The NP role in Australia is a relatively new one with the first NP endorsed to practice in 2000, in New South Wales (NSW). Currently there are over three hundred and fifty NP's endorsed to practice nationally in a variety of specialties (DoH 2010). In comparison to the international position, the numbers are small, but growing consistently with increasing awareness. The success of the NP role is well documented in international and national literature, with NPs providing care in primary and acute care settings (Wilson et al 2008, Jennings et al 2009, Carryer et al 2007, Cole and Kleinpell 2006, Christofis 2001).

The NP role is dynamic and flexible, responding to demands in patient services, and identified gaps in service provision. The ENP role is a proven model of care and is becoming well established in Victorian ED's with a total of 22 ENPs representing approximately 40% of the total Victorian NP numbers, and an unknown number of ENPC preparing for endorsement (DoH 2010). Recent literature is consistent with international findings whereby a high level of satisfaction with this model of care is reported (Jennings et al 2009, Thrasher 2008, Hayes 2007, Davidson and Rogers 2005).

An important issue facing NP's is how to define the 'scope of practice' and how the evolving nature of this practice is determined and described from a clinical perspective in terms of boundaries for practice. The Australian Nursing and Midwifery Council (ANMC) have published a set of competency standards that are accepted as the guidelines upon which practice is based and measured (ANMC 2006). Despite these competency standards which form the acceptable overarching professional standards by which to benchmark the role, clinical variations in ENP roles are evident at the organisational level and further structures are required to inform practice in the clinical setting. The emphasis of NP scope of practice must retain flexibility to ensure essential responses to changes in the health environment. As with other nursing roles, a clinical role which incorporates innovation and dynamism, able to address future challenges of patient care is what the NP role aims to achieve.

In the current setting, discussions have taken place to determine what is expected of the NP role clinically and professionally. Gaps have been identified in relation to how the NP fits into the organisational structures currently in place, in terms of defining what constitutes scope of practice in a changing and evolving role. More specifically, this position relates to determining what the ENP can and cannot do, which patients can be seen, and the medico-legal aspects of clinical practice. This work adds to the literature by providing an introductory discussion around the basic requirements needed to formulate an organisational framework and policy direction for ENP practice.

Background

The development of the NP role, both nationally and internationally, has been politically influenced as a result of the challenges to meet increasing healthcare demands. There have been arguments which laud harnessing the wealth of knowledge and practice experience that nursing brings to healthcare (DHS 2004a), whilst others detract from the quality and expansion of this nursing input (AMA 2005, RACGP 2010, Cree 2009). Despite these differences of opinion, the challenge to improve patient access and equity whilst maintaining a focus on patient outcomes remains a priority.

The ENP role was initially informed by increasing numbers of patient presentations to ED leading to overcrowding and lengthy waiting times. This increase in demand is a position consistent across Victorian and international ED's (Fry 2009, Campo et al 2008, Wilson et al 2008, Davidson and Rogers 2005). As a result of increasing demand on existing services, patients began to experience lengthy periods of 'time to be seen', with management, diagnoses and subsequent discharge times becoming excessive (Barr et al 2000). The ENP model of care initially began with a solid mandate to address the needs of those patients waiting excessive periods in ED waiting rooms.

The ENP role initially sought to address the needs of patients presenting with minor illness or minor injury. These patient presentations were generally assigned

an Australasian Triage Score (ATS) of four or five after triage. The ATS is a clinical tool used in many ED settings to ensure timely patient management according to clinical urgency (ACEM 2009).

Given the innovative nature of the ENP role and the lack of local precedence for its development at commencement in 2004, a decision was made by the Victorian Government DHS following a recommendation by the Nurse Practitioner Implementation Advisory Committee (NPIAC) to produce Clinical Practice Guidelines (CPGs) (DHS 2004b). The CPGs were developed by the individuals working in the role and they directed the clinical practice of ENP/C at commencement of their role. The guidelines framework indicated that they should "address specific clinical presentations" and aim to provide guidance to "the nurse practitioner in clinical assessment, clinical management, referral processes and clinical evaluation." (DHS 2004b pg 15). The NPIAC recommendations also suggested that the CPGs form part of the endorsement process, through the Nurses Board of Victoria (NBV).

At the Alfred Emergency and Trauma Centre (E&TC) twenty five CPGs have been developed to guide the ENP/C role. These CPGs form the basis of clinical practice for the ENP/C including minor injuries such as fractures, sprains and strains, and minor illness such as urinary tract infections and deep venous thrombosis. The diverse nature of ED presentations, together with increasing numbers presenting for primary care, has raised questions about ENP specific CPGs as an outmoded method of clinical definition. The number of hours devoted to their development and the need for ongoing reviews and updates has proved cumbersome. The expectation of writing a guideline to cover 'Nurse Practitioner' specific management of each patient presentation is unrealistic. The guidelines assisted the initial role structure and development, and continue to achieve this for beginning ENP candidates, a more acceptable approach is now needed.

The use of protocols or multi-disciplinary guidelines to inform practice, ensure standardisation of clinical treatment regimes and outcomes, is not to be rejected. However the development of ENP specific guidelines over and above existing multi-disciplinary documents is unreasonable. Guidelines to provide comprehensive information on the patient care continuum for a variety of clinical specifications, and clinician groups which allow for clinical judgement are more appropriate for the direction of patient care into the future. The argument for initially defining ENP scope of practice around single practitioner ENP guidelines, for particular presentations is restrictive and one which impedes flexibility and progression. Consequently the development towards multidisciplinary guidelines for standardisation of clinical regimens seems a more acceptable approach.

A large part of the success of the ENP role at the Alfred E&TC is attributed to the increased ability to maintain improvement in measurable Key Performance Indicators (KPIs). These KPIs have been set by DHS, such as see, treat and discharge >80% of non admit patients within four hours of arriving to the ED (DHS Vic 2008). Following an increase in the number of ENP hours at the Alfred E&TC, this 80% target has come it's closest in many years despite increasing numbers of patient presentations. Whilst it is recognised that there may be other factors contributing to this improvement, it is acknowledged by Alfred E&TC management that the ENP/C group have made a positive impact.

A reduction in the number of patients who 'did not wait'(DNW) ie left prior to treatment commencing – has also been achieved (Lee and Jennings 2006). These results are significant from a risk management perspective, due to the risk of adverse outcomes for any patient who leaves the department without adequate treatment intervention or advice.

It is important to note that Jennings et al (2009) report a high level of patient satisfaction has been achieved in addition to the improved financial outcomes. Further, the competence of NPs to manage patient care in a comparable manner to physicians, with high levels of patient satisfaction combined with increased advice on education, health promotion and follow up advice has been well reported in the international

literature (Chen et al 2009, Jennings et al 2009, Phillips 2007, Barr et al 2000, Chang et al 1999). It is essential to emphasise this human perspective whilst acknowledging that the ENP role remains firmly entrenched within a nursing framework. The ENP role enables the provision of a holistic approach to patient care including patient education and follow up advice, all reflective of a nursing philosophy (Lee and Jennings 2006, Shapiro and Rosenberg 2002, Christofis 2001, Maurice and Byrnes 2001).

Currently at the Alfred E&TC, the ENP/C group together with management and other multi-disciplinary groups are considering the next steps in ENP clinical practice. The goal will be to develop terms of reference for the clinical role of the ENP without reliance on ENP CPGs. Development of a framework is required in order to match ENP clinical practice to departmental needs and appropriateness of clinical knowledge and skill of the clinician groups. This framework must be cognisant of aspects of patient safety and organisational responsibility, whilst allowing flexibility and change to occur as needed.

DISCUSSION

Current scope of practice

The current scope of practice of ENP at the Alfred E&TC continues to be based upon the original Model of Care (MoC) document which is the overarching local governance of the ENP model, restricting ENP practice to CPGs. Under the model, the ENP/C are not permitted to manage patients outside the scope of the CPGs independently. If an ENP (endorsed) assumes management of a patient who falls ouside an existing CPG, the ENP then works within a collaborative model for continuing patient care. Various collaborative models are discussed in the literature, but for the purposes of this setting, collaboration is a means of ENP verifying management and treatment strategies for patients under their care, falling outside the existing CPG model, with a senior medical staff member.

At present there are a number of patient presentations to the ED that are considered ENP appropriate, but not within existing CPGs. The increasing ability of ENPs to function well under the minor injury/minor illness model, creates a situation whereby other patients groups falling outside the CPG model continue to experience delays and extended waiting periods for treatment. Dawood (2000) and Christofis (2001) also report a similar pattern whereby patients presenting with minor injury/illness are treated more efficiently by ENP's than those presenting with emergent conditions waiting for treatment by a medical officer.

This reflects a situation which in part fulfils the intended purpose, but leads to a gap in service delivery due to restriction on ENP scope of practice. Davidson and Rogers (2005) conclude that an overly restrictive framework for practice scope, limits the benefits of the NP role. The CPG model of practice it is argued, is restrictive and raises an important issue around appropriate utilisation of human resources within the healthcare setting.

An opportunity exists to address continuing gaps in service in order to provide better patient outcomes, particularly in terms of waiting times in the ED. Recent data collection undertaken at the setting of this large metropolitan hospital ED, suggests that ENP activity is not governed by CPG's in approximately 35% of cases (Grummisch et al 2008). This reality highlights the need to consider other approaches to define what it is that ENP's could and should be achieving in this ED setting.

The latest data, as seen in table 1, shows the variety of patient presentations seen by ENPs outside of CPG scope and reflects in part the ongoing evolution of the ENP role and the clinical need for flexibility (Grummisch et al 2008). The results in table 1 reflect some of the changing patterns in ED patient presentations from the originl CPG model, and the changing environment in an ED setting. It is argued that an approach other than continuing development of ENP CPGs is required to determine ENP scope of practice within this environment. A more flexible approach is required to ensure equity in service provision for a variable population group.

Table 1: Non CPG patients seen by ENP.

Presenting complaint	Total
Eye injury/foreign body	68
Abscess	54
Allergic reaction	30
Asthma/COAD	5
Back pain	40
Bite - non venomous	17
Catheter change	9
Chest pain	17
Dental pain	15
Epistaxis	8
Foreign body	76
Genito-urinary misc	17
Headache	13
Injury – thorax	37
Misc.	38
Musculo-skeletal unspecified	68
Neurovascular unspecified	7
Osteomyelitis	2
Palpitations	3
POP problem	37
Post op complication	68
Present for diagnostic tests/results	30
Present for inpatient review/admit	31
Present for script/medications	26
Rash FI	43
Social/psych/drug and alcohol	32
Wound management (not injury/post op)	149

This data indicates that clear definition of the NP role is not always apparent, a finding which is also reported by Chakravarthy (2008). To date, in order to maintain optimal use of the ENP group, the extended range of patient management has been achieved through a collaborative model of care. Although collaboration continues to play a large part in ENP practice, as with all nursing roles, this process undermines the utility and clinical judgement of ENP in many instances.

Future direction

The ENP role was implemented five years ago into the Victorian hospital ED setting. In this current setting, the role has been successful in terms of patient satisfaction and improved outcomes (Jennings et al 2009, Lee and Jennings 2006). It is timely to question the organisational structure required to inform continuing expansion of clinical scope of practice to replace the CPG model. This challenge is similarly reported by Cummings et al (2003) in their evaluation of an NP role, and raised by Dawood (2000) in regard to the under utilisation of ENP skills.

The NBV have a publication which clearly articulates the requirements on governance regarding professional scope of practice issues for all registered nurses (NBV 2007). These guidelines are adopted from a previous work on National Competency Standards for the NP which has been endorsed by the ANMC (ANMC 2006). In Victoria, issues of ENP practice are sanctioned by the employing organisation and the setting in which practice is undertaken. In essence, the future direction involves looking at how to continue role development in a manner that continues to meet organisational needs, together with those of patients/families, and nursing professionalism. Consideration must be given to the most constructive and effective means of providing:

- care for patients who fall outside the existing CPG model;
- a flexible ENP model of care which allows for natural evolution in response to patient needs;
- satisfactory clinical support for ENPs providing increased services;
- clinical and professional development to meet the needs of ENPs; and
- a definition of ENP clinical practice which provides role clarity.

Each organisation, when considering establishing an NP model of care, is expected to have in place a framework which addresses issues of expanding scope of practice, including risk management, stakeholder consultation and service needs (NBV 2007). As stated previously, the adopted framework in Victoria was based on a recommendation for CPGs to be developed, and there is no evidence in the literature to describe a variation on this framework in other Victorian ED's. The challenge

is to develop a framework which encompasses changes to NP practice as the roles evolve, as healthcare requirements change or as numbers of NP hours increase to change the workflow patterns. It is proposed that ENP's could, in fact, intervene in the care of a broader range of patient presentations than currently undertaken (Cole and Kleinpell 2006, Davidson and Rogers 2005).

With an increase in the provision of the ENP service and a proven ability with current patient groups, it is judicious to consider advancement of the ENP role beyond the 'minor injury/minor illness' model which informed the initial framework. Initially the ENP framework in the minor injury/illness model was the result of an evaluation of the most common presentations to the ED. The model was built upon these presentations to guide initial education, experience, knowledge attainment, and of course access to care. It was not designed to solely define ENP care but as a platform from which ENP care could become sustainable, progressive and efficient.

Risk stratification begins at triage, risk re-stratification begins with timely patient assessment by a nurse/medical practitioner with initiation of appropriate diagnostics and/or interventions. Subsequent evaluation with decisions regarding management and treatment are also necessary to continue the patient journey in a timely fashion. The expansion of ENP scope of practice to enable diagnoses, management and disposition plans for a variety of patient presentations, combined with appropriate consultation with senior medical staff as required, should see benefits to a larger proportion of patients. As stated, the patient population is not static and experienced staff should be utilised in the most efficient manner. This includes drawing from the vast experience and knowledge base ENP have, first as senior nurses, who have built upon this clinical ability.

There is an abundance of literature available discussing NP role development, role progression, education and scope of practice issues. To date, these works reveal an inconsistent development of NP roles internationally and therefore an inconsistent definition of scope of practice in the clinical arena (Carter and Chochinov 2007, Howie-Esquivel and Fontaine 2006, Cole and Ramirez 2005, Gardner and Gardner 2005, Gardner, et al 2004, Cole and Ramirez 2000, Sherwood et al 1997). Despite these differences, the introduction of NP's into the acute care setting has gained merit and acceptance, and although flexibility is required to reflect various settings, it remains a vital component of framework development that transparency and legitimacy of practice are validated.

Exploring framework development

Evidence suggests that in the current setting ENP's are capable of delivering care and clinical management to patient presentations over and above the existing CPGs (Grummisch et al 2008). With increasing demands for service, broader coverage of the ED by ENP/C and positive impacts on the KPIs of the original target groups of minor injury/illness, it is time to deliberate on the next stage of development of this model of care. Statistics drawn from departmental databases at the Alfred E&TC suggest that expansion of the role is imperative for ongoing ED patient management. The Alfred E&TC has experienced an overall increase in patient presentations representing all ATS categories one – five. It is anticipated that for ENP/C to continue to service areas of most need, their evolving clinical scope of practice should continue to progress. This will ensure other practitioners are better able to meet the needs of more complex patient groups (Wilson et al 2008) and impact ED management as a whole. The challenge is in the organisational direction this should take in order to define and otherwise characterise the evolution of this role in order to widen the impact.

As Masters prepared clinicians, NP's are taught not only clinical knowledge and skill, but also develop solid foundations in critical thinking. The development of a framework for future ENP practice which acknowledges their educational preparation and professionalism is expected. A framework which recognises ENP potential and ignores cumbersome and unnecessary restrictions, such as ENP specific CPGs, is more likely to provide benefits by meeting

changing organisational/healthcare needs. This requires a dynamic perspective with management support, continued multi-disciplinary input and willingness to advance the NP model of care aimed at enhancing the capability of the health care system. Organisational service needs and requirements, ongoing educational and professional development requirements, professionalism, leadership and clinical governance issues must all be addressed. These issues are also discussed in the United States of America literature, whereby the various levels of governance for NPs and their clinical scope of practice are discussed (Hravmak et al 1996). The difficulties faced by organisations when credentialing NPs for scope of practice in individual settings are also discussed (Klein 2008).

It is argued that ENP/C in this ED setting are in a position to expand the service model they provide. Building on a number of clinical governance that processes are in place to address issues of ENP/C competency and safety of practice can inform the development of the framework for expanding ENP practice. Until now, the Scope of Practice committee at the Alfred had not had sufficient processes in place to deal with the issues around extensions to practice that exist for NP's, such as prescribing medications, ordering diagnostics and admitting or discharging patients. These processes are now under review in order to keep pace with the evolving ENP role which outgrew the original framework, based upon CPGs.

As well, ongoing education has continued with the ENP/C attending weekly structured education sessions with the ED medical staff. Other more specific ENP/C education sessions are organised, addressing self identified gaps in knowledge and skill, as well as fulfilling ongoing professional nursing development needs. Once a needs analysis has been assessed, the sessions are presented by a variety of multi-disciplinary health care professionals. Presentation of case studies by the ENP/C group and discussion of clinical scenarios incorporating a holistic approach to care has continued to encourage sharing of knowledge and to enhance problem solving skills.

The ENP/C group at the Alfred E&TC are diligent in reviewing their clinical practice. They review diagnostics which they have ordered in the management of patient care, together with outcomes and follow up where possible. This involves reviewing x-Ray, pathology and other results, to ensure appropriate management plans and follow up are in place. In pursuing the review activities, ongoing professional development is supported whilst encouraging reflective practice. The current review practices will continue as professional development and evaluation strategies for any proposed changes or expansion to scope of practice.

One of the ways in which confidence, competence and ongoing skill management is supported, is in the multi-disciplinary mentor relationships within the department. Individual ENP/C are assigned a ENP mentor as well as a medical mentor on commencement in their role. These relationships are encouraged, with frequent and regular meetings expected. The meetings allow discussion of relevant issues, both clinical and professional and supports the advantages of the ongoing collaborative model of care which exists between ENP and medical staff.

Given the existing collaborative model of care which has evolved across the ED, development and growth of ENP scope of practice beyond current CPGs is the obvious next step. The expanded clinical practice will follow a structured approach according to organisational needs. Suitable target patient groups will be identified through existing department databases. This will guide the development of focussed, clinically based learning needs to ensure ongoing maintenance of competence. A credentialing process will be formalised, with subsequent analysis to provide ongoing information and evaluation of clinical outcomes and ongoing patient satisfaction.

The initial intention of this work was to provide a framework for expanding ENP scope of practice. Although not achieved at this stage, the discussions and experience to date have proved beneficial. The information obtained has provided an opportunity for stakeholders to acknowledge the complex

requirements necessary to progress the current restrictive model of ENP practice. The complexity of this stage of development is recognition that the move forward requires flexibility in the framework to ensure future changes can be met more readily. The future approach involves not only education and professional development issues for the ENP/C group at an individual level, but organisational issues around standardisation of the developing role, clinical governance issues, continuing acceptance, support and understanding from other multi-disciplinary groups within the organisation. Basing future work on these thoughtful insights and with further work it is hoped that a smooth and structured progression of ENP evolution of practice will ensue.

CONCLUSION

At this large organisation, a team approach is being employed in order to address the scope of practice issues specific to ENP. These issues include identifying a framework to underpin the evolving clinical scope of practice in the absence of specifically developed ENP CPGs. This approach is necessary to ensure an ongoing workable ENP model is developed to address current and future patient needs. Preliminary discussions have led to open dialogue between ENP, medical and management teams and have provided important insights for the ongoing success of this undertaking. The discussions have highlighted the need to provide a service which meets patient demand in an environment of increasing pressure, ensuring multi-disciplinary team members collaborate in decision making, ultimately providing a satisfying, productive, and efficient clinical environment including fundamental issues of accountability and risk management.

The challenge involves developing and describing a framework which enables current practice to progress smoothly, making use of existing knowledge and experience; not only in the clinical sense but including issues of policy, role promotion, and role integration. In addition, the framework must incorporate systems that provide a safety net for ENP and patients, to ensure the highest possible standard of care is maintained, and for the organisation to fulfil its obligations to patients and staff. Given the evolving nature of the ENP role in Victorian ED, this progression is seen as a challenge and a positive initiative in the battle to meet increasing service needs.

RECOMMENDATIONS

It is recommended that further development of the ENP role - with particular reference to clinical practice - be tackled in a structured, multi-disciplinary manner with strong nursing representation.

It is further recommended that any future work have rigorous evaluation structures in place to provide evidence of outcomes of the proposed/implemented changes.

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