The capability of nurse practitioners may be diminished by controlling protocols

Jenny Carryer, Glenn Gardner, Sandra Dunn and Anne Gardner

Abstract

Nurse practitioners will become a vital component of the health workforce because of the growing need to manage chronic illness, to deliver effective primary health services, and to manage workforce challenges effectively. In addition, the role of nurse practitioner is an excellent example of increased workforce flexibility and changes to occupational boundaries. This paper draws on an Australasian research project which defined the core role of nurse practitioners, and identified capability as the component of their level of practice that makes their service most useful. We argue that any tendency to write specific protocols to define the limits of nurse practitioner practice will reduce the efficacy of their contribution. The distinction we wish to make in this paper is between guidelines aiming to support practice, and protocols which aim to control practice.

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What is known about the topic?
Nurse practitioners with extended scope of nursing practice, while enjoying success in meeting health system needs in many countries, are a developing profession in Australia and New Zealand. Internationally they are governed by various guidelines and protocols defining practice to various degrees.

What does this paper add?
Building on the findings of the Nurse Practitioner Standards Project, the authors explore the potential for practice protocols to inappropriately constrain the capability of nurse practitioners.

What are the implications for practitioners?
The paper challenges health managers, practitioners and policy makers to think critically about the impact of specific clinical protocols written to define nurse practitioner practice.

THE AIM OF THIS PAPER is to stimulate debate about the use of specific protocols or pathways to determine nurse practitioner (NP) practice. We argue that the use of prescriptive clinical protocols designed specifically for NP practice is restrictive and potentially risky. We also argue that the use of such protocols inhibits the development and utilisation of capability, an attribute that has been demonstrated to be a core feature of NP practice, and thus risks reducing the contribution they may make to a quality health service.

The paper begins by briefly outlining the research project, defines capability as it is explained in existing literature, and describes how capability arose as a feature of our research findings. We then consider the impact on practice and workforce development of requiring

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that NPs work within the constraints of specific NP protocols.

Background

This paper extrapolates from an Australasian study designed to generate shared research-based competency standards for Australian and New Zealand NPs. There is a flow of nurses between the two countries and the existence of a Trans Tasman Mutual Agreement requires mutual recognition of qualifications. Research to develop shared standards for NP education and practice was commissioned to support this process.

Nurse practitioners are registered nurses who have completed a required number of years of clinical practice in a clinical specialty, and undertaken focused Master education relevant to their specialty. Nurse practitioners practice from a nursing approach, but accept responsibility for additional practices such as diagnosis, the ordering of laboratory tests, and prescribing. The model of NP authorisation used in Australia and New Zealand involves planned educational preparation (Master degree), and a rigorous process before the legally protected title is conferred. The development of the role is relatively new in Australia and New Zealand, with both countries having established education and authorisation processes but still moving slowly to create employment structures. In New Zealand especially, the role is directed towards a population health focus.

Clearly, the boundary between nursing and medicine is an area of interest, with the potential for increased flexibility; and this is exactly the area traversed by the NP role. To suggest certain tasks are forever to be performed by medical practitioners is to be rigid and inflexible, and a recipe for the cumbersome and costly health system that currently fails to address significant consumer need.[1,2] Christensen et al[1] suggest that NPs are an “innovative disruption” offering significant potential for change if the forces of resistance to change and traditional power bases can be challenged. Interestingly, Christensen et al also assume that NPs will be used for simple levels of procedural tasks, and will follow protocols in exactly the manner we argue against in this paper.

The focus of this paper, in considering challenges to the usefulness and efficacy of NPs, cuts to the heart of occupational flexibility. If NP practice is limited and constrained by dependence on specific protocols, or in any way made dependent on the presence or supervision of medical practitioners, then the full potential of the role is diminished. Drawing on the study outlined below, we argue that the most valuable aspects of NP practice (flexibility, responsiveness, and increased workforce capacity) are directly limited, if not impeded, by the use of constraining protocols.

Literature review

Historically, the NP role originated in the United States during the 1960s to assist in improving primary health care to under-serviced communities. Similar factors to those evident in the US and Canada paved the way for the implementation of NPs in the United Kingdom in the 1980s,[3] including cost containment in health service provision, the development of a more skilled nursing workforce, and the need to provide improved access to health care services.[4] Very little previous research has attempted to define the essential nature of NP practice, with most research to date focusing on comparative assessments with medicine on cost, quality, patient satisfaction and safety issues, and some evaluation of the role from a health outcome perspective.[4-9] Australia and New Zealand have moved more recently to develop the role, drawing on the experience and evidence of those countries.

As health professionals, Australian NPs are subject to both national and state or territory legislation, while NPs in New Zealand are covered by national legislation. A substantial amendment of health care Acts and regulations has occurred in both Australia and New Zealand in response to implementation of the NP role. These Acts and regulations provide the broad legal framework under which the NP may practice. In 1998, a ministerial taskforce in New Zealand supported

the development of the NP role.[10] A policy document was developed that outlined the regulation of NPs and formed the framework for the NP role.[11] Development of the role of NP has been debated in Australia for more than a decade.[12] Seven Australian states and territories have undertaken or are currently undertaking formal projects to explore NP roles. As of mid 2005, there were NPs registered to practice in five Australian states or territories.[13]

The history of state rather than national responsibility for employment and regulation of nursing in Australia has resulted in different job descriptions and roles. Inconsistencies may occur where there is state rather than national responsibility for nurse registration.[14] However, as is evident from the UK, when there is national nursing registration but no protection of the title of NP, inconsistencies may still occur.[15] The inconsistencies across NP roles in Australia produce variation in service delivery and misunderstanding about the NP role, thus limiting the potential that the introduction of a new role with legal title protection provides, to make an innovative contribution to health in Australia and New Zealand.

The Nurse Practitioner Standards Project

In 2004 the Australian and the New Zealand Nursing Council sponsored the Nurse Practitioner Standards Project. The aims of this project were to conduct research that would inform a description of the core role of the NP; core competency standards for the NP in Australia and New Zealand; and standards for education and program accreditation for NP preparation leading to registration/authorisation.

The primary source of data was in-depth interviews with fifteen authorised NPs.[16] Additional data were derived from NP education programs from 14 New Zealand and Australian universities and tertiary education providers, and interviews with academics from 12 of these programs. Extensive literature related to NP legislation and roles was collected, collated and reviewed. Data were analysed according to the requirements of each dataset, and triangulated to produce findings that addressed the research aims. The study received full ethical approval from relevant human research ethics committees.

The research findings were summarised in the full report:

> The core role of the NP is distinguished by autonomous extended practice. Practice involves the application of high level clinical knowledge, enhanced by autonomy and legislated privileges. Practice in this role is characterised by fidelity to the primacy of a nursing model of practice. The NP is a clinical leader with a readiness and an obligation to advocate for their client base and their profession at the systems level of health care (p.1).[16]

This description captures the nature of the core role of an NP and provided a basis for the development of competency standards for NP practice and education in Australia and New Zealand.

The concept of capability

One of the findings from the study was the recognition that NP practice was characterised by attributes that included, but moved beyond, competencies. During the interview process each NP provided a narrative of case management that they identified as representative of their NP practice. In-depth analysis of these case data revealed a consistency in clinical practice responses that could not be explained through a competency model alone. During literature searching and in peer discussion we identified the notion of *capability* as a useful conceptual framework that captured practice attributes of the NP.

The literature in this field suggests that capability is related to creativity, dealing with complexity, and using competencies in novel and unpredictable environments. The notion of capability has been explored mainly in education and computing;[17,18] but has not been considered in relation to nursing practice, or indeed health care, until the

present study. However, the recognition of capability as a feature of NP practice is in direct contrast to the current trend in some countries to direct, control, and prescribe NP practice through the use of clinical protocols. This trend is not documented in the scientific literature and is difficult to substantiate, but it is strongly reflected in organisational level policy, procedural, and practice environment discussions. As an example, Kaiser Permanente, the largest private integrated health care system in the world serving 8.2 million members in nine states across the US, employs NPs who, in some settings at least, adhere to set guidelines and care pathways, and under the mentorship of a physician may "furnish" medications rather than prescribe.[19] In complete contrast, the large consortium of an estimated 250 nurse-managed health centres in the US which conduct over 1.5 million annual client encounters [20] do not use prescriptive protocols and deliver excellent health outcomes for clients.

The concept of capability emerged in the UK in the mid 1980s as a response to the need for increasing organisational competitiveness, and the rapid changes occurring in the nature of work.[21] Since that time, the concept has been further developed and applied to the creation of learning environments that can better develop capability.[17,21,22] Cairns has defined capability as being present when someone has a justified confidence in their ability to take appropriate and effective action to formulate and solve problems, in both familiar and unfamiliar and changing settings.[23] Thus, while competencies are individual and measurable skills, demonstrated and assessed against agreed standards of competence, capability is also an integration of knowledge, skills, and personal qualities that are used effectively and appropriately in response to varied (familiar and unfamiliar) circumstances.[23] Transferring this to the health setting, and in clinical terms, this means applying clinical judgement honed by extensive knowledge and experience and underpinned by a level of confidence. This allows decision making to reflect the clinical nuances of individual cases, rather than attention to the rote or procedural thinking induced by controlling protocols.

Our Australasian research on competency standards for NPs has found clear evidence of an attitude and approach to practice which has a good fit with notions of capability. In our study, NPs described their ability to move beyond competency and beyond rules, and to synthesise knowledge, experience, and judgement to make highly individualised but safe decisions for individuals and individual situations. It became clear to us that the strength and value of extended nursing practice, as practised by the NP, is the ability to respond with confidence to the myriad complexities produced by human variation in situations of health, injury, and illness. The notion of capability captures what we found in the case studies of NPs, and this has significant implications for the current trend of using prescriptive protocols to define and direct the practice of NPs. A brief note of explanation is warranted. There are still many experienced nurses practising in Australasia who may well demonstrate capability, but have not yet undertaken the authorisation process to become recognised as NPs.

Protocols and guidelines

Guidelines for practice fall under a range of titles, and there is no consistent relationship between the nature of such a document and its title. The literature refers to this confusion and notes the various use of the terms, guidelines, protocols, algorithms, standards, practice policies, and more.[24] The distinction we wish to make in this paper is between multidisciplinary guidelines aiming to *support* practice, and discipline-specific protocols designed to *control* practice.

In using a guideline such as the New Zealand Guidelines Group document *The assessment and management of cardiovascular risk,*[25] for example, it is expected that health professional groups would source advice on cardiovascular risk management based on graded evidence. In contrast, a protocol provides a formulaic list of clinical responses and

procedures expected of NPs managing a client with cardiovascular disease, which often includes detailing the point at which they are expected to refer the client to a medical practitioner.

Multidisciplinary evidence-based guidelines for clinical practice evaluate and grade the available international evidence to determine best practice for all practitioners regardless of discipline. These multidisciplinary guidelines can provide clinicians with ready access to graded evidence. In contrast, there are also examples in the US, the UK and Australia of specific clinical protocols prepared to determine the nature and limits of NP practice. The word protocol in itself conveys a sense that it is more than just a guideline; rather it is a set of rules requiring rigid adherence. Protocols may include algorithms, which determine formulaic clinical responses to a finding, or an illness event. Protocols determine to a large extent not only individual practitioner responses, but also when and where referral is indicated. In some instances in Australia protocols are required at the regulatory level, with protocol criteria established which define and limit the NP role independently of the registration process.[26] These criteria are signed off by a variety of personnel, such as academic educators, experienced clinicians, advanced clinical nurse specialists, or medical practitioners. In other instances protocols may not be legislatively mandated but imposed at organisational or employer level. The result in all of these jurisdictions is that role development is constrained in ways that may not be directly about professional practice, or client needs.[3]

Our concern is that specific NP clinical protocols are an attempt on the part of employers to control NP practice. This occurs ostensibly and overtly on the grounds of safety and due caution, but more covertly as an extension of medical control of nursing practice[27,28] and a failure to properly recognise the skills and knowledge base of NPs. We argue that capable clinicians, intent on following rules, may miss the very cues to which their education, ability and wisdom are designed to respond, which may increase the risk of poor decision making.

Nurses have joined the wider debate about the merits or otherwise of evidence-based practice, most often as supporters rather than detractors.[29,30,31] Berg[24] notes critics have argued that guidelines/protocols lead to cookbook medicine, deskilling by reducing the need for independent thought, and reduction of professional autonomy. Conversely, advocates have argued that such documents do permit room for individual interpretation, allow for deviation, and act to formalise the knowledge base of a professional group.[24] The utilisation of all forms of protocol is part of an overall sweep towards objectivity rather than subjectivity.[32] The debate seems polarised: on one side there are those who see the provision of health care as a linear system; and on the other side those who recognise the innate complexities of the system, and unreliability of prediction. Clinicians in both nursing and medicine are usually deeply aware of the variation in human experience, and the significant impact of context and demographics on most health and illness experiences.

Protocol as control

Any form of guideline should be used as a support to flexible practice, so that, just as creative cooks add extra garlic or leave out some ingredients, capable practitioners have the opportunity to adjust their clinical responses according to the needs of each clinical event. To continue the analogy, it is the experienced and senior cooks who have the confidence and are successful at such alterations, because they draw from a vast repertoire of knowledge and long experience. Similarly, senior practitioners may more confidently deviate from guideline recommendations when their clinical judgement assesses this to be appropriate or beneficial. It has been noted that "Algorithms that reduce patient care into a sequence of binary (yes/no) decisions often do injustice to the complexity of medicine and the parallel and iterative thought processes inherent in clinical judgment." [33]

Why, we ask, is it considered necessary to prepare controlling protocols for NP practice, rather than anticipate that NPs will draw from appropriate multidisciplinary guidelines balanced

against their clinical judgement, as is expected of medical practitioners? The nature of autonomy[34] may lie at the heart of this issue. Proclamations of autonomy and independence by nurses raise alarm in some medical circles. Such fear is often overtly couched in concerns for the collaborative relationships known to be essential for good patient outcomes (see research related to Magnet hospitals[35]), or fears for patient safety from NP practice. Such fears are unsubstantiated in any scientific literature.

Ironically there is evidence that collaborative relationships flourish when they are between practitioners whose relationships are based on provider equity, where the relationship is not hierarchical, does not involve the supervision of one discipline by the other, and where the strength and integrity of contributing parties is recognised.[36] These authors specifically demonstrate that discipline-specific autonomy is crucial to success and facilitates collaboration.

Workforce flexibility

Nurse practitioners are a needed workforce development to increase labour supply.[37] NPs can provide a flexible, accessible and much needed service, which easily spans the boundaries of health maintenance and illness management. An American physician noted this over 30 years ago, when addressing trainee NPs in the US she stated:

> By expanding your knowledge and skills into medicine, and thereby acquiring some of that control, you can in fact expand into nursing. Less medicine when mixed with more nursing, is probably better medicine (or to translate, better health care). By expanding into medicine you will need — more than ever before — to increase your consciousness of what nursing is all about. (p. 686)[38]

If nurses wish to diagnose and prescribe, do they not simply train in medicine? How do nursing and medical education differ? The simple answer is often that medical practitioners treat illness and disease and nurses care for people in context and focus on optimising health and wellness (see for example the recent debate in the *British Medical Journal*[39-48] spawned by Young's article: "The nursing profession's coming of age"[49]). Many medical practitioners would argue, of course that their focus is absolutely on the person. However, nursing education does have a stronger curricular focus on the socio-cultural determinants and impact of health and illness, and a strong focus on assisting people to be healthy regardless of poverty, ethnicity or sexuality. Nurses expect to focus on the contextual details of assisting a person to live well with their diagnosis. The addition of tasks such as the ordering of diagnostic tests and prescribing does not change that focus, but improves access to services by allowing the NP to provide the full episode of care.

Conclusion

Nurse practitioners can become an important workforce strategy for managing the increasing cancer and chronic illness burden, and delivering on the goals of primary health strategies. Both New Zealand and Australia have expended considerable energy at the legislative and government policy level in creating and establishing the NP role. Nurses themselves have willingly undertaken the additional expensive education, making the time and financial commitments. It seems wasteful and counterproductive if the very usefulness of NP practice and the increased workforce flexibility is to be endangered by constraining protocols. Health systems can not afford the waste of human resource that such practices create.

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Competing interests

The authors declare that they have no competing interests.

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