The Nurse Practitioner Research Toolkit

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Chapter 1
Introduction

Overview and background

Ten years ago the first nurse practitioner was authorised in Australia. The development work that began in New South Wales was quickly followed by other jurisdictions and within nine years all Australian States and Territories had achieved official recognition and a legislative framework for nurse practitioner practice. By looking to international developments Australian nurse clinicians and service leaders envisioned and achieved the most dramatic change in the Australian health care landscape since Lucy Osburn and her team of Nightingale-trained nurses arrived at Sydney Hospital in 1868.

The driver for this vision was deeply rooted in the Discipline’s commitment to patient-centred care and patient-centred health service. Service improvement was on the agenda of early change agents in governments and this was matched by the work of reformists in nursing. The rapid uptake of the nurse practitioner role attests to recognition by those at the coal face of health service that this new level of health care provider improves the quality, timeliness and access to health care for underserved groups.

Australia is unique in the world in the careful and strategic approach taken by nursing leaders and regulators to development and implementation of the nurse practitioner role. In 2004 the (then) Australian Nursing Council (now the ANMC) commissioned a trans-Tasman study to inform development of nurse practitioner standards. These standards have formed the basis for a national approach to nurse practitioner practice competencies and standards for nurse practitioner education and authorisation.

The recently completed Australian Nurse Practitioner Study (AUSPRAC) was a further landmark in development of the nurse practitioner project in Australia. This Australia wide study is the first national research project on nurse practitioner service globally. The study had three phases, implemented over three years and investigated the profile, work process and practice outcomes of Australian nurse practitioners. Multiple publications from the study findings contributed important knowledge to the international community on nurse practitioner service. The findings provided baseline data to inform service planners and governments and for ongoing research by Australian nurse practitioners. Furthermore, a range of instruments for researching nurse practitioner service and clinical outcomes were developed and validated.
The instruments developed in the AUSPRAC study are the focus of this Toolkit.

The Nurse Practitioner Research Toolkit is a significant output from the study and an important deliverable to our stakeholders. The Chief Nursing Officers/Advisors of Australia were Collaborating Partners for the study having contributed funding and in-kind support for the rollout of AUSPRAC throughout Australia. This Toolkit will enable them to commission purpose-specific research and audits in each of their States/Territories with a readily available suite of data collection tools.

The second group of stakeholders are the nurse practitioners of Australia, many of whom have made a major contribution of time and effort as research participants across the three phases of AUSPRAC. Their contribution is acknowledged through our presentation of the Toolkit to their College providing the members of the Australian Nurse Practitioner College with a range of data collection tools specifically developed and validated for the Australian nurse practitioner practice context.

Others will map the history of nurse practitioner development in Australia. The history that will lay the lessons we can learn from reformers who, in the face of concerted opposition, could see a better way to configure the Australian health care workforce to meet the changing demographics of patients and consumer.

This toolkit will contribute to mapping the future where nurse practitioner service is characterised by quality and safety in patient care borne of research-informed and evidence-based clinical practice.

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Chapter 2
Conducting clinical audit of nurse practitioner practice

The nature and purpose of clinical audit

Audit and research both play significant roles in the collection and analysis of information to inform clinical practice. It is important to understand the differences between audit and research in order to use each method appropriately.

What is research?

Research can be defined as ‘a systematic investigation undertaken to establish facts and reach conclusions – to add or confirm what is known or to contribute to generalisable knowledge – using scientific inquiry’ (Dixon 2007, p. 7). Quantitative research may include investigating: cause and effect (eg does treatment X produce Y effect); adverse effects of diseases or treatments; risk factors for disease; and the prevalence of rare diseases. Qualitative research typically investigates patterns in human behaviour and human experiences and generates new understandings through development of concepts, theories and hypotheses. Both qualitative and quantitative research aims to generate new knowledge.

What does research involve?

Conducting research involves formulating a research question, aim or hypothesis and identifying a clearly defined sample that has been selected according to pre-defined inclusion and exclusion criteria. For research that is quantitatively analysed (that is, which collects data on numbers of events and which uses statistical methods to ascertain whether or not the research results could have happened by chance), it is important to use objective measurements of observable events or variables using standardised measurement instruments. An adequate sample size (which is calculated before a study commences) of randomly selected participants is usually sought so that the results can be generalised to a broader population with the same characteristics as the study participants. For research that is qualitatively analysed, the size of the sample is not as important. Rather, the textual data obtained from a much smaller sample (which has usually been purposively rather than randomly sampled) is analysed in depth by coding transcripts of text that has been gathered through interviews or focus groups.
When should I use research?

In health, research can be used to rigorously evaluate the effectiveness of different interventions or management strategies on patient outcomes; determine the most cost-effective method of care or treatment; and obtain views on treatment or care. If after reviewing the existing literature on the area under investigation, there is little information known about the topic, research can be used to extend a body of knowledge (Dixon 2007).

What is clinical audit?

Clinical audit can be defined as a process that ‘seeks to improve patient care and outcomes through systematic review of care against explicit measures and the implementation of change in practice if needed’ (Dixon 2007, p. 3). Clinical audit may be used to measure adherence to evidence based clinical practice guidelines and is a useful way for clinicians to measure their current practice and subsequently identify any gaps. The main aim of clinical audit is to rigorously measure how well something is done and to provide feedback to improve local performance of clinical care. An example is the National Stroke Foundation Clinical Audit which involves clinicians examining 40 consecutively admitted patients during a defined timeframe and extracting pre-determined variables of interest. Feedback from the audit results are then provided to each participating hospital to inform clinicians and assist in improving the quality of care they give to stroke patients at their hospital (National Stroke Foundation, 2009).

What does a clinical audit involve?

An auditing procedure should aim to have criteria to determine best practice, a method to measure current practice against these criteria and then have mechanisms in place to implement appropriate changes. Audits may take place either prospectively, that is, collecting data from a given time point moving forward or they may take place retrospectively by reviewing previously collected data, for example, from a patients’ medical records. Prospectively collected data are considered superior to retrospectively collected data because the data are collected for a particular purpose in mind (for example, there is a particular question to be answered) and therefore are less biased than retrospective data (Dixon 2007). Audits are commonly used to measure changes in outcome before starting a new practice change (baseline audit) and, again, after implementation of practice change (follow-up audit). The results from clinical audits aim to contribute to clinicians’ knowledge of their own behaviours and thus can inform whether best practice has been implemented.
When should I use clinical audit?

Clinical audits are best performed to investigate whether best current practice is being achieved and may be used when high level evidence already exists for the area under investigation and thus **no further research is required**.

What is the difference between research and audit?

In summary, research assists the clinician to determine what constitutes good care. Clinical audit is used to determine how well the research is put into practice.

**Data collection tools for clinical audit**

Various data collection tools and strategies are used to conduct a clinical audit and selection of tools depends upon the nature of the audit. When planning an audit you may want to consider tools such as survey, case review, structured interviews, and adverse event records. We have included in this chapter two instruments that could be used in an audit of nurse practitioner service or clinical practice; a data abstraction tool for collecting standardised information from a patient’s health records and a multi disciplinary team questionnaire that can be used to evaluate the perceptions of nurse practitioner service from members of the health care team.
Data Abstraction Tool
Instructions for Use

The purpose of the data abstraction tool is to obtain information from patient’s health records during a specific period of data collection. The attached Data Abstraction Tool is structured to help you collect information necessary to provide a detailed description of NP service. This will provide information on the type of clinical care provided by the nurse practitioner. This instruction document will take you through each section of the data collection tool.

Section One:

After you have supplied information on the first three fields (i.e. names and service) you need to specify the data collection period. We recommend the data collection period to be of 30 days or one months’ duration. Within the specified period record the Occasions of Service. This is the total number of times the patient has attended the nurse practitioner service.

Section Two:

In the space provided, enter the patient’s principal diagnosis or main reason for seeking healthcare. For example, a patient who attends the Emergency Department may be diagnosed as having a scaphoid fracture following a skate board accident. Therefore the principal diagnosis is scaphoid fracture. In some instances, the patient may have more than one diagnosis; record the patient’s principal diagnosis and all other diagnoses. For example, a patient attends a renal clinic and has been diagnosed with chronic kidney disease, urinary retention and prostate cancer; you record all three diagnoses.

Section Three:

In this section, you are asked to record information on the types of pathology tests collected for the patient. In the section where types of pathology tests are listed, tick all boxes that apply. If a pathology test has been ordered that is not listed, tick the Other box and record the test in the space provided then record in the corresponding box the number of times in the 30 day period that these tests have been ordered for the patient. Identify if the tests were performed by an internal provider (i.e. in the hospital or health service) or by an external provider (e.g. a private pathology company). Record the number of times these tests were performed.

Section Four:

Complete this section as for instructions in Section Three. Record if the radiology tests were performed or requested by the nurse practitioner by placing a tick in the corresponding box.
Section Five:

Write a list of all medications prescribed by the nurse practitioner. List the drug group (if known) and the generic drug name. If you are uncertain what the generic drug name is record the brand name. For example, the nurse practitioner has prescribed a patient with a wound infection an antibiotic. In the drug group column you would write antibiotic and in the generic drug name column you would enter the name of the antibiotic prescribed e.g. amoxycillin and clavulanic acid.

Section Six:

In this section you will record information on the types of therapeutic interventions performed by the nurse practitioner. Place a tick in all of the boxes that apply and record the number of times these interventions were performed in the corresponding box. An example of the procedural intervention might include peritoneal dialysis or urinary catheterisation.

Section Seven:

In Section Seven record information on the types of referrals made or received by the nurse practitioner. You need to tick all the boxes that apply.
Data Abstraction Instrument

SECTION 1 – DEMOGRAPHIC INFORMATION

Enter information in block letters below

<table>
<thead>
<tr>
<th>Data Collector Code:</th>
<th>Nurse Practitioner Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Practitioner Model:</td>
<td></td>
</tr>
<tr>
<td>Data Collection Period:</td>
<td>_____<strong>/</strong><strong><strong>/20 - _____<strong>/</strong></strong></strong>/20</td>
</tr>
<tr>
<td>Occasions of Service:</td>
<td>(in last 30 days)</td>
</tr>
</tbody>
</table>

SECTION 2 – DIAGNOSIS

Enter patient’s principal diagnosis in block letters below

<table>
<thead>
<tr>
<th>Diagnosis:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

SECTION 3 – DIAGNOSTIC INVESTIGATIONS

Pathology

Tick all boxes that apply

<table>
<thead>
<tr>
<th>Number of times tests ordered</th>
<th>Number of times internal or external provider used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal provider</td>
</tr>
<tr>
<td>Haematology</td>
<td></td>
</tr>
<tr>
<td>Biochemistry</td>
<td></td>
</tr>
<tr>
<td>Cytology</td>
<td></td>
</tr>
<tr>
<td>Microbiology</td>
<td></td>
</tr>
<tr>
<td>Serology</td>
<td></td>
</tr>
<tr>
<td>Histology</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4 – DIAGNOSTIC INVESTIGATIONS

Radiology

Tick all boxes that apply

<table>
<thead>
<tr>
<th>Number of times tests ordered</th>
<th>Number of times internal or external provider used</th>
<th>Record if tests were performed or requested by NP (tick box that applies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal provider</td>
<td>External provider</td>
</tr>
<tr>
<td>Plain film</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ultrasound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SECTION 5 – MEDICATIONS PRESCRIBED BY NP

<table>
<thead>
<tr>
<th>Drug Group (if known)</th>
<th>Generic Drug Name (do not include dosage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 6 – THERAPEUTIC INTERVENTIONS

<table>
<thead>
<tr>
<th>Type of Interventions performed by NP (tick all that apply)</th>
<th>Number of times performed</th>
<th>Record examples of identified interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ Procedural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Counselling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Education and information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Provision of, or assistance with, aids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Monitoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Hospital admission for acute care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Social assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Other (specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 7 – REFERRALS

<table>
<thead>
<tr>
<th>Referrals made by NP (tick all that apply)</th>
<th>Referrals received by NP: (tick all that apply)</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ GP</td>
<td>❑ GP</td>
</tr>
<tr>
<td>❑ Nurse Practitioner</td>
<td>❑ Nurse Practitioner</td>
</tr>
<tr>
<td>❑ Medical Specialist</td>
<td>❑ Medical Specialist</td>
</tr>
<tr>
<td>❑ Allied Health Professional</td>
<td>❑ Allied Health Professional</td>
</tr>
<tr>
<td>❑ Community nursing service</td>
<td>❑ Community nursing service</td>
</tr>
<tr>
<td>❑ Other health professional (specify)</td>
<td>❑ Other health professional (specify)</td>
</tr>
<tr>
<td>❑ Other agency (specify)</td>
<td>❑ Other agency (specify)</td>
</tr>
<tr>
<td>❑ Other agency (specify)</td>
<td>❑ Self referral</td>
</tr>
<tr>
<td>❑ Other agency (specify)</td>
<td>❑ Other agency (specify)</td>
</tr>
</tbody>
</table>
Evaluating the Nurse Practitioner Role

Multidisciplinary Team Questionnaire

*Please return your completed questionnaire in the enclosed stamped addressed envelope*
Part 1 – Perceptions of nurse practitioner service

This questionnaire is designed to elicit your views on the Nurse Practitioner role. In responding to the items please draw upon your current experience of working with a nurse practitioner.

Each item has 5 possible responses. The responses range from 1 (Strongly Disagree) to 5 (Strongly Agree). Please read each statement. Mark the one response that most clearly represents your degree of agreement or disagreement with the statement. Please respond to all of the statements.

<table>
<thead>
<tr>
<th></th>
<th>I fully understand the nurse practitioner role</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall the introduction of nurse practitioner services has been a success</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Nurse practitioner service meets the needs of the patients</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Nurse Practitioner prescribing increases the risk of incorrect treatment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Nurse practitioner prescribing is necessary</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Nurse practitioners offer holistic care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Nurse practitioners offer safe care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>I trust the nurse practitioner to diagnose correctly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>I am worried that nurse practitioners do not have the necessary knowledge to prescribe</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>The nurse practitioner service is easy to access</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>The nurse practitioner has a positive impact on patient care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Nurse practitioners are adequately educated and prepared for their role</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>Nurse practitioners can refer patients directly to medical specialists</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
14. The nurse practitioner has access to a second opinion from medical colleagues when necessary
   1  2  3  4  5
15. The nurse practitioner role results in improved health service for patients
   1  2  3  4  5
16. I fear nurse practitioners will make an incorrect diagnosis
   1  2  3  4  5
17. The introduction of the nurse practitioner has reduced delays in patient care
   1  2  3  4  5
18. The introduction of the nurse practitioner has reduced duplication of service
   1  2  3  4  5
19. The introduction of the nurse practitioner has reduced the number of health care professionals a patient must interact with
   1  2  3  4  5
21. The introduction of the nurse practitioner has increased patient satisfaction levels
   1  2  3  4  5
22. The introduction of the nurse practitioner has freed up doctors’ time
   1  2  3  4  5
23. The introduction of the nurse practitioner has had a positive impact on inter-professional relationships
   1  2  3  4  5
24. The Nurse practitioner service enhances patient compliance with treatment
   1  2  3  4  5
25. Nurse Practitioner practice is safe
   1  2  3  4  5
26. The nurse practitioner uses an organised and systematic approach to history taking
   1  2  3  4  5
27. Nurse practitioners are supported by doctors in their role
   1  2  3  4  5
### Part 2 – Demographic and Professional Profile

Please answer the following questions as they apply to you/your role. Where indicated please tick the appropriate box.

**1. Please indicate your role in your service (Please tick as many as apply):**

<table>
<thead>
<tr>
<th>Role</th>
<th>Ticked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director or assistant director of nursing</td>
<td></td>
</tr>
<tr>
<td>Nurse Manager</td>
<td></td>
</tr>
<tr>
<td>Clinical nurse</td>
<td></td>
</tr>
<tr>
<td>Clinical nurse consultant</td>
<td></td>
</tr>
<tr>
<td>Medical practitioner</td>
<td></td>
</tr>
<tr>
<td>Registered nurse</td>
<td></td>
</tr>
<tr>
<td>Hospital pharmacist</td>
<td></td>
</tr>
<tr>
<td>Member of allied health service</td>
<td></td>
</tr>
<tr>
<td>Please specify</td>
<td></td>
</tr>
<tr>
<td>Other (please Specify)</td>
<td></td>
</tr>
</tbody>
</table>

**Please specify**  

**Other (please Specify)**  

<table>
<thead>
<tr>
<th>Level of Involvement</th>
<th>Very Involved</th>
<th>Somewhat Involved</th>
<th>Minimal Involvement</th>
<th>No Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Involvement</th>
<th>Very Involved</th>
<th>Somewhat Involved</th>
<th>Minimal Involvement</th>
<th>No Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Thank you for taking the time to complete this questionnaire. Your contribution to the study in providing this information is very much appreciated.

If there is anything else you would like to add about the nurse practitioner role please do so in the space provided below

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

________________________________________________________________________________________________________

If you have any queries regarding this questionnaire please do not hesitate to contact:

Questionnaire adapted with permission from:
References and Readings

References


Recommended Readings


Chapter 3

Researching nurse practitioner patterns of practice

The nature and purpose of practice research

Researching clinical practice covers two main areas of inquiry. One is the use of research evidence to inform clinical practice; that is the fields of translational research or evidence based practice research. The second is for those who are interested in examining practice patterns and components and is research of clinical practice which is the focus of the tools supplied in this section of the Toolkit.

There are various reasons for wanting to measure how health care professionals spend their time. These include use and requirements for resources; estimating staffing requirements and, as used in the AUSPRAC study, research to evaluate the work patterns of a new type of clinician to inform health service planning. In other settings researching clinicians’ work patterns has been conducted to compare the work of different levels of clinicians, such as comparing work patterns of enrolled nurses with registered nurses (Chaboyer, et al. 2008) or comparing work patterns of different professions such as junior doctors with nurse practitioners (Hoffman, 2003).

The most common forms of research to investigate the nature of clinical practice are time and motion studies and work sampling. It is important to distinguish between these two methods. Briefly, time and motion studies focus on detailed recording of activity including the nature of the activity, exact time spent on activities and time taken on movement between activities. A stopwatch is used to ensure accurate timing and the duration and activity is recorded on a data collection instrument. Observations are conducted over extended time periods. Time and motion studies are conducted to answer a range of research questions related to work practices; for example to evaluate resource requirements, inform re-design of clinical work areas or to measure interdisciplinary work practices.

Work sampling is emerging as an effective research approach to provide information on the patterns of clinicians’ work activity. In the nurse practitioner context work sampling could be used to find answers to questions like: what do nurse practitioners do? How do nurse practitioners divide their time? What is the main focus of nurse practitioner practice? Additionally a service manager may seek to answer the question of what is different about work patterns of nurse practitioners and clinical nurse consultants to ensure optimum use of varied clinical skills and knowledge.

The methods used in work sampling research are primarily observational and involve taking randomly spaced observations of work activity that can be generalised into a picture of clinician work patterns. Data are collected according to an established set of work categories. Each category has a number of activities, and observed behaviour is classified according to these activities.
Work sampling is an observational technique that produces counts representing the number of times that an individual has been observed performing each of the range of activities. In the AUSPRAC study the activities were categorised under the headings of Direct Care, Indirect Care and Service Related, there were a total of 30 activities across these categories.

When planning to conduct work sampling research the following points need to be considered as a start:

- If you are new to research, collaborate with an experienced researcher or get assistance from a research mentor
- Have a clear and well formulated research question. The question will direct the course of your study and the data analysis so it’s important to get this right.
- Read the literature on work sampling methods, some examples are included in this reference list. Make sure you have a clear plan for the study based on the requirements of good work sampling research from your readings
- Write out a full study protocol. There are many standard research texts that will guide you in this process
- Work sampling method is expensive so ensure that you have sufficient funding
- Get clearance from your Human Research Ethics Committee.

**Data collection tools for researching practice**

The following tools and supporting documents are specifically designed for collecting data on nurse practitioner work patterns. They were designed for the AUSPRAC Study and based on previous work done by Pelletier & Duffield (2003), Urden & Roode (1997), Rosenfeld and her colleagues (2003) and the ANMC Nurse Practitioner Competency Standards (2006).

*If you conduct work sampling research using the instruments and processes in this chapter please cite the references indicated below*
WORK SAMPLING CATEGORY DEFINITIONS

DIRECT CARE

All nurse practitioner activities performed in the presence of the patient / family / caregiver, such as assessing patient, prescribing medications or ordering diagnostic tests and procedures[1, 2]. This also includes explanations given to the patient/family/caregiver regarding the above activities[1, 2].

DIRECT CARE ACTIVITIES

1. **Physical assessment**: incorporates all activities performed to obtain objective data to differentiate normal from abnormal physical findings. Physical examination may include a screening examination; regional or branching examination in which an in-depth assessment of a specific body system or part is undertaken; complete physical examination, a periodic examination, or head-to-toe assessment[3]. Includes techniques of inspection, auscultation, palpation and percussion.

2. **History taking**: the process of eliciting detailed information from a patient/carer caregiver including presenting complaint, history of current illness, review of systems, past medical history, medications, allergies, drug/alcohol use, smoking history, family history, social and personal history, patient’s ideas, concerns and expectations.

3. **Communicates diagnosis**: involves verbal or written communication of the patient’s diagnosis based on the patient’s signs and symptoms[4] to the patient / family / caregiver, to health care workers or to other persons involved in patient’s referral and ongoing care. Includes commencing patient on trajectory of care and organising status in health care Service.

4. **Requests diagnostic investigations/procedures**: written or verbal request for a diagnostic investigation or procedure[4]. Investigations may include blood tests, spirometry, ECG, radiology, stress-tests, etc.

5. **Performs diagnostic investigations**: using skills, equipment or devices which are applied, inserted, maintained or removed from the patient. Includes positioning, instructions and documentation[4]. For example, electrocardiogram, biopsy, bacterial/viral swabs, Doppler studies, phlebotomy, spirometry, audiometry etc.

6. **Analyses / interprets diagnostic investigations**: the process of interpreting findings from diagnostic reports or investigations i.e. such as interpreting an x-ray or laboratory values.

7. **Performs / manages therapeutic interventions**: performance of procedures and practices designed to manage, improve or maintain patient’s health and well-being. Also includes coaching patients in self-care or delegating activities to other health care professionals, and includes counselling the patient/family/caregiver.

8. **Prescribes medication**: the process of selecting and prescribing medication including drug, dosage, routes and frequency in writing following clinical assessment of a patient and provision of instructions for the dispensing and administration of the medication[5].

9. **Administers medication**: activities which involve administering medications and intravenous infusions to patients. For example, giving medication by any route, commencement of intravenous (IV) therapy, maintaining IV therapy, administering blood and oxygen, IV pump set up and maintenance, oxygen set up and maintenance, administering sedation to conscious and unconscious patients.

10. **Interacts with patient / family / caregiver**: verbal interactions with the patient / family / caregiver for the purpose of initiating, intervening, reviewing, revising, and evaluating the patient care plan. Includes social interaction.[6]
11. **Teaching**: includes activities such as teaching, reinforcing, and evaluating learning, providing patient/family/caregiver with information.

12. **Initiates transfers / discharge**: the process of communicating or organising discharge or transfer of a patient.

13. **Telemedicine**: an alternative to face-to-face consultation in situations where face-to-face consultation is not possible. It is characterised by a geographic separation between the patient and the service provider, and the use of telecommunication technologies to establish communication and interaction between the patient and the provider to enhance clinical functions. The essence of telemedicine is the transfer of expertise instead of the transfer of the patient.[7]

**INDIRECT CARE**

All nurse practitioner activities performed away from the patient but on a specific patient’s behalf, including communicating with other providers, coordination of care, collaboration with other health professionals, documentation and initiating or receiving referrals[1, 2].

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<thead>
<tr>
<th>INDIRECT CARE ACTIVITIES</th>
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<tbody>
<tr>
<td>14. <strong>Handover</strong>: the process of giving or receiving an updated description of patient status for the purpose of shift-to-shift continuity, unit-to-unit transfer, and or break or lunch coverage. This may be communicated either live or taped.</td>
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<tr>
<td>15. <strong>Fills out standardised forms</strong>: includes completion of forms such as medical certificates, work cover forms, etc.</td>
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<tr>
<td>16. <strong>Documents in progress notes and charts</strong>: includes any documentation in progress notes or other charts, excluding admission that record patient-provider interactions[4]. Includes fax and email.</td>
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<tr>
<td>17. <strong>Computer data entry – patient</strong>: includes entering patient data into computer. For example, treatment data or indicators excluding documentation in progress notes and charts.</td>
</tr>
<tr>
<td>18. <strong>Computer data retrieval – patient</strong>: includes retrieval of patient information from a computer. For example, laboratory test results, patient demographics, etc.</td>
</tr>
<tr>
<td>19. <strong>Coordinates care</strong>: documenting, reviewing, evaluating or communicating patient information. Includes rounds and communications with all health care professionals (such as phone calls, referrals, delegation, and planning for admission or discharge). Includes debriefing after critical incidents.</td>
</tr>
<tr>
<td>20. <strong>Discharge planning</strong>: includes generating discharge summaries or instructions for patient, general practitioner or other health professional[8].</td>
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<tr>
<td>21. <strong>Used references for patient care</strong> (text/electronic): referencing written resource materials (e.g. textbooks, phone lists, procedure manuals)[4].</td>
</tr>
<tr>
<td>22. <strong>Set up and preparation of room / equipment</strong>: obtaining and returning equipment or supplies necessary for patient care and preparing equipment/room for use and clean-up after procedure[4].</td>
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**SERVICE RELATED**

All nurse practitioner activities related to the nurse practitioner model of service. Activities are not patient specific and include, for example, attending meetings, conducting teaching or in-service, collecting and analysing data, program or service development or evaluation and administration[1, 2].
### Service Related Activities

23. **Travel**: includes travel to/from patient’s house, transit between wards/unit or treatment centres.

24. **Computer data retrieval**: includes retrieval of information for the purposes of auditing or reporting.

25. **Research and Audit**: includes activities related to enquiry or measurement of patient, service or product. Includes, for example, the collection, recording or analysis of data through measurement, interview, review of records, reports or service information. [9].

26. **Meetings & Administration**: attending or planning for meetings. For example, committee work, interviews, reading written communication, communicating on non-patient matters. Administration activities may include answering phones, delivering messages, email, filing reports, assembling charts, locating/addressing forms.

27. **Preceptoring**: providing direction, support and education to a less experienced health care professional. For example to students, nurses, medical staff, allied health, etc.

28. **Continuing professional development – self**: includes activities related to developing and maintaining skills and knowledge. Including attending conferences both local and national, seminars or workshops, reading and scholarly writing.

29. **Provision of continuing professional development – others**: includes participation in teaching and learning activities, both formal and informal, and acting as a resource. Includes both preparation and delivery [1].

### Personal

30. **Personal**: all personal activities not related to patient care, service or professional development[2]. Activities related to meals, breaks, adjusting personal schedules, personal phone calls and socialising with co-workers[2, 4, 5, 10].

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*Time period: enter data collection period here. For example, 0900 – 1100 hours.*
# Nurse Practitioner Activities

<table>
<thead>
<tr>
<th>Direct Care</th>
<th>Indirect Care</th>
<th>Service Related</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Administers medication</td>
<td>22. Sets up &amp; prepares room/equipment</td>
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<tr>
<td>10. Interacts with patient/family/caregiver</td>
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<tr>
<td>11. Teaching</td>
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<tr>
<td>12. Initiates patient transfers/discharge</td>
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<tr>
<td>13. Telemedicine</td>
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*Time spent on travel: [ ] minutes

References and Readings


Chapter 4

Researching nurse practitioner service

Principles and purpose of health services research

Researching health service is about investigating how specific factors influence the community’s access to health care. Health services research is useful when reliable information is needed on the influence of innovation or change in a specific area of health care. This includes investigating the influence of new technology, service models, workforce configuration or clinical guidelines.

A more formal and widely accepted definition of health services research is:

... the multidisciplinary field of scientific investigation that studies how social factors, financing systems, organisational structures and processes, health technologies and personal behaviours affect access to health care, the quality and cost of health care and ultimately our health and well-being. Its research domains are individual, families, organisations, institutions, communities and populations (Lohr 2002)

Unlike studies of effectiveness which can only be conducted by measurement and comparison, there is no single method used in health services research. The field draws from a range of methods according to the nature of the research question and research aim. Case study methodology is a research approach often used to investigate health services and was one of the methods used in the AUSPRAC study.

We used case study to investigate the influence of nurse practitioner service on the organisation of care, multidisciplinary team function and patient services in eleven service settings that included a nurse practitioner, throughout Australia.

Case study usually adopts a multi-method approach to inquiry. That is, several data collection methods are used and multiple participant groups are investigated. For example in the AUSPRAC study we collected data on detailed description of the service environment, we interviewed the nurse practitioner and members of the multidisciplinary team and we interviewed patients and examined their nurse practitioner care from entries in their health records. Each of these data sets is analysed separately then the findings combined to give a comprehensive picture of the Case being examined.
The AUSPRAC case study research approach could be used to examine one specific nurse practitioner service. Or case study could be used to examine other nurse practitioner related service topics such as change in service indicators, change in service model, examination of service gaps, patient flow and patient outcomes, comprehensive clinical audit or any nurse practitioner related topic that has several dimensions of interest.

If you are interested in conducting case study research around nurse practitioner service the following points need to be considered as a start:

- Read the literature on case study methods, some examples are included in this reference list. Make sure you have a clear plan for the study based on the requirements of case study research.

- If you are new to research, collaborate with an experienced researcher or get assistance from a research mentor.

- Have a clear and well formulated case definition and research question. These statements are essential to direct the course of your study. Spend time to formulate these so they are clear and concise.

- Write out a full study protocol. There are many standard research texts that will guide you in this process.

- Get clearance from your Human Research Ethics Committee.

**Data collection tools for researching health services**

The following tools and supporting documents were specifically designed for the case study research conducted for AUSPRAC. Any or all of these tools can be used for case study research in conjunction with other instruments. Other methods might include survey, work sampling, patient outcome measures and so on.

*If you conduct case study research using any of the instruments and processes in this chapter please cite the AUSPRAC study. Many of the AUSPRAC publications are in development or under review so contact Glenn Gardner for reference details (ge.gardner@qut.edu.au)*
Reconnaissance of Service Context Tool (RoSCo)

Instructions for Use

The attached RoSCo tool is structured to help you collect information necessary to provide a detailed description of the NP service you are investigating. This is an essential step in case study research as it will provide necessary information to determine and describe the context of the ‘case’. This instruction document will take you through each section of the data collection tool.

Section One:

After you have supplied information on the first three fields (i.e. names and service) you will record factual data about the NP model and service context. In the Physical Context box, tick the primary context of NP service, and where applicable tick one of the further options.

Section Two:

In this section, you are asked to provide written notes about the physical environment and service context. This will include providing information about the layout of the clinical setting, and the flow of patients through the service area. For example, if it is an emergency department, how large is it? Does it have an ambulance bay, a rapid assessment clinic or short stay area?

Section Three:

In section three, describe how the service is coordinated and identify who is responsible for the coordination of care activities. For example, does the service utilize hospital internal referral/external systems? Does administrative staff make appointments for patients to see the NP, or how patient care duties are allocated – does this allocation occur at a daily meeting?

Section Four:

Section four asks you to describe the health service team, in addition to the NP. This might include medical officers, nurse unit managers, allied health, administrative officers, etc.

Section Five:

In section five, describe the pattern(s) of patient attendance. For example, is patient attendance via an appointment system, drop-in centre, recurring appointments, or as a single visit only.

Section Six:

For example, if the service is procedural, what does the NP do and how does it connect with the service team? This section will allow you to explore the nature of interventions, and how these services are provided, i.e., whether in a team context, or NP allocated patient groups.
Section Seven:

When describing the atmosphere of the service, simply record what you see in the service environment. For example, you may observe that although the service is very busy, there is lots of conversation with patients, family and other clinicians. You may notice an atmosphere of urgency, calmness or chaos. Staff may work closely together or may work in isolation with little contact or communication with each other.

Section Eight:

In this section, you are asked to describe interaction and communication between the NP and other team members. Again, write what you see. Would you describe the interaction and communication as functional, collegial and team-orientated. Do you identify mutual respect between the NP and the team members? Give examples.

Section Nine:

In this final section, you are asked to describe the typical pattern of NP activity. This may include direct patient care, but also extends to the other roles the NP has. Again, this will be model specific, but may include administrative duties, teaching and professional development activities. Describe these in detail. For example, if the NP is travelling, how does this occur? In a hospital vehicle used, or is the nature of the travel walking between hospital departments?
Reconnaissance of Service Context Tool
RoSCo

SECTION ONE:

<table>
<thead>
<tr>
<th>Data Collector Name:</th>
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<tr>
<td>Nurse Practitioner Name:</td>
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<tr>
<td>Name of Service:</td>
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<tr>
<td>Nurse Practitioner Model:</td>
<td>Describe service model</td>
</tr>
</tbody>
</table>

**Physical Context:**

- **Hospital**
  - Inpatient
  - Outpatient
  - Public hospital
  - Private hospital
  - Tertiary referral hospital
  - Metropolitan
  - District hospital
  - Area health service
  - Regional hospital

- **Community nursing organisation**
  - Public
  - Private

- **Aged care residential**
  - Public
  - Private

- **General practice**

- **Community health centre**

SECTION TWO:

Describe the physical environment and service context (i.e. layout of clinical setting, flow of patients through service area)

SECTION THREE:

Describe how the service is coordinated and identify who is responsible for coordination of care activities (E.g. outpatient administration staff, hospital internal referral or external system)
SECTION FOUR:
Describe who is part of the NP health service team (i.e. medical officers, nurse unit managers, allied health, administrative officers, etc)

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SECTION FIVE:
Describe the pattern(s) of patient attendance (i.e. appointment system, drop-in centre, recurring appointments, single visit only)

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<th>Description</th>
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SECTION SIX:
Describe the types of services that are provided to the patient by the NP (i.e. counselling, procedural, monitoring, hospital admission for acute care)

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SECTION SEVEN:
Describe the atmosphere of the service (i.e. positive, customer-focussed, collegial, busy)

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SECTION EIGHT:
Describe the interaction and communication between the NP and team members

SECTION NINE:
Describe typical pattern of NP activity
Interview Schedule for Case Study Participants

Nurse Practitioners

This is a semi-structured interview structured within a framework of three themes. Namely; the organisation of care, team functioning and patient service

Within each of these themes we have supplied triggers to direct your questions. Please remain flexible and responsive in using these triggers without imposing limitations on the direction that your interviewee wants to take you within this framework.

The organisation of care

Questions for the nurse practitioner interview relating to perceptions and observations on the influence of their role on care delivery can include:

- Continuity of care
- Patient-centred care
- Perceptions of issues related to co-ordination of care
- The most significant challenges facing them in this role
- Please also question about their estimates of most common presentations and their perception of where the NP role has most impact.

Team functioning

Questions are posed to gain information on the impact of the NP role on the service team. How has it changed and what is the NP’s role within the team. You may also what to pose questions around:

- Collaboration issues
- Professional development/clinical development issues
- Source of, and destination of, referrals.

Patient service

Questions her will help you to gain understanding of the impact of the NP role on patients. So you are seeking information relating to:

- The focus of patient care in the NP service
- The approximate number of patients managed per day/week
- The NP’s perceptions of what patients want from the service and what the service wants for patient outcomes.
## Interview Schedule for Case Study Participants

### Patients/Carers

The patients’ perception of NP service is an important component in health services research. Patient interviews will supply information about the value and focus of this service.

This is a semi-structured interview that will be conducted within a framework of three themes. Namely; the organisation of care, team functioning and patient service.

Within each of these themes we have supplied triggers to direct your questions. Please remain flexible and responsive in using these triggers without imposing limitations on the direction your interviewee wants to take you within this framework.

### The organisation of care

To what extent is the patients’ experience of health service influenced by the addition of the NP. Whilst remaining response to the direction the patient takes you please structure your questioning around their experiences of:

- Scheduling of activities and care
- Issues related to care co-ordination, any duplication, and changes (better or worse) to access to service
- How responsive the NP is in providing service
- Any fragmentation of care
- Their level of confidence in NP safety and quality of care - ask for examples.

### Team functioning

What is the patient/carer’s:

- Understanding of the NP role
- Experience of duplication, mix of care providers, ask for examples
- Their perceptions of access and wait time for clinical service.

### Patient service

You will be seeking information from the patients’ experience in the service about:

- Their satisfaction with clinical care
- The health and service outcomes they want and the level of satisfaction with outcomes
- Their expectations of the NP service today and over the period of management/care/treatment.
Interview Schedule for Case Study Participants

Health Professionals

This is a semi-structured interview that will be conducted within a framework of three themes namely; the organisation of care, team functioning and patient service.

Within each of these themes we have supplied triggers to direct your questions. Please remain flexible and responsive in using these triggers without imposing limitations on the direction your interviewee wants to take you within this framework.

The organisation of care

Questioning in this area will help you gain information on the impact of the NP role on the rest of the service team. So you will question the other team members’ and other disciplines’ perceptions on how the NP role influences:

- Continuity of care
- Patient-centred care
- If the NP role has any influence on fragmentation of care (causing or removing)
- The flow of work in the service
- The outcomes of this health service.

Team functioning

Introduce questions relating to NP influence on:

- Team workloads
- Workloads of the individual you are interviewing
- Their understanding of the NP role (have them describe the NP role)
- Inter professional relationships
- Patterns of collaboration if any.

Patient service

You will have the NP’s perceptions of the impact on patient service – so you will be interested to find out if there is a common view. Team members need to be questioned around the topics of:

- Patient centred care
- Co-ordination of care issues
- Perception of where the NP role has most impact on patient care.
References and Readings


Chapter 5

Researching nurse practitioner patient outcomes

Principles and purpose of researching patient outcomes

Nurse practitioners are often asked how their care affects patient or client outcomes. There are many aspects of healthcare-related outcomes that can be considered because health (or ill health) is the result of a combination of social, psychological and biological factors and not just the absence of disease. Measuring this complex concept can be very daunting. There will always be debate about how best to measure health outcomes but there is agreement that evaluation must include health service, clinical and patient perspectives. Some suggested readings about measuring health and health outcomes are included at the end of this chapter.

Evaluation of the service that NPs provide and the associated health outcomes of patients should be based on the use of developed and tested tools where possible. Measurement should include baseline data and ongoing generic and specific patient outcome measures. Service measures include utilisation of different healthcare professionals, such as number of times patients access GPs or emergency departments as well as NPs over a specified time period. Specific clinical measures may be related to improvement in physiological status such as evaluation of biochemical profiles (for example, liver function tests) or medical imaging tests (for example, cardiac output studies). It is also important to explore the patient’s perspective ‘through perceived health status and health-related quality of life and the patient’s (and carer’s where appropriate) satisfaction with the treatment and outcome’ (Bowling, 2002, pg 13).

Previous evaluation of nurse practitioner patient outcomes has often been limited to measures of patient satisfaction. Patient satisfaction is used by many agencies as an indicator of care outcomes (Agosta, 2009) but questions are often very broad in scope and therefore are not very sensitive or specific measures. Until now, evaluation of Australian nurse practitioner services has been model specific. There is a real need to use generic measures so that nurse practitioner services can be evaluated at a national (and international) level to provide robust comparative information for strategic health service planning.

This chapter provides guidance about some of the tools and methods that are available for evaluating patient outcomes. The suggestions are based on tools that have been tested in the AUSPRAC Study. In this study we focussed on tools that could be used with patients with diverse health problems, cared for by a wide range of nurse practitioners practicing in both metropolitan and rural areas, within acute and community health services and across a diverse range of settings (that is, ‘generic’
tools). In this chapter we focus on information that can be collected from patients’ perspective: measures of service utilisation, perceived health status, satisfaction with care and those factors that are likely to influence changes in health status and satisfaction. Clinical measures are also very important but tend to be disease specific and are not addressed in this toolkit. Advice provided in the previous chapters is also very relevant; especially Chapter 2 and the dot points listed as starting points in both Chapters 3 and 4.

If you conduct an evaluation of nurse practitioner patient outcomes, there are several issues that need to be considered before you start. The responses will depend on the purpose and scope of the study but the issues include:

- Whether or not there is a need for ethical approval from an appropriately structured human research ethics committee (NHMRC 2007).
- How large a sample of patients is required. References about sample size are included in the useful resources section.
- What method of data collection is to be used. This decision will be governed by considerations related to the extent of the information to be collected and the skills and resources available to the data collection team.

**Data collection tools for researching patient outcomes**

As already discussed, measuring patient outcomes is complex. Here we focus on perceived health status, including functional status and quality of life. Functional status and quality of life (at a generic level) are best measured by widely used tools such as the Short Form 12 (SF-12v2™ Health Survey 1994) so that comparison can be made across time and health disciplines. The SF12 was used in the Australian Nurse Practitioner Study. It was easy to administer and was sensitive to changes in health status where patients had short term health problems (such as many of those managed by Emergency Department Nurse Practitioners). The license for this tool has to be purchased but we strongly recommend its use as a simple and effective generic health status measure that will provide reliable comparative data.

The remainder of this chapter focuses on factors that may influence health status. We have identified the following factors:

- Self reported comorbidity level
- Patient’s level of healthcare service utilisation
- Patient access to nurse practitioner service
- Patient’s satisfaction with nurse practitioner’s care for presenting problem
- Patient’s experience with coordination of care by nurse practitioner
- Level of safety and quality of services provided
- Patient demographics.
After review of the literature, we identified or developed tools to measure each of these listed factors, using validated questions where possible. Each tool will now be briefly discussed. These tools can be used in face-to-face interviews with patients, as postal surveys or as telephone surveys. All are available without cost, although use of some questions require permission from the original author.

All other tools presented below address factors that may influence health status.

**Self reported comorbidity level**

Comorbidity describes the effect of all other diseases on an individual patient other than the primary disease of interest. The Charlson Comorbidity Index is a widely accepted, validated method, currently used to quantify comorbidity although it was initially developed as a tool to predict mortality. The Charlson Comorbidity Index comprises questions about 22 conditions such as heart disease and cancer. There is a validated self-report format that is simple to administer and imposes less demands on a data collector’s time than medical record-based assessments. To use this instrument contact Mary Charlson on mecharl@med.cornell.edu for permission. No fee is required.

**Patient’s level of healthcare service utilisation**

The Stanford Patient Education Research Center Chronic Disease Self-Management Program has developed a series of health assessment questionnaires to assess a variety of patient outcomes (Lorig & Laurent, 2007). These questionnaires are in the public domain and we have selected questions that assess health care utilisation; important because they provide information that can be used to compare costs to effects (Lorig & Laurent, 2007). The Stanford measures are simple and quick to administer and administration does not require specific training. In addition, no licences or special permissions are required. We have also included questions previously used in other studies about nurse practitioners (Allnutt, 2010; Gardner & Gardner, 2005; ACT Health Steering Committee, 2002).

**Patient access to nurse practitioner service**

This brief tool investigates the route of access to the nurse practitioner and includes some questions about the patient’s knowledge of nurse practitioner services. It has been informed by several previous studies about nurse practitioners.

**Patient’s satisfaction with nurse practitioner’s care for presenting problem**

This tool is derived from two sources. Some questions are amended from the Ambulatory Care Experiences Survey (see next section) and some are questions used in
the study by Allnutt, et al. (2010). The questions are very specific and so avoid some of the problems with the lack of sensitivity of some patient satisfaction surveys.

**Patient’s experience with coordination of care by nurse practitioner**

This tool is based on questions from the Ambulatory Care Experiences Survey – Short Form described by Safran (Safran, 2002-5), which is freely available for use without permission. Again the questions are very specific and avoid some of the problems with the lack of sensitivity of some patient satisfaction surveys. The survey can be used for any health professional group and we have made it specific to nurse practitioner services.

**Level of safety and quality of services provided: Medication safety questions**

We have selected medication knowledge as the focus for a safety and quality measure. One of the most important aspects of nurse practitioner service is the focus on a nursing model that includes holistic care and patient education. Whether or not nurse practitioners are prescribing, part of holistic care at this level of nursing practice is review of medications. We consider this particularly important because, while nurse practitioners have similar prescribing patterns to physicians (Hooker and Cipher 2005), patients in Australia are still unclear about the prescribing rights of nurse practitioners (Allnutt, et al. 2010) with only 40% reporting an understanding that nurse practitioners are able to prescribe medications. This tool was developed specifically for the AUSPRAC Study and explores the patient’s knowledge of their medications. The questions were informed by a study reported by Shen and others (Shen, 2006).

**Patient demographics**

These questions are largely self-explanatory and are structured to conform to recommendations by the Australian Institute of Health and Welfare for consistency of data collection (Australian Institute of Health and Welfare, 2010). They are also informed by minimum data that were deemed necessary in the N3ET report on a proposed nurse practitioner minimum dataset (Australian Health Ministers’ Advisory Council, 2006). Consistent collection and reporting of these data are important for understanding nurse practitioner services and measuring their effects at a national level (Gardner, 2009; Productivity Commission, 2005).
### Resources used in development of ‘Patient Outcomes Tools’

<table>
<thead>
<tr>
<th>Resource</th>
<th>Reference(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Katz, 1996.</td>
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<td></td>
<td>Allnut, 2010.</td>
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<tr>
<td></td>
<td>Australian Capital Territory and Steering Committee of the ACT Nurse Practitioner Project, 2002.</td>
</tr>
<tr>
<td>Patient access to nurse practitioner service</td>
<td>Allnut, 2010.</td>
</tr>
<tr>
<td></td>
<td>Safran, 2002-2005</td>
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<tr>
<td>Patient’s experience with coordination of care by nurse practitioner</td>
<td>Safran, 2002-2005</td>
</tr>
<tr>
<td>Level of safety and quality of services provided</td>
<td>Shen, 2006.</td>
</tr>
</tbody>
</table>

- **If you conduct patient outcome research using any of the instruments and processes in this chapter please contact Anne Gardner (anne.gardner@jcu.edu.au) for assistance with obtaining permission to use tools and correct attribution of source materials including reference to AUSPRAC. The AUSPRAC patient outcome publications are currently in development.**
Patient access to nurse practitioner services

1. Have you seen a Nurse Practitioner before?

   Yes............ [ ] ➔ Go to Question 3
   No............ [ ]
   Unsure........ [ ]

2. Have you heard of Nurse Practitioners before?

   Yes.... [ ]
   No..... [ ] ➔ Go to Question 4

3. If yes, how did you find out about the Nurse Practitioner?

   Posters............................... [ ]
   Information Sessions........... [ ]
   Professional Referral.......... [ ]
   Word of Mouth.....................[ ]
   Media ............................... [ ]

   If Other (Please specify) ........................................................................
4. Were you referred to the Nurse Practitioner from another service?

Yes…. [ ]

No….. [ ] ➔ Go to Question 5

a. If yes, who referred you to the Nurse Practitioner?

1. A general practitioner (GP) or other primary care medical practitioner
2. A medical specialist
3. An allied health care provider
4. Another Nurse Practitioner
5. Another registered nurse or midwife (other than a Nurse Practitioner)
6. A hospital
7. Another type of health care establishment (other than a hospital)
8. Self-referral
9. Other………………………………………………………(Specify)

5. Did you have to wait to see the Nurse Practitioner?

Yes…. [ ]

No….. [ ]

a. If yes, how long?

Less than 30 minutes…. [ ]

30 minutes to an hour… [ ]

1-2 hours....................... [ ]

More than 2 hours ...... [ ]
Patient demographics

1. What is your date of birth

Do you identify as Aboriginal or Torres Strait Islander?

Aboriginal/not Torres Strait Islander origin...................... [ ]
Torres Strait Islander/not Aboriginal origin................. [ ]
Aboriginal & Torres Strait Islander origin.................... [ ]
Neither Aboriginal/Torres Strait Islander origin......... [ ]

2. What is your employment status?

Employed full-time ..........[ ]
Employed part-time........[ ]
Unemployed ................... [ ]
Invalid pensioner.............[ ]
Aged pensioner/retired..... [ ]
Student............................ [ ]
Home duties...................... [ ]
Other............................... [ ]
3. **What is the highest level of education you have achieved?**

Did not complete primary school........................ [ ]

Primary school only........................................ [ ]

No intermediate or school certificate.................... [ ]

Leaving or higher School Certificate..................... [ ]

TAFE.................................................................... [ ]

College.................................................................. [ ]

University........................................................... [ ]
Patient experience with coordination of care

1. Has the NP seemed **informed and up-to-date** about the care you received from other healthcare providers?

   - Never
   - Almost never
   - Sometimes
   - Usually
   - Almost always
   - Always
   - I did not see any other healthcare provider in the last 12 months.

2. When the NP has sent you for a blood test, x-ray or other test, did the NP or someone from the NP’s office follow-up to give you the test results?

   - Yes, always
   - Yes, sometimes
   - No, never
   - The N.P did not send me for any medical tests in the last 12 months.
Patient satisfaction with nurse practitioner care for presenting problem

1. Have your reasons for coming to see the NP been resolved/sorted out
   In full?
   In part?
   Not at all?
   If only in part or not at all, please can you tell me a bit about this?
   …………………………………………………

2. Now I want you to think about the NP, how much has he/she contributed to this?
   Yes, definitely contributed
   Yes, somewhat contributed
   No, definitely not contributed

3. Were you satisfied with the NP treatment of your most pressing health need?
   Highly Satisfied
   Satisfied
   Neither satisfied nor unsatisfied
   Unsatisfied
   Highly unsatisfied
4. **Overall, how would you rate the quality of care provided by the NP?**

   - Highly satisfied
   - Satisfied
   - Neither satisfied nor unsatisfied
   - Unsatisfied
   - Highly unsatisfied

5. **How often did the NP explain things in a way that was easy to understand?**

   - Never
   - Almost never
   - Sometimes
   - Usually
   - Almost always
   - Always

6. **How often did the NP listen carefully to you?**

   - Never
   - Almost never
   - Sometimes
   - Usually
   - Almost always
   - Always
7. How often did the NP give you clear instructions about what to do to take care of the health problems or symptoms that were bothering you?

- Never
- Almost never
- Sometimes
- Usually
- Almost always
- Always

8. How often did the NP seem to know all of the important information about your medical history?

- Never
- Almost never
- Sometimes
- Usually
- Almost always
- Always

9. Did the NP recommend a treatment for a health problem or symptom that was bothering you?

- Yes
- No
10. Did the NP ever say that there is more than one treatment option to consider for your care?
   
   Yes  ➔ Go to Question 11
   
   No  ➔ Go to Question 13

11. When there was more than one treatment option to consider, did the NP give you enough information about each option?
   
   Yes, definitely
   
   Yes, somewhat
   
   No, definitely not

12. When there has been more than one treatment option to consider, did the NP ask you which treatment option you preferred?
   
   Yes, definitely
   
   Yes, somewhat
   
   No, definitely not

13. Did the NP give you the help you need to make changes in your habits or lifestyle that would improve your health or prevent illness?
   
   Yes, definitely
   
   Yes, somewhat
   
   No, definitely not
   
   I did not need help with this
14. **How often does the NP spend enough time with you?**

   Never
   Almost never
   Sometimes
   Usually
   Almost always
   Always

15. **How comfortable do you feel in talking to the NP about anything, even things that you might not tell anyone else?**

   Very comfortable
   Quite comfortable
   Comfortable
   Not very comfortable
   Not comfortable at all

16. **How would you rate the NP’s knowledge of your medical history?**

   Very poor
   Poor
   Fair
   Good
   Very good
   Excellent
Patient’s level of healthcare service utilisation

1. Which of the following health services have you used in the last [insert time period]?

<table>
<thead>
<tr>
<th></th>
<th>General Practitioner</th>
<th>Community Health</th>
<th>Specialist Medical Officer</th>
<th>Allied Health Professional</th>
<th>Nurse Practitioner</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Once or twice</td>
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<td></td>
<td></td>
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<tr>
<td>Every couple of months</td>
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<td></td>
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<tr>
<td>Once a month</td>
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<tr>
<td>More regularly (detail)</td>
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</tbody>
</table>

2. Do you have a regular General Practitioner (GP)?

   Yes…. [ ]

   No….. [ ]

3. In the past [insert time period] how many times did you go to a hospital emergency department? _______times

4. How many different times did you stay in a hospital overnight or longer in the past [insert time period]? _______ times
Level of safety and quality of services provided: understanding of medications

1. Are you currently prescribed or taking any medication?
   YES  □ ➔ Go to Question 2
   NO   □ ➔ That is the end of the survey. Thank you very much for your participation.

2. Did the NP prescribe or review any medications you are currently on?
   YES  □ ➔ Go to Question 3
   NO   □ ➔ Go to Question 5

3. Did the NP discuss these medications with you? YES / NO
   YES  □ ➔ Go to Question 4
   NO   □ ➔ Go to Question 5

4. How long did the NP discuss medications with you? .........................minutes

5. What is the name of one of your medications that you are currently taking?
   ............................................................................................................................

6. Can you tell me the dosage prescribed of this medication?.........................

7. What times of the day do you have to take the medication?.........................

8. What was the medication prescribed for?......................................................

9. Do you know of any common side effects for this medication? ............

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Self reported comorbidity level

Myocardial infarction:
1. Have you ever had a heart attack? YES / NO

Congestive heart failure:
2. Have you ever been treated for heart failure? (You may have been short of breath and the doctor may have told you that you had fluid in your lungs or that your heart was not pumping well.) YES / NO

Peripheral vascular disease:
3. Have you had an operation to unclog or bypass the arteries in your legs? YES / NO

Cerebrovascular accident:
4. Have you had a stroke, cerebrovascular accident, blood clot or bleeding in the brain, or transient ischaemic attack (TIA)? YES / NO

Hemiplegia:
5. Do you have difficulty moving an arm or leg as a result of the stroke or cerebrovascular accident? YES / NO

Chronic obstructive pulmonary disease:
6. Do you have asthma? YES / NO.

If ‘yes’, do you take medicines for your asthma?

a. No
b. Yes, only with flare-ups of my asthma.
   c. Yes, I take medicines regularly, even when I’m not having a flare-up.

7. Do you have emphysema, chronic bronchitis, or chronic obstructive lung disease? YES / NO

If ‘yes’, do you take medicines for your lung disease?

a. No
b. Yes, only with flare-ups.
   c. Yes, I take medicines regularly, even when I’m not having a flare-up.

Ulcer disease:
8. Do you have stomach ulcers, or peptic ulcer disease? YES / NO

If ‘yes’, has this condition been diagnosed by endoscopy (where a doctor looks into your stomach through a scope) or an upper GI or barium swallow study (where you swallow chalky dye and then x-rays are taken)? YES / NO
**Diabetes:**

9. **Do you have diabetes (high blood sugar)?**
   
   a. No
   b. Yes, treated by modifying my diet.
   c. Yes, treated by medications taken by mouth.
   d. Yes, treated by insulin injections.

10. **Has the diabetes caused any of the following problems?**
   
   a. Problems with your kidneys. YES / NO
   b. Problems with your eyes, treated by an ophthalmologist. YES / NO

**Renal:**

11. **Have you ever had the following problems with your kidneys?**
   
   a. Poor kidney function (blood tests show high creatinine). YES / NO
   b. Have used haemodialysis or peritoneal dialysis. YES / NO
   c. Have received kidney transplantation. YES / NO

**Connective tissue disease:**

12. **Do you have rheumatoid arthritis?** YES / NO
    
    If yes, do you take medications for it regularly? YES / NO

13. **Do you have any of the following conditions?**
    
    a. Lupus (systemic lupus erythematosus) YES / NO
    b. Polymyalgia rheumatica YES / NO

**Dementia, liver disease, leukaemia, lymphoma, tumour, metastases, AIDS:**

14. **Do you have any of the following conditions?**
    
    a. Alzheimer’s Disease, or another form of dementia YES / NO
    b. Cirrhosis, or serious liver damage YES / NO
    c. Leukaemia or polycythaemia vera YES / NO
    d. Lymphoma YES / NO
    e. Cancer, other than skin cancer, leukaemia or lymphoma YES / NO

    If ‘yes’, has the cancer spread, or metastasised to other parts of your body? YES / NO

f. AIDS YES / NO
References and Readings


Safran, D.G. 2002-2005 Ambulatory Care Experiences Survey- Short Form (PCP) New England Medical Center Hospitals, Inc.

SF-12v2™ Health Survey 1994, 2002 by QualityMetric Incorporated and Medical Outcomes Trust. All Rights Reserved. SF-12® a registered trademark of Medical Outcomes Trust. (SF12v2 Standard, US Version 2.0).


Chapter 6

Conducting a nurse practitioner census

National Workforce Census

Information on the Australian Health Workforce is collected by the Australian Institute of Health and Welfare (AIHW). The Nursing and Midwifery Labour Force Survey is conducted annually by the AIHW and collects information on nurses and midwives registered or enrolled with an Australian Nurse Registration Authority at the time of the survey. The information collected includes demographic and employment characteristics (AIHW, 2009).

Workforce planners use published census data which have been produced by government agencies. An example of the use of this type of census data is the report on workforce participation among international medical graduates in England using the National Health Service (NHS) census (Hann, Sibbald & Young, 2008). Another example is that of Belegen, Vaughn and Vojir (2008) who used government reports to access the impact of nurse supply and associated factors using the US Census Bureau source information.

While the AIHW reports are a valuable source of information for workforce planning they do have limitations. The limitations have been identified as information gaps related to the specialised health workforce, the unregulated health care worker and new health care professionals. In order to address the gaps in health workforce information, censuses have been conducted. An example of where a national approach to a census and survey was used to obtain specific information on an unregulated health workforce is “The 2007 National Aged Care Workforce Census and Survey” (Martin & King, 2008).

The nurse practitioner role is relatively new to Australian health care delivery and whilst these professionals have been regulated by Nurse Registration Authorities, limited workforce information including demographics, employment practices and service delivery is known. The AUSPRAC Study was conducted to inform governments, health policy makers, workforce planners, health care managers and clinicians on the profile, process and outcomes of nurse practitioners in Australia (Gardner et al, 2009).

What is a workforce census?

A workforce census is the systematic collection of quantitative information for a given population. A national workforce census involves collection of data from all jurisdictions where members of the specific health workforce being studied are
employed. Middleton et al. (2010) provides an overview of what is involved in a national census. This overview includes the methods employed, questionnaire development and study procedure.

Primary workforce census should be undertaken with caution as they involve large studies across jurisdictional boundaries and may be costly and the conduct of this scale of research would benefit from consultation with experienced researchers.

Data collection tools for National/State census of nurse practitioners

The AUSPRAC study included the national nurse practitioner census which was conducted twice over a three year period in order to identify trends in the profile of Australian nurse practitioners. The survey instrument used in the AUSPRAC study is supplied in this chapter.

The published works from AUSPRAC including journal articles provide reliable and high quality information about Australian nurse practitioners. The national census on the status of Australian nurse practitioners has provided new knowledge to inform governments, health policy makers, workforce planners, health care managers and clinicians on the profile of this new health care professional.

The survey instrument supplied in this Toolkit is a valuable resource for organisations and individuals who are responsible for nurse practitioner workforce development, monitoring nurse practitioner service trends or national nursing workforce profiles.

Accordingly, we recommend the Nurse Practitioner Survey instrument to the AUSPRAC Collaborating Partners namely the state Chief Nursing Officers/Advisors and the Australian Nursing and Midwifery Council.

Whilst the instrument was developed and tested for national level data collection on nurse practitioners, by removing the items specific to national level data, state and territory Chief Nursing Officers/Advisors will find the Nurse Practitioner Survey instrument a useful tool for collecting state-wide information on the nurse practitioner workforce.

The attached questionnaire will in time need amending to adjust to changing regulatory requirements at state/territory and national levels and continuing development of nurse practitioner service. Additionally, whilst the instrument was developed and tested for national level data collection on nurse practitioners, by removing the items specific to national level data, state and territory Chief Nursing Officers/Advisors will find the Nurse Practitioner Survey instrument a useful tool for collecting state-wide information on the nurse practitioner workforce.
1. What is your sex?

   Male ..... □1      Female ..... □2

2. What is your date of birth?

   D    D    M   M   Y    Y    Y    Y

   □□□□□□□□

We would like to know where you usually live

3. What is your residential postcode? ...

4. In which suburb / town / locality do you usually live? ..................................................

5. In which Australian State or Territory do you usually live?

   SA ............ □1       VIC ................................. □5
   WA ............ □2       NT ............................... □6
   NSW ............ □3       QLD ............................. □7
   TAS  □4                     ACT .......................... □8
       Not Living in Australia ...... □9

6. Are you an Australian citizen?

   Yes, Australian citizen .......... □1            No, temporary resident .......... □3
   No, permanent resident .......... □2           No, working visa .............. □4

7. Are you of Aboriginal or Torres Strait Islander origin?
(For persons of both Aboriginal and Torres Strait Islander origin, please select both boxes)

   No ............................................. □1
   Yes, Aboriginal  ......................... □2
   Yes, Torres Strait Islander ............ □3

8. Are you a member/ fellow of professional association/s or organisation/s:

   Yes .... □1 go to Q 9
   No...... □2 go to Q 10
9. To which association/s or organisation/s do you belong? *(please select all that apply)*

Australasian Rehabilitation Nurses Association (ARNA) ........................................... 2
Australasian Sexual Health & HIV Nurses Association (ASHHNA) ........................................... 3
Australian Association of Maternal Child & Family Health Nurses (AAMC&FHN) .......... 4
Australian College of Critical Care Nurses (ACCCN) .................................................. 5
Australian College of Midwives (ACM) ............................................................................ 6
Australian Confederation of Paediatric & Child Health Nurses (ACPCHN) ............. 7
Australian Council of Community Nursing Services (ACCNS) ................................. 8
Australian Day Surgery Nurses Association (ADSNA) .................................................. 9
Australian College of Mental Health Nurses Inc (ANZCMHN) ................................. 10
Australian Nursing Federation (ANF) ............................................................................. 11
Australian College of Nurse Practitioners (ACNP)
(formerly Australian Nurse Practitioner Association) ......................................................... 12
Australian Practice Nurses Association (APNA) ............................................................... 13
Rural Nursing & Midwifery Faculty, RCNA
(formerly Australian Rural Nurses and Midwives & formerly Association for Australian Rural Nurses) .............................................................. 15
Australian Women's Health Nurses Association Inc (AWHNA) ........................................ 16
Australian Wound Management Association (AWMA) ................................................. 17
Cancer Nurses Society of Australia (CNSA) ..................................................................... 18
Cardiac Nurses Network of Australia and New Zealand (CNNANZ) ............................. 19
Clinical Nurse Consultants Association of NSW (CNCAN) ........................................... 20
College of Emergency Nursing Australasia (CENA) ....................................................... 21
Congress of Aboriginal and Torres Strait Islander Nurses (CATSIN) ............................... 22
Council of Remote Area Nurses of Australia Inc (CRANA) ........................................... 23
Department of Defence ........................................................................................................ 24
Discharge Planning Association ......................................................................................... 25
Geriacton Inc ....................................................................................................................... 26
Nurses in Independent Practice (NIP) .................................................................................. 27
Palliative Care Nurses Australia (PCNA) ............................................................................ 28
Royal College of Nursing, Australia (RCNA) .................................................................... 29
The College of Nursing (incorporating the NSW College of Nursing) ....................... 30
Other (please specify) ......................................................................................................... 31
...........................................................................................................................................
Throughout the questionnaire we refer to ‘Registered Nurse’. By this, we mean nurses authorised by the relevant state or territory Nurses’ Boards to practice as a registered nurse. In the state of Victoria they are called ‘Division 1 Registered Nurses’.

10. In what year did you first become a Registered Nurse?

11. Where did you receive your first registered nurse qualification?

   SA.......................... 1
   WA.......................... 2
   NSW.......................... 3
   TAS.......................... 4
   VIC.......................... 5
   NT ......................... 6
   QLD ....................... 7
   ACT ....................... 8
   Not in Australia...... 9

If not in Australia, please specify country .................................................

12. Since your initial registration, how many years have you worked as a Registered Nurse? (i.e. the number of years worked, either full-time or part-time since you first registered. Exclude time not working as a registered nurse and any time on unpaid leave. Include time working as a NP.)

   Years □□□

13. In what year were you first authorised as a Nurse Practitioner in Australia?

14. In which Australian State or Territory did you receive your NP authorisation?

   SA ......................... 1
   WA ......................... 2
   NSW ....................... 3
   TAS ....................... 4
   VIC ....................... 5
   NT ....................... 6
   QLD ..................... 7
   ACT ..................... 8
15. What was your pathway to authorisation as a NP in Australia?

a) Completion of a Board/Council accredited NP postgraduate degree only – go to Q 16 ......................................................... 1

b) Completion of an accredited degree and presentation of a portfolio/case study – go to Q 16 ......................................................... 2

c) Presentation of a portfolio/case study and interview by an expert panel – go to Q 19 ................................................................. 3

16. In what year did you complete your Board/Council accredited postgraduate degree?

17. What was the title of your Board/Council accredited postgraduate degree? (e.g. Master of Nursing Practice, [Nurse Practitioner])

18. From which tertiary institution did you receive this qualification? (please state full name and city of tertiary institution)

19. In what states are you authorised as a NP? (please select all that apply)

Please include the Category or Band of Practice if relevant to your state or territory.

Category or Band of Practice

SA........ □ 1 .................................................................

WA ........ □ 2 N/A

NSW ....... □ 3 .................................................................

VIC ....... □ 4 .................................................................

QLD ...... □ 5 N/A

ACT ...... □ 6 .................................................................

NT ...... □ 7 N/A

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PROFESSIONAL DEVELOPMENT (EDUCATION)

This section asks questions about your nursing education. We would like to know if you are currently undertaking any education relevant to your role as a NP (e.g. Master of Nursing Practice, [NP])

(Currently undertaking refers to being enrolled in and actively participating in an educational program during the month of September, includes scheduled break times)

The first set of questions in this section asks about any current education you are undertaking

20. Are you currently undertaking any education programs relevant to your role as a NP?
   Yes .... [ ] go to Q 21
   No..... [ ] go to Q 25

21. Which of the following education programs are you currently undertaking?
   (please select all that apply)

   Doctoral Degree ......................... [ ]
   Diploma...................................... [ ]
   Masters Degree .......................... [ ]
   Certificate III and Certificate IV ...... [ ]
   Graduate Diploma ....................... [ ]
   Certificate I and Certificate II ......... [ ]
   Graduate Certificate ..................... [ ]
   Non-Award Courses........................ [ ]
   Bachelor Degree .......................... [ ]
   Miscellaneous Education ............... [ ]
   Advanced Diploma or
   Associate Degree......................... [ ]

22. What is/are the name/s of the education program/s?

   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................

23. What teaching methods are employed?
   (please select all that apply to the highest award you are currently undertaking)

   Distance education ...... [ ]
   Workshop...... [ ]
   Seminar ...... [ ]

24. What modes of delivery are employed?
   (please select all that apply to the highest award you are currently undertaking)

   Face-to-face........ [ ]
   Printed materials ....... [ ]
   Online....... [ ]
If you are not currently studying we would like to understand your reasons. This will help with planning for continuing education for NPs.

25. Which of the following options best describes your reason/s for not studying at this time?
   *(please select all that apply)*

   - No relevant education program available .. □
   - Unable to access .................. □
   - Not interested at this time .................. □
   - Financial constraint .................. □
   - Family issues/constraints .................. □
   - Unable to obtain study leave .... □
   - Have recently completed program .......... □
   - Lack of workplace support....... □
   - Can see no need at this time.................. □
   - Other *(please state below)* ........ □

The second set of questions in this section asks about any education program/s you have undertaken and completed since becoming authorised as a NP.

26. Have you *completed* any education programs related to your practice as a NP since becoming authorised as a NP?

   Yes .... □ go to Q 27
   No...... □ go to Q 29

27. Which of the following education programs have you completed?
   *(please select all that apply)*

   - Doctoral Degree ...................... □
   - Diploma.................................. □
   - Masters Degree ....................... □
   - Certificate III and Certificate IV ...... □
   - Graduate Diploma ...................... □
   - Certificate I and Certificate II ......... □
   - Graduate Certificate .................. □
   - Non-Award Courses........................ □
   - Bachelor Degree....................... □
   - Miscellaneous Education ............. □
   - Advanced Diploma or
   - Associate Degree..................... □

28. What are the names of the education programs?
   *(include up to three of the most recently completed programs)*

   (a) .............................................................. Year completed □ □ □ □

   (b) .............................................................. Year completed □ □ □ □

   (c) .............................................................. Year completed □ □ □ □

You are now halfway through the survey. Thank you for your continued participation. Your responses are valued!
29. What was your position title in your last health related job immediately prior to being authorised as a NP? (e.g. RN, Clinical Nurse Specialist, Clinical Nurse Consultant, Nurse Unit Manager, Nurse Manager etc. If you had been ‘acting’ in a more senior position for 3 months or more, please indicate this and also give your substantive position. If you had been ‘acting’ in a more senior position for a period of less than 3 months, just give your substantive position.)

........................................................................
........................................................................
........................................................................
........................................................................
.................................................................

30. For how long since you were first authorised as a NP have you worked as a NP? (i.e. the number of months or years worked, either full-time or part-time since you first authorised as a NP. Exclude time on unpaid leave or working solely as a RN.)

Months □□ □□□□□□ □□□□□□ AND/OR Years □□

31. In your last working week, were you working as a NP? (either full-time or part-time)

Yes .... □1 go to Q 32

No □□ You have almost finished, go to Q 44

32. What is your clinical field? (please select the ONE category that best describes your field)

Acute care (cardiac failure)................... □1 HIV.......................................................... □20
Acute care (gastroenterology)................ □2 ICU liaison .................................................. □21
Acute care (neonatal ICU)...................... □3 Mental health............................................. □22
Acute care (neonatal)............................ □4 Mental health (perinatal) ......................... □23
Acute care (oncology)........................... □5 Midwife practitioner ............................... □24
Acute care (orthopaedics)..................... □6 Neurosurgery............................................ □25
Acute care (paediatric palliative care)...... □7 Paediatric (pain management, ED, ICU
Acute care (respiratory)....................... □8 Palliative care, diabetes) ......................... □26
Acute care (dermatology)...................... □9 Pain management ...................................... □27
Aged care .......................................... □10 Palliative care ........................................ □28
Cardiac ............................................. □11 Primary health ....................................... □29
Community health............................... □12 Rehabilitation/Habilitation (aged care) .. □30
Continence – women’s health ............... □13 Renal/Nephrology ................................. □31
Diabetes............................................. □14 Sexual health ........................................... □32
Drug & Alcohol .................................. □15 Urology ................................................... □33
Emergency ........................................ □16 Women’s health ....................................... □34
Generalist, remote areas..................... □17 Wound management .............................. □35
Genetics............................................. □18 Young people’s health ............................ □36
High dependency................................ □19
Other (please specify)......................... □37

EMPLOYMENT PROFILE

The next section asks about your current employment profile both as a NP and for any other nursing or health-related job in which you may be working.
(Please do not include any other employment that is non-health related)
33. In your last working week, what was the nature of your employment?

I worked full-time as a NP ................ 1
I worked part-time in a dual role  ........... 1
I worked part-time as a NP only ........... 2 (NP and other nursing/health-related role) ........... 3

34. In your last working week, how many hours in total did you work in the following job/s?
(Please include any paid or unpaid overtime and answer to the nearest hour)

In NP job/s? 
In other nursing health-related job/s ... 
Total hours ..............................................

35. In your last working week, please select the category that best describes the principal place where you worked.
(please select only one box in each applicable column)

<table>
<thead>
<tr>
<th>(a) NP job</th>
<th>(b) Other job (if applicable)</th>
</tr>
</thead>
</table>
| Private medical practitioner rooms/surgery (including 24-hour medical clinics) | 1  
| Public hospital-acute care | 2  
| Private hospital-acute care | 3  
| Public outpatient clinic | 4  
| Private outpatient clinic | 5  
| Public ambulatory centre | 6  
| Private ambulatory centre | 7  
| Public Day procedure centre | 8  
| Private Day procedure centre | 9  
| Public Residential aged care centre | 10  
| Private Residential aged care centre | 11  
| Other Residential aged care centre | 12  
| Public Hospice | 13  
| Private Hospice | 14  
| Public Community health centre | 15  
| Private Community health centre | 16  
| Non-government community nursing organisation | 17  
| Public Rural and remote centre | 18  
| Private Rural and remote centre | 19  
| Defence force facility | 20  
| Government department or agency | 21  
| Public school | 22  
| Private school | 23  
| Public Commercial/Industry/business eg pathology | 24  
| Private Commercial/Industry/business eg pathology | 25  
| Other General nursing Public (please specify) | 26  
| Other General nursing Private (please specify) | 27  
| Other non-nursing health related (please specify) | 28  |
36. In your last working week, which of the following best describes your employment conditions in your principal NP job and for any other nursing or health-related job?

<table>
<thead>
<tr>
<th>(a) NP job</th>
<th>(b) Other job (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td></td>
</tr>
<tr>
<td>Fixed term or temporary contract</td>
<td></td>
</tr>
<tr>
<td>Own business or other</td>
<td></td>
</tr>
</tbody>
</table>

We are interested in the allocation of responsibilities in your current role/s. Please make the balance add up to 100%. For example, direct patient care 70%, research 20%, administration 10%.

37. In your last working week, approximately what PERCENTAGE of time did you spend performing the following role/s?

<table>
<thead>
<tr>
<th>(a) NP job/s</th>
<th>(b) Other job/s (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct patient care</td>
<td></td>
</tr>
<tr>
<td>Administration and management</td>
<td></td>
</tr>
<tr>
<td>Education of patients</td>
<td></td>
</tr>
<tr>
<td>Education of nurses</td>
<td></td>
</tr>
<tr>
<td>Education of medical and/or allied health colleagues</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>Other, please specify</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

We would like to know where you work as a NP.

38. What is the postcode of your principal NP workplace? [ ] [ ] [ ] [ ]
   If you practise in more than one place, please list the postcodes of your other main workplace(s).

39. In which suburb / town / locality is your NP workplace? ...............................................................
   If you practise in more than one place, please list the other suburb/town/locality in which you also practise.

40. In which Australian State or Territory is your NP workplace/s?
   SA........ 1    TAS ....... 4    QLD ....... 7
   WA ....... 2    VIC ....... 5    ACT ....... 8
   NSW ....... 3    NT ....... 6
41. Have you returned to work as a NP in the last 12 months, after a period of unpaid absence?

Yes .... □1 go to Q 42

No...... □2 go to Q 43

42. For how long was the absence?

Years □□ & Months □□

43. My current NP position was initiated primarily by:

(please select the ONE most relevant)

Myself .................................................. □1 Self and Department of Health .... □5
Health service and Department of Health .... □2 Health service ..................... □6
Department of Health .............................. □3 Other (please specify) .... □7
Self and health service ............................. □4 Now go to Q 45

This question only relates to you if you are not currently employed as a NP.

44. LAST WEEK, did you take active steps to look for work as a NP in Australia?

(Active steps include: applying for work as a NP, enquiring about a job, answering an advertisement, registering with an employment agency, advertising for work or contacting people in the profession about a job.)

No.......................................................... □1
No, because about to start working as a NP ................. □2
Yes, looked for full-time work as a NP ..................... □3
Yes, looked for part- time work as a NP ..................... □4

You are helping us a great deal. Please continue!
Throughout this section we refer to ‘Clinical Protocols’. This term encompasses the various phrases used in each state or territory. (ACT – Clinical Practice Guidelines, NSW – Practice Guidelines, QLD – Health Management Protocols, SA – Guidelines and Protocols, VIC – Clinical Practice Guidelines, WA – Clinical Protocols, NT – Clinical Practice Guidelines).

45. Is your capacity to work as a NP determined by clinical protocols?
   Yes ....  □1 go to Q 46
   No...... □2 go to Q 50

46. Are your clinical protocols developed?
   Yes .... □1 No...... □2

47. Are your clinical protocols approved?
   Yes .... □1 No...... □2 N/A.... □3

48. Are you working under clinical protocols but awaiting approval to prescribe medications?
   Yes .... □1 No...... □2 N/A.... □3

49. Which of the following categories are included in your medication protocols, whether approved or not?
   (please select one box on each line)
   Schedule 2 ......................... Yes □1 ........... No □2.......... N/A □3
   Schedule 3 ......................... Yes □1 ........... No □2.......... N/A □3
   Schedule 4 ......................... Yes □1 ........... No □2.......... N/A □3
   Schedule 8 ......................... Yes □1 ........... No □2.......... N/A □3
   Section 100.......................... Yes □1 ........... No □2.......... N/A □3
50. To whom do you refer patients?
(please select all that apply)

- Allied health professionals .................................................. □ 1
- Staff specialist within my Area Health Service ........ □ 2
- Specialists outside my Area Health Service ............. □ 3
- General Practitioners .......................................................... □ 4
- Other (please specify) ........................................................... □ 5

51. Which of the following diagnostic tests are relevant to your practice?
(please select all that apply)

- Radiology .......................................................... □ 1
- Biochemistry tests ................................................ □ 6
- Nuclear medicine tests ........ □ 2
- Respiratory function tests ...... □ 7
- Cytology tests .................................................. □ 3
- Psychological tests ............................... □ 8
- Microbiology tests .......................... □ 4
- Ultrasound tests ........................................ □ 9
- Haematology tests .......................... □ 5
- Other (please specify) ..................... □ 10

52. Do you have hospital admission privileges

- Yes .... □ 1
- No...... □ 2

53. Do you have hospital discharge privileges

- Yes .... □ 1
- No...... □ 2

54. Who provides your professional indemnity insurance?
(indemnity insurance may be incorporated in your terms of employment)

- Royal College of Nursing Australia ........... □ 1
- Australian Nursing Federation ................. □ 2
- No indemnity insurance ....................... □ 3
- Don’t know .................................................. □ 4
- Other (please specify) ......................... □ 5
Our final questions ask for your opinion about barriers and enablers to your current clinical work as a NP.

55. To what extent do the following limit your practice as a NP?
(please circle the number that best describes your response)

<table>
<thead>
<tr>
<th>Option</th>
<th>Not at all limiting</th>
<th>Extremely limiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. No authority to prescribe through the Pharmaceutical Benefits Scheme</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b. No authority to issue sick leave certificates</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c. No Medicare Provider Number</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d. Limits set by professional indemnity insurance</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e. No authority to issue workers’ compensation certificates (i.e.):</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>WorkCover Certificate of Capacity (VIC) or WorkCover Medical Certificate (NSW) or Prescribed Medical Certificates (PMCs) (SA) or Workers’ Compensation Medical Certificates (QLD &amp; ACT &amp;WA &amp;NT &amp;TAS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Lack of support from within the nursing profession</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>g. Lack of organisational support</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>h. Lack of legislative support</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

56. Please expand on any issues you have indicated in Q55 above and include any other factors that you believe limit your practice as a NP.

........................................................................................................................................
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YOU HAVE FINISHED. THANK YOU FOR YOUR TIME

Please return the questionnaire in the reply-paid envelope supplied to:


References and Readings


