



# REPORT ON CURRENT NURSING PRACTICE ON ROTTNEST ISLAND: POTENTIAL FOR THE NURSE PRACTITIONER ROLE

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**MARCH 2002**



The authors wish to acknowledge the contribution of Curtin University students Kerry Smeathers, Malcolm Hare, Laurina Holland and Nicola Oxley in the compilation of the literature review and collection of data.

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## TABLE OF CONTENTS

	<b>PAGE</b>
<b>1.0 EXECUTIVE SUMMARY</b>	<b>5</b>
<b>2.0 INTRODUCTION</b>	<b>8</b>
<b>3.0 BACKGROUND TO THE STUDY</b>	<b>9</b>
<b>Nurse practitioner</b>	<b>10</b>
<b>Areas of practice</b>	<b>13</b>
<b>4.0 SIGNIFICANCE OF THE STUDY</b>	<b>14</b>
<b>5.0 RESEARCH OBJECTIVES</b>	<b>15</b>
<b>6.0 METHOD</b>	<b>15</b>
<b>Sample and Sampling Methodology</b>	<b>15</b>
<b>Instrument</b>	<b>16</b>
<b>Data Collection</b>	<b>16</b>
<b>Analysis</b>	<b>16</b>
<b>7.0 RESULTS</b>	<b>17</b>
<b>Descriptive statistics</b>	<b>17</b>
<b>Health Issues</b>	<b>17</b>
<b>Documentation</b>	<b>19</b>
<b>Nurse-led Care</b>	<b>22</b>
<b>Standing Orders</b>	<b>24</b>
<b>Medication Administration</b>	<b>26</b>
<b>Wound Care</b>	<b>28</b>
<b>Nursing Interventions</b>	<b>29</b>
<b>Tests and Procedures</b>	<b>30</b>
<b>Paramedic Role</b>	<b>31</b>
<b>Primary Health Care</b>	<b>32</b>
<b>Advanced Practice Role</b>	<b>33</b>

<b>8.0 DISCUSSION and RECOMMENDATIONS</b>	<b>35</b>
<b>Health Issues</b>	<b>35</b>
<b>Documentation</b>	<b>37</b>
<b>Nurse-led Care</b>	<b>39</b>
<b>Nurses in Isolated Practice</b>	<b>41</b>
<b>Medications</b>	<b>42</b>
<b>Pharmacy Issues</b>	<b>42</b>
<b>Interventions and Tests</b>	<b>43</b>
<b>Client Health Education</b>	<b>46</b>
<b>9.0 APPENDIX 1</b>	
<b>Rural and Remote Nursing Competencies</b>	<b>48</b>
<b>10.0 APPENDIX 2</b>	
<b>Client’s Perception of Presenting Problem</b>	<b>54</b>
<b>11.0 APPENDIX 3</b>	
<b>Rottnest Island Audit of Nursing Practice Tool</b>	<b>62</b>
<b>12.0 REFERENCES</b>	<b>70</b>
<b>TABLES</b>	
<b>Table 1 Type of medication administered by the nurses</b>	<b>26</b>
<b>Table 2 Nursing interventions performed by the nurses</b>	<b>29</b>

## **EXECUTIVE SUMMARY**

Rottnest Island is unique in that it has a small number of residents and a visitor population of approximately 400,000 tourists annually. Nurses at the Rottnest Island Nursing Post provide emergency and primary health care services to all in need of health care on the Island. Although the community is inaccessible by road and more than 20km by sea from the mainland, Rottnest Island is not currently classified as a rural or remote health service facility but considered an area of isolated practice.

The aim of this study was to examine the current nursing practice at the Rottnest Island Nursing Post (RINP). In addition, the study was designed to provide an account of the nursing activities of the Rottnest Island nurse to inform a preliminary description of the scope of the advanced practitioner's role. A retrospective study was conducted and a random sample of 1024 client records, over a twelve-month period from 01/11/99 to 31/10/2000, were selected and audited at the Nursing Post.

The findings show that the nurses at the RINP work as independent practitioners responsible for their own decision-making and are accountable for their practice. They demonstrate a vast array of skills and knowledge in assessment, diagnosis, nursing care and evaluation. In the context of the research the nurses assume roles that are normally restricted to the medical practitioner, but because of the isolation of their practice and the lack of other accessible and available health professionals they work independently. Thus, their practice is extended and requires the recognition and acknowledgment of advanced nursing practice.

The study demonstrates that there is indeed a need to legitimise the expanded role of the nurse, clarify the scope of nursing practice, and enable clinical autonomy. The diverse nature of nursing practice in this community means that there is potential for development of the role of the Nurse Practitioner when legislation in Western Australia permits this. The study prepares the foundation for the development and implementation of the Nurse Practitioner role in this isolated nursing practice setting because it has been able to identify and articulate the scope of current advanced nursing practice. Advanced practice involves defensible clinical decisions directed by scientific knowledge and the needs of the client (Keyzer, 1997). The findings of the current study are also consistent with earlier research that confirms that community

health nurses must be current in their diagnostic and technical skills concerning an array of issues, because clients present with complex and varied health problems (Kozlak, 2000). Indeed this is the case at the Rottnest Island Nursing Post.

Of particular importance in the findings is the exemplary care provided by the Rottnest Island nurses, their immense knowledge base, care, skill and systematic decision-making in the provision of superior client care. The scope of nursing practice is indeed broad and encompasses all aspects of health care and service delivery. As a result of the study several recommendations to acknowledge and improve nursing practice at the RINP have been made. They are placed in no particular order but reflect the findings of the study as the process of the research unfolds. Attention is drawn to the recommendation that these nurses be recognised for their advanced practice role, and that the status of Nurse Practitioner be considered to appropriately reward and compensate these excellent health professionals as they strive to provide quality health care.

Recommendation 1: To revise the current method of HCare data collection and replace it with a system that is based on a nursing model of care in order to clearly record the scope of nursing practice. There are many settings, similar to Rottnest Island, where nurses are currently using a system that does not reflect their practice.

Recommendation 2: That further education for nurses be provided to ensure improvement in their documentation. Emphasis on the importance of documentation in relation to all facets of nursing care is needed and consideration given to the adoption of more sophisticated computer technology.

Recommendation 3: That policies and procedures be implemented to afford the Rottnest Island nurse the legal protection required so that the scope of nursing practice is articulated and delineated.

Recommendation 4: That each page of the standing orders be signed by the medical officer to ensure legality of the Rottnest Island nurse's action.

Recommendation 5: That the Rottnest Island nurses in isolated practice be afforded the same conditions and status as Rural and Remote nurses, with Nurse Practitioners appointed to the Nursing Post as soon as the Western Australian legislation permits.

Recommendation 6: That further education be provided to the Rottnest Island nurses in regard to the safe administration and responsibility associated with the promotion and administration of Schedule 2 and 3 drugs.

Recommendation 7: That a review of the pharmacy role of the Rottnest Island nurse be undertaken in collaboration with the Chief Pharmacist at Fremantle Hospital. In addition, that the drugs on the imprest system be reviewed to ensure safe and effective practice.

Recommendation 8: That the Rottnest Island Authority be consulted in relation to relieving the nurse of the transport role which may impinge on the delivery of safe and appropriate client care

Recommendation 9: A need for more health promotion campaigns on the Island for holiday-makers, workers and residents consistent with the primary health care philosophy. These programs could promote health and well being for workers and residents and inform holiday-makers of the potential for injury on the Island (marine and bicycle injuries).

Recommendation 10: A comprehensive marketing campaign concerning the role of the Rottnest Island nurse and the Nursing Post is required. This campaign could also promote health and inform potential holiday-makers of the essential medical provisions to bring to the Island.

## **INTRODUCTION**

Rottnest is a small island in the Indian Ocean approximately 22 kms from mainland Western Australia and the nearest point of access to the mainland is the Port of Fremantle. It has a small permanent population of between 150-400 residents depending on the season. However, Rottnest Island is unique in that it has a transient population of approximately 400,000 tourists annually, the busy periods being school holidays, public holidays and weekends. Visitor numbers are increasing in the winter months due to major advertising campaigns by the Rottnest Island Authority. Although the community is isolated Rottnest Island is not currently classified as a rural or remote health service facility, but this is presently under consideration.

The health service to the island is provided at the Rottnest Island Nursing Post with tertiary health care facilities more than an hour away by air or sea. The nursing post has facilities to attend to 30 clients per day, on average, and provides accident and emergency facilities and primary health care services for the permanent and transient residents. During the winter months (May to November) there is no resident medical officer on the island. The nursing post operates 24 hrs a day with the nurse required to attend after hours on an on-call basis via Health Direct contact. There are three nurses who reside on the Island with one employed as a level 3 nurse manager and two employed as level two clinical nurses. In addition there are approximately 8 nurses employed in a casual capacity. The nurses respond to all emergency situations and triage responsibilities are conducted according to the patient's needs prior to consultation with the medical practitioner.

Under the existing legislation, registered nurses at Rottnest Island Nursing Post (RINP) are not permitted to prescribe or administer Schedule 4 or Schedule 8 drugs unless working under the supervision of a medical practitioner or referring to standard orders. When there is no medical practitioner on the island the nurses rely on telephone consultations with the Emergency Department at Fremantle Hospital, other appropriate hospitals and departments, and patient's own general practitioners. Standard Treatment Protocols are in place for certain conditions but directives are often obtained by facsimile, phone and e-mail from Fremantle Hospital. For nursing staff to work within the legal parameters of their practice, telephone consultations are



necessary for guidance and drug usage and pertain to almost all occasions of service including minor medical ailments. This practice is cumbersome and time consuming and results in extended waiting times for clients.

Nurses in remote and rural areas are not officially recognised as autonomous practitioners, as the literature has indicated (Smith, 1996) hence, it is important to review the Rottnest Island nurses' role. Moreover, Cramer (1998) indicated that there is little evidence of how nurses practise in remote areas. It is believed that nurses at Rottnest Island work at an advanced nursing practice level that involves defensible clinical decisions directed by scientific knowledge and the needs of the client (Keyzer, 1997). Advanced practice nurses are described as 'tricultural and trilingual' – they have knowledge, practice and skills of the cultures of mainstream nursing, biomedicine and everyday life (Brykczynski, 1999). An exploration of the functions and activities of these nurses may highlight current nursing practice at RINP. This is especially timely when there is a desire on the part of health authorities to address the need for autonomous nursing practice, improved management and continuity of high quality health care in rural and remote areas.

## **BACKGROUND AND LITERATURE REVIEW**

It is assumed that in rural and remote areas nurses provide comprehensive care for their community. According to McMurray (1993) remote area nurses are primary caregivers contributing to many aspects of community health, usually on an on-call basis, 24-hours a day. Harris (cited in McMurray, 1993) articulated their role stating it requires an independent spirit, confidence in clinical and interpersonal skills, as well as being resourceful and committed to the community. Several nurse scholars have claimed that rural and remote area nurses are working in the capacity of Nurse Practitioners (Chang, Daly, Hawkins, McGirr, Fielding, Hemmings, O'Donoghue & Dennis, 1999; Harford, 1993; Smith, 1996). They argued that these nurses are working in roles requiring an advanced level of practice. This confirms the 1992 NSW nurse practitioner's discussion paper which first originated the need, at a national level, to examine the utilisation of nurses in the community (cited in McMurray, 1993).

To comply with the request to articulate the community nurse's role there is an urgent need to examine and formalise the Nurse Practitioner (NP) role in Western Australia in order to recognise and substantiate the advanced nursing role of those working in rural and remote communities. Nurses at RINP, like many others working in Western Australian communities, require expansion of the nursing role to legitimise their current positions. Many of these nurses would argue that currently they work independently in practice, and are responsible and accountable for nursing decision-making and nursing actions. Cramer, (1998) found that one of the main problems of remote area nurses was the lack of role clarity with the overlap between medical and nursing practice being the cause of role ambiguity. This also is supported by the work of Kreger (1991) who stated that the lack of guidelines leaves nurses open to abuse from the system. Although autonomous practitioners, rural and remote nurses are not officially acknowledged or reimbursed for their role in the health care of the community (Smith, 1996). Therefore, a need exists to sanction, support and recognise their practice appropriately through legislation. Hence, a research study that enables nurses to examine the scope of nursing practice is urgently needed.

### **Nurse Practitioner**

Until recently there has been no formal recognition of the Nurse Practitioner (NP) role in Australia unlike the United States (Harford, 1993) and the United Kingdom (Read & George, 1994). Although they have been recognised in some overseas countries for several years, they occupy a relatively new role in the health service within Australia and currently are able to practice only in NSW. In Western Australia changes to the legislation to enable the role of NP are currently before the legislative council for consideration. Despite the legitimisation of the role, much of the literature suggests that in certain areas of Australia, such as rural and remote, registered nurses have already been working in the capacity of a NP. This review of the literature outlines the need, role, education requirements and effectiveness of the independent nurse practitioner.

A suitable definition of the Nurse Practitioner (NP) role in Australia has been identified, however, and is consistent with the delineation of the nurse's role in communities similar to Rottnest Island. A NP is:

‘a registered nurse working in an advanced clinical role the characteristics of which will be determined by the context in which they are authorised to practice and which includes the legislative authority to exercise clinical functions not currently within the scope of nursing practice’(National Nursing Organisation, 2000:1).

The definition highlights role explication as an issue of considerable importance for those nurses working in rural and remote areas in Australia. Nursing evolves to meet the needs of the community and nurses undertake tasks in order to enhance the wellbeing of the community (Chiarella, 1998). The Nurse Practitioner (NP) role is an extension of nursing practice and therefore an important addition to health care services. The role blends the knowledge and skills of medicine and nursing in such a way as to ensure that the holistic, person-focus is not compromised or lessened (Brykczynski, 1999). Nurse Practitioner’s have an appropriate mix of skills, are concerned with public safety and provide services that are responsive, safe and effective (Chiarella, 1998). Thus, acknowledgement and recognition of the NP role will facilitate a pro-active approach in meeting the needs of the local community.

In some settings currently, nurses assume roles that are normally restricted to the medical practitioner because of the isolation of their practice and the lack of role clarity. Hence, the need to legitimise the expanded role of the nurse, clarify the scope of nursing practice, and enable clinical autonomy. However, the diverse nature of nursing practice in rural communities, means that there will not be uniformity in the role of the NP (Appel & Malcolm, 1999). The role will in fact be delineated by the context in which practice occurs and this will require educational preparation for advanced nursing practice suitable for application in a variety of milieu. To prepare for this challenge, and because of the array of nursing interventions in different situations, an analysis is necessary to define current nursing practice. This can be accomplished through audits, evaluation and research.

Thus, in order to prepare for the development and implementation of the NP role it is essential that rural and remote nursing practice settings identify current advanced nursing practice. Advance nursing practice involves defensible clinical decisions

directed by scientific knowledge and the needs of the client (Keyzer, 1997). Advanced practice nurses are described as ‘tricultural and trilingual’ – they have knowledge, practice and skills of the cultures of mainstream nursing, biomedicine and everyday life (Brykczynski, 1999).

The impetus for the development of the NP role is the result of changes in health care management styles that have occurred due to cost containment, emphasis on primary and community care, medical technology advances, and increased specialisation within nursing and medicine (Offredy, 2000). In NSW, the NP role development was guided by the principles of collaborative planning, inclusion of a multi-disciplinary team and an agreed, identified local need of a health service (NSW Health Department, 1998). Walsh (2000) described development of the NP role in the United Kingdom and stated the role was implemented in response to a need for primary health care (PHC) for people in remote and rural areas. Hooke, Bennett, Dwyer, van Beek and Martin (2001) stated that the development of the NP role at one health centre occurred due to being unable to staff the centre with general practitioner’s (GPs), and the client’s need for reduced waiting times.

Thus it is argued the aim of NPs is to improve health services and increase diversity and flexibility of health care (Armstrong, 2001). Brykczynski (1999) viewed the role of the NP as one that combines the positive aspects of both nursing and medicine in order to achieve humanistic health care in an environment of economic constraints. Services provided by NPs complement, they do not replace, those provided by GPs, offering an alternative means of health care (Keegan, 1998). The NP works to either manage the health needs of the patient or refer the patient if appropriate and necessary (Walsh, 2000). The goal is that they work collaboratively with other health care providers, and within their specialist and authorised area of practice provide expert nursing care (Armstrong, 2001). Keegan (1998) stated the role was to work within a model focussed on the global trend of PHC and illness prevention.

There is strong support for the NP role in rural emergency settings. In a randomised trial of 232 clients, using quantitative and qualitative methods, there was no significant difference in client satisfaction whether treated by a nurse or medical

practitioner in the emergency context (Chang, Daly, Hawkins, McGirr, Fielding, Hemmings, O'Donoghue & Dennis, 1999). This finding was previously endorsed by Strange (1994) and Lewis and Woodside (1992) in studies that found client satisfaction with NPs was consistently high. Experiences in 10 pilot research projects in the 'Nurse Practitioner Project' in New South Wales was also supportive of the advanced nursing role. Findings suggested that consumers had improved access to health services and that NPs satisfied consumer expectations (NSW Department of Health, 1995).

Hooke et al (2001) reported that nurses working in the role of NPs satisfied the guidelines for best practice, were appropriate and effective in their roles and that they were able to perform enhanced clinical practice. Other improvements in client care have also been noted. Kinnersley et al (2000) and Venning, Durie, Roland, Roberts and Leese (2000) found that consultations with NPs as opposed to GPs were longer in time and were more satisfying to the patient. Significantly more clients were informed of the causes, symptoms, relief and action to take if the problem persisted when they consulted a NP. There were no differences in symptom resolution and prescriptions (Kinnersley et al., 2000) but more opportunistic screening in primary care when seen by a nurse compared to a GP (Venning et al., 2000). It is believed that reduced consultation time or return rates of clients means that NPs are also more cost effective than GPs (Venning et ., 2000).

### **Areas of Practice**

There is debate concerning the areas of practice for Nurse Practitioners and the NSW Nurses' Registration Board has focussed on maternal and child health, high dependency, mental health, rehabilitation, medical/surgical and community health nursing (Armstrong, 2001). However, inequities such as access and provision may occur for some populations within health care services (Offredy, 2000). An area of particular need is rural and remote areas, when compared to metropolitan areas. This is consistent with implementation in the UK where NPs are employed to focus on farm accidents, mental health and occupational diseases in selected rural areas (Walsh, 2000). Kinnersley, Anderson, Parry, Clement, Archard, Turton, Stainthorpe, Fraser, Butler and Rogers (2000) stated that their research supports acceptance of the

role of the NP in treating clients requiring same day consultations in primary care. Another area of employment for NP's is within research and Keegan (1998) supported the establishment of sound research results to emphasise the importance of health promotion and illness prevention.

Although in Western Australia the implementation of the first NP is proposed for rural and remote nursing practice settings in the initial phase (HDWA, 2000), there is a case to be made for the use of NPs in isolated practice areas also. Nursing posts, such as that at Rottnest Island, provide primary care services, treat accident victims, deal with mental health problems, promote primary health care and provide same day consultations, often without medical care available. These are all areas articulated in the literature as being suitable and advantageous (Walsh, 2000; Kinnersley et al., 2000), from an economic and care perspective, for clients. Thus, the proposed research seeks to document nursing roles and functions in the Rottnest Island isolated practice setting in order to build an argument for the immediate implementation of NPs in this context, as soon as the Western Australian legislation permits. It is also important to understand the advanced nursing practice role in order to develop clear policies to allow nurses to order diagnostic radiology and pathology, interpret tests, prescribe and refer clients (Chiarella, 1998).

## **SIGNIFICANCE**

The current study is necessary to provide important information to substantiate the advanced nurse's role in an isolated community with characteristics similar to rural or remote nursing posts. It is anticipated that this knowledge will enable a realistic appraisal of the expanded role of the nurse on Rottnest Island when the Nurse Practitioner role is legitimised in Western Australia. In addition to contributing to an understanding of the advanced practitioner's role the proposed project will provide evidence of patient care outcomes and create a benchmark for standard nursing practice in such settings. It is acknowledged that meaningful data has already been gleaned from the New South Wales experience of the NP role. However, it is important to conduct the proposed research in Western Australia given that the context of nursing practice is unique in terms of the vastness and isolation of the geography.

## **RESEARCH OBJECTIVES**

- To audit current nursing practice at the Rottneest Island Nursing Post.
- To identify, from the available data, the current nursing activities of the Rottneest Island nurse to inform a preliminary description of the advanced practitioner's role.

## **METHOD**

A retrospective study design was employed in the research. Using an audit tool developed specifically for the study, records of cases were randomly selected and audited. The records reviewed included those that involved emergency clients who accessed the nursing post in a 24 hour period, seven days a week and also the primary health care clients of the Island nurses.

### **Sample and Sampling Methodology**

A random sample of 1024 client records, over a twelve-month period from 01/11/99 to 31/10/2000, were selected and audited at the Nursing Post. To select the random sample of client records, five data sets, representing all the HCare statistics of the nursing staff working at the Nursing Post during the study period, were used. Each data set included 41 to 59 pages with a maximum of 20 client contacts per page: a target population of about 7,000 cases. The random sample of client records was selected using a Research Randomizer program available on the Internet (i.e., [www.randomizer.org/form.htm](http://www.randomizer.org/form.htm)).

A sample size calculator, for random samples, was used to estimate the required sample size prior to the commencement of the study. Based on a target population of 7000 cases per year, 926 records were required to achieve a 95% confidence level with a confidence interval of 3 ('Creative Research Systems' <http://www.surveysystem.com/sscalc.htm>). Hence, it is suggested that a sample size of 1024 records is justified as representative of cases attended over the twelve-month period.

## **Instrument**

The audit tool developed specifically for this study, encompassed all the elements of the 'daily patient record' and 'performance indicator' tools identified by Cramer (1999) in research pertaining to rural and remote nursing practice. Cramer granted permission for reference to, and modification of, the tool. The Rottnest audit instrument was developed by a panel of expert community health nurses and piloted extensively on patient records at Rottnest Island prior to the main survey. Several changes were made to the tool during the pilot testing including, the ordering of questions as well as the breadth of questions to ensure validity of the tool and a reflection of current nursing practice. None of the piloted records have been included in the main survey. The team of researchers who collected data were instructed by the main investigator on use of the tool prior to commencement. In addition, inter-rater reliability of the instrument was measured with pairs of researchers comparing their responses and reaching consensus to ensure reliability of the tool.

## **Data Collection**

Data collection included a thorough review of each client record selected. The review was conducted on resident, transient and commuter client files, and non-resident records. This has meant a detailed examination of the relevant triage records in the Nursing Post in relation to accident and emergency cases. Child health records have also been included in the random sample to cover primary health care contacts. Use of the evacuation book (Royal Flying Doctor Service/transfer by ferry), after-hours call-out book, records of calls to Fremantle Hospital and meeting records have also been included in the audit.

## **Analysis**

Data related to the first 588 client contacts was recorded onto the audit tools, and these tools were scanned, using Remark II software, and readied for subsequent analysis using the Statistical Package for Social Sciences (SPSS Version 10.0). Data from client contacts 589 to 1024 were manually entered into SPSS. All records were thoroughly checked by the researchers and qualitative data entered and coded. The analysis of the full data set comprised descriptive and inferential statistics. A



descriptive review of the findings and issues related to nursing practice evident in the audited records is presented below.

## **RESULTS**

### **Descriptive statistics**

The sample of 1,024 audited client records from the Rottnest Island Nursing Post (RINP) primarily comprised 83% non-residents (n=848), that is, visitors to Rottnest Island, with the next largest cluster of clients being transient residents (11%, n=113). This group consisted of those individuals who do not permanently live on the Island but reside for long periods of time usually over the summer vacation period for work purposes. Five percent of the client records reviewed were residents (n=54), with a substantially smaller group of clients (1%) being commuters (n=9), that is, those commuting to the Island for work on a daily basis. The age of the clients in the sample ranged from 7 days old to 89 years ( $M=28.10$ ,  $SD=20.06$ ). The median age of the sample was 23 years. Of the clients, 52% were female, 48% were male, and on one occasion a group of school children receiving primary health care were included in the sample.

An examination of the postcodes recorded for each client revealed that participants came from a variety of geographical zones in metropolitan and rural Western Australia (n=932, 91%), as well as interstate (n=47, 5%), and internationally (n=42, 4%) with 3 missing cases. Of those Western Australian clients not residing on Rottnest, approximately 58% of these came from the more affluent Perth suburbs, including Applecross, Claremont, Churchlands, Cottesloe, Dalkeith, Floreat Park, Hillarys, Marmion, Nedlands, Peppermint Grove and Wembley Downs.

### **Health issues**

Based on the HCare statistic codes used at the RINP, the primary health issues identified by the nurses included 36% injuries (n=367), 12% skin and subcutaneous tissues problems (n=124), 11% respiratory system problems (n=118), 10% nervous system and sense organs (n=97), 9% miscellaneous health issues (n=90), 8% digestive system concerns (n=79), 4% musculoskeletal system problems (n=38), 3% reproductive system and pregnancy issues (n=28), 2% genito-urinary system

difficulties (n=24), 1% circulatory system problems and 1% immunisation (n=13), 0.95% mental health (n=10), 0.85% social health issues (n=9), 0.55% blood/blood forming organs (n=6), 0.25% infectious and parasitic diseases, and 0.25% endocrine/nutritional/metabolic/immunity problems (ns=3), and 0.15% speech and language difficulties (n=2).

The services provided to clients at the RINP for the primary health issues identified included 43% treatment (n=436), 21% drug therapy/management (n=218), 15.8% assessment (n=162), 13% multiple services (n=128), 2.8% review or re-assessment (n=29), 2% advocacy/liaison (n=24), 0.76%, immunisation (n=8), 0.48% practical assistance (n=5), 0.39% counselling (n=4), 0.25% screening (n=3), 0.15% psychometric assessment, 0.15% equipment/plan – provision/instruction, 0.15% health education/promotion (ns=2), and 0.07% client transport only (n=1).

**Exemplar – Miscodes for primary health issues ‘service provided’**

The nurses, on occasion, incorrectly coded the service provided to clients in the HCare statistics. For example, a 45 year-old female client presented with a cut foot related to a probable cobbler sting. This required immersing the foot in hot water and infiltrating the area with lignocaine for pain relief. Oral Panadeine Forte was used together with a non-steroidal anti-inflammatory (Ibuprofen). The ‘service provided’ was recorded as multiple services on the client’s notes when in fact the nurse was the only service provider for this client. Hence, the code was inappropriate and should have been coded as a treatment only.

The service results from the HCare statistics revealed in 64% of cases no further action/treatment was required (n=651). In 16.7% of cases clients were referred (n=172), 15% further review/treatment was required (n=156), 2% client evacuation was the outcome (n=21), 1.8% further support/monitoring was required (n=19), 0.40% were immediately discharged (n=4), and 0.10% the client did not attend/not at home (n=1).

**Exemplar – Miscodes for primary health issues ‘service results’**

A 62 year old female client presented for assessment of a leg wound and treatment. The ‘service results’ in the HCare statistics indicated that the client was for referral which was not the case. In fact the client was to return to the nurse for review of the case. This occurred often in the nursing notes where ‘referred’ was coded frequently when the client was to be reviewed or monitored by the nurse.

## Documentation

Overall, the documentation by the nurses was satisfactory but not always accurate with 54 identifiable occasions (5%) where a code for a primary health issue was inappropriate. In addition there were another 10 cases (1%) where the presenting problem was miscoded. In all instances, these latter miscodes related to immunisation as the primary health issue. The nurses were confronted with numerous presenting problems (Appendix 2), many of which were not easily coded into the HCare framework. There were 135 occasions (13%) where a code for the service provided was inappropriate. The majority of these involved the code 'multiple services' (n=115) where the appropriate code should have been recorded as a 'treatment provided'. Other miscodes included drug therapy/therapy (n=7), practical assistance (n=5), immunisation (n=3), assessment (n=2), advocacy/liaison, review or re-assessment, and treatment (ns=1). Double entries in the documentation were also reported resulting in inaccurate information collected. The double entries could have been avoided if the nurse had appropriately recorded a primary and secondary health issue for one occasion of service for the client. It is clear from the audit results that there were instances in which the HCare statistics do not reflect the services provided by the nurses at the Nursing Post.

### Exemplar – Documentation

In many cases the codes used by the nurses in their documentation of the HCare statistics were not descriptive of the clients nursing problem, nursing diagnosis, nursing care or discharge planning. One reason for this may be the medical model around which the HCare statistics appear to have been formulated. For example, where the problem and nursing care related to simple or complex wound care the only option for nurses was to document 'skin lesions' in the statistics.

There was also inaccuracy in documentation with regard to how some procedures were coded. For example, 'fish hook' in some cases was coded as 'sport and recreation', 'minor injury', 'limb injury' or 'foreign body'. Of course none of these codes illustrated the level of care provided by the nurse or the advanced skills required to care for the client with this problem.

Furthermore, there were 11 occasions (1%) where the 'service results' were coded inappropriately. The two codes used most often were client evacuation (n=5) and referred (n=5). The final miscode for service results involved further support/monitoring required. In seven of these cases, the appropriate code to use should have been no further action or further review/treatment. In the final four cases,

the appropriate code should have been further review/treatment required. The findings also revealed, generally, a lack of attention to detail in the nursing documentation making it difficult to extract data in the audit.

In addition to the identification of primary health issues, 66 clients also had secondary health issues recorded by the nurses. These health issues included 30% immunisation (n=20), 15% injuries (n=10), 11% respiratory system problems (n=7), 9% skin and subcutaneous tissues problems (n=6), 8% nervous system and sense organs (n=5), 6% social health issues (n=4), and 4.5% endocrine/nutritional/metabolic/immunity problems (n=3), 3% reproductive system and pregnancy issues, 3% genito-urinary system difficulties, 3% miscellaneous health issues, 3% digestive system concerns (ns=2), 1.5% circulatory system problems, 1.5% musculoskeletal system problems, and 1.5% infectious and parasitic diseases (ns=1).

#### **Exemplar – Coding of primary and secondary health issues**

Due to the limitations of the HCare statistics, the coding of health issues and the services provided by the nurses was not well demonstrated in the documentation. The nurses, therefore, are not providing adequate information about the care they provide. Often the documentation and recorded statistics did not reflect the complexity of the decision making involved in client care. For example, in the following case a nurse recorded 'multiple services' in relation to the primary health issue service provided rather than correctly reflecting the care given and documenting a second health issue. A 28 year old female fell from her bicycle and sustained facial lacerations, broken teeth and a suspected head injury. The nurse recorded in the statistics that she provided 'multiple services' in relation to a head injury. The more appropriate code would have been 'treatment provided'. The nurse's role was to diagnose and treat several health issues including wound care and dental trauma. All of these injuries required that the client to be referred to the mainland for further treatment.

Another example demonstrating the complexity of the cases seen by the nurses, and the difficulty with the HCare system, involved a 42 year old male client who presented with an irritable eye and was treated for an eye infection with the appropriate treatment and referral to the doctor being documented. The client's history also revealed he was a newly diagnosed type 2 diabetic. The nurse, being concerned about diabetic complications assessed the client through Blood Glucose Level and urinalysis with plans for further review at the Rottneest Island Nursing Post. This was not noted in the HCare statistics as a secondary health issue.

The service provided by nurses for the recorded secondary health issues included 35% assessment (n=23), 26% drug therapy/management (n=17), 23% treatment (n=15), 13% immunisation (n=9) and 3% counselling (n=2). The secondary health issues

service results included 83% no further action/treatment required (n=55), 14% referred (n=9), and 3% further review/treatment required (n=2).

#### **Exemplar – secondary health issues**

Immunisation was sometimes given but not coded as a separate health issue. This did not enable the nurses to demonstrate that while attending to the client's initial health concern they also were able to use their assessment skills to include care related to health promotion, to improve the client's health and wellbeing.

The documentation in the recording of secondary health issues revealed some anomalies. In all instances, the codes recorded were from the immunisation range of health issues which have since been altered. This reflected the changes in the HCare coding due to changes in the immunisation schedule statewide. Furthermore, based on the 66 clients with secondary health issues identified there were 14 (21%) occasions where the 'service provided' code was inappropriate. In these cases, the service provided was recorded as either drug therapy/management (n=13) or treatment (n=1). In these 14 cases it would have been more appropriate to have recorded immunisation.

The findings revealed the nurses used 'local codes' to more accurately reflect the main health issues seen at the RINP because of the limitations of the HCare statistic system. These codes were developed by the Island nurses for their own use to monitor health issues. In 251 cases, the nurses recorded 'local codes' to demonstrate the most common client problems encountered. In total, the 'local codes' were used to describe 343 outcomes/characteristics across these cases. Based upon the total number of outcomes (n=343) reported by the nurses, twenty-three percent were bicycle accidents. Injuries occurred without a helmet in only 1% of outcomes. Marine accidents made up 18.7% of the outcomes recorded by the nurses at the Nursing Post. Alcohol related injuries were noted for 7% of the outcomes, assault was recorded in 0.87% of outcomes, and drug related problems occurred in 0.58% of outcomes. Adult immunization (5%) and sutures was recorded in 5% of outcomes, while child immunization occurred in 0.87% of outcomes. Work place injury was a minor problem on the Island making up only 1% of the outcomes recorded by nurses. The ambulance was recorded for 16% of outcomes. The local code for residents was

recorded 15% of the time, and mainland referral was recorded by the nurses 6% of the time.

In 91% of cases (n=931), the time of day for consultation occurred during office hours, which are 0830 to 1630. In 9% (n=93) of cases the consultations occurred out of hours. Most (81%) of the out of hours consultations resulted in nurses being 'called out' to attend the client (n=75).

#### **Exemplar – out-of-hours**

The results showed that much time in out-of-hours consultations was spent in the transportation of clients to the Nursing Post where they were assessed, required limited care in most cases, and then transported back to their residence. There appear to be alternatives to this to diminish the time taken in out-of-hours consults. For example, it may be more appropriate to encourage the nursing staff to provide care in the Rottneest accommodation where the client is located. This would require the use of transportable lighting and the equipment available in the ambulance.

#### **Nurse-led Care**

Significantly, the results showed that nurses provided care 85% of the time (n=871) without the assistance of a medical officer present. On 146 occasions (14%) the nurse and medical staff were involved in client assessment and care together. At times multiple staff were involved in client care (0.7%, n=5) but rarely did the medical officer act alone (0.3%).

The nurses assessed the clients firstly by recording a health history, predominantly with a physical health focus (n=971, 95%) with only 1% having a psychosocial focus (n=11). In two percent of these cases nurses included both a physical health history and a psychosocial history (n=23). Finally, in 2% of cases the health history was unable to be coded due to inadequate documentation (n=19).

Considering the varied array of clients who approached the Nursing Post for care there was not much evidence in the documentation that the nurses provided psychological care for the clients. Although clients presented with health issues related to mental health and social issues.

**Exemplar – psychological care**

For example, the nurse received a phone call from Health Direct re 50-year old male on the Island who was very distressed with suicidal ideation. He expressed an urgent need to be evacuated from the Island as his son had committed suicide in a hospital on the mainland a half an hour earlier. The nurse contacted the Police, visited the client and arranged for an emergency evacuation with RFDS.

A problem-oriented physical assessment was conducted by the nurses for 94% of the 1024 clients (n=962) who presented with primary health issues. Only four percent of the assessments involved the nurses completing complex physical assessments (n=39). However, 2% of the physical assessments were unable to be coded due to inadequate documentation (n=23).

**Exemplar – complex physical assessment**

For example, a 65-year old female involved in a snorkelling accident was coded as sport and recreation but actually presented with salt water aspiration, hypothermia with peripheral shutdown and low oxygen saturation levels. The nurse, in the paramedic role, attended the client and transported her to the Nursing Post. She conducted a complex physical assessment to identify health issues, applied nasal oxygen and monitoring equipment, inserted intravenous therapy and phoned for medical advice and assistance with an order given for a chest X-ray. The patient was seen by the Island doctor following this and the client was evacuated as an emergency to the mainland via RFDS. The HCare statistic code did not reflect the complexity of this incident.

Not surprisingly the nursing care plans implemented by the Rottnest Island nurses varied across the 1024 cases. In many instances the nurses included more than one planned action, hence, the percentages and numbers are not equivalent to 100% as there were 2,217 planned actions. The audited records showed that the nursing care plans involved client's treatment 36.2% of the time (n=803). The nurses planned to offer; treatment advice 24.2% (n=536), reassess/monitor 13.1% (n=291), consult the doctor 7.4% (n=164), health education 5.3% (n=117), referral 5.2% (n=115), reassurance and assessment 5% (n=111), and health promotion 3.2% (n=71). In addition to these nursing plans, the nurse also planned on 0.14% occasions to act only in a pharmacy role (n=3), in 0.09% wound care, and in 0.09% venepuncture (ns = 2), and in 0.04% of occasions the plan was to review wound care and dressings or 0.04% offer a referral letter (ns = 1).

## Standing Orders

From the sample of 1024, Standing orders (S/O) were reported to be used by the nurses in 28% of cases (n=283). Of the 283 cases, there were only six cases (3%) that involved either an inconsistency in the use of, or an inaccuracy in the interpretation of the standing orders. There were 15 additional cases in which treatment was administered without a standing order. Across the full sample of 1024 clients, suturing, collection of bloods, drug administration and some procedures were conducted without standing orders. It is not considered that these practices were outside the scope of the nurse's practice but the lack of policies and procedures to guide the nurse's actions means that these advanced skills challenge the boundaries of practice.

### **Exemplar – standing orders**

The nurses were involved in caring for clients who required care not covered by standing orders. For example a 25 year old male client with musculo-skeletal injuries after a rugby game, complained of neck pain and tenderness in the posterior right scapula. The client was given oral Voltaren and treatment advice, however, although this appeared to be appropriate treatment the nurse did not have the authority to diagnose and treat in this way.

Sometimes the standing orders were used inappropriately and nurses performed care outside their scope of practice. Almost exclusively, the nurse's care was shown to be exemplary and decision-making provided an advanced level of practice. For example the nurse gave Flucloxacillin to a 35 year old female client who presented with symptoms consistent with a upper respiratory tract infection (URTI).

Specifically, there were no standing orders or policies and procedures to guide the nurse's practice in the administration of Schedule 2 or 3 drugs that may otherwise be bought by the client over the counter. These drugs were, however, dispensed regularly by the nurses. The lack of policies and procedures in relation to the administration of these drugs means the question of liability, if a client was allergic to a drug dispensed by a nurse or suffered some other ill effects, was not considered. The nurse may be accountable if there was such a negative outcome for the client. In addition, the audit revealed that the standing orders document was not been signed on every page by the medical officer. This potentially allows extra pages to be incorporated without authorization. This also means that the nurses may not have been adequately covered legally to perform specified treatments.



### **Exemplar – standing orders**

There were many instances in which nurses referred to the S/O but did not follow them completely. Alternatively in several cases S/O were not referred to at all and the nurses made their own decisions regarding care. In almost all cases the assessment and care given by the nurse was appropriate but the nurses did challenge the boundaries of the scope of their practice. Policies and procedures are required to ensure that the nurse is legally covered.

- Bites - appropriate medication was given but standing order was not referred to with S4 cream prescribed by the nurse (Hydrocortisone 1%)
- Nurse should have put Aspirin on bite, treatment appropriate but did not follow standing orders
- Nurses dispensed S4 drugs without standing order (NSAID)
- There is no S/O for acute pain, and the nurses dispensed S4 drug without standing order - Panadeine Forte, appropriate assessment and treatment
- Ear syringed for several clients, no standing order for this practice
- Inconsistency in standing order regarding administration of antibiotics. For example, alternative antibiotics were given to clients and the nurses did not refer to the S/O for the condition treated
- There was no specific S/O for ring block
- There was no policy or procedural guidelines for suturing performed by the nurses
- Nurse gave out S4 drug without standing order – Nurofen (S2), not supplied by hospital, same component as Ibuprofen (S4) which was given
- Nurse gave alternative NSAID with no script, no doctor order, no standing order, however, assessment was appropriate with health education

Contrary to the earlier findings in this report, more nurses consulted medical advice than was documented in the nursing notes as a planned action, in that they sought assistance by phone for 18% of the clients (n=185) attending the RINP. In total, 188 phone calls were made, with three clients requiring two phone calls to be made regarding their condition. Seventy five percent of calls were made to the Rottneest Island Doctor for advice (n=141), 14% of calls were made to Fremantle Hospital (n=26), 5% to the GP (n=10), 1% to Princess Margaret Hospital (n=2), and 0.5% to King Edward Memorial Hospital (n=1). There were 8 occasions (4.5%) in which medical advice was sought from other sources. These included a call to a doctor (relative of patient) who prescribed antibiotics, a medical officer from the WA Alcohol & Drug Authority, a patient's consultant, a patient's own GP (n=2), and a pharmacist (n=3).

In many instances the nurses pursued more than one outcome from the phone call, as there were 200 outcomes for the sub-sample of 182 clients. Treatment advice from the doctor made up 35% of the outcomes (n=70), for 35% of outcomes, a drug was

ordered by the doctor (n=70), and 15.5% of phone call outcomes a review of treatment was recommended (n=31). Additional outcomes (14.5%) from these phone calls for these 182 clients included treatment by the nurse or doctor (n=1), a consultation with a doctor (n=15), appointment for doctor review, and client evacuation (ns=2), blood test was requested by doctor, the nurse received information from the discharge hospital, a referral to the GP was instigated, a script requested, a client subsequently transferred to Fremantle Hospital Emergency Department, client transferred to Princess Margaret Hospital, an x-ray ordered, further investigation required, and unable to contact doctor (ns=1).

**Table 1 Type of medication administered by the nurses**

<b>Medication Administered</b>	<b>Number of Clients</b>	<b>Percent</b>
analgesia	193	29
antibiotics	99	15
immunisation agent	45	7
antihistamine	44	7
anti-emetics	37	6
bronchodilator	33	5
local anaesthetic	25	4
antipruritics	24	4
topical corticosteroid	18	3
antiseptic agent	15	2
contraceptive agent	13	2
Narcotics	12	2
NSAID	12	2
anti-inflammatory agent	10	1
antifungal agent	9	1
steroidal agent	8	1
antibacteriocidal agent	7	1
ear wax softener	7	1
sedative agent	7	1
decongestant agent	6	1
antipyretic agent	4	1
antidiarrhoeal agent	3	0.4
antiparasitic agent	3	0.4
antispasmodic agent	3	0.4
evacuant	3	0.4
oral rehydration agent	3	0.4

### **Medication Administration**

Across the 1024 cases, medication was administered to 54% of the clients (n=553), with 668 medications administered overall. The medication schedule was varied

across the 553 clients. Specifically, Schedule 4 drugs (S4) were given in 42% of cases, Schedule 2 drugs (S2) in 29% of cases, Schedule drugs 3 (S3) in 25 % of cases, and Schedule 8 (S8) in 4% of cases. Table 1 outlines the main types of medication administered by the nurses.

**Exemplar – medication decision-making**

In regard to medication administration the nurses occasionally substituted one antibiotic for another. For example, a child presented with a middle ear infection and according to the S/O should have been given Amoxycillin, however, a substitution was made with Augmentin. The nurse decided this based on the child's history of ineffective Ceclor administered by the GP in the last week. Although it is suggested that the decision-making was sound the nurse's actions were not within the scope of current practice.

In addition, other medications were administered on two occasions (0.3%) and these included an alkaliniser agent, a detoxifying agent, an emollient, oxygen therapy and poultice agent. Those administered on one occasion (0.2%) included an antacid, an anticoagulant, an anticonvulsant agent, an antihypertensive agent, an antimigraine agent, a blood by-product, a faecal softener, histocrayl glue, an iron supplement, methadone, an ocular lubricant, an ocular astringent, a vasodilator, anti-thrombotic therapy, and vitamin B.

**Exemplar - medications**

The nurses knowledge of medications was thorough, however, on occasion the nurses used this knowledge of medication administration without authority to assist the clients. For example, a client, with a history of a hip replacement, presented to the Nursing Post requesting Orudus 300mg for his osteoarthritis. The nurse supplied Voltaren 50mg tds, a Schedule 4 drug, without S/O or the authority of a doctor. The client was correctly assessed, told to present to his doctor in 4 days time and given the appropriate health promotion advice.

The administration of medications occurred via a variety of routes. Forty-seven percent of the medications administered were via the oral medication route, 16% topical application, 13% intramuscular injection, 5% subcutaneous injection, 5% inhaler, 2.5% spray, 2.5% eye drops, 2% ear drops, 1.7% per rectum, 1.5% nebulizer, and 1% mouth gargle. Other forms of medication administration routes included 0.8% eye ointment, 0.8% intravenous, 0.6% per vagina, 0.3% intranasal, and 0.3% Hudson mask administration.

**Exemplar – pain management**

The list of options for pain management medications available for use by the nurses was limited. For example, in caring for a client with a cobbler sting the S/O state the nurse should provide Schedule 8 drugs whereas, based on a thorough nursing assessment, the nurse decided to give moderate analgesia cover using Ibuprofen, Panadeine Forte and infiltrated with a local anaesthetic, none of which was covered by S/O. This was an effective outcome as evidenced by the patient being discharged with adequate pain relief.

**Wound Care**

The findings revealed that many of the clients (35%) who presented at the RINP for treatment required wound care of some type (n=354). Often more than one type of dressing was required for each client, thus the total number of dressings is 469. Forty-seven percent of the wound care performed for these clients involved various wound dressings requiring specialised knowledge of wounds and wound care (n=220). Twenty-nine percent required clean/dry dressings (n=134), 9% involved the use of steristrips (n=42), 9.46% of clients required suturing with/without a dressing (n=45), 1% treatment for sunburn (n=6), 0.63% burn (n=3), and 0.43% scald (n=2). Other types of wound care included 1% poultice dressing and 1% wound irrigation (ns=5), 0.85% antiseptic gauze dressing (n=4), 0.42% debridement of wound (n=2), and 0.21% antibiotic dressing (n=1). Of these, the dressings were classified in 80% of cases as simple dressings and 20% of the dressings were complex.

**Exemplar – wound care**

There was no S/O for suturing or the infiltration of a wound with local anaesthetic. A typical scenario is outlined in the following case study. A client presented with a cut to forehead 1.5 cm in length between the brows. No loss of consciousness (LOC). After a problem oriented assessment the wound was infiltrated with xylocaine 1% and sutured. The procedure was completed with a fixomal dressing. The client was given appropriate information about the removal of sutures. It appears that this nursing diagnosis and treatment was appropriate but the nurses advanced wound care skills are not recognised in the S/O. This procedure was common throughout the audit with nurses often using adrenaline and xylocaine 1% in the infiltration. There is debate, however, concerning whether nurses should be suturing a client's face which also occurred on occasion.

## Nursing Interventions

In addition to wound care other nursing interventions (n=393) performed by the nurse were recorded for 330 clients. Table 2 outlines the nursing interventions implemented by the nurses at the RINP in response to their assessment.

**Table 2 Nursing interventions performed by the nurses**

<b>Intervention</b>	<b>Number of Clients</b>	<b>Percent</b>
Health education	117	29
RICE	59	15
Splinting/strapping	53	13
Removal of foreign bodies	29	7
Ice therapy	15	3.8
Ear syringing	14	3.6
Psychosocial counselling	12	3
Cannulation	9	2.1
Removal of sutures	8	2
Intravenous therapy	7	2
Mental health care	6	2
Plaster-of-paris	6	2
Eye irrigation	6	2
Fitting of crutches	6	2
Fitting of sling	6	2

Furthermore, nursing interventions included the exploration and debridement of a wound (1.3%), hot/cold therapy (1.3%, ns=5), heat immersion (1%), oral rehydration therapy (1%, ns=4), applying eye pad (0.7%), steam therapy (0.7%, ns=3), elevation of leg (0.5%), pressure/support bandage (0.5%, ns=2), catheterisation (0.5%, ns=2), cool water compress (0.2%), cervical spine management (0.2%), enema given (0.2%), eyebrow ring removed (0.2%), full blood count (0.2%), haemostasis and pressure bandage (0.2%), interpreter service liaison (0.2%), lanced nail with needle (0.2%), patient showered and removal of glass (0.2%), and ring block (0.2%, ns=1).

### **Exemplar – treatment provided**

The nurses provided treatments such as syringing the ears about which there is debate concerning whether the skill is safe practice for nurses. It is suggested that the advanced nurse practitioner has ear health education with competency based assessment of their skills in line with the S/O.

An example of the advanced assessment and skill required of the nurse in isolated practice is the care provided for a 33 year old woman who presented with earache and wax in ears. The nurse syringed the ears and wax came out, discharging the client quickly and successfully. However, S/O state the ear canal should be viewed and cerumol drops daily for two days then gently syringed with nozzle directed to the upper ear canal. There are S/O for syringing of the ear after cerumol for 2 days. However, some nurses syringe without cerumol and there is concern expressed that this procedure may not be appropriate for nurses to perform especially if the nurse has not been educated and deemed competent.

### **Tests and Procedures**

The tests and procedures (n=350) performed by the nurse were recorded for 229 clients. Often more than one test was initiated for each client. These tests and procedures included 33% vital signs taken (n=116), 11% oxygen saturation recordings (n=40), 9% urinalysis testing (n=30), 5% fluorescein eye staining (n=18), 4% x-rays (n=14), 3% otoscopy (n=12), 3% weight taken, 3% pharmacy role, 3% midstream urine specimen, and 3% blood test taken (ns=11), 3% visual acuity (n=9), 2% peak flow readings, 2% neurological observation, (n=8), 2% faecal test (n=7), 2% blood glucose monitoring (n=6), 2% Electrocardiograph tracing, and 2% pregnancy tests (ns=5), 1.2% limb observation, 1.2% fetal heart monitoring, and 1.2% abdominal palpation (ns=4), 1% wound swabs (n=3), 1% throat swabs taken (n=2), 0.4% vision/hearing screening, 0.4% swab from ear taken, 0.4% school health screening, 0.4% interpretation of lab results, 0.4% eye toilet, 0.4% ear syringing, 0.4% audiometry, 0.4% auscultation of lung fields, 0.4% height, 0.4% external pacing, and 0.4% breast screening (ns=1).

### **Exemplar – tests performed**

A 35-year old female, 16 weeks gestation presented at the Nursing Post for a routine antenatal check by the nurse. Health education and health promotion was provided and antenatal fundal height, client weight and vital signs including blood pressure were recorded. Urinalysis was performed and bloods taken for triple test. A psychosocial assessment was conducted with this client.

## Paramedic Role

The nurses performed functions consistent with a paramedic role, that is, retrieving clients and treating them at the scene initially if required, before transporting them safely to the RINP for further assessment and treatment. This occurred for 8% of clients in the sample (n=82). The nurses also performed a transport role for an additional 7% of clients (n=73). To fulfil this role the nurses drove the ambulance to various and isolated parts of the island to collect clients who had called for assistance, this involved both time, skill, creativity and flexibility in the delivery of care. Thus, in 15% of cases the nurses were involved in transporting clients, in addition to providing nursing services. Sometimes fulfilling these two roles (n=62) simultaneously presented an almost impossible task for the nurses.

### **Exemplar - transport issues**

Because of the lack of transport on the island, the nurses were involved in non-nursing duties such as transporting clients to the nursing post for treatment and then transporting them back to their accommodation. This removed the nurses away from the nursing post and possibly other clients when it occurred within office hours. Many of the transports occurred out of hours and were resource intensive. For example, the nurse was called to a client out of hours at 1900 to attend to a 'jelly fish sting'. The treatment required involved the application of ice and stingoos. The client could have presented to the RINP without the nurse having to take the ambulance across the Island. This potentially builds the dependency of the clients and an expectation that diminishes the important role of the advanced practitioner. It may be possible to suggest to the Rottnest Island Authority that someone on the Island, other than the nurses, assume the transport role.

To fulfil their role at the RINP the nurses relied on others in the community for support and the results showed that this occurred on 12 occasions (1%) across the 1024 cases. The support included the Police (n=4, 33%), Ranger, and Fire/Rescue service (ns=2, 17%). In addition, other supports noted in the documentation were the Bus service, Rottnest Island security and Volunteer Sea Reserve (ns=1, 8%). This result probably underestimates the number of times the nurses engaged the community to assist them. It was not possible in many cases to ascertain from the audit whether the nurses engaged support or not. However, the complexity of care with which the nurses were involved suggests that in many instances the nurses accessed the supports available to them in the community. Hence, the results are more likely a reflection of substandard documentation in this regard.

The findings revealed that of the total sample only 3.2% of clients required evacuation from the island (n=33) with the nurses involved in managing emergency situations. Of these evacuations 15 (45.5%) were considered by the staff to be urgent requiring immediate removal from the Island either by ferry, boat or air and 12 (36.5%) were categorized as non-urgent with the client evacuated on safe transport back to the mainland when available. Six cases (18%) were considered emergency that involved organisation for immediate evacuation by Royal Flying Doctor Service (RFDS).

#### **Exemplar – evacuation case study**

The HCare statistics did not provide nurses with an opportunity to record the seriousness of the case. For example, one nurse recorded a case as ‘sport and recreation’ when in fact it was actually a serious back injury requiring multiple services and an urgent RFDS evacuation from the Island. A similar record was actually a serious submersion and aspiration of salt water that needed to be evacuated from the Island via RFDS.

#### **Primary Health Care**

The nurses initiated specific educational, primary health care (PHC) programs on 22 occasions. These included 72% immunisation programs (n=16), 14% school health programs, and 14% health education (ns=3). The type of health education initiated included diving fitness, a general healthy lifestyle program, and health promotion that focussed on healthy living lifestyle for controlling hypertension. In addition, there was one case in which it was recorded that the attendance to the clinic was inappropriate, and there was a need to educate the public concerning the type of service the clinic provides.

#### **Exemplar - primary health care**

The results showed that while the nurses provided health promotion for several residents, particularly in relation to school health, more initiatives involving visitors and transient workers would be advantageous in relation to PHC. Although a campaign on sun care had been initiated in the twelve-month period of the study, generally, health promotion programs for the public were not evident. For example, results revealed an opportunity to provide bike safety programs, given the high incidence of this type of physical injury on the Island.

For the 1024 client records audited 2.4% of cases involved no assessment or treatment provided by the nurse (n=25). In these instances the nurse acted in a pharmacy role



by providing medication, filling scripts, booking the client in to see the doctor, or receiving items that had been loaned out to the client.

#### **Exemplars - dispensing prescriptions**

The pharmacy role of the nurse was evident in the records in terms of dispensing drugs and either providing drugs for clients who had a prescription that needed to be filled or organising for them to be delivered. For example, the faxing of prescriptions to the mainland to be filled was one of the roles of the nurse. Often clients forgot their medication and the nurse needed to contact their General Practitioner for a prescription to be forwarded to the Pharmacy on the mainland and transported by ferry to the General Store. There were not codes available in the HCare statistics to record the nurse's pharmacy role. For example, the dispensing of (Salbutamol) Ventolin inhaler was usually documented in the statistics by the nurses as 'Asthma'.

Finally, it was documented that in 2.5% of the 1024 cases there were problems related to those particular cases (n=26). Almost half of them involved lack of documentation (n=11, 42.5%). Eight cases (30.5%) had problems with the HCare codes not reflecting the true nature of the condition. There were three (11.5%) instances where the recording of immunisation should have been recorded as a secondary issue. Furthermore, four (15.5%) cases reflected a variety of issues ranging from problems with diagnosis, and treatment.

#### **Advanced Practice Role**

In order to gain a clearer description of the advanced practice role performed by the nurse at Rottneest Island, the following cross tabulations were performed using a sub sample of the data taken that focused specifically upon the nurse as the primary caregiver.

Cross tabulations were examined on the use of standing order by the nurses and the medication schedules S4 and S8. Out of 871 client contacts the nurse administered a Schedule 4 medication 200 times. A standing order alone was used for 75% of the Medication Schedule 4 drugs (n=151), while a phone call made to a doctor for authorisation was initiated for 17% (n=35). For 3% of clients, the administration of Schedule 4 drugs was covered by either a standing order or a phone call for clearance from a doctor (n=6). The remaining 5% of drugs were issued by the nurse either without the use of a standing order or obtaining clearance from a doctor (n=8).

The nurse administered a total of 11 Schedule 8 medications. A standing order alone was used for 64% of the Schedule 8 medications (n=7), while a phone call made to a doctor for authorisation was used for 27% of the Medication Schedule 8 drugs (n=3). Finally, 9% of the Schedule 8 medications issued by the nurse were covered by both a standing order or by obtaining clearance from a doctor, with in-writing confirmation within 24 hours (n=1).

The nurses performed a variety of wound care. Of particular interest to the researchers, was the nurse's role in performing suturing and suturing/dressing when they were the primary caregiver. The Island nurse in the advanced nursing role may perform this type of wound care. The nurses in this sample sutured 14 clients when they were the primary caregiver. A phone call for doctor advice was used on 14% of occasions (n=2). However, 86% of the suturing was performed by the nurse without advice from the doctor (n=12). The nurses also performed 20 suture/dressings. A phone call for doctor advice was used on 15% of occasions (n=3). Again, 85% of the suturing was performed by the nurse without advice from the doctor (n=17).

The nurses also initiated and interpreted additional tests and procedures. Of particular interest to the researchers, was the nurse taking bloods, performing x-rays, external pacing monitoring, and blood glucose tests. When the nurse was the primary caregiver, blood was taken from 7 clients. A phone call was made to a doctor for advice for 29% of clients (n=2). However, 71% of bloods being taken by the nurse occurred without advice from the doctor (n=5). The nurses took two X-rays, on both occasions the doctor was phoned for advice before proceeding, as per policy. The nurses also performed blood glucose tests for 3 clients. In each case, the doctor was phoned for advice before proceeding with this procedure. Finally, the nurses did not perform any tests or procedure related to external pacing when they were the primary caregiver.

These practices clearly describe the advanced role performed by the nurses, independent of the medical practitioner and within the scope of nursing practice. They challenge nursing practice only in relation to the adequate development and implementation of policies and procedures to guide the nurse's role. These are

required however, to guide practice and also to provide the legal and ethical framework within which the nurses must work.

## **DISCUSSION**

Primarily the Rottnest Island Nursing Post provides health care to visitors to the Island with 84% of the clients being holiday-makers. Residents make up a much smaller proportion of clients treated (5%) with 11% of those requiring care being workers on the Island. Not only is the Nursing Post isolated from the mainland and mainstream health services, but for nine months of the year the nurses are the only health care providers on Rottnest Island, with its transient population of 400,000 visitors annually. The nurses care for males (52%) and females (48%) who range in age across the lifespan. Because most of the clients are visitors to the Island the nurses, in the majority of cases, provide care for clients whose health history is unknown to them until they present at the Nursing Post thus, the nurses often confront situations for which they are unfamiliar. Similarly, the clients experience health problems or crises that are unexpected because they are enjoying holidays and recreational activities. This presents a particular challenge for the practitioners in the delivery of health care.

While 91% of the clients who visit the Nursing Post are Western Australians the results reveal an interesting phenomenon. More than half (58%) of the clients are from the western suburbs of the Perth metropolitan area, which traditionally is considered to represent people from the more affluent areas. Characteristically, this means that clients are well educated, on high incomes, have professional employment, hold high expectations and are well informed regarding health and health care delivery.

### **Health Issues**

The primary health concerns of clients presenting to the Nursing Post are most often injuries (36%). The majority of these are bicycle (n=82) or marine accidents (n=64). The HCare statistics offer little real information about the diversity and complexity of cases the nurses experience because they are grouped around medical model categories. The study, however, shows that the scope of issues that clients present with is large and immensely varied with every conceivable health problem

represented in the findings (Appendix 2). It is clear that the nurses must be knowledgeable, skilful and experienced in assessment, nursing diagnosis, nursing care and evaluation of outcomes. In their work as independent practitioners the nurses are responsible for their own decision-making and accountable for their practice. This finding is consistent with earlier studies that confirm that community health nurses must be current in their diagnostic and technical skills concerning an array of issues, because clients present with complex and varied health problems (Kozlak, 2000).

Review of the HCare statistics reveals health service delivery at Rottneest Island involves the provision of treatment (43%) for clients in a variety of forms and a large component of the nurse's work involves drug therapy and management (21%). Other aspects of health care that the nurse initiates include assessment, advocacy, counselling, screening, health education and health promotion. Because of the nature of service delivery most cases (64%) require no further action or treatment but many clients require follow-up (15%) or are referred to seek further medical assistance (17%). Others continue to be monitored by the staff (2%) or are immediately evacuated (2%). It is clear the nurses provide health care and service delivery to a large client base with varied health issues. The community health nurse's role to provide equitable, accessible, socially and culturally appropriate health care across a broad array of health issues in the community (McDonald & Smith, 2001) underscores the primary health care role of these nurses. Documentation of this advanced role strengthens the argument that these practitioners are at the cutting edge of health service delivery.

The findings show that some clients (6%) also present with a secondary health issue when they attend the Rottneest Island Nursing Post, thereby increasing the complexity of the issues that the nurses resolve. In many cases (30%), opportunistic immunisation is provided but often clients have multiple problems such as additional injuries (15%), respiratory problems (11%) or a myriad of other health concerns. However, the results do not appear to accurately reflect the number of clients in this group. The audit shows that in many cases there are miscodes and omissions in the HCare statistics because the nurses have difficulty in coding their nursing assessment and care into a medical framework. This presents a real issue in terms of capturing the scope of the nurses' practice.

When caring for clients with secondary health issues the study shows, not surprisingly, that the nurses engage in similar health service delivery to that required for the primary health concern. Nurses assess the client in 35% of cases, provide drug therapy (26%), treatment (23%) and other types of care. Mostly, these issues require no further action (83%).

Because of the difficulty in the routine recording of the scope of nursing practice in isolated settings such as the RNIP, it is evident that the current HCare system is less than effective in documenting nursing assessments, actions, care and evaluation. This makes it difficult for nurses to substantiate the scope of practice, complexity of care and advanced role they assume in the health care system. Thus, when nurses are asked to 'measure' what they provide in terms of health care, they are unable to substantiate their role, because the coding systems are not nursing outcome based. In the literature the frustration with documentation systems is not new. Scoates, Fishman & McAdam (1996) found that nurses complain that some documentation formats do not give a clear clinical picture and others have found that they are used inconsistently or do not provide adequate nursing information (Mosher, Rademacher, Day, & Fanelli, 1996). Furthermore, qualitative studies show that in spite of the comprehensiveness of documentation, it fails to include elements that are of importance to nursing. Clearly the nurses at Rottneest Island use their own system of 'local codes' to reflect and monitor their practice more accurately.

**Recommendation 1:** To revise the current method of HCare data collection and replace it with a system that is based on a nursing model of care in order to clearly record the scope of nursing practice. There are many settings, similar to Rottneest Island, where nurses are currently using a system that does not reflect their practice.

## **Documentation**

The difficulties encountered by the nurses in documentation using the HCare statistic system are evident. Several miscodes and omissions are apparent in the findings of the audit both in relation to the health issues identified and the health service delivery. The importance of accurate documentation cannot be underestimated in terms of quality client care. Nursing documentation forms a major part of the record of a patient's health care (Eggland, 1995), and has become increasingly important in

recent decades due to changes in nursing, regulations and legal requirements (Iyer & Camp, 1991). Strong links between government funding (Iyer & Camp, 1991), quality assurance and research (Egglund & Heineman, 1994) further reinforce the need for comprehensive documentation (Congdon & Magilvy, 1995).

Legislated standards in various countries (Gunningberg, Lindholm, Carlsson, & Sjöden, 2000; Scoates et al., 1996; Taylor & Abernethy, 2000) require nursing documentation to be complete and comprehensive. It is nevertheless clear that this requirement is often not met. For example, Gunningberg et al. (2000) showed that only three out of fifty-five nursing records in their study actually met Sweden's legislated standards for comprehensiveness and quality. Devlin, Hair, & McEldownery (1999) noted that the writing and recording skills of nurses in their project were generally poor. The legal implications of documentation are becoming a personal and professional imperative for nurses to document thoroughly, as this serves as a form of protection against the increasing risk of malpractice litigation (Murphy, 1997).

As with the current research project, a common use of nursing notes is to review treatment and practice, either for research, to benchmark for changes to documentation (Short, 1997) or for quality control or funding purposes (Congdon & Magilvy, 1995). However, this is not always a simple process as found by the researchers. During the audit each of the 1024 problem oriented (triage) records were carefully analysed to extract data for completion of the audit tool. The time at which care was delivered by the nurse, as well as the length of time taken in client care was not always obvious from the nursing notes. The filing of documents for ease of retrieval was also an issue in the audit process making the review of notes costly in terms of time. In many cases the documentation was satisfactory but omissions were noted in the nurses' descriptions of assessment and care provided. The imprecision in documentation is consistent with the findings of Brooks (1998) who noted with concern that nurses were unwilling or unable to put in writing the full range of nursing care that they perform. She noted that all the nurses in her study gave verbal reports that included spiritual and psychosocial needs and interventions, but their written notes only included medically oriented, physical factors. It is particularly interesting that the majority of nurses in her study "were surprised by the

incongruence between what they said was important and their documentation” (p 185).

A common challenge in nursing documentation is the use of different terminology for the same condition, treatment or outcome—sometimes by the same nurse (Kane, & Mahony, 1997; Short, 1997). Common meaning exists, but effort is required to recognise it. Moorhead & Delaney (1997) describe a successful attempt in their study to relate nursing interventions documented in clients’ records to the North American Nursing Interventions Classification (NIC) system. They noted that use of common terms in nursing documentation can lead to improved measurement of patient outcomes. They support the use of computer technology to assist with standardisation of nursing language.

This type of technology may also be appropriate for use in isolated settings such as Rottnest Island, to enhance the accuracy and uniformity of documentation. There is no doubt from the findings that the Rottnest Island nurses provide care that demonstrates an advanced level of practice. However, accurate and precise documentation to more fully reflect this situation would be beneficial and advantageous not only for the clients but for government funding bodies, legislative requirements, research and quality assurance.

**Recommendation 2:** That further education for nurses be provided to enhance improvement in their documentation. Emphasis on the importance of documentation in relation to all facets of nursing care is needed and consideration given to the adoption of more sophisticated computer technology such as hand-held personal computers to assist in improvements in documentation.

### **Nurse-led Care**

In 85% of cases at the Rottnest Island Nursing Post the care was nurse-led. This means that the nurse functions independently without a medical officer present on the Island. The study shows that in this context the nurse makes clinical decisions and complex professional judgements in isolation from other health professionals. The nurse is able to balance the demands of clinical treatment with the need of preventive health activities within the parameters of the service. On 14% of occasions the nurse works together with the medical staff but the records reveal that the nurse always

conducts the initial assessment and calls the medical officer only if required, making the initial clinical judgement. On some occasions (1%) multiple staff are required and a team approach to care is taken. The findings demonstrate also that the nurse manages a range of emergency situations including complex assessment, care and evacuations if necessary.

The literature abounds with examples of the satisfaction of clients with nurse-led care. Using quantitative and qualitative methods Chang, Daly, Hawkins, McGirr, Fielding, Hemmings, O'Donoghue and Dennis (1999) found in a randomised trial of 232 clients, that there was no significant difference in client satisfaction whether treated by a nurse or medical practitioner in the emergency context. Strange (1994) and Lewis and Woodside (1992) previously confirmed this in studies that found client satisfaction with nurse practitioners was consistently high. Experiences in 10 pilot research projects in the 'Nurse Practitioner Project' in New South Wales also suggest that consumers had improved access to health services and were satisfied with nurse led care in the form of NPs. (NSW Department of Health, 1995). This reinforces the notion that the advanced practice role of the Rottneest Island nurse is appropriate and satisfactory in terms of the delivery of care to clients.

In the study, the nurse assessed the client by recording a health history and predominantly a physical assessment (95%). Little consideration was given in the assessment to psychosocial needs (1%) but this probably more accurately reflects an omission in the documentation as described previously. However, the findings suggest that particular attention is necessary in regard to psychosocial assessment of clients in the future. Usually the nurse conducts a problem-oriented assessment (95%) but complex assessments are required in several instances.

The nursing care plans are multifaceted and reflect the many dimensions to treatment that the nurse must consider in caring for the client. This planning demonstrates excellent clinical decision-making skills, problem-solving, communication skills, reflection, organisations skills and time-management. Further evidence of the nurse's erudition and sophistication in the planning and delivery of care.



### **Nurses in isolated practice**

The study shows that once care is planned the nurse either proceeds independently to deliver care, follows the standing orders or phones (n=185) one of the many available resources, such as, a tertiary hospital, the client's general practitioner or a community agency for assistance. Standing orders were consulted in many cases (28%) by the nurse, which reflects the high level of care required by clients, the complexity of the cases and the advanced knowledge base of the nurses to guide their diagnostic and interpretive skills. Usually the nurse refers to the Rottnest Island standing orders prepared by Fremantle Hospital, however, often the Remote Area Nursing Emergency Guidelines (2000) were used even though the nurses are not classified as Remote Area Nurses but rather nurses engaged in isolated practice. The findings reveal that on some occasions (3%) the nurse did not follow standing orders consistently or inaccuracies occurred. All of these instances were not outside the scope of advanced nursing practice, however, the policies and procedures to enable care to be delivered in this way were not obvious. Examples include, suturing, administration of some medications (S2, S3), specific treatments and ordering of tests. The study shows there is a need to remedy this situation in order to legally protect the nurses with appropriate policies, procedures and guidelines.

**Recommendation 3: That policies and procedures be implemented to afford the Rottnest Island nurse the legal protection required so that the scope of nursing practice is articulated and delineated.**

In addition the study reveals that the medical officer has not signed every page of the standing orders, prepared by the hospital. Potentially this allows extra pages to be incorporated without authorization. This also means that the nurses legally are not covered to carry out specified treatments.

**Recommendation 4: That each page of the standing orders be signed by the medical officer to ensure legality of the nurse's action.**

The recognition of the nurses at the RINP as general registered nurses rather than rural and remote practitioner means that they are not eligible for entitlements such as leave, tax exemptions, subsidised annual travel and availability of funding for further education. It can be argued that since the nurses follow Remote Area Nursing

Emergency Guidelines (2000) and can demonstrate that they also achieve the competencies of rural and remote nurses they should be recognised for their advanced practice knowledge and skills, and the isolated environment in which they provide client care (Appendix 1).

**Recommendation 5:** That the Rottnest Island nurses in isolated practice be afforded the same conditions and status as Rural and Remote nurses, with Nurse Practitioners appointed to the Nursing Post as soon as the Western Australian legislation permits.

### **Medications**

The findings demonstrate the diverse knowledge and required expertise of the nurses working at the RINP. For all 1024 cases audited medication was administered to 54% of the clients with polypharmacy requirements necessary for many clients. This requires the nurses to possess advanced knowledge in regard to pharmacotherapeutics and decision-making regarding contraindications or adverse drug reactions. In most cases Schedule 2 and 3 drugs (54%) were given with Schedule 4 drugs comprising (42%) of medications administered and 4% of drugs from Schedule 8. It is important the guidelines and policies be implemented to ensure the safe administration of particularly Schedule 2 and 3 drugs that may be given without full knowledge of the implications of administration in a setting such as Rottnest Island Nursing Post.

**Recommendation 6:** That further education be provided to the Rottnest Island nurses in regard to the safe administration and responsibility associated with the promotion and administration of Schedule 2 and 3 drugs.

In the majority of cases drugs were administered orally (47%) but it is necessary for the nurse to be skilled in the administration of drugs via any of the other routes; intramuscular and subcutaneous injection, intravenous, topical application, spray, drops, gargle, ung, nebulizer etc.

### **Pharmacy Issues**

In some cases (2%) the nurse administers drugs to the client either in response to standing orders or acts in a 'pharmacy role' to ensure prescriptions are filled, medication is provided etc. While this again is within the scope of the nurse's practice

and knowledge base clear guidelines are necessary to ensure legal requirements are adhered to. The study shows that occasionally there is also difficulty in changing the drugs dispensed by Fremantle Hospital. There is still a stock of drugs that have been deleted from the MIMS that are currently being dispensed by the nurses. Hismanal is an example of this and currently is given for stings/bites or allergic reaction even though it was discontinued in August 1999. At peak activity times there is often a drain on the imprest system meaning that some drugs may not be available and the nurse may have to substitute one drug for another and not be covered by standing orders. It may be advantageous for the standing orders to include an alternative drug if the first drug is not available. Or a call to Fremantle Hospital for advice may be appropriate. Another example of a difficulty faced by the nurses is the availability of the anti-inflammatory drug Ibuprofen that is provided on the imprest system but is a Schedule 4 drug when Nurofen, a Schedule 2 drug with similar pharmacokinetic properties is not provided. A change in drugs offered by the hospital to the Nursing Post may alleviate some of these potential problems.

**Recommendation 7:** That a review of the pharmacy role of the nurse be undertaken in collaboration with the Chief Pharmacist at Fremantle Hospital. In addition, that the drugs on the imprest system be reviewed to ensure safe and effective practice.

### **Interventions and Tests**

The research shows that wound care is an important nursing intervention encountered frequently in the provision of client care. About 35% of clients required either complex (20%) or simple wound care (80%) with many wounds necessitating the advanced skill of the nurse with sutures essential (10%) for effective wound management. Because wound care is increasingly a highly specialized area of clinical nursing practice (Lumby & Picone, 2000) it is evident from the findings that the Rottneest Island nurses also possess knowledge and skills in this specialist area of practice.

The scope of the nursing interventions delivered in the care of clients was remarkable in terms of breadth and depth of knowledge and skills required by the nurse. Health education and health promotion (29%) formed a large component of nursing care emphasising the nurses' primary health care role in the provision of acute and

emergency care. Other skills required by the nurse to implement practice include the removal of foreign bodies, cannulation and intravenous therapy, ice therapy, catheterisation, steam therapy, ear syringing, eye irrigation, plaster of paris, bandages, enema, cervical spine management, fetal heart monitoring, fitting slings and crutches etc. There are many specialist areas of nursing included in this list of skills. This means that the nurse has advanced knowledge and skills in areas such as cardiac care, orthopaedics, respiratory nursing, oncology, ophthalmology, emergency nursing, mental health, paediatrics, midwifery, child health and school health, to mention a few.

The range of tests and procedures that the nurse performs in the delivery of nursing care is clear from the findings of the study. These include vital signs, oxygen saturation, fluorescein eye staining, urinalysis, mid stream urine test, blood tests, visual acuity, peak flow readings, glucose monitoring, electrocardiograph tracing, neurological observations and many more. All of these are within the scope of nursing practice but the diversity of interventions and tests necessary for each individual client reveals the exemplary knowledge and skills of these advanced health professionals. The nurses are able to synthesise knowledge from the initial client assessment and integrate this with ongoing assessment and evaluation of the client. It is evident that the initial decision-making is analysed throughout the clients stay to ensure optimal care for clients with additional tests and procedures initiated to facilitate the best possible health outcome.

In addition to the exemplary role of the advanced nurse practitioner at Rottneest Island the nurse faces management decisions about emergency situations that occur on and around the Island. In just over 3% of cases the nurse must organise emergency evacuation of clients to the mainland. Of these evacuations most are urgent (46%) requiring the support of the Royal Flying Doctor Service while others are non-urgent (37%) and are organised with routine transport services, such as the ferry, boat etc. It is usually at least an hour before medical assistance arrives in urgent emergency situations and the skills of the nurse are necessary to ensure satisfactory client outcomes.

What makes the Rottnest Island nurses' role more remarkable than that of counterparts in rural and remote nursing posts throughout Western Australia, is the paramedic role that the nurse also facilitates. In about 8% of cases the nurse retrieves the client from any area of the Island to which called. This may be an isolated and potentially dangerous part of the coastline, a call to an accident on one of the roads around the Island or request for assistance on one of the many boats. The nurse not only provides initial care and stabilises the client for transport but also drives the ambulance while providing emotional support and comfort for the client during the journey. This challenge to simultaneously fulfil two roles in the care of the client is almost impossible and requires careful consideration of acceptable expectations of the nurse as this could be considered unsafe practice. On occasion fulfilling the paramedic role requires the nurse to close the Nursing Post until her return. The nurse, in an additional 7% of cases also offers transport to clients to the Nursing Post and back to their residence if required. This involves time, skill, creativity and flexibility in time management and organisation to ensure that care is delivered appropriately and of a high standard.

**Recommendation 8: That the Rottnest Island Authority be consulted in relation to relieving the nurse of the transport role which may impinge on the delivery of safe and appropriate client care.**

While others in the community such as the Police, Ranger and Fire and Rescue work with the nurse to achieve optimum client care, there appears from the findings of the study to be a need for greater recognition and acknowledgment for the role of the nurse on the Island. As a recognised health professional tasks such as driving the ambulance, cleaning it and transporting dirty linen to the jetty appear to detract from the professional capacity of the role. It is suggested that other health professionals would not accept these responsibilities as part of their normal workload. Discussions with the Rottnest Island Authority may be advantageous to address these issues.

While the nurses provide some primary health care including school health screening and health promotion campaigns there is a need to expand this important area of health care on the Island. Certainly, health promotion is conducted with the Transfield workers and other workers on the Island but an expanded role in the delivery of health

promotion may empower holiday-makers and residents to take more responsibility for their own health care.

**Recommendation 9:** A need for more health promotion campaigns on the Island for holiday-makers, workers and residents consistent with the primary health care philosophy. These programs could promote health and well being for workers and residents and inform holiday-makers of the potential for injury on the Island (marine and bicycle injuries).

### **Client Health Education**

The findings of the research reveal a need for an extensive marketing campaign concerning the role of the Rottnest Island nurse. Few people appear to recognise the important and skilled role of the nurse and the difficulty of practice in this context. To assist individuals it appears important to educate potential clients about the possible health issues that may cause a problem on the island. For example, health promotion and prevention information needs to be provided to people as they purchase their tickets, or before, for the island. Potential holiday makers, commuters, transient residents and residents need to be aware of the need for a first aid kit containing, stingoes, antiseptic, bandaids, sunburn cream and analgesic, over-the-counter medication and any prescription drugs. Information could be provided to clients through the Rottnest Island Authority when accommodation is confirmed or given to day travellers on purchase of their tickets. There is also the scope to advertise and market the role of the nurse and the Nursing Post on the Ferries that transport residents, workers and holiday-makers, to take full advantage of the opportunities to provide health information.

**Recommendation 10:** A comprehensive marketing campaign concerning the role of the Rottnest Island nurse and the Nursing Post is required. This campaign could also promote health and inform potential holiday-makers of the essential medical provisions to bring to the Island.

In conclusion it is clear from the research that the Rottnest Island nurses are capable, skilled, knowledgeable and provide exemplary care to their clients. They provide care consistent with best practice and within their capability in terms of the scope of nursing practice and their advanced practice skills. It is timely for the nurses to be

acknowledged and their expanded role to be legitimised with appropriate status, remuneration and recognition for practice in this isolated context.

## **APPENDIX 1 RURAL AND REMOTE NURSE COMPETENCIES**

Despite the Rottneest Island nurse's workplace classification as isolated practice rather than rural and remote practice, many of the features and competencies associated with the nurse's roles and functions are similar. The findings of the research, therefore, will be used to demonstrate the nurse's advanced practice role using the framework of the Remote Area Nurse Competencies (Eckermann & Dowd, 1999).

### **Competency Unit 1**

#### **Provides safe, high quality health care across the lifespan of individuals/communities in remote areas**

The age range of the sample from 7 days to 89 years indicates that the nurses at the Nursing Post provide health care across the lifespan to individuals and families within their own communities. Eighty five percent (85%) of the cases at the Rottneest Island Nursing Post (RINP) are attended by the nurse only. In this capacity the nurse makes clinical decisions and complex professional judgements in isolation from other health professionals. The Island nurse balances the demands of clinical treatment with the need for preventive health activities within the parameters of the service. This is evident in the opportunistic immunisation that the nurses provide to clients when they have come to the RINP for other treatment. The findings also show that 3.2% (n=33) of clients required evacuation from the island indicating that the Island nurse manages a range of emergency situations involving client evacuations, complex assessment and care.

### **Competency Unit 2**

#### **Demonstrates commitment to self care and safe practice in the remote workplace**

The Island nurse demonstrates a commitment and responsibility to self care and safe practice by following the local nursing post safety procedures and protocols. The nurse maintains radio contact at all times, notifies Fremantle Hospital switch operator when on call outs after hours, and carries a stress alarm when alone in the RINP. Safe working practice is maintained at high activity periods by the rostering of extra staff and extending the RINP hours to cope with demands placed on the health facility.

The nurse monitors and complies with occupational health and safety legislation and policies. There is a regular audit of the RINP by the Occupational Health and Safety Unit, and Senior Community Health Management with input and feedback from the Island nursing team.

The permanent Island nurse is deemed competent to drive the four wheel drive ambulance and follows the Island driving protocol.

The Island nurse is involved in quality improvement activities, which review and update nursing procedures to ensure safe working environment for all who work in and come into contact with the RINP. This is evident in the development of the orientation manual for staff employed at RINP and the audit and daily check list for emergency equipment.



### **Competency Unit 3**

#### **Adopts a community development approach to health care**

The Island nurse fosters the partnership between the local community and the health care team. This is evident in the school and workplace commitment made by the nursing staff. The nurse conducts primary health care programs within the community in the form of first aid training for volunteer emergency services, workplace safety and health with the program called “tool box sessions”, and the growth and development sessions for the local school community. This is evident with the Island nurse providing primary health care to 41% of the resident population in the form of immunisation and school health programs, and health education (pg 32).

### **Competency Unit 4**

#### **Advocates and protects the rights of individuals, families and communities in relation to health care**

Equal access for all clients who require nursing assessment and care is ensured as the nurses provide transport for clients whom cannot get to the RINP. Client triage from an advanced nursing practitioner is paramount when transport is requested due to staffing issues. A commitment to client outcomes is demonstrated through skilful consultation, advocacy, planned individual care and the protection of client rights. Confidentiality is maintained within the professional parameters, this is evident in the audit through documentation and adherence to correct processes. The findings revealed that the Island nurse initiated and coordinated the evacuation off the island of 3.2% of clients who were deemed in need of further assessment and treatment whether this is by Royal Flying Doctor Service for emergency cases or by ferry for non-urgent issues.

Maternal and child health issues relating to postnatal depression is multifaceted with the Island nurse dealing with complex parenting and emotional issues, providing professional support and liaising with health professionals on the mainland to obtain the best possible outcome for the client.

### **Competency Unit 5**

#### **Conducts remote area nursing practice in a way that can be ethically justified**

The Island nurse makes decisions that challenge the scope of practice but the results of the study show that they are always ethically justified and based on advanced level of decision-making (pg 27).

### **Competency Unit 6**

#### **Functions in accordance with legislation, taking account of customary law and common law affecting remote area nursing practice**

The Island nurse demonstrates a consistently high standard that is maintained within statutory and ethical guidelines when dealing with release of information. The nurse is mindful of the issue of confidentiality presented by living and working in the community. The Island nurse advocates for the client to access appropriate services even when access is difficult. This is evident with evacuation of 3.2% of clients from the island when seeking for treatment both in the emergency and non-urgent cases. The findings also reveal that the Island nurse sought assistance and consulted medical advice via telephone for 18% of clients attending the RINP when standing orders (S/O) did not cover client issues in order to obtain best outcome for client (pg 20).

The nursing documentation includes a record of the decision making to demonstrate accountability for nursing actions and outcomes, often referring to the S/O and emergency manuals for assistance. As standing orders used by the Island nurse does not cover the diverse and complex cases that present to the RINP, the nurse often combines S/O regime with that of the Remote Area Nursing Emergency Guidelines to provide optimal treatment for the presenting client.

Promotes and implements strategies to reduce potential unsafe environment and unsafe practice for the protection of self, colleagues, clients and the community. The Island nurse utilises community assistance in the form of police, rangers, and voluntary emergency services when necessary to ensure a safe environment for self, colleagues and the client involved. The health education provided to the community by the Island nurse such as diving fitness and healthy lifestyle programs is in-situ to promote a safe and healthy community environment.

### **Competency Unit 7**

#### **Identifies own values and beliefs and their impact within the remote area setting on self, own practice and community**

The Island nurse demonstrates an understanding of the impact of the values, customs and spiritual belief of individuals/groups on own practice. The nurse, both in the team setting and individually, examines and reflects on the clients values, customs and spiritual beliefs which impact on nursing practice on the Island through performance management system (PMS) and regular staff meetings. The Island nurse uses high level of judgement based on experience and knowledge is reflected in the decision making. A comprehensive approach is used in decision making to focus on client's expressed and actual needs. The findings of the study indicate that 85% of the cases at the RINP are attended by nurse only where the Island nurse makes clinical decisions and complex professional judgement in isolation from other health professionals (pg 36).

### **Competency Unit 8**

#### **Engages in collaborative approaches to professional learning and development**

The Island nurse supports clinical practice by regular professional staff development on mainland and by distance education. In-service for staff at the RINP is done on a need basis in areas such as decompression and diving incidents, managing aggression in the community, documentation, four wheel driving relevant for competency with the island ambulance, and occupation health and safety. The nurse adheres to annual assessment of advanced life support, defibrillation and relevant certification such as X-ray technician certification. Identifies own professional development through performance management system (PMS).

The Island nurse's documentation is of a very high standard with the care provided by the nurse reflecting an advanced level of practice (pg36).

Immunisation certification and annual updates of all nursing staff that practice at the RINP is well supported by the staff which enhances optimal opportunistic primary health care in areas such as immunisation. This is evident with 1% of primary and 31% of secondary health issues recorded as immunisation on HCare. The Island nurse is aware of the need pharmacological education and seeks regular updates to maintain competent levels of pharmacological knowledge due to the constant demands placed

on the nursing staff to initiate pharmacological treatment. This constant demands placed on the Island nurse is supported by the study which indicated at medication was administered to 60% of clients who attended the RINP (pg 21).

### **Competency Unit 9**

#### **Utilises research to inform own practice and to improve standards of care**

The Island nurse promotes research and evaluation that is collaborative and provides feedback. The nurse is involved in health promotion campaigns that are relevant to the island through the use of pamphlets and opportunistic health education of clients that present to the RINP. The contact with these health promotion campaigns supports the nurse's knowledge base and enhances standards of care provided. Audited client records revealed a minimum of 5% of clients required health education and a further 3% health promotion.

Local data codes have been developed to reflect the type of injuries that are most common on the Island such. The local codes included the number of bike accidents with or without helmets, marine accidents, alcohol related injuries, assaults, and mainland referrals. These local data codes are used to target specific health promotion themes relevant to the Island, with bike accidents without helmets followed by marine accidents of major concern (pg 33).

The Island nurse is involved with the Local Island Authority in reviewing and developing health prevention strategies pertaining to high activity periods on the island such as 'schoolies week' and peak holiday periods. The nurse is supportive of and contributes to nursing and primary health care research conducted on the Island in areas such as in the Injury Prevalence Survey.

### **Competency Unit 10**

#### **Develops effective management strategies to implement and support primary health care**

Due to the diverse nursing background of each nurse working at the RINP, the island nurse's input into the development of effective management strategies is encouraged and supported. Open communication at all levels of health management, with regular feedback, allows for the identification of potential conflict situations which can be managed using diverse problem solving techniques that each nurse brings to the Island. This fosters an environment in which the nurse can be empowered and build on existing advanced nursing experience.

The Island nurse often works with the local authority and law enforcement agency to develop multi-disciplinary strategies and approaches to enhance safe environment on the Island especially during high volatile periods such as 'schoolies week' and public holidays.

### **Competency Unit 11**

#### **Facilitates teamwork**

The Island nurse supports the development of colleague's self identified learning needs and assists with transferring of skills where appropriate. Facilitates team review and evaluation processes in a way that encourages team development such as team involvement in decision making concerning staff rostering, staff mix,

management of material resources, updating emergency equipment, check lists and nursing post administrative issues.

The Island nurse fosters partnerships within the multi-disciplinary health care team, which includes professional relationship with doctors, and others whom are involved with direct client care and safety. The nurse establishes and maintains effective and collaborative working relationships with other members of the health care team, including the broader community through open communication and regular contact.

The audit revealed that the Island nurse sought advice predominantly from the Rottneest Island doctor, followed by the Fremantle Hospital medical officer. Advice was also sought from others which included the client's own doctor, pharmacist and Western Australia Alcohol and Drugs Authority. Locally the audit revealed assistance was obtained from the police, rangers, Island security and the voluntary emergency services. The involvement with the voluntary emergency services on the Island, consists of the provision of both emergency and primary health care education from the Island nurse plus the orientation of these volunteers to the type of assistance that maybe required of them by the nursing staff.

## **Competency Unit 12**

### **Demonstrates advanced skills in communication**

The Island nurse, through effective communication and leadership, promotes health to enhance the capacity of individual and the community to maximise health outcomes. Welcomes feedback from colleagues, individuals and community members on health service provision for the Island through contact with key persons, and supports the community to identify health needs. The nurse is involved with local groups such as LEMAC (Local Emergency Management Action Committee) where collaboration occurs to form strategic alliances to enhance the continuity and delivery of health care.

The nurse recognises the pivotal role of the client, in the communication process, to maximise health outcomes by assessing the client's level of understanding of the presenting health issue and health care options available on Rottneest Island. This is paramount as the audit indicated that 83% of the clients who attended the RINP to be non-resident. The importance of critical, relevant and culturally appropriate information is provided in complex situations, especially when dealing with variety of overseas visitors to the Island. The Island nurse provides relevant and timely health information to individual clients and groups in a form that facilitates their understanding. This is evident in the health education provided to clients by the Island nurse in such areas as immunisation and school health programs, and lifestyle health education for both resident workers and Island visitors, and with information and assistance given to clients when evacuated for further treatment.

The Island nurse accepts responsibility for the establishment, maintenance, finalisation and preservation of necessary documentation. This is evident with the use of HCare statistical collection book, evacuation record and client files which has allowed for audit of nursing practice conducted at the RINP.

### **Competency Unit 13**

#### **Deals effectively with conflict in the remote workplace**

The Island nurse demonstrates ability to identify and respond to situations which have the potential for conflict. This being evident at high activity periods for the Rottnest Island such as 'schoolies week', holiday periods, and New Year's Eve where strategies, such as increased staffing levels, are put into place to deal with the extra demands placed on the RINP.

The nurse facilitates conflict resolution with issues such as alcohol abuse and violence that is ever present in any community setting and especially evident during high activity periods on the island, adhering to organisational and community guidelines when responding to conflict. It is evident from the audit that the Island nurse works with and obtains assistance from community resources such as the police, rangers, Island security, and voluntary emergency services when necessary to obtain best outcome for the client.

### **Competency Unit 14**

#### **Demonstrates effective negotiation and liaison skills**

The Island nurse liaises with community agencies such as police, voluntary emergency services, and Local Island Authority in the development and implementation of strategies to prevent or minimise health risk and monitors outcomes. This is achieved through formal and informal contacts, and is paramount for the forward planning for high activity periods on the Island.

The audit indicates that the Island nurse consults and liaises with medical personal and other professionals on the mainland such as pharmacist, client's own doctor, medical officers from the major metropolitan hospitals for treatment advise, review of treatment and to obtain orders. There is evidence of negotiation and liaison with agencies such as the Flying Doctor Service, boat companies and receiving hospitals in the evacuation of clients off the Island. This demonstrates intersectoral collaboration with all areas of the health care team and other agencies both on Rottnest Island and the mainland.

## APPENDIX TWO: CLIENT'S PERCEPTION OF PRESENTING PROBLEMS

Sandfly bites	Renal calculi - review pain	Slammed finger in car door
Vomiting after each meal	Morning after pill	Pilonodial sinus
Pilonodial sinus	Pilonodial sinus	Gravel rash
Cough & unwell	Constipation	Requesting Ventolin puffer
Left foot - stood on sea urchin	Lacerated head	Gastroenteritis
Deep cut to right knee	Injured knee and ankle	Swollen eye
Chest pain	Stenosis of ileostomy	Unwell - fever and sore throat
Sore right knee	Insect bite	Foreign body in right eye
Check of supra pubic catheter	Hurt groin	Infected hand
Abrasions 4th finger right	Nausea, cold shivers	Bike fall
Pain in right side of stomach	Cut left foot	Genital irritation
Nausea, abdominal pain	Review of blood pressure	For fasting bloods - chol & bsl
Removal of sutures	Lacerated toe	Splinter on right foot
Sea urchins spine in feet	For hep b immunization	Bladder infection
Irritation of right eye	Results of pap smear and msu	Irritation of right eye
Inflamed eye	Rash on lower legs	Fish hook in left finger
Dressing to right foot	Cut finger	Sting on ear
Requesting elocan ung	Sea urchin spine in hand	Irritated left eye
Wound review	For methadone	Sore throat swollen glands
Swollen right elbow	URTI	Aches and pains
Sore throat & cough	Cream in eye	Gravel rash
Vomiting	Physical check	Skin spot
A boil on the leg	Second hep b injection	Tooth ache
Bike fall	Very sore foot	Pregnancy
URTI cough at night	Lumbar back pain	Fall from pushbike
Bad eye	Ear	Miserable, not sleeping well
Cut foot on coral	Unprotected sex	Remove sutures
Dressing on hand and face	Sore penis, pain passing urine	Back injury - waves
Bleeding from the bowel	Pregnant	Cobbler spur
Splinter in toe	Discharging left eye	Cut foot
Leg cut	Sore tummy	Cut knee from bike fall
Infected cut on leg from jetty	Cut right leg	Right knee injury
Coughing up blood	Badly grazed elbow	Client perception not stated
Lacerated elbow on left arm	Ear infection	Ear infection
Blood pressure check	Cut on skin	Sore tooth
Lesion on chin	Ear ache	Chronic indigestion, vomiting
Sore penis	Urinary tract infection	Tonsillitis, earache, flu
Extremely painful throat	Eye infection	Foreign body in foot
Discuss pap results	Fever and cough	Vomiting, cough, fever
Requesting quinine tablets	Stung by a blue bottle or other	Head injuries
Cut toe	Cut right forearm	Ear infection
Vomiting/ fever	Wound on foot	Query bronchitis, pregnant
Finger lacerated by glass	Scrape and bruised right shin	Scrape and bruised right shin
Burning, hands and feet	Sore throat sinusitis	Bladder infection
Fluey type	Review of sutures	Antenatal check
Flu shot required	Antenatal check	Review for URTI

Flu vaccine	Bronchitis	Cuts and abrasions
Fall from pushbike	Lacerated right leg	Cut on foot
Splinter taken out of hand	Rolled ankle	Insomnia
Inflamed	Sprained ankle	Hit ring finger
Asthma - medication requested	School health screening	School health screening
Tooth ache	Sore throat	Nausea and vomiting
Lost tablets - need replacement	Ankle injury	Haemorrhoids
Lacerations - bike injury	Fish bone in throat	Methadone administration
Methadone administration	Bloods to be taken	Splinter removal
Stinger marks	Middle ear problem	Stubbed toe
Lacerated foot	Diarrhoea	General aches and pains
Sore foot	For removal of small splinter	Fall from bike
Fell off bike	Asthma	Foreign body right heel
Wound on scalp	Fall over onto right hand	Allergy
Burnt fingers from frying pan	Immunization	Right wrist pain
Grazed leg	Period pain	Painful right wrist
A jelly fish sting	Graze - bike accident	Fall from bike
Asthma	Immunisation request	Fall from bike
UV burns	Sore eye	Severe back problems
Urticaria	No voice, sore throat	Chron's disease
Cut finger	Ventolin inhaler request	Infected chest
Blocked right ear	Jelly fish sting	Diarrhoea
Stinger bite	Swollen testicle	Petrol burns
Sore leg	Cut right knee	Jelly fish sting
Sore throat, high temperature	Can't go to the toilet	Migraine headache
Stiches to leg	Jelly fish sting	Right eye irritation
Stiff neck	Burn blister on finger	Fall from bike
Deep chesty cough, sore throat	Clean out wounds	Burn from spilt coffee
Allergy	Jelly fish sting	Jelly fish sting
Left ear infection	Script for pharmacy	Boiling water scold
Irritated eye	Eye irritation	Stinger bite
Jelly fish sting	Cut lip	Marine accident, dressing
Sprained ankle	Dettol for knee	Queried a white tail spider bite
Lacerated left foot	Swollen left hand	Lips burned
Jelly fish stings	Injured left arm fall from bike	Grazes, fall from bike
Request for blood test	Sores on leg	Not stated
Suspected tonsillitis	Head cold	Sore left elbow
Sting	Cuts	Minor cuts and rotate wrist
Cut finger	Ear irritation	Headache and temperature
Sore throat, blocked nose,	Reef cut review	Sore throat and bad back pain
Sore stomach and throat	Lacerated left foot and leg	Requesting ventolin puffer
Boat accident	Cut foot	Fever and neck stiffness
Rash both arms	Bee sting/swollen	Ruptured knee
Review of boil on right thigh	Quokka bite	Request script for acylour tabs
Requesting ventolin puffer	Hit on head at school	Phlebitis
Vomiting	Bike fall	Bilious attack
Methadone management	Stinger reaction	Anaemia
Fish hook in finger	Cut finger	Headache

Crush injury right index finger	Red left eye	Quokka bite
Sore left right eye	Bleach splash into left eye	Painful left calf
Nausea and vomiting	Blood results	Antenatal care
Flu vaccination	A red sore eye	Red eye with pus
For second hepatitis injection	Asthma	Check blood pressure
Stinger	Queried fractured arm	Requesting eye medication
Pain in back and testicles	Fever and sore ears	Foreign body in left eye
Asthma	Trauma to left elbow	Extreme menstrual cramping
Wound dressing	Flu	Stenosis of ileostomy
Toenail infection	Migraine	Antenatal check
Itchy arms and legs	Sand in left eye	Something wrong with ear
Jarred knee	Stitches out	Fish hook in left hand
Tightness in chest	Fish bite	Sore arm
Asthma	Sore throat, headache, stomach -	Something stuck in head
Deep graze	Fever and abdominal pain	Sea sickness
Pulled muscle	Painful fingers	Kicked little toenail, infected
A sore wrist	Can't move neck	Poison finger
Nausea and vomiting	Earache	Blood test
Quokka bite	Bike accident - grazes	Stung on face and lips
Cut between toes	Possible uti	Replacement of bandage
Scrape and deep gash	Swollen fingers	Cut
Sore and watery left eye	Sore on knee	Crampy abdominal pain
Cut foot	Cut foot	School sores
Infected leg	Head injury	Trauma - sore ribs
Injure toenail on left foot	Hearing and vision screening	Painful corn on toe
Rash on arms, legs	Morning after pill	Review of skin condition
Lacerated finger	Belly button to be checked out	Cut toe
Sore throat, swollen glands,	Headache and nausea	Head lice
Wanting nsaid	Cuts to foot	Hit head and feeling unwell
Stomach pain	Hit left-leg by bike	Stiches taken out
Sore toe nail	Wound on thumb	Sand in eye
Have a cold	Cut hand	Check for chest infection
Cut	Lacerated fingers on right hand	Bicycle accident
Aggravated tennis elbow	Cut to little toe	Soreness in right inner ear
Bite on left ankle	Cut finger with knife	Conjunctivitis
Review wound	28 weeks gestation, tiredness	Seeks advice on a cut
Chesty cough	Abrasion to knee	Injured right toe
Head cold - stuffy	Facial rash	Diarrhoea
For pregnancy test	Leg graze	Cholesterol medication
Sore hand	Bite on neck and head	Sore back
Check	Twisted right ankle	Cut arm
Twisted ankle	Swollen area under right eye	Urine infection
Review of eye injury	Nil stated	Not stated
Re-opened existing wound	Rash around eyes	Possible conjunctivitis
Unwell	Gastroenteritis	Swollen finger ,cray bite, ?bee
Stomach cramp and diarrhoea	Cut toe	Cut on sole of left foot
Stung arm	Pain on urination, urgency	Ear ache
Stinger bite	Clean wound and treatment	Cold/flu symptoms



Ankle injury	Sore hip	Rash
Bike fall	Sprain fracture right lower leg	Vomiting
Jelly fish stings - headache	Reef cut	Marine – cuts, bruising to foot
Review hearing	Grazed arm - needs bandage	Review of ear infection
Fell off bike - abrasions to knee	Slammed finger in door	Pain, irritation right ear
Head ache	Wound care	Removal of sutures
Pregnancy issue	Sand in left eye	Foot sprain/bruising
Abdominal pain	Query injured lower spine	Very sore back when breathing
Itchy legs	Swollen finger	Bloods taken
Requesting Ventolin puffer	Asthma	Nose bleed
Head lice	Head lice	Cut on foot
Big toe nail has come off	Removal of wound drain	Sprained ankle
Stinger sting on back - 40 hours	Itchy eye	Infected thumb
Swollen foot	Ankle and hip injury	Blood nose
Sore ear	Snorkelling accident	Dressing on wound
Sand in eye - irritated	Dental abscess	Query insect/spider bite hand
Sore leg	Painful back - facet joint	Sting
Query tonsillitis	Sore kidneys	Nausea, lower abdominal pain
Reef cuts and grazes	Right knee stiff, sore, inflamed	Foreign body in left eye
Fish hook injury	Fish hook	Sting - jelly fish
Marine sting	Swollen ear	Bruised knee
Newly diagnosed NIDDM	Irritable eye	Bleeding toe
Dislocated shoulder	Lacerated ankle	Allergic reaction to bite
Requests Canestan	Wrist stiff and sore	Painful toe
Thrush	Sore eye and toe	Dehydrated, fever, throwing up
Glass in foot	Blocked ear	Bike injury - abrasions
Blood pressure check	Croup	Squashed finger
Stinger on chest	Laceration left foot	Vomiting
Stinger	Nausea related to sea sickness	Wanted a Ventolin puffer
Infected eyebrow ring	Bite on leg	Sore throat
Sore throat	Sore throat	Abrasions to big toe and leg
Blocked ear	Cough	Sore toe
Nil stated	Nil stated	Hard of hearing left ear
Vomiting	Sting bite	Cut knee
Stinger on stomach	Right index finger cut	Ear blockage
Ears checked for wax	Diarrhoea	Supply of tablets
Bike accident wound/dressing	Bike accident - graze	Bike fall - abrasion right knee
Bike injury limb abrasions	Cut toe	Common cold, jelly fish sting
Bruised leg	Not stated	MMR, growth, ectopic skin
Fish hook left leg	Nil stated	Vomiting, urinating blood,
Sprained ankle	Ears	Upset tummy
Inflamed bites	Blood pressure check	Flu
Respiratory infection ? Asthma	Bronchitic type cough	Allergic reaction
Coral underneath toe	Gastroenteritis	Badly cut thumb
Fell off bike	Burn	Cut foot
Wants eye drops	Mild burns	Suspected fractured rib
Infected abrasions to leg	Allergy	Nausea and diarrhoea
Chemical in right eye	Injured toenail	Sore throat

Pain related to spinal fusion	For depo provera	Chest, back pain, sore throat,
Review of respiratory symptoms	Laceration of thigh	Infected nail
Food poisoning	Anaemia	Grazed elbow
Ear infection, flu symptoms	Sprained ankle	Requests morning after pill
Sore eye	Wax on eardrum	Injury to right wrist - skin tear
Painful right ankle	Rash in right axilla	Sore eye
Laceration- face, broken teeth	Review of lacerated finger	Lacerated finger
Vomiting	Small lump on neck	Post coital contraception
Oral thrush	Rash	Cut foot
Split lip	Blisters	Grazed elbow
Swelling face, arm, rash	Fell off bike scraped knee, elbow	Fell off bike
Sea sickness	Small laceration	Pinched nerve
Lacerations to arms & legs	Cut toe	Sea sickness
Rash	Nausea & vomiting	Bike accident cut knee
Centipede bite	Generalized aches & pains,	Collapsed on basketball court
Grizzly child & fever in	Bad head pain,migraine	Big toe injury
Push bike accident	Caught finger in door	Breast lump
Collected letters for consultant	Watery eyes - allergy to grass	Marks on legs and arms
Infected finger	Cut on chin	Midgy/mozzie bites - allergic
Cut received from bike accident	Infected upper lip	Sore eye
Allergic reaction to mozzie bite	Rash in groin, back of legs	Fly in ear
Flea bites	Review of wound Bartholin's cyst	Upset stomach
7/40 gest. headache, diarrhoea	Sore ear, runny nose	URTI
For repeat m.s.u	Grazed arm	Cut on chin
Query glass splinters	Rash	Painful wrist
Gash in knee	Cystitis (urinary burn)	Lip cut
Head injury	Hand cut	Remove three stitches
Severe migraine	Grit in my left eye washed out	Bloodshot eye
Swollen right arm	Rash on trunk and neck	Request ventolin
Ear ache	Cut finger	Sea urchin spikes
Right ankle twisted	Hypertension/obesity	Squashed left-hand
Rash on leg	Fall from bike	Injuries from falling off bike
Pregnancy test	Cut heel on sharp metal sticking	Psoriasis (dry skin) medication
Slipped and broke toe	Irritable high temperature	Sore thumb after bike fall
Eye irritation	Mouth ulcers	Injured right elbow at work
Mouth ulcers	Deep knee abrasion	Loose wire in braces
Right leg and toe injury	Requesting Ventolin inhaler	Sunburn
Home injury	House fire	Infected sebaceous cyst
Vomiting, nausea, stomach pain	Unwell	Ear ache
Grazes on knees /hip / elbow	Minor cut	Feel shocking (unwell) cough
Review of hand dressing	Splashed with cleaning fluid	Fish hook in hand
Injury to left	Laceration to right side of eye	Cold symptoms
Glass splinters all over body	Possible eye injury	Severe nausea & migraine
Fall, injury	Infection in eye	Bruising to face
Bad cough, check chest	Push bike accident	Mozzie bites - swelling
Hard to breathe	Ear and chest examination	Ear ache & temperature
Hoarse voice	Require ventolin puffer	Bike accident, badly grazed
Broken skin on elbow from a fall	Constipated	Crushed finger

Damaged little toe nail	Stinger - inflammation left eye	Infected stud area on lower lip
Cut foot	Quokka bite	Burn
Knee graze	Persistent cough	Severe back pain
Ear ache	Cut forehead grazes to left thigh,	Grazes to left thigh, knee,
Morning after pill	Sore and itchy eyes	Croup
Unconscious	Jelly fish sting	Fell off bike scraped leg
Persistent itch - query hives	Wound review	Blister on left leg
Shortness of breath, Ventolin	Hives	Suspected broken little finger
Rolled ankle	Trauma to right ring finger	Insect bite
Splinter in right ankle	Grazed right elbow	Cut on chin
Cut on right hand	Appointment with doctor	Schizophrenic patient
Patient requesting medication	Presented as query UTI	Sore arm caused by fall
Skinned knees	Gashed on right elbow	Persistent cough
Sticky eye	Eyes are sore	Cough and phlemgy chest
Asthma	Cut foot	Requesting Ventolin puffer
Bite on left ear	Requesting script to be filled	Blocked ear
Review of blocked ear	Cut lip	Cut to the knee
Blistered hand	Injured left knee	Temperature and sore throat
Emergency contraceptive pill	Review dressing	Bruised finger joint
Glass in heel	Wants script filled	Requesting anal medication
Ear wax	Red right eye	Painful gums
Cut small toe left foot	Cut on big toe lacerated thumb	Lacerated thumb
Sore toe from bike accident	Sore finger nail	Snuffly baby
Ear problem	Twisted ankle	Peanut allergy
Query hit by luggage trolley	Rash on neck	Stinger bite
Foreign matter in eye	Sore right knee previous problems	Injured index finger
Cut leg	Requesting ventolin puffer	R/O subaceous cyst yesterday
Deep cut to lower left leg	Sea sickness	Right hip sore, grazes hand
Cut on left hand	Abrasions	Vomiting
Fever, vomiting, diarrhoea	Cut on foot	Conjunctivitis
Allergic reaction	Sore ears	Sore eye
Grazed knee	Possible infected thumb	Coughing
Bandage change	Dizziness - blood in ear	Bleeding finger
Nausea, diarrhoea, vomiting	Purchase Ventolin inhaler	Vomiting
Rash	Marine stinger	Possible stinger
Foreign body left foot	Cut on leg	Gash on knee
Sore eyes	Stomach cramps and vomiting	Infected cuts
Infected cuts - not healing	Itchy eye	Head injury
Injured ankle	Took warfarin dose twice	Abdominal pain
Immunisation - fish hook	Sore throat	Fell and hurt shoulder
Fever lethargy	Spots on trunk	Ear ache
Graze on right knee	Right elbow wound	Blocked ears
Bee sting	Migraine	Hit by a rogue wave
'000' call out for exhaustion	Fall in shower	To get hand re-dressed
Chesty cough	Vomiting	Gash on leg
Allergies and eczema	Sore upper back around chest area	Query laryngitis
Cut on large toe	Temperature for 24 hours	Itchy right ee
Cystitis	Stung by stinger	Flu

Possible fracture little toe	Client requesting inhaler	Abrasions
Sore throat	Review existing suture line	Bp check
Unable to weight bear	Redress wound	Client requesting ventolin
Redress wound	Redress wound	Viral conjunctivitis
Sore left eye	Redressing right foot	Earache
Post choking episode	Abdominal pain	Fall from bike
Infected injury to foot	Discharging right ear	Blister on left foot
Asthma	Ears blocked from infection	Hives or other allergic reaction
Left grazed knee	Grazes and toenail wound	Stiches to be removed
Splinter in foot	Laceration to right knee	Sea sickness
Return of crutches	Telephone re childs sleeping	Complained of ear wax
Ear blocked and immunisation	Lacared foot	Cut thumb
Vomiting	Right ear possible infection	Severe headache
Morning after pill requested	Cut on finger	Lump on left-sole of foot
Fall from pushbike	Sore throat	Rolled ankle
Fungus/thrush	Fell off bike	Reddened areas on leg
Depression	Depression	Depression
Antenatal check 37/40	Antenatal check 37/40	Cut to left foot
Returned for nebulizer and	Eye feels scratched	Fell and hit head
Headache and nausea	Query tonsillitis	Left shoulder - sting
Scraped knee	Knee cut on coral	Cut above left eye
Bike fall - scratches hands, knee	Requesting prescription	Rash on legs
Sore neck, throat and headache	Painful left eye	Sore left eye, rubbing toe
Review lip and grazes	Fall resulting in grazes on face	Left arm injured in fall off bike
Sprained ankle	Query bike accident	Pain query haemorrhoids
Wanting cough mixture	Pain relief from teething	Left buttock pain
Client threatening suicide	Requested script to be filled	Irritated eye
Heart palpitations/ weakness	Stiches to be removed	Blood big toe
Facial abrasions	Sore on foot - query old bee sting	Grazed nose and forehead
Suspected left ear infection	Generally feeling unwell	Grazes to left knee, left elbow
For emergency contraception	Cold cough	Throat, head, body aches
Multiple superficial wounds	Travel sickness	Sore right eye
Insect bites- swelling and nausea	Leg put through glass	Grazed knee
Superficial laceration right knee	Injured calf muscle	Review of otitis media
Ear ache	Sore toe	Cut foot
Broken ankle	Review of painful wrist	Wrist hurt after bike fall
Review of sore eye	Sore eye	Thrush
Query dislocated thumb,	Prickle in foot	Skin graze on elbow
Cold symptoms	Travel sickness	Bitten by a sick quokka
Stinger	Fall from bike	Urine infection
Stung on inside of leg in the	Split lip	Sore knee
Cut on head	For lab results	Knee scrape
Unusual sore developing on leg	Laceration left shin	Collected letter for referral
Eemergency contraception	Bike accident - cuts & grazes	Wanting to purchase panadol
Flu vax	Review of sprained ankle	Sprained ankle
Lacerated scalp	Asthma	Injured
Hurt foot and ankle	Review of dressing	Cut hand diving shallows
Enebriated	Grazes to toe, hand and elbow	Cut to forehead

Hurt bruised right shoulder	Headache	Knee scrape
Marine sting	Stinger	Bitten whilst snorkelling
Squashed large toe - left foot	Swollen ankle	Toenail off in biking accident
Muscle sprain	Bike accident - hand, knee, head	Stomach problems
Return for dressing	Infected grazed knee	Splinter/something in foot
Back muscle spasms	Diarrhoea, vomiting for 48 hours	Swollen elbow
Stomach cramps, muscle pain	Bad cough	Left eye irritation

# AUDIT TOOL FOR CURRENT NURSING PRACTICE ON ROTTENST ISLAND

THE FOLLOWING QUESTIONS ARE TO BE COMPLETED BY COLOURING IN THE APPROPRIATE CIRCLE OR BY WRITING IN THE SPACES PROVIDED USING A BLACK PEN

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5. Any other health issues?

Yes

No

If NO, go to question 9

6. Primary Health Issue

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<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Service Provided (HCare Stats)

--	--

OFFICE USE ONLY									
0	1	2	3	4	5	6	7	8	9
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Service Results (HCare Stats)

--	--

OFFICE USE ONLY									
0	1	2	3	4	5	6	7	8	9
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Time of consultation (check call-out book):

In hours

Out of hours

N/A

10. Care provided by:

Nurse only

Medical Officer

Nurse/medical

Multiple staff



**11. Nursing history:**

- Physical health
- Psychosocial
- Both

**12. Physical assessment:**

- Problem orientated assessment
- Complex physical assessment

**13. Nursing plan?**

- |  |   |
|--|---|
| Reassurance <input type="radio"/>      | Reassess/Monitor <input type="radio"/>                |
| Treatment advice <input type="radio"/> | Referral <input type="radio"/>                        |
| Health promotion <input type="radio"/> | Consult doctor <input type="radio"/>                  |
| Health education <input type="radio"/> | Other ( <i>please specify</i> ) <input type="radio"/> |

.....

**14. Use of standing order:**

- Yes
- No

**15. Did the nurse phone for medical advice?**

- Yes
- No

**If NO, go to question 18**

**16. Phone advice from whom?**

- |  |   |
|--|---|
| GP <input type="radio"/>                     | Poisons Centre <input type="radio"/>                  |
| Rottnest Island doctor <input type="radio"/> | PMH <input type="radio"/>                             |
| Fremantle Hospital <input type="radio"/>     | KEMH <input type="radio"/>                            |
| RPH <input type="radio"/>                    | Other ( <i>please specify</i> ) <input type="radio"/> |

.....

**17. What was the outcome of the phone call?**

- Drug order                       Review of treatment   
Treatment advice                       Other (*please specify*)

.....

**18. Medication schedule:**

- S3   
S2   
S4   
S8

**If NO to question 18, go to question 21**

**19. Type of medication administered:**

- Antibiotics                       Resus drugs   
Analgesia                       Anti-emetics   
Narcotics                       Antipruritic   
Bronchodilator                       Other (*please specify*)

.....

**20. Medication administration route:**

- Oral                       S/C                       Sub Lingual   
IV                       Spray                       PR   
IM                       Nebulizer                       Topical   
Patch                       Inhaler                       Other (*please specify*)

.....

.....

**21. Type of wound care:**

***Burn Management***

- Suture
- Sunburn
- Steristrip
- Scald
- Suture/Dressing
- Burn
- Dressing
- Clean/dry
- Other (*please specify*)

.....  
 .....

**22. Describe the wound care:**

- Simple
- Complex

**23. Other nursing interventions:**

- RICE
- Cannulation
- Splinting/Strapping
- Health education
- POP
- Catheterisation
- R/O Foreign bodies
- Counselling*
- Intravenous
- Psychosocial
- Midwifery delivery
- Trauma
- Other (*please specify*)
- Mental health

.....

**24. Other tests/procedures performed by the nurse:**

- Bloods
- Visual acuity
- X-Ray
- Urinalysis
- Airway management
- Faecal test
- External pacing
- Pap smear
- STD screening
- Pregnancy test
- O2 saturation
- ECG tracing
- Blood glucose
- Breast screening
- Defibrillate
- Other (*please specify*)

.....  
 .....

**25. Nurse retrieval in: (paramedic role)**

Yes

No

**26. Nurse retrieval out: (transport role)**

Yes

No

**27. Other support used:**

Police

Ranger

Fire and Rescue Service

Other (*please specify*)

.....

**28. Evacuation of patient?**

Yes

No

**29. If answered yes to Q28, rating of evacuation:**

Emergency (escorted, RFDS)

Urgent (RFDS, ferry, boat)

Non-urgent

**30. Program:**

- 0-5
- Immunization
- First Aid
- School Health
- Women's Health
- Health Education

*Please specify the type of health education: .....*

.....

**31. Flagged for interview with ..... (nurse):**

- Yes
- No

**Further Comments :**

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

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