A FRAMEWORK FOR A NURSE PRACTITIONER ROLE IN ACUTE RHEUMATIC FEVER AND RHEUMATIC HEART DISEASE

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ABBREVIATIONS AND ACRONYMS

Abbreviation	
ACCHS	Aboriginal and Torres Strait Islander Community Controlled Health Centres
AHPRA	Australian Health Practitioner Regulation Agency
ARF	Acute rheumatic fever
AUSPRAC	Australian Nurse Practitioner Study
CARPA	Central Australian Rural Practitioners Association Inc.).
CNC	Clinical nurse coordinator
CPD	Continuing professional development
CTO	Continuing therapy only
CQI	Continuous quality improvement
FTE	Full time equivalent
GAS	Group A Streptococcus
KPI	Key Performance Indicator
HITH	Hospital in the Home
MBS	Medical benefits schedule
MO	Medical Officer
NMBA	Nursing and Midwifery Board of Australia
PBS	Pharmaceutical Benefits Scheme
PCCM	Primary clinical care manual
RAN	Remote area nurse
RHD	Rheumatic heart disease
RHDA	Rheumatic Heart Disease Australia
SCM	Shared care model
RN	Registered nurse
SPPE	Standards of practice in paediatric echocardiography

EXECUTIVE SUMMARY

INTRODUCTION

This paper outlines the legislative and professional requirements for the endorsement of a nurse practitioner (NP) in Australia and presents a case for an NP role in the prevention and management of acute rheumatic fever (ARF) and rheumatic heart disease (RHD).

ARF and RHD is a major health care problem in Australia. The majority of patients in Australia are Aboriginal and Torres Strait Islander people living in remote and rural areas where remoteness; transient population; poor living and education standards; high health practitioner turnover; and limited knowledge of the disease all contribute to delays and deficiencies in health service delivery and, ultimately, to the burden of disease.

A nurse practitioner practices in accordance with Commonwealth, State and Territory legislation and professional regulations. The nurse practitioner is endorsed to function autonomously and collaboratively in an advanced and extended clinical role, collaborating with and complementing the role of other health care providers. The nurse practitioner also plays an important role in education, research and leadership in their endorsed field of practice.

A project working group provided expert advice in identifying a potential role for an NP in the current model of service for ARF and RHD management. Areas where an NP could make a difference in improving service delivery and long term health outcomes are

- delays in service delivery;
- gaps in continuum of care; and
- lack of knowledge and experience of ARF and RHD for community members, patients and clinicians.

SCOPE OF PRACTICE

The nurse practitioner would provide an autonomous, advanced and extended clinical nursing role in the prevention, diagnosis and therapeutic management of ARF and RHD in a primary health care context as described in the *Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease*. (RHDAustralia, 2012). The nurse practitioner would be primarily engaged in holistic primary health care for Aboriginal and Torres Strait Islander people living in regional and remote areas of Northern and Central Australia.

CONCLUSION

A nurse practitioner in ARF and RHD would provide not only advanced clinical skills and knowledge, but also leadership, advocacy, and education for ARF and RHD. Working autonomously and in collaboration with the wider health care team, an NP could play a pivotal role in building the capacity of the health service to provide a more systematic, timely and coordinated approach to addressing service gaps and improving outcomes in the management of ARF and RHD.

INTRODUCTION

This paper outlines the role of the nurse practitioner (NP) in Australia, including legislative, professional and educational requirements related to the role and scope of practice, and presents a case for an NP specifically trained and dedicated to supporting diagnosis and management of acute rheumatic fever (ARF) and rheumatic heart disease (RHD).

The nurse practitioner model has been shown to improve access and timeliness of health care in national and international studies. (King, 2012; Stanik-Hutt et al., 2013). The role was introduced in Australia in 2000. Since then, NP positions have been established in all States and Territories and in a number of disciplines. (Gardner et al., 2010). Nurse practitioners are playing an increasing role in meeting service system gaps, improving health outcomes, and potentially contributing to a reduction in health care costs.

The *Nurse Practitioner Standards for Practice* are determined by the Nursing and Midwifery Board of Australia.

> *A nurse practitioner is an advanced practice nurse endorsed by the Nursing and Midwifery Board of Australia to practise within their scope under the legislatively protected title 'nurse practitioner.*

http://www.nursingmidwiferyboard.gov.au/

The role builds on and expands the registered nurse scope of practice. A nurse practitioner is endorsed to function autonomously and collaboratively in an advanced and extended clinical role, collaborating with, and complementing the role of other health care providers.

The role may include, but is not limited to

- assessment and management using nursing knowledge and skills;
- direct referral of patients to other health care professionals;
- following-up on any components of care initiated;
- initiation, titration and cessation of medications;
- ordering and interpreting clinical and diagnostic investigations; and
- specific endorsed procedural components.

The nurse practitioner also plays an important role in research, education and leadership.

Professional requirements for NPs in Australia include a Master's degree with work-based component, and demonstrated advanced practice as a registered nurse (RN).

The scope of practice should enable the NP to address the problems, issues and gaps in service that cannot be addressed, or are not addressed in a timely manner, by other health care professionals under the current service model.

BACKGROUND

National RHD Coordination Unit - RHDAustralia

RHDAustralia was established in 2009 under the Australian Department of Health's Rheumatic Fever Strategy as the National RHD Coordination Unit.

RHDAustralia is based at Menzies School of Health Research in Darwin. RHDA's aim is to reduce death and disability from ARF and RHD in Australian Aboriginal and Torres Strait Islander people by

- supporting RHD programs which have been established in the Northern Territory, Queensland, South Australia and Western Australia;
- establishing a national ARF and RHD data collection and reporting system in partnership with the RHD programs to help measure the quality of local health service delivery and provide national data on ARF and RHD;
- disseminating evidence-based best practice guidelines and education materials; and
- increasing community awareness of ARF and RHD and its prevention.

RHD Control Programs

The four State and Territory RHD programs funded under the Rheumatic Fever Strategy contribute to and benefit from the activities of RHDAustralia. Although each program has its own priorities and unique characteristics in terms of burden of disease, geography and service provision, the overall role of the programs is to

- identify people with or at risk of ARF and RHD and include their details on a disease register;.
- improve delivery of long-term secondary prevention treatment which helps prevent recurrent ARF and development or worsening of RHD;
- support clinical and public health practice by increasing disease awareness and expertise among the health workforce, so that they can provide appropriate health services to people with ARF and RHD, including clinical care and follow up, in line with best practice;
- provide advice on education and self-management support for people with ARF and RHD and their families, and the community;
- promote primary prevention which focuses on preventing first episodes of ARF; and
- use information from the disease registers to monitor health outcomes, and produce epidemiological reports to help improve control program activities.

The Northern Territory (NT) program is based in Darwin with a satellite program in Alice Springs. The program in Western Australia is based in Broome, in Queensland it is based in Cairns, and in South Australia the RHD program is based in Adelaide. All programs are attached to public health units.

Development of the framework

The concept of a dedicated NP role to support ARF and RHD was discussed at the RHDAustralia Jurisdictional Reference Group meeting in September 2013. Anecdotal evidence from preliminary consultations had indicated a range of areas in which an NP could add value to the service and improve health outcomes. A nurse practitioner specialising in this field could potentially play an important role in supporting RHD control programs to meet their objectives in optimising patient care, and in helping to close the gap between Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander

health outcomes. Any resulting service system improvements would further embed the chronic care model within existing RHD services and programs. A nurse practitioner would support skills development for remote area nurses (RANs) and other advanced practice nurses currently working in Aboriginal and Torres Strait Islander and/or remote area health programs.

Nominations for membership of the RHDA Nurse Practitioner Working Group (the Working Group) were called for during June-July 2014, and a series of preliminary meetings were held August - October 2014.

Membership of the Working Group includes representation from

- State and Territory based RHD control programs (Qld, WA, SA, NT);
- specific clinical expertise (cardiologist, pharmacist, maternal health/midwifery);
- Aboriginal and Torres Strait Islander Health Practitioner;
- general practitioner;
- Master of Nursing Practice (NP) course coordinator (Charles Darwin University);
- Aboriginal and Torres Strait Islander community controlled health service (ACCHS):
- nurses (including NPs in various roles, clinical nurse coordinators (CNCs) and RANs); and
- Office of the Chief Nursing & Midwifery Officer (NT).

The role of the Working Group is to support the development of the NP Framework, forming a pool of knowledge around the role specifically for ARF and RHD; providing high-level advice and strategic direction; and monitoring the development of the model.

Initial meetings of the Working Group were essentially brainstorming sessions around the need for an NP - the issues and gaps in service which could be addressed by the inclusion of an NP in the health care team, and the special skills required to address those needs. The output from these deliberations formed the basis of the NP scope of practice.

For ease of development, and in order to avoid making the project too unwieldy, a decision was made to focus initially on the development of the role in the Northern Territory. This Framework however, has been developed as a model that can be adapted and used by any State or Territory health care service or potential NP candidate who may want to pursue the ARF and RHD role.

Sample supporting documents have been developed to assist in this process. (See: Appendices 3-6)

A CASE FOR A NURSE PRACTITIONER ROLE IN ARF AND RHD

Background to ARF and RHD

Acute rheumatic fever is an auto-immune illness caused by the body reacting to a *group A streptococcus (GAS)* bacterial infection of the throat (strep throat) or possibly the skin. The immune system gets confused when reacting to the infection, and may also react to specific parts of the body including the heart, joints, brain and skin. This results in a generalised inflammatory illness that is called acute rheumatic fever (ARF). Not all people who have a streptococcal infection develop ARF; however those who have had ARF are at high risk of getting it again.

Despite the dramatic nature of the illness, ARF typically leaves no lasting damage to the brain, joints or skin. If the heart is involved, there can be persisting heart valve damage, and this is called rheumatic heart disease (RHD). Most people with RHD require complex long-term care which includes regular medical specialist review, regular echocardiograms and blood tests, and heart failure medication.

Recurrent ARF illnesses following recurrent GAS infections may cause further valve damage, and this leads to worsening of RHD, sometimes resulting in the need for cardiac surgery. Recurring ARF illnesses therefore need to be prevented. Recurrences of ARF can be prevented by providing regular and timely antibiotics usually in the form of three or four weekly benzathine penicillin G (BPG) injections. This is referred to as secondary prophylaxis. Adherence rates, however, are commonly poor. This leaves many patients vulnerable to repeat episodes of ARF, and potential development of RHD. In an audit of the Northern Territory's RHD Control Program data, Edwards (2013) found that "on any 1 day 20% to 67 % were not protected and 'at risk' of recurrence because of delayed secondary prophylaxis."

Kenya's story

When Kenya was eight, she had a lot of sore throats. Her Mum took her to the clinic and asked the doctors to check for acute rheumatic fever (ARF). The doctors did not diagnose Kenya with ARF, so she did not receive preventative benzathine penicillin G (BPG) injections every 28 days to stop further episodes.

In 2011 when Kenya was fifteen, she started to cough up blood, her heart began to beat fast, and she was in a lot of pain. She ended up in emergency, was diagnosed with three damaged heart valves and RHD, and had emergency lifesaving heart surgery.

Kenya is fully aware her illness could have been prevented. An early diagnosis of ARF would have notified her local clinic to put her onto a control program of BPG injections every 28 days to prevent repeat episodes of ARF, and prevent RHD. (Extract from *Murmur. Misdiagnosis of rheumatic heart disease …* (2014)).

Disease profile in Australia

In Australia, the disease is linked to poverty and social disadvantage. The vast majority of people with ARF and RHD are Aboriginal people and Torres Strait Islanders, many of whom live in remote areas of central and northern Australia. In many remote communities social disadvantage, including poor education opportunities and high unemployment, is associated with higher smoking rates, poor nutrition, physical inactivity and poor access to health services. The prevalence of chronic disease is higher in these environments than for the rest of Australia. (Australian Institute of Health and Welfare (AIHW), 2014, p.99*).*

Remoteness of Aboriginal and Torres Strait Islander communities impacts on ARF and RHD, in terms of health service access and uptake. Even urban centres across northern Australia are considered remote

in relation to cardiac surgery services which are concentrated in the southern states. Cultural and health beliefs and practices, language barriers, and lack of interpreting services are other factors which may impact on health and health service provision.

Aboriginal and Torres Strait Islander people are up to 8 times more likely than other Australians to be hospitalised for ARF and RHD, and nearly 20 times as likely to die from the disease.(RHDAustralia, 2012). Pacific Islanders, and migrants from high-prevalence countries, are also at high risk. The highest rates of ARF are found in children aged 5-14 years and the highest rates of RHD are found in adults aged 35-39. Pregnancy with RHD places women at high risk of complication, and managing patients following heart valve surgery is difficult in remote areas.

Service system gaps and issues in the management of ARF and RHD

Delays in service delivery, gaps in continuum of care, and lack of knowledge and experience of ARF and RHD for community members, patients and clinicians were identified by the Working Group and other key advisors as the main problem areas along the ARF and RHD prevention and management pathway where a nurse practitioner could make a difference in improving service delivery and long term health outcomes.

The ARF and RHD care pathway

Primordial prevention	*Primary prevention*	*Secondary Prevention & RHD control*	*Diagnosis & management of RHD*
Prevent GAS infections by reducing risk factors: Broad social, economic and environmental initiatives undertaken to prevent or limit the impact of GAS infection in a population.	**Target populations at risk**: Prompt treatment of GAS infections reducing GAS transmission, acquisition, colonisation and carriage, or treating GAS infection effectively to prevent the development of ARF in individuals.	**Secondary prevention of ARF**: Prompt diagnosis of recurrent ARF. Administering regular prophylactic antibiotics to individuals who have already had an episode of ARF to prevent the development of RHD, or who have established RHD in order to prevent progression of the disease.	**Medical and surgical management of RHD**: Intervention in individuals with RHD to reduce symptoms and disability, and prevent premature death.

Delays in service delivery for ARF and RHD are commonly experienced in the areas of

- initial identification, assessment and initiation of treatment for ARF and RHD;
- diagnostic investigations and review of results*;
- medication – initiation, review, titration and cessation at correct times; and
- follow up of patients (for scheduled reviews, following hospital discharge etc).

*A Nurse Practitioner trained and endorsed to conduct and interpret screening echocardiograms could improve the timeliness of diagnosis and commencement of treatment. A pilot study of a program using portable echocardiograms conducted in Fiji found that trained nurses can competently operate portable echocardiography machines and “detect findings suggestive of rheumatic heart disease with high sensitivity and reasonable specificity”. (Colquhoun et al., 2013).

Gaps in continuum of care are experienced as a result of

- the difficulty of ‘fast tracking’, and the logistics of conducting regular reviews which can be very difficult or impossible in remote situations;
- gaps in clinical services and medication management between specialist treatment and staff ‘on the ground’ – primary, secondary and tertiary care (during and between stages) “It all falls down in the middle” (D. Heppner, personal communication, 2014);
- a mobile and transient population (remote – urban – interstate) - makes it difficult for patients to access treatment (or for health care practitioners to access patients). Patients are therefore often lost to treatment and follow up;
- late or non-renewal of prescriptions for secondary prophylaxis and other regular medication (anti-hypertensive and anti-coagulant therapy, beta-blockers, etc.);
- a limited number of medical practitioners to service the target population. (The majority of doctors’ time during a remote clinic visit can be taken up with referral of new general medical cases and renewing scripts, leaving little time for management of known RHD cases);
- health services being unwilling to retrieve patients for treatment and/or hospitalisation (where ARF is often not considered serious enough for hospitalisation); and
- a lack of health practitioner confidence and experience in identifying and managing the diverse symptoms of ARF and RHD.

There is a perceived lack of knowledge and experience of ARF and RHD in Aboriginal and Torres Strait Islander communities, and within the health care practitioner team. It is thought that the disease process – its causes, progression and treatment protocols - are not well known and understood. Some of the reasons for this might be

- poor understanding of germ theory and cultural beliefs about the causes of illness in Aboriginal and Torres Strait Islander communities;
- ARF and RHD is not taught in some medical and nursing courses - perhaps because it is commonly (and wrongly) thought to have disappeared in the Australian health care setting; and
- many health practitioners are not experienced in working in Aboriginal and Torres Strait Islander communities and may never have seen a case of ARF. High turn-over of practitioners means limited time to become familiar with remote health issues and in particular ARF and RHD – (‘Fly in, fly out’ doctors).

This lack of knowledge and experience may contribute to the above mentioned gaps and delays in service delivery, and treatment adherence rates for patients.

A nurse practitioner model of service would be effective in addressing these service system issues. The model would improve quality of care, and could potentially contribute to cost savings in terms of reduction in medical practitioner workload, the need for hospitalisation, and specialist and surgical input.

Appendix 1: *Working document: issues and gaps in service –potential role for a nurse practitioner in ARF/RHD* provides more details of the Working Group's discussions about service system gaps and other issues.

Potential nurse practitioner role in addressing service gaps and issues

The primary objectives of the role are to increase access to high quality and cost effective care, streamline the patient journey between acute and primary health care services, and enhance health outcomes in populations at high risk of having or developing ARF or RHD. The nurse practitioner consults with other health care practitioners when the patient's condition requires care beyond their scope of practice, as determined by the collaborative framework of the specific health service.

The nurse practitioner would be a core member of the multidisciplinary team, providing advanced and extended clinical practice as a priority to patients with AFR and RHD. While the NP's work is clinically focused, they are also capable in the other practice domains of education, research and leadership. The nurse practitioner would provide expert advice to local health services in respect to a patient's ARF and RHD status, while working autonomously to facilitate treatment, and/or review.

The areas where the service system falls down along the ARF and RHD care pathway are well known and understood. A nurse practitioner with these capabilities focusing on ARF and RHD as a specialty would be well placed to address the issues and gaps in service outlined above. They would be able to work autonomously within their scope of practice, identifying and responding to primary health care needs more flexibly than the existing nursing workforce, thus contributing significantly to improving health outcomes.

The following scenarios provide just a few examples of where and why NP intervention is needed, and how that might affect patient care and health outcomes. In most of these scenarios, the NP acts as a centralised care coordinator and 'go-to' person with specialist clinical nursing knowledge of ARF and RHD.

Scenario #1: Transient population

A patient from a remote community is due for regular BPG injection but has temporarily located to an urban centre therefore cannot access their usual health service for the scheduled injection.

The patient attends a local urban health service (e.g. GP, community health service, hospital emergency department, or ACCHS) which does not have access to the RHD program register or patient's home health service medical record.

Acting as a central coordinator, the NP with access to the RHD register and patient record could authorise /prescribe the administration of the BPG injection. Importantly, the NP would also instigate and coordinate action on other services which should be opportunistically attended to while the patient is in town (or advise/request local health service to undertake same) - e.g. dental treatment; scheduled reviews or other follow up action such as: surgery work up that may have been delayed or overlooked; order and/or perform investigational or serial echocardiogram; and initiate clinical work up if the patient is due to cease prophylaxis.

The nurse practitioner would report to and liaise with the urban health service and the patient's home health service, ensuring the patient's record and the RHD register is updated accordingly.

Scenario #2: Annual reviews

An RHD Program advises a remote health centre that it is time for a patient's annual review by the cardiologist. The health centre and patient wait for the medical officer (MO) to visit, review patient and make a referral. The referral is sent to cardiology, and the patient is put on the cardiology waiting list. A nurse practitioner coordinator working centrally would note the date review is due, liaise with the patient's health centre and cardiology, and write the referral immediately thus ensuring more timely review.

The nurse practitioner would also liaise with the health centre regarding other appropriate interventions which could be undertaken opportunistically while the patient is visiting the urban centre for cardiology review, and make referrals for those interventions.

Scenario # 3: RHD in pregnancy

RHD can reveal itself during pregnancy, when there is a 30-50% increase in blood volume. A patient in the later stages of pregnancy presents with pulmonary oedema and is hospitalised. RHD is diagnosed. The patient spends the rest of her pregnancy in hospital – away from family and local support. (Not all clinical staff think of RHD when a woman presents with chronic cardiac failure).

Who manages the patient's RHD during this time? A multi team approach is needed, but who provides education about RHD (for both patient and family)?

A nurse practitioner in a centralised role could play a pivotal part in coordinating care, and facilitating effective collaboration between cardiologist, obstetrician, anaesthetist, intensive care specialists, midwives, the RHD program, and the patient's home health service.

A recognised and endorsed nurse specialist in ARF and RHD would have the authority to advocate for, promote, and facilitate routine screening for RHD during pregnancy, thus helping to ensure that the disease is picked up and treated early before a mother becomes very ill and in need of early hospitalisation.

Scenario 4: 'Hub and spoke' or outreach service

A nurse practitioner involved in direct patient care in a remote health centre (working regularly on site, or making a visit as part of a centrally coordinated outreach service) could

- conduct clinical assessments and initiate referrals, diagnostic tests, treatment as needed;
- review known patients, manage medication, renew scripts, make referrals to the multidisplinary team and order necessary investigations;
- provide leadership and support to the local team with reference to ARF and RHD; and
- provide incidental and structured learning opportunities for the local (and visiting) health care team.

Summary of the NP role in the management of ARF and RHD

Whether working in a centralised coordinating role or in direct patient care, the NP could play a pivotal role in addressing these service system issues and improving health outcomes by

- being a critical thinker, with authority to treat, represent and advocate for ARF and RHD;
- undertaking a leadership role - working with the ARF and RHD health care team and other services – e.g. hospital; ACCHS; Hospital in the Home(HITH) - to promote and facilitate collaborative practice;
- educating and building health care team capacity to ensure timely and appropriate diagnosis, treatment and follow up of ARF and RHD patients;
- monitoring and reviewing patient journeys in ARF and RHD - identifying system failures, advocating for and recommending improvements, and providing expert advice in the development of policies, protocols and guidelines;
- ensuring that practitioners are receiving information regarding their RHD practice, and that this information is being acted upon – e.g. monitoring changes in practice and improvements in uptake of secondary prophylaxis;
- acting as an accessible, centralised and expert 'go to person' for information and advice for the health care team, and facilitating communication and collaboration between RHD program managers and practitioners;
- advocating for and providing support and professional guidance around specific issues and gaps in service such as dental care and RHD in pregnancy, and promoting and educating the health care team on the importance of these in RHD care;
- supporting and facilitating long term planning of disease management, including palliative care; and
- overseeing care coordination, making recommendations, and supporting the nursing workforce, Aboriginal health practitioners, and RHD programs in relation to ARF and RHD care.

In addition to this high level advocacy, education, research and leadership role, the NP would undertake appropriate NP endorsed clinical interventions which could

- facilitate, support and streamline the patient journey;
- enable fast tracking of patients by identifying and responding to primary health care needs more flexibly than the existing nursing workforce;
- improve medication management;
- reduce the number of patients lost to follow up;
- facilitate patient access to services, in particular secondary prophylaxis;

- improve patient flow with consequent increase in specialist throughput;
- ensure more appropriate use of limited system resources (e.g. specialist doctors) by more appropriate referral pathways;
- take some pressure off primary care medical officers (MOs) who may often spend the majority of their time during health centre visits writing and/or renewing scripts and making referrals for routine cases - thus allowing more time for MOs to see new patients and deal with more complex cases; and
- reduce occasions of patient travel and associated costs.

LEGISLATIVE, PROFESSIONAL AND EDUCATIONAL REQUIREMENTS FOR NURSE PRACTITIONERS

Legislative Framework

The nurse practitioner practices in accordance with Commonwealth, State and Territory legislation and professional regulations. Two significant pieces of legislation have been enacted in recent years which have improved prospects for registered nurses to move into the NP role.

In the past, Australian nursing was regulated by each State and Territory under their specific nursing legislation. In 2009 a single national act, the *Australian Health Practitioner Regulation National Law Act,* was passed. There is now one national regulatory act, with individual state regulations allowing it to operate under state law. (e. g. The Northern Territory's *Health Practitioner Regulation (National Uniform Legislation) Act, 2010*. This national uniform legislation was followed in 2010 by the *Health Legislation Amendment (Midwives and Nurse Practitioners) Act, 2010* which allowed NPs to prescribe from the Pharmaceutical Benefits Scheme (PBS), and allowed for limited Medical Benefits Schedule (MBS) access for NPs.

In addition to this Commonwealth legislation, there are individual State and Territory acts and regulations which govern NP practice. This includes each State and Territory's poisons and/or therapeutic goods legislation, as well as other legislation relevant to the NP's scope of practice and professional role such as notifiable diseases legislation.

Most States and Territories have developed strategies and/or tools for developing and implementing the NP role in their own jurisdiction. The legislative and regulatory frameworks specific for each State and Territory are documented in detail therein. For example:

Queensland	*Queensland Nurse Practitioner Implementation Guide.* http://centreforpallcare.org/assets/uploads/Qld_Nurse_Practitioner_Implementation_Guide.pdf
Western Australia	*Nurse Practitioner Business Models and Arrangements. Final report.* http://www.nursing.health.wa.gov.au/docs/reports/Business_Models_Arrangements.pdf
South Australia	*Nurse Practitioners in South Australia: a toolkit for the implementation of the role.* http://www.sahealth.sa.gov.au/wps/wcm/connect/c9998680452470f59b9edb005ba75f87/Nurse+Practitioner+Implementation+Toolkit.pdf?MOD=AJPERES&CACHEID=c9998680452470f59b9edb005ba75f87
New South Wales	*Nurse Practitioners in NSW - Guideline for Implementation of Nurse Practitioner Roles-NSW Health.* *http://www0.health.nsw.gov.au/policies/gl/2012/GL2012_004.html*
Northern Territory	*Strategic Plan for nurse practitioners in the Northern Territory, 2014-2016.* http://www.health.nt.gov.au/Nursing_and_Midwifery/Nurse_Practitioners/index.aspx

Standards for professional practice

The Nursing and Midwifery Board of Australia (NMBA) governs the professional conduct of nurse practitioners. The following NMBA publications are the core standards for NPs in Australia:

- Nurse Practitioner Standards for Practice.

- National Competency Standards for the Registered Nurse.
- Code of Ethics for Nurses in Australia.
- Code of Professional Conduct for Nurses in Australia.

http://www.nursingmidwiferyboard.gov.au/

Regulation and endorsement of NPs is controlled by the Australian Health Practitioner Regulation Agency (APHRA) working in cooperation with the NMBA. In addition, the NP specialising in ARF and RHD will be guided by the relevant policies and protocols of their health care service and their own State or Territory health department, office of nursing, and RHD program.

Endorsement

To be eligible for endorsement as an NP, the registered nurse must demonstrate the following:

- Current general registration as a registered nurse.
- The equivalent of three (3) years' full-time experience in an advanced practice nursing role, within the past six (6) years from date of application seeking endorsement.
- Successful completion of an NMBA approved nurse practitioner qualification at Master's level or education equivalence as determined by the NMBA.
- Compliance with the NMBA's Nurse Practitioner Standards for Practice.
- Compliance with the NMBA's continuing professional development registration standard.

http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx

Once endorsed, the NP must submit an annual declaration to the NMBA that all standards, codes, guidelines and legislation relating to the role have been complied with.

Education and training

Endorsement as an NP requires the successful completion of an approved nursing qualification at Master's degree level. The NMBA allows for two pathways to endorsement:

Pathway 1: Successful completion of an NMBA approved Master's Degree (Nurse Practitioner).

Pathway 2: Successful completion of substantially equivalent NMBA approved nursing education that enables the applicant to meet the competency standards for endorsement as an NP.

The nurse practitioner candidate following pathway 1 will work with the education provider, their own support/mentoring group, and their employer to develop a course of study relevant to their specialty and individual scope of practice.

A list of the Australian tertiary institutions offering the Master of Nursing (Nurse Practitioner) courses can be found on the APHRA website.

http://www.ahpra.gov.au/Education/Approved-Programs-of-Study.aspx

As an example of admission requirements, the Charles Darwin University Master of Nursing (NP) requires applicants to have

- current registration as an RN with AHPRA;
- a Graduate Diploma or equivalent in the nursing specialty (equivalence is usually a combination of experience and tertiary education);
- a minimum of 5 years FTE experience as an RN including
    - ✓ a minimum of 3 years clinical practice as an RN in the specialty area; and
    - ✓ a minimum of 1 year FTE at advanced practice level in the relevant specialty area of practice.
- a curriculum vitae demonstrating active involvement in professional organisations and contribution to the ongoing development of the profession; and
- written confirmation of employer support to undertake the extended practice components of the course, including providing appropriate clinical mentorship and a minimum of 0.6 FTE employment.

Strategies and policies to support the development of the NP role are in place in most jurisdictions, for example:

Strategic plan for nurse practitioners in the Northern Territory
http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/88/32.pdf&siteID=1&str_title=Strategic%20Plan%20for%20Nurse%20Practitioners%20in%20the%20NT.pdf

Study assistance for postgraduate study for nurses is also available, for example:

The Northern Territory's *Nursing and midwifery studies assistance grant scheme.*	http://www.health.nt.gov.au/Nursing_and_Midwifery/Studies_Assistance/index.aspx
SA Health Postgraduate Study Assistance Program for Public Sector Nurses and Midwives.	*http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/about+us/department+of+health/system+performance+division/nursing+and+midwifery+office/nursing+and+midwifery+education,+learning+and+development/nursing+and+midwifery+scholarships+and+post+graduate+study+assistance+program*
The Australian College of Nursing scholarships.	http://www.acn.edu.au/nahsss_pg

Continuing professional development

A commitment to continuing professional development (CPD) and compliance with the NMBA's *Continuing professional development registration standard* is a requirement for ongoing endorsement. The NP will work with their own support/mentoring group, and their employer to develop a program of continuing education to further develop their specialist skills, and to ensure compliance with NMBA standards.

http://www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Audit.aspx

Compliance with CPD standards and evidence of CPD undertaken would form part of the review and evaluation of the role.

PROPOSED SCOPE OF PRACTICE

The nurse practitioner in ARF and RHD would be authorised and endorsed to work autonomously and collaboratively in this specialised clinical role. Each NP candidate would develop their own scope of practice and study program in consultation with their employer. The scope of practice would therefore be determined by the expertise, competency and professional goals of the candidate, the health system needs, and the context of the area of specialty. An ongoing professional development plan could be included in the individual scope of practice.

Major diagnostic areas & type of clinical presentation managed autonomously by the NP

The nurse practitioner would provide an autonomous, advanced and extended clinical nursing role for individuals, families and communities for the prevention, diagnosis and therapeutic management of ARF & RHD in a primary health care context. A particular focus of the NP's work would be around the prevention of ARF and RHD as described in *The Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease*. (RHDAustralia, 2012).

Core attributes and skills
Experience and Knowledge
The nurse practitioner would have expert knowledge, extended experience and competency in this specialisation. This would include advanced comprehensive holistic assessment skills, and a high level of clinical reasoning skills for assessing, diagnosing and managing care of people and populations with ARF and RHD. The nurse practitioner would also be expected to have a high level of experience with general health issues and primary health care nursing as it applies to Aboriginal and Torres Strait Islander people and remote health in Australia. Depending on the location and setting, this would allow the NP to function as a generalist with a specialisation in ARF and RHD, ensuring they are able to provide holistic nursing care across the spectrum of diseases and health care issues found in Aboriginal and Torres Strait Islander communities. This would enable a more flexible career pathway, contribute more fully to the work of the local health care team, and ensure greater participation in patient care.
Attributes
The Nurse Practitioner would be a highly capable critical thinker with a high level of interpersonal skills for consultation, negotiation, mediation and advocacy for patients, population groups, the nursing profession and other health professionals. The nurse practitioner would be capable in developing and maintaining collaborative alliances and effective partnerships, and providing education, specialist advice and support to patients and the health care team.
Advanced and extended clinical practice
The nurse practitioner would establish and maintain professional and clinical supervision and consultation arrangements which are appropriate for the extended and advanced nature of the NP role, responsibilities and level of accountability. This will ensure high quality professional practice standards and activities which optimize patient care and outcomes. Working within the framework of *the Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease* (RHD Australia, 2012) and other relevant practice guidelines and protocols, the NP specialising in ARF and RHD would be endorsed to work independently and autonomously in the following areas:

Assessment and diagnosis
• Conduct comprehensive, relevant and holistic health assessment, applying advanced clinical decision making to deliver evidence based collaborative care. • Conduct timely and considered diagnostic investigations. • Apply diagnostic reasoning to formulate diagnoses. • Order and interpret investigations to facilitate diagnosis and care planning. • Refer and consult as appropriate for care decisions in accordance with established models of care. • Consider quality use of medicines and therapeutic interventions in planning care. • Translate and integrate evidence into planning care. • Prescribe indicated non-pharmacological and pharmacological interventions.
Specific procedural activities for the role
• Perform and interpret echocardiograms (where trained and endorsed to do so). • Perform and interpret electrocardiograms. • Perform and interpret diagnostic spirometry.
Care planning, management and coordination
• Support, advise and implement health promotion and primary and secondary prevention activities for individuals, families and communities. • Engage in higher level discussions with tertiary care providers & provide intervention for patients who need complex care. • Manage episodes of acute care within a chronic disease management framework. • Coordinate/provide care, education and self-management support and advocacy for people with ARF & RHD and their families & communities. • Provide care coordination and follow up care – supporting and facilitating continuity of care within the remote context – including discharge planning & coordination of post-surgery care. • Monitor patient progress and consult with and/or refer to specialist clinician as appropriate. • Work with multi-disciplinary team to provide palliative care as needed. • Support primary care staff to manage patients within the clinical setting. • Work collaboratively to ensure holistic health care – including hygiene, skin care and oral health.
Prescribing and therapeutic interventions

Working collaboratively and within the framework of the National Strategy for the Quality use of Medicines, and in accordance with any prescribing authority as determined by the relevant drugs and poisons legislation of each state and territory, an NP may be endorsed to initiate, review, renew, titrate and cease medications within their scope of practice.

The prescribing model would be governed by individual State and Territory legislation and protocols, and by the relevant therapeutic guidelines. Nurse practitioner prescribing would cover, but not be limited to, the major diagnostic area and type of clinical presentation managed autonomously by the NP within their identified scope of practice

The specific areas where medications would primarily be managed are:

- Primary prevention: treating GAS infections with antibiotics to prevent development of ARF.
- Secondary prevention: regular secondary prophylactic antibiotics to prevent recurrence of ARF and development of RHD, or further progression of RHD.
- Tertiary care: stabilising the condition of the heart through the use of anti-hypertensives and anti-coagulants, diuretics, and medications for the treatment of dyslipidaemia.

Evaluation and practice improvement

- Evaluate outcomes of own practice.
- Link practice with Continuous Quality Improvement (CQI) programs.
- Support collection and analysis of CQI data.
- Investigate and incorporate contemporary interventions for ARF & RHD prevention and management into practice.
- Identify gaps in service and provide education to the health workforce to improve service delivery & health outcomes.
- Promote and support integrity of RHD register.
- Review epidemiological data in the local context.

Education

- Provide clinical and professional education and support to other members of the health care team, and contribute to patient, caregiver, student and public learning related to ARF and RHD.
- Collaborate with academic, research, and professional networks to engage in local, national and international activities to disseminate information related to innovations in practice and the evaluation of therapeutic interventions for ARF and RHD.

Research

- Support reflective practice, evidenced-based care and quality management, and be

capable in the conduct of clinical audits, clinical research and the application of research knowledge.

- Provide 'at the coal face' clinical nursing perspectives in epidemiological surveillance-analysing data and supporting translation of knowledge into evidence-based practice.

Leadership

- Provide clinical and professional leadership in nursing issues at both the local and national levels within the ARF and RHD speciality - through the promotion and dissemination of nursing and health care knowledge beyond the individual practice setting.
- Provide clinical supervision, mentoring and training to NP candidates and other nurses to ensure sustainability of the role.
- Provide education and training in ARF and RHD to other members of the health care team.
- Conduct systems reviews and make recommendations for change – identifying gaps in service and providing education to the health workforce to improve service delivery & health outcomes.
- Influence health care policy and practice through professional networks and participation in local, jurisdictional and national reforms.
- Engage health care providers and others as appropriate in consultations, case management and planning discussions to facilitate seamless coordinated care and enhance health literacy.
- Engage in and lead clinical collaboration, providing timely feedback and communication with the multidisciplinary team, other involved agencies/persons, families and patients regarding the outcome of all assessment or reviews and ongoing management plans and recommendations.
- Establish and maintain effective communication and collaborative networks and partnerships with community based primary health care providers, tertiary care providers, other health services/agencies, and community stakeholders to provide optimum health care outcomes
- Support service systems – contributing to standards, quality initiatives and development of policies, procedures and practice guidelines to optimise patient care.

Target population for the NP service

Data on the burden of ARF and RHD in Australia suggest that this NP would primarily be engaged in holistic primary health care for Aboriginal and Torres Strait Islander people living in regional and remote areas of Northern and Central Australia.(Gray, 2013). Pacific Islanders and migrants from other high-prevalence countries are also at high risk.

Priority targets within these groups are:

- 5-14 year olds: The incidence of ARF is highest in this group, making it a priority target for secondary prophylaxis, and preventing the development of RHD.
- 14-25 year olds with ARF (for secondary prophylaxis and prevention of progression to RHD).
- Adults aged 35-39 with RHD (highest rates of RHD are found in this group).
- Pregnant women. (Pregnancy with RHD places women at high risk of complication).
- Patients in remote areas following heart valve surgery.

Employment model and location of practice setting

The existing models for health services to Aboriginal and Torres Strait Islander people in regional and remote northern and central Australia indicate that this NP role would most likely be engaged in either the public sector or an Aboriginal community controlled health service (ACCHS) setting.

The location would depend on the services provided by the particular health service, and the communities with the highest demand for services. The setting might be an urban community health centre, remote health facility, a regional hospital outpatient department, or any combination of these.

A potentially effective model might be a centralised 'hub and spoke' service, which includes a regional urban base and outreach services to remote communities.

In areas where there is a mix of public and community controlled services, this role could potentially work well as a public/community controlled health service collaboration. (For example - a district health service and a local ACCHS).

Collaborative arrangements and services available to support the role

The nurse practitioner specialising in ARF and RHD would work autonomously and collaboratively within their particular health care framework and team structure. The nurse practitioner will maintain relationships with and be supported by the following:

- Patients, their families and communities.
- Nurses.
- Cardiologists, cardiac surgeons and cardiac surgery units.
- Neurologists.
- Physicians and paediatricians.
- Obstetricians, midwives, anaesthetists, intensive care specialists.

- General Practitioners – urban, rural and remote.
- Sonographers and Radiographers.
- Dentists.
- Pharmacists – hospital based & community based.
- Allied health services – physiotherapists, occupational therapists, social workers.
- Non-clinical services, e.g. patient travel services, interpreters, schools.
- Infectious disease specialists.
- Population health team.
- Chronic disease management team.
- RHD control program staff and practitioners.
- Researchers and epidemiologists.

Prescribing arrangements: Pharmaceutical Benefits Scheme (PBS) and Medicare Benefits Schedule (MBS)

*The Health Legislation Amendment (Midwives and Nurse Practitioners) Act, 201*0, and the *National Health(Collaborative Arrangements for Nurse Practitioners) Determination, 2010,* enabled NPs to request appropriate diagnostic and pathology services for which Medicare benefits may be paid, and to prescribe certain medicines under the Pharmaceutical Benefits Scheme (PBS). Nurse practitioners must also be authorised to prescribe under their particular State or Territory law, and within their scope of practice.

Depending on the situation (State/Territory; type of service; location etc.) and the collaborative team arrangements, these prescribing rights may be full prescribing rights limited only to the NP's scope of practice, or they may be restricted or limited to a particular formulary or protocol, or a specific context of practice. Specific protocols might include limitations such as 'continuing therapy only' (CTO), or 'shared care model' (SCM). In the NT, the NP does not need to submit a drug formulary. Prescribing rights depend on the scope of practice, and are not limited by any particular protocol.

Nurse practitioners prescribing PBS-subsidised medications must have in place a collaborative arrangement with a medical practitioner. In most situations, the NP is deemed to be in a collaborative arrangement if employed by a health care service that employs or engages one or more specified medical practitioners.

To access Medicare arrangements an eligible nurse practitioner is required to

- have a Medicare provider number;
- be working in a private practice;
- have professional indemnity insurance; and
- have collaborative arrangements in place with a medical practitioner.

Nurse practitioners employed in the public health system at rural and remote sites approved under the COAG s19(2) Exemptions Initiative and the 19(2) Exemptions of Aboriginal and Torres Strait Islander Community Controlled Health Centres, (ACCHS) are eligible for exemption from the clause stating MBS

benefit is not payable if working with a public sector provider. This initiative applies to small and remote towns, (population less than 7000), with an identified GP shortage.
More detailed information on NPs and MBS can be found in the document: *Eligible nurse practitioner services: questions and answers.*

http://www.health.gov.au/internet/main/publishing.nsf/Content/midwives-nurse-pract-qanda-nursepract

The medicines listed for PBS prescribing by authorised nurse practitioners are identified by 'NP' in the PBS Schedule at:

http://www.pbs.gov.au/pbs/home

Key clinical practice guidelines

- Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease.
- Australian Medicines Handbook.
- CARPA standard treatment manual.
- Clinical procedures manual for rural and remote practice.
- Minymaku kutju tjukurpa – Women's business manual.
- Primary Clinical Care Manual (PCCM).
- Reference book for the remote primary health care manuals.
- Other relevant local disease control guidelines. e.g. The NT's *Guidelines for community control of scabies, skin sores and crusted scabies.*
- Diagnostic sonography protocols (where trained and endorsed). e.g.:
  - ✓ Guidelines for standards of practice in paediatric echocardiography (SPPE).
  - ✓ World Heart Federation criteria for echocardiographic diagnosis of rheumatic heart disease—an evidence-based guideline.
- Other protocols or drug formularies specific to NP practice in individual States/Territories. e.g. Queensland's *Nurse practitioner drug therapy protocol*; and other nurse practitioner health management protocols for specific diseases.

DEVELOPMENT, IMPLEMENTATION, AND GOVERNANCE OF THE ROLE

The development of an NP role, and the ensuing career pathway, is generally a 4 step process:

1. Selection of candidate
2. Candidate undertakes and completes study
3. Candidate gains endorsement asan NP
4. NP participates in continuing education, monitoring and review

The clinical service multidisciplinary health care team would play an important role in supervising, supporting and mentoring the NP – from initial candidacy, through study and work placements, to graduation and endorsement as an NP.

Each State and Territory has its own process for developing, mentoring and evaluating an NP role. This usually involves a working group or similar advisory and monitoring body, which plays a key role in developing the individual scope of practice, and the processes for monitoring/mentoring, role development, continuing education and evaluation of the specific role. Given the burden of ARF and RHD in Aboriginal and Torres Strait Islander communities, the advisory group may include a patient or other community representative.

For example, Queensland has District Nurse Practitioner Steering Committees, which cover NPs in different roles in specific regions, rather than just one speciality.

See: Appendix 2 for RHDA's *Nurse Practitioner Working Group terms of reference*

The Queensland government's *Clinical Governance for Nurse Practitioners in Queensland* provides a useful guide for developing governance protocols.

http://www.health.qld.gov.au/nmoq/nurse-practitioner/documents/np-impguide.pdf

Evaluation and review

An evaluation plan would need to be developed in collaboration with the service provider, implementation/governance group and other key stakeholders. The efficiency, effectiveness, and safety of the NP role should be demonstrated through the monitoring and evaluation of relevant outcome measures in the context of the particular NP's scope of practice, the objectives of the health care service, and the jurisdictional RHD Program.

The service gaps and needs identified by the Working Group for this project have informed the development of the scope of practice for an NP in ARF and RHD, and thereby established the basis of the evaluation criteria for this role. In this context, the key performance indicators (KPIs) would include

- improvements in timeliness of service delivery;
- improvements to gaps in continuum of care;
- improved knowledge and experience of AFR and RHD for health practitioners;
- increased knowledge and understanding of ARF and RHD for patients and their community;

- improved patient satisfaction with service, quality of life scores, and adherence to medications; and
- demonstration of how and where these improvements have changed overall health outcomes for the target population.

Other KPIs should be developed to demonstrate evidence of

- safe practice;
- compliance with legislative and regulatory requirements – including CPD';
- smooth transition of operational NP services;
- integration of NP role into health services model of care;
- services delivered within NP approved scope of practice;
- integration of the NP role within the wider health community, including other health care professionals, employers, health administrators, and health system users; and
- capacity for competency and efficiency measurement.

Tools are available for assisting with the CQI and evaluation process.

AUSPRAC nurse practitioner research toolkit	http://www.nursing.health.wa.gov.au/docs/reports/AUSPRAC_NURSE_PRACTITIONER_RESEARCH_TOOLKIT.pdf
One21seventy. Clinical audit tool for rheumatic heart disease and acute rheumatic fever.	http://www.one21seventy.org.au/cqi-information/clinical-audit
Clinical Governance for Nurse Practitioners in Queensland: a guide. Section 5: Clinical audit review	http://www.health.qld.gov.au/nmoq/nurse-practitioner/documents/np-impguide.pdf

RISKS/BARRIERS AND OPPORTUNITIES/ENABLERS

An individual business case would identify risks, barriers and opportunities according to the specific organisation, area of operation, and location. The list below suggests some broad generic items which might potentially impact on the implementation of the role in any situation.

Risks/Barriers	Opportunities/Enablers
***Recognition and acceptance of the NP role by other health care professionals, patients and the general community*.** Nurses: Concern that an NP will 'take over' CNC and/or RAN role while not adding to the current service. (Perception that RANs and CNCs can prescribe and treat certain things already - "We already do this as advanced practice nurses "). Confusion about the role/title. (NP c/f Advanced Practice Nurse?) Doctors: AMA policy does not support independent NPs. https://ama.com.au/sites/default/files/documents/AMA_Independent_Nurse_Practitioner_Position_Statement.pdf	There has been very good support and enthusiasm for this role from all key informants, including all health care professionals involved in the Working Group. Strategies and/or policies supporting and promoting the NP role are in place in most States and Territories. Evidence of patient satisfaction with care provided by NPs working in other specialties. Precedents of NPs working successfully in other areas – e.g. diabetes, aged care, liver disease, cardiac care, mental health, emergency departments. (Nazareth et al. 2008; Wand et al, 2012). RANs do not 'prescribe' but instead initiate medicines according to a Scheduled Substance Treatment Protocol such as CARPA. NPs can operate beyond the standard procedure manuals. NP prescribing may be based more on diagnosis and expert clinical knowledge rather than a defined protocol. Aboriginal and Torres Strait Islander and other patients in remote communities are already used to working with and being treated by nurses (RANs). Clear role definition and scope of practice will highlight the NP's advanced clinical practice, autonomy and high level role in critical thinking, leadership, advocacy, and education. NP would play a key role in critically analysing service systems and reviewing/recommending change. Educate stakeholders and engage them in implementation plans, ongoing monitoring and auditing of the role.

Risks/Barriers	Opportunities/Enablers
Costs Salary & other employment costs Education –study costs Professional indemnity insurance: private practitioners must provide own insurance. (Public providers are covered by own employer insurance). Additional cost to private health provider of adding a new PBS prescriber.	State and Territory commitment to building the NP workforce. Potential cost reduction by reducing medical workload, while improving quality of care and possibly reducing need for specialist and especially surgical input. Study assistance schemes for nurses are available in most States and Territories. Most States and Territories support development of the NP role for particular specialties. Role could be developed initially within existing budget and staffing. Career development pathway for existing position(s) from candidate to endorsed NP. Public health service NP will be covered under employer insurance.
Career pathway: recruitment, mentoring, support, governance and CPD Graduate not able to get endorsement as an NP. NPs could 'do themselves out of a job' if ARF and RHD burden of disease status improves and NP is no longer needed in this area. Limited scope of practice. NP graduate not able to find work specific to their specialty. Mentoring and supervision: there are few experts in this area, and they are all specialists with busy schedules. Failure to identify ongoing professional development opportunities (including work placements during study).	Clearly identify need and justification for the role before planning for implementation. Candidate and employer/sponsor to work with education provider to ensure appropriate scope of practice, and course content. Potential to make this a more generalist position with ARF and RHD focus e.g. as part of a chronic disease or cardio vascular disease scope of practice. NP in this area will already have good experience and knowledge in related areas. Position could be a generalist PHC nurse with specialist skills in ARF and RHD – able to transfer skills and specialisation if and when necessary. Co-operation and coordination between organisation, candidate, education provider and general health care team to ensure there is a role and a position (and ongoing support) before commitment to study. Identify speciality area of need and develop scope of practice before recruiting. Target specialty, not individual candidates. Ensure availability of appropriate expertise for supporting the role, and appropriate organisations and services to provide

Risks/Barriers	Opportunities/Enablers
Potential for NP to be overburdened with expert/advocacy/education role and not have time for clinical hands on work (or vice versa). NP may end up being just another member of staff treating 'everything that comes in the door' in a very busy service area.	CPD specific to this area of work. Develop policies and procedures to govern practice, and audit the role. Business plan should include clear strategy for ongoing mentoring, support and clinical audit of the role. Most states and territories have policies and strategies to support development of the NP role. Links with CQI programs already in place in RHD programs. Ensure clear definition of role and service model.
Sustainability of the role Candidate resigns from a position or gives up study. Limited number of NPs in this area – no one to replace when on leave or on resignation. Recruitment and retention. Difficult to recruit to remote areas. Difficult to employ an NP – only 1000 of them Australia wide. No NPs with specialisation in ARF/RHD to date.	Contractual arrangements for vacating a position (or transferring out) if no longer a candidate. Backfilling strategy - Advanced Practice nurse or RAN and other members of health care team available to continue work. Succession planning - Ensure there are positions for new candidates. Support new candidates. Provide study support. Develop a clear career pathway and mechanism for supporting it. Role could be urban based with outreach model. Potential opportunities for shared model – private/public?

CONCLUSION

Rates of ARF and RHD have declined dramatically in most industrialised countries over the past century, and it is now considered to be almost eradicated in those areas. In Australia however, it remains a major health care problem. The majority of patients in Australia are Aboriginal people and Torres Strait Islanders living in remote and rural areas where remoteness; transient population; poor living and education standards; high health practitioner turnover; and limited knowledge of the disease all contribute to delays and deficiencies in health service delivery, and ultimately, to the burden of disease.

The Nurse Practitioner role is now well established in Australia, with NPs endorsed to work in a variety of specialties. A nurse practitioner in ARF and RHD would provide not only advanced technical and clinical skills and knowledge, but also leadership, advocacy, and education for ARF and RHD. This would include identifying needs, facilitating or undertaking research and CQI, and supporting the integrity of the RHD program register.

Working autonomously and in collaboration with the wider health care team, the NP could play a pivotal role in building the capacity of the health service to provide a more systematic, timely and coordinated approach to addressing service gaps and improving outcomes in the management of ARF and RHD.

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APPENDIX 1: WORKING DOCUMENT: ISSUES AND GAPS IN SERVICE – POTENTIAL ROLE FOR A NURSE PRACTITIONER IN ARF/RHD

ISSUE/GAP	CAUSES? WHY IT'S A PROBLEM	HOW CAN A NP HELP?
Primary and primordial prevention Not done well enough?	Lack of resources - time, human and financial Lack of knowledge and understanding of causes of ARF/RHD by community and many HPs? Lack of understanding and a paucity of empirical research of how to best approach primary and primordial prevention strategies for ARF/RHD Focus of HCPs and community on other issues which they perceive as being more important. Varying views on how to improve community engagement	High level advocacy role. Social determinants of health. Education for HPs and community. Professional relationships/Credibility/ Advocacy /liaison/networking/collaboration: – Health Dept, Education Dept. Environmental Health, Housing etc. Govt policy. Leadership and Research role – Advise/recommend, facilitate, participate in research
Clinical Management Gaps in continuity of care – e.g. renewal of prescriptions for 2nd prophylaxis - Follow up treatment. Gap in clinical services btw Specialist treatment and staff 'on the ground'. *'it all falls down in the middle'* 'Fast tracking' difficult or impossible. Patients lost to treatment and follow up. Logistics of conducting regular reviews. . **Medication management** btw specialists' visits and reviews. For patients on regular medication - anti-hypertensives, beta-blockers, anti –coagulation etc. Existing cardiac coordinators can't make referrals or order investigations. Not empowered to initiate	Gap in care coordination (Fragmented) Mobile population (treatment barriers). Urban/interstate – travel to hospital or for other reasons – lost to treatment and follow up. Health services often unwilling to retrieve patients for treatment/hospitalisation. ARF not considered serious enough. Current limitations for nurses – cannot prescribe – may only initiate medicines according to a Scheduled Substance Treatment Protocol such as CARPA. Lack of knowledge and understanding of ARF/RHD- for patients, community and HPs	Advocacy and networking. Link with CQI teams. Care coordination role. Keep up with movement across communities - Support care coordinators Better education for health care practitioners Identify and respond to primary health care needs more flexibly than existing nursing workforce Single point of contact is important – someone to 'put the dots together' Review, initiate, discontinue and adjust medications, initiate and interpret investigations and make referrals for specialist follow up as needed

ISSUE/GAP	CAUSES? WHY IT'S A PROBLEM	HOW CAN A NP HELP?
treatment. Gaps in early detection of risk factors, signs and symptoms and inadequate treatment Holistic assessments needed. Failure to recognise importance of and initiate treatment for skin sores. (Need for a dedicated team to do 'skin'?) Difficulty getting discharge summaries-	We don't have a cohort of Medical Officers who are working in Aboriginal and Torres Strait Islander Health Lack of practitioner confidence/experience in identifying and managing the diverse symptoms of ARF. Delayed referral and/or inadequate response for management of ARF after it has been identified.	Collaboration Early identification and sustained intervention Education role – health professionals. Support and advise on education for patients and community Improve patient flow with consequent increase in specialist throughput. Good to have a central person to follow up patients re: discharge from hospital & discharge summaries. More appropriate use of limited system resources (eg: specialist doctors) by more appropriate referral pathways. Support and promote shared e-health records. Educate HPs and community about importance of treating skin sores Assessment and initiation of treatment for skin sores
Treatment barriers Poor patient and community knowledge and understanding of disease and its causes. /risk factors. Lack of appropriate client and community responses to prevention and management strategies? Patients and community thinking that problem is 'fixed' after surgery. Health service not always willing to retrieve	Not enough or inappropriate education for patients and community. Communication problems – Different languages; lack of interpreters; hearing loss; use of complex English. These issues not taken seriously enough? Lack of understanding by patients and community:	Credibility – authority to advocate/represent RHD. Education role – 'educating up' for HPs. Contribute to orientation programs. Promote and manage community education programs. Broaden responsibility for education – e.g. health dept. Work with other services – hospital/AMS/HIH (network,

ISSUE/GAP	CAUSES? WHY IT'S A PROBLEM	HOW CAN A NP HELP?
pt. – other priorities. Transient population - Remote, Urban, interstate - makes it difficult to access treatment (or for HPs to access patients). Difficulties when people are in town. (Can be for hospitalisation, or staying on campus (self care or sleeping on the floor next to the patient etc) as an escort for an admitted patient.) (Or other reason or location). ARF/RHD patients miss their 4 weekly Injections. Very hard to get 2[ndary] Prophylaxis administered in urban setting. Standard order should be a requirement. Patient's primary clinic should be updated on date BPG given, and also RHD register to know the person is in town and/or at hospital so they can follow up.	Poor or no understanding of germ theory. Cultural responses to causes of illness. ARF/RHD not always a priority or not recognised as such. Travel to hospital and/or for other reasons. Service system failure : Poor communication/collaboration btw health services	collaborate) Identify system failures and advocate for/recommend improvements. Initiate, review, cease prescriptions within scope of practice Leadership role - Improve collaboration Work to address service system failures Advocate for self management approaches
Timeliness (and time wasted?) Time lag for of diagnosis and initiation of treatment (including response times for test results), and delay in initiating treatment due to wait for Dr to confirm diagnosis and write prescriptions, order diagnostics and make referrals. Limited no. of Drs – majority of time during clinic visit can be taken up with medication and referrals – and renewing scripts (for ALL chronic diseases). Could be done from a central place without needing Dr to sign off. 6month and yearly reviews often logistically impossible.	Distance. Lack of resources/Specialists HPs. Frequency of specialists visits.. Waiting times for specialists appointments. Waiting time for investigations and results and wait time for follow up by specialist = delay in initiation of treatment. Lack of stability and specialist clinical support in health centres. High turnover of HPs Gap in care coordination?	Independent specialist skills. Advocate/Expert 'go to person' Clinical assessment, order and interpret results of investigations, diagnosis and initiation of treatment. Can take some burden off Drs. (Often spend majority of time during clinic visit writing/renewing scripts). RHD NP role will take pressure off the primary care doctors and work closely with the patients and specialists to improve outcomes

ISSUE/GAP	CAUSES? WHY IT'S A PROBLEM	HOW CAN A NP HELP?
So reviews are not done on time, or patients miss out completely. Existing cardiac coordinators can't make referrals or order investigations. 2[ndary] prophylaxis not ceased at due time. (and re started if necessary.)	Wait for specialist to cease medication. Poor knowledge and understanding of health practitioners re: ARF/RHD and its causes. Locum medical officers are incredibly expensive and not always available. Relying on locums and fly in/fly out clinicians	NP could conduct some of the basic, routine follow ups in consultation with specialist clinicians. Referring patients for more comprehensive review as needed. – All of this in a more timely manner. Initial assessment and referral to specialist for formal review. Care coordination. (Oversee, make recommendations); Ongoing education and clinical support for HPs. Cease medication as indicated. Ongoing Education, Leadership and clinical support role – 'Go to' person for the health care team. .
Diagnosis (& misdiagnosis or missed diagnosis?) Delay in routine echos – delivery and review of. People may wait for months for echocardiogram. (Outreach Echo's would be great). Missed opportunity to screen for RHD- including in early pregnancy, and when repeated episodes of skins sores are seen. Failure to recognise Refugee and Maori pop'ns may have RHD (ARF/RHD is seen as an exclusively Aboriginal and Torres Strait Islander health problem) Incorrect labelling of ARF vs RHD. Relying on a diagnosis of ARF before screening for RHD.	Lack of knowledge of HPs. ARF/RHD a confusing and complicated illness. Not enough echos and/or people trained to do them? ARF/RHD not taught in medical/nursing/midwifery studies. High staff turnover - loss of continuity of care and knowledge base. Some HPs don't have the confidence or knowledge to make decisions? Lack of standardised protocols for screening specific groups e.g. ante-natal for Aboriginal and Torres Strait Islander (and refugee?) women.	High level advice/education and support. Advocate for resolution to this problem. Ability to undertake and interpret screening echos – and to train others to do same? Leadership – investigate and advocate for 'mobile' Echocardiograms? Support program?. Education for HPs. During training. Orientation to remote health. Orientation to local health services. Continuing education to health centre staff. Input to policies, protocols, guidelines. Bridge between program managers and practitioners. Advocacy - Liaison/Collaboration with Refugee health programs.

ISSUE/GAP	CAUSES? WHY IT'S A PROBLEM	HOW CAN A NP HELP?
Limited services for expert follow up and continuity of care – need clinician for this .	High HP turnover - loss of continuity of care and knowledge base. Regional area lacking in stability and clinical support. HPs lack confidence to make decisions.	
Maintenance of RHD Register: Sometimes people are labelled as RHD when they have ARF. People clutter the register because no-one is empowered to make the decision to take them off. Electronic records – transition has been poor. System too slow – things under reported. Some ATSIHPs not computer literate	Lack of knowledge and experience of ARF/RHD.	Liaison/coordination role – Primary care –RHD programs- Tertiary care. Leadership and advocacy role? Support integrity of, and promote register.
Women's business. RHD in Aboriginal and Torres Strait Islander women often not diagnosed until well into pregnancy - or missed entirely? RHD commonly discovered in 2nd trimester.	Lack of knowledge of importance of screening for RHD in pregnant Aboriginal and Torres Strait Islander women. Lack of appropriate protocols?	Support guidance around care in pregnancy & motherhood Professional liaison – education
Oral Health - Not part of routine care?	Not routinely part of initial assessment/routine care	Education of HPs Collaboration with dental health to promote importance of dental health in RHD. Care coordination
Hospital experience	Gaps in care coordination?	Follow up care on return to community.

ISSUE/GAP	CAUSES? WHY IT'S A PROBLEM	HOW CAN A NP HELP?
Care Coordination – Discharge planning Follow-up on return to community.		In collaboration with specialist – and between specialist's visits - follow up/review of regular medications – e.g. anti-hypertensives, beta-lockers, anti-coagulation medication.
Palliative care? Do patients drop off radar at this point? Yes! Care needs to be holistic	No longer under active treatment? Lack of recognition that palliative care is not just for old people! Not part of the patient journey in current system.	Role for NP in Long term planning of disease management, resources, education, and community support ? Continue holistic care
CQI – We need to know how we are doing - e.g. a big problem with RHD at the moment is the low rate of secondary prophylaxis – (around 50 to 60% percent in NT). Practitioners should have feedback as to what their prophylaxis rate is.		Leadership and Research role. Monitor/ review patient journey. NP could have a role in ensuring that practitioners are receiving information regarding their RHD practice, that this information is being acted upon - changing practice and increasing prophylaxis rates

APPENDIX 2: PROJECT WORKING GROUP AND OTHER KEY ADVISORS

Nurse Practitioner Working Group: Membership	
Bo Remenyi	Paediatric Cardiologist. Royal Darwin Hospital
Christian James	RHDA Education & Training Officer
Christopher Helms	Cardiothoracic surgery nurse practitioner PhD student - Australian NP metaspecialties & practice standards.
Claire Boardman	Deputy Director, RHDAustralia
Desley Williams	Coordinator, Darwin Midwifery Group Practice
Doune Heppner	Nurse Practitioner. Nth Qld
Erin Howell	QLD RHD Program Representative. RHD CNC, Cairns.
Jennifer Cottrell	SA Program Coordinator
John Morgan	Primary Health Care Remote Pharmacist. Top End Health Services. Gove District Hospital. Nhulunbuy NT.
Karen Davidson	Clinical Manager, Anyinginyi Health Aboriginal Corporation
Kerry Sims	A/Dir Ed & Research Nursing & Midw. NT Dept of Health (NP Mental Health)
Marea Fittock	NT RHD Program Coordinator
Mark Russell	RAN. Remote Sexual Health Population Health Manager. (Formerly RHD Nurse Coordinator NT Central.)
Melissa Van Leeuwen	NT Central RHD Nurse Coordinator
Nadarajah Kangaharan	Director of Medicine and Cardiologist. Division of Medicine. Royal Darwin Hospital
Rhonda O'Keefe	Aboriginal Health Practitioner (RHD Coordinator) Anyinginyi, Tennant Creek.
Rosalie Schultz	Senior Medical Officer. Regional Health Services Division. Central Australian Aboriginal Congress. Alice Springs
Rosemary Harbridge	Project Officer - Nurse Practitioner Framework, RHDAustralai
Samantha Colquhoun	Int. Programme Coordinator. Centre for International Child Health. Dept Paediatrics, University of Melbourne.
Samantha Peterson	NP candidate WA. (WA Program representative)
Sandra Dunn	Professor of Health, Clinical Practice. Charles Darwin Uni.
Sara Noonan	Technical Advisor, RHDAustralia
Sinon Cooney	Katherine West Health Board
Vicki Gordon	AMSANT. Member, Australian College of Nurse Practitioners
Other consultations and key advisors	
Dr Robyn Aitken	Chief Nursing & Midwifery Officer of the Northern Territory (Acting)
Gaynor Garstone	Diabetes Educator. Health Development, NT Department of Health (NP candidate)
Beth Amega	Renal public health nurse, Danila Dilba Aboriginal Medical Service, Darwin
Kylie Tune	NT Coordinator RHD in pregnancy Study (AMOSS)
Noela I.R. Davies	Rheumatic Heart Disease Nurse Coordinator, Top End. Centre for Disease Control, Territory Wide Services, Department of Health, NT.
Jess de Dassel	Project Manager (RHD Secondary Prophylaxis project) and PhD scholar. Menzies School of Health Research.
Denise Smythe	Primary Health Care Clinical Quality Coordinator, Katherine West Health Board
Heather Keighley	Director of Nursing and Midwifery; Top End Primary Health Care Services (Acting)

APPENDIX 3: NURSE PRACTITIONER WORKING GROUP TERMS OF REFERENCE

Approved by:
JRG 24 June 2014
Last reviewed:
11 August 2014

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SECTION 1 – INTRODUCTION

PURPOSE

The purpose of this document is to set out the terms of reference, composition and operating arrangements of the Nurse Practitioner Working Group.

DEFINITIONS

Word/Term	Definition
ARF	Acute Rheumatic Fever
JRG	Jurisdictional Reference Group
RHD	Rheumatic Heart Disease
RHDA	Rheumatic Heart Disease Australia

GOVERNING BODY

This committee is a working group of RHDAustralia managed by Menzies School of Health Research

SECTION 2 - PROCEDURE

1. RESPONSIBILITY

The Nurse Practitioner Working Group has been established to undertake the following:

- consider and provide high level advice on the development of a model for a Nurse Practitioner role in RHD;
- support each other with exchange of issues and ideas and form a pool of knowledge around the nurse practitioner role in RHD;
- provide strategic direction and advice on issues and key themes;
- identify other suitable individuals to be consulted in the development of the model;
- monitor the development of the model;
- debate, clarify, comment and make recommendations on draft model to reflect local needs;
- identify overall issues, risks and gaps likely to impact on the development and eventual implementation of the model;
- provide feedback and strategic advice on progress and milestones, issues resolution and policy directions to progress the work;
- act as a problem-solving forum to address issues that arise at either a policy or operational level;
- ensure that RHDA jurisdictional programs, and others working in RHD remain informed;
- identify strategies to mitigate emerging issues associated with development of the model; and

- advise on future mechanisms for supporting implementation of RHD Nurse Practitioner positions across the RHDA jurisdictions.

2. COMPOSITION

2.1 Membership

Name	Role/ Type of Appointment	Term of Office
Claire Boardman	Chair; Deputy Director RHDA	Duration of project
1 Senior Representative from each jurisdiction that operates an ARF/RHD control program. *	Appointed * See below.	
Rosemary Harbridge	RHDA. Project Officer, NP Framework	
Sara Noonan	RHDA Technical Advisor	
Christian James	RHDA Education & Training Officer	
Samantha Colquhoun	Internat. Programme Coord. Centre for International Child Health. Dept Paediatrics, Uni Melb	
Sandra Dunn	Prof. of Health, Clinical Practice… Charles Darwin Uni.	
Jennifer Cottrell	SA Program Coordinator *	
Samantha Peterson	NP candidate WA. *****WA Program rep**.**	
Erin Howell	RHD CNC Cairns. Qld RHD Program rep*****	
Marea Fittock	NT Program Coordinator *****	
Melissa Van Leeuwen	NT Central RHD Nurse Coordinator	
Kerry Sims	A/Dir Educ. & Research Nursing & Midwifery. NT Dept of Health (NP Mental Health)	
John Morgan	PH Care Remote Pharmacist. Top End Health Services. Gove District Hospital. Nhulunbuy NT.	
Rosalie Schultz	Senior Medical Officer. Regional Health Services Division. Central Australian Aboriginal Congress**. A**lice Springs	
Rhonda O'Keefe	Aboriginal Health Practitioner (RHD Coordinator) Anyinginyi, Tennant Creek NT	
Karen Davidson	Clinical Manager, Anyinginyi Health Aboriginal Corporation	
Sinon Cooney	Katherine West Health Board	
Mark Russell	RAN. Remote Sexual Health Population Health Manager. (Past RHD Nurse Coordinator NT Central)	
Bo Remenyi	Paediatric Cardiologist. Royal Darwin Hospital	
Desley Williams	Coordinator Darwin Midwifery Group Practice	
Vicki Gordon	AMSANT; Member, Australian College of Nurse Practitioners,	
Doune Heppner	Nurse Practitioner. Qld Health.	
Nadarajah Kangaharan	Director of Medicine and Cardiologist. Division of Medicine. Royal Darwin Hospital	
Christopher Helms	Cardiothoracic surgery NP; PhD student (Australian NP metaspecialities & practice standards)	

- **The jurisdiction's Department Head will be asked to appoint members*

2.2 Chair Duties

- Clarifying with the members what the group has to achieve, in the short and long term;

- Providing firm guidance on expectations and positive reinforcement to other group members;
- Ensuring the group fulfils its functions and behaves in accordance with its rules and codes of conduct, including with respect to disclosures of interest;
- Ensuring meeting agendas and papers are appropriate for the group requirements;
- Making meetings effective;
- Ensuring the group is focusing on matters relevant to their function and considering each matter with appropriate care and propriety;
- Ensuring that the group arrives at clear decisions;
- Ensuring decisions are implemented appropriately and outstanding actions are monitored;

2.3 Chair Term of Office

- Duration of project

3. OPERATING PROCEDURES

3.1 Quorum

- A Quorum of the Group will consist of a minimum of 8, and must include each of the RHDA jurisdictional representatives (or a delegate).

3.2 Meetings

- The Group will meet at least 2 times during the life of the project, and more frequently if deemed necessary;
- The Group will exist for the duration of the project, but may continue to meet in support of implementation of positions in RHDA jurisdictions;
- The Chair may call a meeting of the Group if so requested by any member of the Group;
- Where practicable, the agenda together with reports and documents that relate to the Group will be forwarded to members within 10 days prior to enable consideration prior to meetings;
- Accurate minutes will be kept of each meeting of the Group. The minutes of a meeting shall be submitted to Group members following the meeting, and shall be ratified at the next subsequent meeting of the Group.

3.3 Reports

- The Chair will table progress reports relating to the items being addressed by the Group as stipulated in the minutes of the meeting relating to the item.

3.4 Evaluation and Review

The Group will review its terms of reference, and evaluate its performance against the current Terms of Reference if required during the life of the project.

APPENDIX 4: FRAMEWORK FOR A NURSE PRACTITIONER ROLE IN ARF/RHD

NURSE PRACTITIONER STANDARDS FOR PRACTICE: DOMAINS: CLINICAL, EDUCATION, RESEARCH, LEADERSHIP

CLINICAL STANDARD 1
Assesses using diagnostic capability

CLINICAL STANDARD 2
Plans care & engages others

CLINICAL STANDARD 3
Prescribes & implements therapeutic interventions

CLINICAL STANDARD 4
Evaluates outcomes & improves practice

LOCATION & SETTING
Identify service model, location & setting

- *Public or Private?*
- *Rural or Urban?*
- *Primary/Secondary / Tertiary Care?*

GOVERNANCE
Define strategy for implementation, mentoring & support, monitoring & evaluation

CLINICAL SKILLS
Define specialty clinical skills for the role

- *Assessment & diagnosis*
- *Prescribing & other therapeutic interventions*
- *Care planning, management & coordination*

CHARACTERISTICS OF PATIENTS
Define target population

- *Aboriginal and Torres Strait Islander people living in regional and remote areas of Northern and Central Australia;*
- *Pacific Islanders and migrants from other high prevalence areas.*

DEFINE ROLE & SCOPE OF PRACTICE
Identify service system gaps

- *Delays in service delivery*
- *Gaps in continuum of care*
- *Lack of knowledge and experience of ARF & RHD*

DEGREES OF AUTONOMY; COMPLEXITY OF PRACTICE
Identify relevant standards, guidelines, etc.

- *Australian guidelines for prevention, diagnosis, and management acute rheumatic fever and rheumatic heart disease, 2012.*
- *Other relevant guidelines, standards, protocols, etc.*
- *MBS & PBS referrals and prescribing according to location (State/Territory; urban or remote), & the practice setting.*

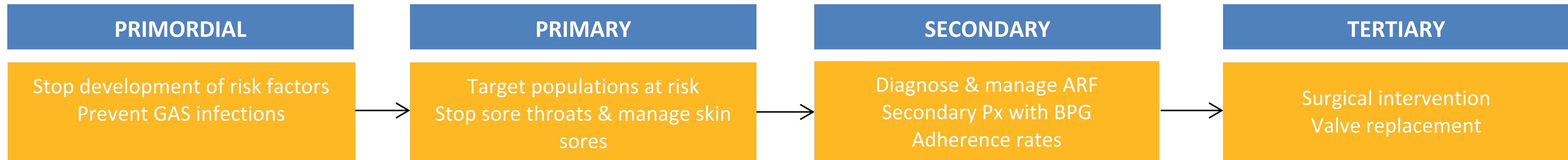
TEAM RELATIONSHIPS
Identify collaborative arrangements & other relationships

- *Collaboration in management of ARD & RHD cases*
- *Monitoring, mentoring & supporting the role*

FOCUS OF THE ROLE

Clinical; Education; Research; Leadership.

THE ARF & RHD PATHWAY



APPENDIX 5: SCOPE OF PRACTICE (SAMPLE BASIC OUTLINE)

Major diagnostic area
Prevention, diagnosis and therapeutic management of Acute Rheumatic Fever and Rheumatic Heart Disease in a primary health care context, as described in the *Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease*. (RHDAustralia, 2012).
Prescribing and therapeutic interventions
Specific areas where medications will primarily be managed: • Primary prevention: treating GAS infections with antibiotics to prevent development of ARF • Secondary prevention: regular secondary prophylactic antibiotics to prevent recurrence of ARF and development of RHD, or further progression of RHD. • Tertiary management: stabilising the condition of the heart through the use of anti-hypertensives and anti-coagulants, diuretics, and medications for the treatment of dyslipidaemia.
Specific procedural activities for the role
• Perform and interpret echocardiograms • Perform and interpret electrocardiograms • Perform and interpret diagnostic spirometry
Target population for the NP service
People at risk of ARF/RHD: • Aboriginal and Torres Strait Islander people living in regional and remote areas of Northern and Central Australia. • Pacific Islanders and migrants from other high-prevalence countries. Priority targets within these groups: • 5-14 year olds; 14-25 year olds with ARF. • Adults aged 35-39 with RHD. • Pregnant women. • Patients in remote areas following heart valve surgery.
Employment model
Describe local service and model of care.
Location of practice setting
Describe location and setting for the NP model of care.
Collaborative arrangements and services available to support the role
Working autonomously and collaboratively within the health care model and team structure of (*service provider*), the NP will maintain relationships with and be supported by the following: *Insert names of specific services and practitioners available to support local model of service. e.g.: Patients, their families and communities; nurses; cardiologists, cardiac surgeons and cardiac surgery units; neurologists; physicians; paediatricians; obstetricians; midwives; anaesthetists; intensive care specialists; general practitioners; sonographers and radiographers; dentists; pharmacists; allied health services – physiotherapists, occupational therapists, social workers; non-clinical services, e.g. patient travel services, interpreters, schools; infectious disease specialists;*

population health team; chronic disease management team; RHD control program staff and practitioners; researchers and epidemiologists
Key clinical practice guidelines
Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease. Australian Medicines Handbook. *Insert other key guidelines or protocols according to context of the service model and local practice:* *e.g.* CARPA standard treatment manual; *Clinical procedures manual for rural and remote practice; Minymaku kutju tjukurpa – Women's business manual; Reference book for the remote primary health care manuals; NT Guidelines for community control of scabies, skin sores and crusted scabies; Guidelines for standards of practice in paediatric echocardiography (SPPE); World Heart Federation criteria for echocardiographic diagnosis of rheumatic heart disease—an evidence-based guideline.*
Governance
The (*working group/advisory/monitoring body*) will monitor, mentor and support role development, continuing education and evaluation. *Insert service specific governance protocols*
Evaluation and review
An evaluation plan will be developed in collaboration with (*service provider)*, the (*working group/advisory/monitoring body*), and other key stakeholders. Key performance indicators (KPIs) will include improvements in the identified service gaps and needs: • Improvements in timeliness of service delivery • Improvements to gaps in continuum of care • Improved knowledge and experience of AFR/RHD for health practitioners • Increased knowledge and understanding of ARF/RHD for patients and their community. *Insert other KPIs according to local service model and local priorities.*

APPENDIX 6: JOB DESCRIPTION (SAMPLE)

Job Title: Nurse practitioner (Acute rheumatic fever and rheumatic heart disease)
Designation:
Work Unit:
Responsible to:

Primary Objective

The Nurse Practitioner (NP) functions autonomously and collaboratively in an advanced and extended clinical role within their specialty scope of practice: acute rheumatic fever (ARF) and rheumatic heart disease (RHD). The NP consults with other health care practitioners when the patient's condition requires care beyond their scope of practice as set out in the collaborative practice framework.

As a core member of the multidisciplinary team the objective of the NP role is to increase access to high quality and cost effective care, streamline the patient journey between acute and primary health care services and enhance health outcomes for individuals, families and communities.

Key Responsibilities

- In collaboration with the multi-disciplinary health care team, provide high quality clinical care and coordination of continuity of care for patients with ARF and RHD.
- Engage in and lead clinical collaboration, providing timely feedback and communication with the multidisciplinary team, other involved agencies/persons, families and patients regarding the outcome of all assessments, reviews, ongoing management plans and recommendations.
- Provide clinical and professional education and support to other members of the health care team, and contribute to patient, caregiver, student and public learning related to ARF/RHD.
- Conduct service systems reviews - identifying gaps in service, making recommendations for change, and contributing to standards, quality initiatives and development of policies, procedures and practice guidelines to improve service delivery & health outcomes.
- Collaborate with academic, research, and professional networks to engage in local, national and international activities to disseminate information related to innovations in practice, and the evaluation of therapeutic interventions for ARF and RHD.
- Support reflective practice, evidenced-based care and quality management, and be capable in the conduct of clinical audits, clinical research, and the application of research knowledge.
- Establish and maintain effective communication and collaborative networks and partnerships with community based primary health care providers, tertiary care providers, other health services/agencies, and community stakeholders to provide optimum health care outcomes.
- Provide clinical and professional leadership in nursing issues at both the local and national levels within the ARF and RHD speciality through the promotion and dissemination of nursing and health care knowledge beyond the individual practice setting.

Selection Criteria

Essential

- Master of Nursing (Nurse practitioner) or Nursing and Midwifery Board of Australia (NMBA) approved program or education equivalence as determined by NMBA.
- Endorsement as an NP with ARF & RHD scope of practice, or eligible to obtain same.
- Proven experience in delivering a complex primary health care service in a culturally and geographically diverse environment.
- Expert knowledge and demonstrated experience in an advanced clinical nursing role in ARF & RHD.
- Demonstrated ability to develop and maintain collaborative alliances and effective partnership with key stakeholders, health professionals and other organisations.
- Demonstrated knowledge, experience and commitment to ongoing personal and professional development, Continuous Quality Improvement (CQI), evidence based practice, education and innovation in-line with organisational goals.
- Demonstrated leadership in clinical and managerial decision making: able to participate in unit and team planning, and be a conduit for change and implementation.
- Demonstrated expertise in providing education to health care professionals, patients and the general community.