Pathway of referral, preoperative and discharge care process to facilitate quality of care and safety for Aboriginal people transferred from remote area communities for cardiac care

Referral and preoperative process

- Patient referred from community to cardiologists at the Royal Darwin Hospital for investigative angiogram.

- Thursday afternoon meeting with Cardiologists and Cardiac Surgeons in Adelaide via videoconference link up with Royal Darwin Hospital Cardiologists, discuss each patient on a case-by-case basis to determine appropriate intervention to treat cardiac condition. Patients are then prioritised into three categories—priority one two or three. Priority one patients are those that require cardiac surgery as a matter of urgency.

- Friday morning meeting between Remote Area Liaison Nurse (RALN) communicating with cardiac surgical team to identify all Aboriginal people who reside in Northern Territory remote area communities that have been referred for cardiac surgery.

- RALN communicates with cardiac surgery secretary to read the cardiologist referral letter for assessment to flag potential problems that may hinder or complicate the cardiac care pathway before the patient travels and arrives in Adelaide.

- RALN communicates with Aboriginal Health Unit located in the hospital to inform them of the name of the patient and their community including expected date of arrival, date of surgery and accompanying escort three to four weeks in advance. Travel and accommodation details faxed from NT Travel to Aboriginal Health Unit.

- RALN communicates with the Renal/dialysis unit in hospital to inform them of cardiac patient who requires life long dialysis. This process assists the renal team in determining a treatment plan for the patient for the duration of their admission prior to arrival in Adelaide.

- Aboriginal Health Unit and/or RALN communicates with NT Travel to ensure flight/travel and accommodation at Aboriginal hostel has been confirmed and booked in a timely way.

- Remote Area Liaison Nurse communicates with remote area health clinic, Aboriginal health workers, nurses and visiting doctors (when available) to make them aware of treatment plan for the patient and to explain the surgical process.

- Remote Area Clinics advised to inform the patient of the need to travel to Adelaide for surgery and for patient to delegate an appropriate escort/carer. This is crucial because escorts or carers have been known to be delegated by an Elder for the patient in a particular community and surgery has been cancelled as a result of inappropriate carer/escort.
This process involves a community Elder or previous Aboriginal patients that have travelled and experienced the surgery who travel (sometimes vast distances) out to where the referred patient resides to share their personal stories in their own language/dialect. In addition, this includes an explanation of the need to stay in Adelaide hospital for five days and Aboriginal hostel for five days prior to being transferred back home. This process strongly facilitates the psychological and spiritual preparation that is so crucial in the preparation of the patient because family members are encouraged to be involved in this process also thereby facilitating informed consent (community participation).

There are two types of cardiac surgery that are very common for Aboriginal people and they are cardiac valve surgery or cardiac bypass surgery. Both procedures require major open-heart surgery.

- **Cardiac valve surgery** (mitral, aortic or tricuspid valve) results from undiagnosed/untreated rheumatic heart disease (which exists in epidemic proportions in many remote area communities, particularly in young children). The majority of these patients admitted to hospital are very young and are aged from 12 years to mid 30’s. Some of the young women in this group have young babies that are still being breastfed. (The majority of children some as young as six months of age, are admitted to another interstate hospital for the same procedure.)

- **Cardiac bypass surgery** is recommended when the coronary arteries of the heart are blocked restricting oxygenated blood flow to the heart. The diseased arteries are removed and grafted with a healthy vein that is harvested from the leg. This cohort of patients is usually aged from early 40’s to late 60’s.

Pre-operative Cardiac checklist faxed to health clinic.

This information includes the need for the patient to bring warm clothes, money, medicare card etc. and identifies any cultural obligations that they have.

Phone call to remote area nurses and Aboriginal Health workers to identify co-morbidities, recent blood tests to assess for abnormal results, MRSA status, STD status and medication regime. This process facilitates the clinical pathway to ensure the patient is clinically prepared so that surgery is not cancelled on arrival to hospital resulting in unnecessary travel and wasted resources.

Specific medications at this point need to be stopped prior to the surgery to prevent bleeding complications during the surgery.

Blood results need to be monitored at this point to identify any abnormalities that result in delayed or cancelled surgery.

RALN provides direct contact details to patient’s family in community to enable them to make direct phone calls to the patient. In the past, it was common for the patient’s family not to have contact with them until their arrival back home after 10 – 12 days.
If the patient requires cardiac valve surgery, The Rheumatic Heart Disease Register in Darwin is notified by the RALN. They are also involved with explaining to the patient why heart surgery is necessary and the process involved in detail.

This process ensures that the patient is included on the Rheumatic Heart Disease Register for appropriate life long treatment and follow up.

RALN communicates with Northern Territory Dental Quality Assurance to alert them of priority one patients that require a dental assessment prior to surgery to deem them “dentally fit” for surgery. This ensures that surgery is not cancelled in Adelaide due to a dental review not being attended to at community level prior to leaving their community.

RALN communicates with STD clinic for a particular remote area community to assess STD status. This ensures that the patient has received appropriate treatment for STD prior to travelling to Adelaide to ensure surgery is not delayed or cancelled.

RALN communicates with surgical team in hospital prior to patient arriving in Adelaide to flag potential problems and to seek direction and advice.

Post operative process

RALN informs Aboriginal Health unit, step down, NT Travel and all key care providers in community regarding patients expected date of discharge to hostel and expected date of travelling back home. This process facilitates patient safety so that they are not lost in the follow up process.

RALN faxes discharge letter and medication script to remote area health clinic for ongoing management and treatment post cardiac surgery and for medications to be ordered in a timely way. At this point education regarding cardiac rehabilitation is discussed with the remote area nurses on a case by case basis for each patient. This is necessary as all cardiac rehabilitation is generic to all people accessing cardiac services and the unique environment where Aboriginal people reside from needs to be considered in the education process.

Communications with the Rheumatic Heart Disease Register to ensure patients are not lost in the follow up process.

RALN provides her direct contact details to remote area clinic. This is crucial if the patient presents to the clinic with post operative complications as this provides an avenue for the key care providers in the remote area health clinic to seek specialised cardiac care knowledge.