Cardiac Clinical Advisory Group
Cardiothoracic Surgery Services
Response to Green Paper

The Cardiac Clinical Advisory Group (CAG) is pleased to have this opportunity to provide this response to the Government’s Green Paper for Cardiothoracic Surgery Services.

There was consensus from the all of CAG members regarding the content of this submission.

Service Profile

Current Service Overview

Based on the Service Descriptions provided in the revised Tasmanian Role Delineation Framework (TRDF) the CAG believes that the following levels of service are being provided in Tasmania:

- Royal Hobart Hospital (RHH) – Level 6
- Launceston General Hospital (LGH) – Level 0
- North West Regional Hospital (NWRH) – Level 0
- Mersey Community Hospital (MCH) – Level 0

Recommendation 1

The attached profile for Cardiothoracic Surgery Services be included into the final version of the TRDF (Attachment B).

Service Description – Levels 5 to 6

The CAG has reviewed the service descriptions for Levels 5 to 6 and considers the service descriptions to be appropriate – refer to Recommendation 1.
Service Requirements – Levels 5 to 6

The service requirements specified for Levels 5-6 within the TRDF are appropriate (refer to Recommendation 1).

Going forward, the Cardiac CAG believes the above stated service levels are appropriate to meet the needs for cardiothoracic surgery services in Tasmania.

The Cardiothoracic Surgery Unit

The RHH provides a state-wide Level 6 service through the Tasmanian Cardiothoracic Surgical Unit (CTSU).

The state-wide service is governed by THO-South, with local clinical governance arrangements in place utilising a single dedicated theatre for cardiac surgery and a cardiothoracic ward that provides 11 beds for cardiothoracic surgical patients.

It is envisaged that the move to a single THS post July 2015 should facilitate a more equitable financial model for the provision of this state-wide service currently solely funded by THO-South.

The treatment quality and clinical outcomes of the CTSU are excellent in comparison to interstate centres despite inherent access and resourcing issues and relatively low throughput.

To address these issues, the current state-wide cardiothoracic service needs to be reinforced through sustainable planning, improved collaboration and governance, clinical redesign, appropriate workforce recruitment and succession planning.

Recommendation 2

That the RHH be adequately supported through clinical redesign to provide a full Level 6 Cardiothoracic Surgical Service with capacity to meet the needs of the Tasmanian population.

Future Demand

Cardiovascular Disease (CVD) is a leading cause of mortality and a significant cause of disability in the Tasmanian community.

CVD puts enormous pressure both on the health care system and the state health budget. The risk factors for CVD i.e.: familial history; obesity; inactivity; smoking; and sedentary lifestyle are present in the Tasmanian population at rates above the national average and demand is anticipated to increase.
**Current Demand**

Departmental data (collected via ‘For Your Information’ system) indicates that cardiothoracic surgical throughput has decreased significantly over the last three years from 450 cases in 2007, to 300 cases in 2014.

However, recent national data from the AIOC Report suggests that this number should be higher. Other Cardiothoracic Units with similar population catchments (e.g. Townsville, Newcastle and New Zealand’s South Island) are performing around 600 open heart surgery procedures per annum.

The reduced throughput is a result of a combination of factors that include:

- hospital management decisions to reduce elective surgery capacity as a cost saving exercise resulting in decreased cardiothoracic surgery;
- hospital bed block resulting from unstable cardiology in-patients, who are waiting for cardiothoracic surgery;
- dependencies on key surgical and cardiac perfusionist personnel (refer to Recommendation 3 and 4); and
- Lack of access to ICU beds for post-operative recovery.

This is supported by an internal clinical audit of CTSU indicating that more than 50% of all elective surgery postponements for cardiothoracic surgery are due to the lack of availability for an ICU bed post-op. While the majority of these surgeries are rescheduled, a small number of patients die each year while waiting for treatment.

**Patient Pathways**

Data shows that PTAS eligibility criteria are not always rigidly applied and some Tasmanian cardiothoracic patients have accessed interstate treatment, which they could have received in Tasmania.

This is against PTAS eligibility policy and criteria stating that financial assistance is not to be granted if the service in question is provided within Tasmania. The Cardiac CAG requests that a review of approval processes for PTAS funding be undertaken.

Interstate referrals for cardiothoracic surgery represent *underutilised demand* and need to be redirected back to the CTSU to help boost service throughput and eradicate costs of unnecessary interstate patient travel.

Poor communication with interstate hospitals adversely affects the level of clinical risk to patients due to lack of appropriate clinical follow up and post op care locally. The issues surrounding interstate referral, which adversely affect care for patients requiring
Cardiac surgery, were major drivers for the establishment of the service in Tasmania over 20 years ago.

**Referrals**

Patients are referred for cardiothoracic surgery by cardiologists.

Cardiology services are provided at the RHH and the LGH, with some outreach to the North-West of the state. There is no Staff Specialist in cardiology operating in the North West region.

The PTAS data highlights that not all cardiologists in Tasmania (both public and private), are referring patients to the Tasmanian CTSU.

State-wide referral protocols and policy outlining patient pathways must be established within the public sector to redirect patients into the current cardiothoracic service to ensure future service sustainability.

Consultation and collaboration needs to occur between public and private cardiologists to support current services and encourage referral of all Tasmanian cardiac patients to the statewide CTSU in the future.

**Outreach**

In addition to redirecting interstate referrals, the provision of cardiothoracic outreach clinics to the North and North-West regions of the state should to be increased.

By providing a robust statewide service across all region would help to facilitate the number of patients referred to the state-wide CTSU, rather than other interstate providers.

Increasing the capacity for telehealth facilities across the state would facilitate support mechanisms for general medicine physicians located in the North-West and enable greater statewide collaboration between cardiology specialists and key staff involved in patient management and care at the weekly multidisciplinary team meeting held at RHH.

**Safety and Quality**

It is critical that cardiothoracic surgeons are able to meet surgical caseloads requirements to maintain the safety and quality requirements for accreditation. Sustained reduction in service capacity and inadequate referral numbers makes accreditation standards difficult to maintain.
**Key Service Interdependencies**

The management of patients with cardiac and thoracic conditions requires collaboration and consultation across multidisciplinary teams (MDT) which include cardiologists, cardiothoracic surgeons, pathologists, radiologists, respiratory physicians, and oncologists and radiation therapy consultants (where appropriate).

Referrals for elective cardiothoracic surgical procedures involving the heart and surrounding organs come from:

- public and private cardiologists,
- respiratory physicians for diagnostic procedures or thoracic surgical procedures involving the sternum, ribs, lungs or vascular structures; and
- oncology physicians where surgical intervention is recommended for removal of cardiac, lung or thoracic tumours.

The interdependence that cardiothoracic surgical services has with other sub-speciality services is critical to the role of RHH as a state-wide tertiary referral centre. The location of the statewide CTSU service at the RHH allows other sub-speciality services (e.g. Trauma service, Cardiology services Renal services etc.) to function at a Level 6 as outlined in the TRDF.

**Workforce Requirements – Levels 5 to 6**

The workforce requirements specified within the TRDF for Levels 5-6 are generally appropriate (refer to Recommendation 1).

The RHH currently has two (2) cardiothoracic surgeons in its employment and one (1) cardiac perfusionist.

While there is funding for a second perfusionist, this position has been difficult to fill. This has resulted in occupational health and safety risk, and a situation that is unsustainable due to the sole perfusionist technically being on call 24/7 all year round.

Further, leave cover for both the cardiothoracic surgeons and the perfusionist is difficult and expensive, requiring the use of locums.

Current staffing configurations do not meet the following best practice guidelines for the establishment and running of a safe and sustainable cardiothoracic unit:

- Minimum of three (3) cardiothoracic surgeons;
  - To allow the current caseload to be increased to 450 and the senior surgeon to take on a greater mentoring role; provide capacity for outreach services

---

1 The Australian and New Zealand Society of Cardiac and Thoracic Surgeons, *Guidelines for the Establishment of an Adult Cardiac Surgery Unit (CSU).*
to be established for the North-West and address a sustainable succession planning model.

- Minimum of two (2) cardiac perfusionists to ensure a sustainable on-call roster can be safely maintained and mitigate key person dependencies.

**Recommendation 3**

That the RHH appoint a junior cardiothoracic surgeon immediately to:

- facilitate succession planning for the CTSU
- reduce key personnel dependencies
- increase service capacity; and
- provide an outreach services to the North-West.

**Recommendation 4**

That the RHH seek employment of and appoint a second perfusionist to the CTSU.