



Australian Government
Organ and Tissue Authority



National Standard Operating Procedure

Organ Allocation

Organ Rotation

Urgent Listing

Introduction

The Australasian Donation & Transplant Coordinators Association (ADTCA), the Transplantation Society of Australia and New Zealand (TSANZ), DonateLife and the Organ and Tissue Authority (OTA) have collaborated on the development of the National Standard Operating Procedures for organ allocation, organ rotation and urgent listings.

This document has been developed based on revision and updating of previous allocation procedures, results of ADTCA Extra-Renal Organ Allocation Audit Reports and changes in allocation criteria as per the TSANZ Clinical Guidelines for Organ Transplantation from Deceased Donors (TCG).

The TSANZ Council and the ADTCA Executive have approved this Standard Operating Procedure (SOP) and the Organ and Tissue Authority (OTA) and DonateLife Agencies have supported the finalisation of this SOP.

Purpose

The purpose of this SOP is to support the allocation of organs for transplantation through a transparent, fair and equitable process.

User

The intended users of this SOP are both donation and transplantation clinicians of Australia and New Zealand.

Scope

This document contains operating procedures pertaining to the allocation of organs for transplantation from deceased donors, organ allocation rotations and urgent listing procedures for heart and liver. This document excludes organ allocation from living donors.

Responsibility**DonateLife Agencies and New Zealand Donation Services**

It is the responsibility of each Australian DonateLife Agency and Organ Donation New Zealand to maintain the ADTCA/TSANZ Organ Allocation Rotation documentations for their jurisdiction.

The Transplantation Society of Australia and New Zealand (TSANZ)

TSANZ Advisory Committees act as peak bodies for their organ-specific special interest groups, advising in the areas of recipient eligibility, donor organ retrieval, allocation and utilisation of organs for transplantation. The TSANZ will share reports and findings with relevant committees, including the Advisory Committees, to inform practice improvements.

National Allocation User Group (NAUG) DonateLife/OTA/ADTCA

The organ allocation rotation audit process is currently being undertaken by the OTA National Allocation User Group (NAUG), with support from ADTCA. The NAUG comprises of DonateLife representatives from each jurisdiction (except ACT), an ADTCA representative and OTA representatives.

The NAUG will undertake a full national audit and provide quarterly and final reports to ADTCA, TSANZ and OTA for review, approval, and endorsement. The NAUG will also play a vital role in the communication and education to their local jurisdiction on key lessons and clinical practice changes as an outcome of the audit process. The OTA will share reports and findings with relevant committees, including the Clinical Governance Committee, to inform practice improvements.

The Organ and Tissue Authority (OTA)

The OTA agrees to facilitate communication between DonateLife Agencies, Organ Donation New Zealand, TSANZ and ADTCA in relation to the organ allocation, rotations, urgent listings SOP, guidelines, and auditing processes.

The OTA will participate in the review and discussion of the audit data prior to dissemination and publication of quarterly and annual reports.

The OTA will facilitate the review process of the National Standard Operating Procedures for Organ Allocation, Organ Rotation and Urgent Listings. The review process will be undertaken by a designated Working Party comprising of DonateLife Agency representatives, ADCTA representative and OTA representatives.

Version Control

This document is reviewed annually in alignment with the TSANZ Clinical Guidelines for Organ Transplantation from Deceased Donors, OrganMatch development and, algorithm capabilities. There may also be instances where a review is required more frequently to support changing clinical practice

Next scheduled review date: February 2025.

Version #	Changes made	Approved by	Date
2.0	<ul style="list-style-type: none"> — Revisions in respect to time taken for unit to respond — Rewording of patients on urgent heart listing — Restatement of allocation practices for patients on urgent liver list and addition of a new urgent category 2c — Revisions to Intestinal/multivisceral allocation — New section on allocation procedures for pancreas in SA — Changes in liver notification process in Queensland — New Appendix – intestinal/Intervisceral allocation — A new section on audit 	<ul style="list-style-type: none"> — OTA — ADTCA Exec — TSANZ Council 	2017
2.1	<p>Minor amendments to:</p> <ul style="list-style-type: none"> — Section 1 Urgent listing to include '2.4 Offering Urgent Listing's' — Section 2 Organ allocation procedures 'inclusion and deletions as agreed '1.2 DCD Heart allocation procedures' created 	<ul style="list-style-type: none"> — OTA — ADTCA Exec — TSANZ Council 	January 2018
2.2	<p>Amended to align with new versions of the TSANZ Clinical Guidelines V1.4, July 2020:</p> <ul style="list-style-type: none"> — Paediatric considerations — Updating Kidney allocation <p>Holding statements added regarding the NAUG and new audit process (amend Responsibilities page 2, Section 4 page 24 and removed Appendix 11-13)</p> <p>Minor amendments to:</p> <ul style="list-style-type: none"> — Replaced NOMS with OrganMatch, replaced renal withkidney where not part of a name — Corrected formatting or other errors — New screen shots for Appendices 1-8 — Compassionate listing for lungs notification — Updated contact tables, added nationally funded centers and SA pancreas/islet unit 	<ul style="list-style-type: none"> — OTA — ADTCA Exec — TSANZ Council 	April 2021
3.0	<ul style="list-style-type: none"> — Transfer of ADTCA/ TSANZ 'Organ allocation, organ rotation, urgent listings and auditing processes' V2.2 Interim April 2021 into new format — Addition of TSANZ role in the Responsibility section — Removal of non-nationals reference in General Principles for non-kidney organ allocation — Removal of reference to requirement to notify interstate committees and DonateLife Agencies of combined transplant listings — Removal of reference to Hepatitis C Positive register in Kidney Allocation procedures 	<ul style="list-style-type: none"> — OTA — ADTCA Exec — TSANZ Council 	October 2021

Version #	Changes made	Approved by	Date
3.0 (cont.)	<ul style="list-style-type: none"> — Addition of notification to home state prior to offering to urgent listings — Addition of updated and expanded paediatric considerations in the kidney, heart, lung, heart lung bloc and liver sections to align with TSANZ Clinical Guidelines V 1.7 September 2021 — Updated age range and terminology for Donation after circulatory determination of death (DCDD) heart allocation — Addition of Lung National Notification Procedures with terminology change — Update and clarification on pancreas offer process — Additional clarification of Intestinal allocation procedures — Removal of Section 4 – The Organ Allocation Rotation Audit — New Appendix 1 – ADTCA-TSANZ Organ Allocation Rotations: Addition of each state/territory and New Zealand organ allocation rotations with state transplant units and order of rotation — Removal of all Appendices of examples of Urgent Listing templates and organ rotations — Removal of Appendix 7 – Intestinal Listing — Removal of Appendix 8 – Miscellaneous Listing — Removal of Appendix 9 – Kidney Allocation Algorithms — Removal of Appendix 10 – Guidelines for Donor Referral (Victorian Intestinal Unit Protocol 2015) 	<ul style="list-style-type: none"> — OTA — ADTCA Exec — TSANZ Council 	October 2021
4.0	<ul style="list-style-type: none"> — Addition of 'intended user 'and review of version control — New map of transplantation units across AU & NZ, removal of previous tables — 1.1 Review of Extra-renal allocation – 'offer to home state first prior to urgent listings', and ensured consistency across document — 2.1.d Amendment to allocation of left kidney to highest rank recipient as per RTAC consensus — 5.1 Review of General Allocation Procedures for heart offering and urgent heart listings – <i>offer to home state prior to urgent listings</i> — 6.2.1 DCDD Liver considerations – DCDD livers to be offered interstate to VIC/QLD — 8.3 Home state transplant Units – c. SA & NT home state transplant unit is Royal Adelaide Hospital — 8.4.3 New flow diagram for SA offering process — 8.4.4 NZ Pancreas or islets to also be offered to SA — New Appendix B – Defining the "home state" — Review of all contact numbers per jurisdiction — Review of Appendix A – Lung Rotation – WA added to the east coast Lung Rotation — New Appendix C – Renal Transplant unit contacts 	<ul style="list-style-type: none"> — OTA — ADTCA Exec — TSANZ Council 	February 2023
4.1	<ul style="list-style-type: none"> — Revisions to section 3 Heart Lung Bloc to recognise all paediatric heart transplant centres — Revisions to section 5 Heart – paediatric considerations, inclusion of NZ to the heart allocation rotations, and new Appendix D — Review of Appendix A: <ul style="list-style-type: none"> — addition of NSW Paediatric to Heart rotations — addition of NZ to QLD, VIC, and NSW Heart rotations — addition of WA to VIC Heart Lung bloc rotations — removal of NZ from NT Adult Liver rotations — removal of WA from QLD, NSW, and TAS Lung rotations 	<ul style="list-style-type: none"> — OTA — ADTCA Exec — TSANZ Council 	December 2023

Table of contents

Section 1 ▶ General principles			4
1.1 Organ Allocation	4	1.3 Research Programs	4
1.2 Multi-Organ Transplants	4	1.4 Recognised Donation and Transplant Units	5
Section 2 ▶ Kidney			8
2.1 Kidney allocation procedures	8	2.3 Paediatric considerations	8
2.2 Referral procedures	8		
Section 3 ▶ Heart Lung Bloc			10
3.1 General allocation procedures	10	3.3 Contacts for heart lung bloc allocation	11
3.2 Paediatric considerations	11		
Section 4 ▶ Lung			12
4.1 General allocation procedures	12	4.3 Paediatric considerations	13
4.2 National notification procedures	12	4.4 Contacts for lung allocation	13
Section 5 ▶ Heart			14
5.1 General allocation procedures	14	5.4 Contacts for heart allocation	15
5.2 DCDD heart allocation procedures	14	5.5 Urgent Listings	15
5.3 Paediatric considerations	14		
Section 6 ▶ Liver			18
6.1 General allocation procedures	18	6.4 Contacts for adult and paediatric liver allocation	19
6.2 Adult liver allocation	18	6.5 Urgent Listings	20
6.3 Paediatric Liver Allocation	18		
Section 7 ▶ Intestinal/Multivisceral			24
7.1 General allocation procedures	24	7.3 Isolated intestine allocation procedures	24
7.2 Intestine and liver/multivisceral allocation procedures	24	7.4 Contact details for Intestinal/multivisceral allocation	24
Section 8 ▶ Pancreas and Islets			25
8.1 General allocation procedures	25	8.4 Allocation process	25
8.2 Pancreas and islet allocation procedures	25	8.5 Contacts for pancreas and islet allocation	29
8.3 Home State Transplant Units	25		
Appendices			
A ADTCA-TSANZ Organ Allocation Rotations	30	C Renal Transplant Unit Contacts	35
B Defining the 'home-state'	34	D Paediatric Heart Offering	36

Section 1

General principles

1.1 Organ Allocation

1.1.1 Extra-Renal organ allocation

- a** Organs are offered to the jurisdiction's home state first. If there is no home state (i.e., there is not a heart and lung transplant unit) the organ is offered according to the specific ADTCA/TSANZ Organ Allocation Rotation. Please also see Appendix B: Defining the home state.
- b** When there are urgent listings, the home state unit is offered the potential donor organ PRIOR to offering to the transplant unit of the urgent listing. If the offer is declined for the urgent listing, the organ is offered back to the home state and the ADTCA/TSANZ Allocation Rotation are to be followed.
- c** The home state or 1st offer state are responsible for determining medical suitability. If the home state declines the offer (i.e., no suitable recipient, logistics) and the organ is deemed medically suitable to offer on, the organ is offered according to the ADTCA/TSANZ Organ Allocation Rotation to ensure a fair and equitable distribution.
- d** The offer is rotated through each jurisdiction as appropriate, in strict order until either the organ is accepted, or all units have declined the offer.
- e** Transplanting units must respond to an organ offer within 30 minutes of receiving and acknowledging the offer. The response should be i, ii or iii as noted below:

i Acceptance

OR

- ii Provisional Acceptance of the formal offer.** In some circumstances additional time may be required to solve, for example, logistical impediments or obtain medical suitability information, including the undertaking of additional investigations. An extension of time should be granted if there is a provisional acceptance of the organ pending the resolution of logistical impediments including arrangements for out of state retrieval teams and/or availability of clinical information requested.

OR

- iii Decline the offer:** not medically suitable, no suitable recipient, transmission risk, age of donor or logistics

- f** Units receiving offers should make every effort to respond as quickly as possible to expedite the allocation process.

1.1.2 Kidney allocation

- a** The allocation of kidneys is coordinated through OrganMatch (OM) according to the Australian Allocation Algorithms to generate a kidney organ offer list (OOL) for each donor.
- b** Transplanting units have 60 minutes to accept or decline the offer.
- c** Units receiving offers should make every effort to respond as quickly as possible to expedite the allocation process.

1.1.3 Paediatric allocation

- a** Refer to the relevant section of each organ type for details of paediatric considerations for both paediatric donors and allocation to paediatric transplant units.

1.2 Multi-Organ Transplants

- a** Combined transplant listings e.g., liver/kidney, heart/kidney, liver/lung are required to be formally approved by local jurisdiction transplant committees.
- b** Organs should not be allocated to recipients for combined transplants prior to completion of this formalised process and written confirmation of acceptance by local jurisdiction transplant committees is received. The exception to this is heart/lung bloc offers and kidney/pancreas offers.

1.3 Research Programs

- a** Research programs are required to be approved formally through the relevant local jurisdictional Committees and Human Research Ethics Committees as required.
- b** DonatLife Agencies are required to be formally notified of any research programs on donor organs, blood or tissues of any organ donors and it is preferred that the donation coordinator discusses research programs during the consent conversation.
- c** The donation coordinator must inform the relevant transplant unit or researcher at the time of referral that they have obtained the relevant research consent.

1.4 Recognised Donation and Transplant Units



Donation

Australia – Donateline
All states and territories

New Zealand – Organ Donation New Zealand
North and South Island



Organ Donation
New Zealand

Section 1 / General principles

Currently recognised transplant units

		Heart	Renal	Lung	Liver	Pancreas*
NSW	1 St Vincent's Hospital Sydney	●	●	●		
	2 The Children's Hospital at Westmead	●	●		●	
	3 Prince of Wales Hospital		●			
	4 Sydney Children's Hospital		●			
	5 John Hunter Hospital		●			
	6 Royal North Shore Hospital		●			
	7 Royal Prince Alfred Hospital		●		●	
	8 Westmead Hospital		●			●
VIC	9 The Alfred Hospital	●	●	●		
	10 The Royal Melbourne Hospital		●			
	11 The Royal Children's Hospital	●	●		●	
	12 Austin Hospital		●		●	
	13 Monash Medical Centre		●			●
	14 Monash Children's Hospital		●			
	15 St Vincent's Hospital Melbourne		●			
QLD	16 The Prince Charles Hospital	●		●		
	17 Princess Alexandra Hospital		●		●	
	18 Queensland Children's Hospital		●		●	
SA	19 Royal Adelaide Hospital		●			●
	20 Women's and Children's Hospital		●			
	21 Flinders Medical Centre				●	
WA	22 Fiona Stanley Hospital	●	●	●		
	23 Sir Charles Gardiner Hospital		●		●	
	24 Perth Children's Hospital		●			

		Heart	Renal	Lung	Liver	Pancreas*
NZ	25 Auckland City Hospital	●	●	●	●	●
	26 Wellington Hospital		●			
	27 Christchurch Hospital		●			
	28 Starship Children's Hospital#				●	

* Simultaneous pancreas and kidney transplant unit – defined as a clinical service of a state public hospital that actually performs the relevant transplant procedure.

Transplants are performed at Auckland City Hospital, but patients are transferred to Starship for post-operative care.

Clinical islet separation facilities

A clinical islet separation facility is defined as a clinical facility of a state public hospital that actually separates islets from human pancreata under a Human Research Ethics Committee (HREC)-approved protocol and has the required regulatory approval/licensing.

NSW	Westmead Islet Laboratory
VIC	St Vincent's Institute of Medical Research

Clinical islet transplantation and infusion units

A clinical islet transplant unit is defined as a clinical service of a state public hospital that actually performs the relevant transplant procedure under HREC-approved protocols

NSW	Australian National Pancreas Transplant Unit, Westmead Hospital
SA	The Royal Adelaide Hospital
VIC	St Vincent's Hospital Melbourne
NZ	New Zealand National Pancreas Transplant Unit, Auckland City Hospital

Research islet separation facilities

A research islet facility is defined as a state public hospital or research institute that actually separates islets from human pancreata for research under a HREC-approved protocol with whatever regulatory approval/licensing is required

NSW	Westmead Islet Laboratory
SA	The Royal Adelaide Hospital
VIC	St Vincent's Institute of Medical Research

Intestinal transplantation units

VIC	The Austin
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Vascularised composite allograft units

VIC	St Vincent's Hospital Melbourne
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Section 2

Kidney

2.1 Kidney allocation procedures

- a** The allocation of kidneys from deceased donors is coordinated through OrganMatch (OM) according to the kidney allocation algorithm in the TSANZ Clinical Guidelines. The major criteria used by OM in allocations are blood group, HLA match, waiting time and donor specific antibodies. OrganMatch maintains an approximate balance in donor kidneys between the states.
- b** OrganMatch will generate an organ offer list (OOL) which determines the ranked order of recipients according to:
 - i National authorised deviation
 - ii National matching and allocation algorithm
 - iii State based allocation algorithm
- c** The donation coordinator will offer the kidneys in order of rank, if a kidney is declined, then the kidney is offered to the next ranked recipient.
- d** The highest ranked recipient will receive the left kidney. If there is anatomical variance poor perfusion or damage and where logistics allow -the 'preferred' kidney will be allocated to the highest ranked recipient. This is to be discussed between accepting units at the time of offer/ retrieval of the organs.
- e** If there is only 1 kidney suitable for transplant, this kidney will go to the highest ranked recipient
- f** Under special circumstances a kidney may be allocated regardless of the OOL, this is known as an 'unplanned (exceptional) allocation'. In these circumstances the relevant transplant unit will be responsible for making clinical decisions regarding allocation.
- g** New Zealand does not utilise OrganMatch, it has its own deceased donor National Kidney Allocation Scheme which is described here:

<https://www.tewhatauora.govt.nz/whats-happening/about-us/who-we-are/our-leadership-and-structure/expert-groups/national-renal-transplant-service/nrts-papers-and-reports/#national-kidney-allocation-scheme>

2.2 Referral procedures

- a** Each jurisdiction will have agreed processes for referral of state based allocated kidneys. Refer to local Standard Operating Procedures.
- b** When a kidney is allocated to an interstate recipient it is the responsibility of the state/ territory donation coordinator to contact the appropriate person in the recipient state/territory and provide the kidney offer.
- c** The donation coordinator from the donor state should make all reasonable attempts to refer the kidney prior to or during the donor retrieval surgery to minimise ischaemic times, particularly when kidneys are allocated interstate.
- d** Transplant Unit surgical request for left or right kidney allocation for a recipient is acceptable practice and must be honoured at the time of allocation. This is a directive from TSANZ Renal Transplant Advisory Committee. If both recipient units require the same kidney for surgical reasons, a discussion between the implanting surgeons should be facilitated by the donation coordinator.
- e** Transplanting units will have 60 minutes to accept or decline a kidney offer. If 60 minutes has passed without a response the kidney offer may go to the next recipient on the OOL after discussion with the transplanting unit

2.3 Paediatric considerations

- a** For donors aged greater than 5 years or greater than 20kg, kidney allocation should proceed as for adult donors via the generated OOL.
- b** For donors >10kg to 20kg, or aged >1 to 5 years, standard allocation via a generated OOL also applies, although kidneys should be offered en-bloc in the first instance.
- c** Potential smaller donors constitute a broad category with varying implications for the complexity of retrieval and transplant surgery, particularly in the case of donors <5kg or ≤3 months. Pre-allocation advice from transplant units regarding medical suitability and capacity to transplant kidneys from these potential donors should be sought.

The TSANZ provide the following recommendations for paediatric kidney donation and allocation.

Donor Age and Size Range	Offer of: Single Kidney (SK) En-bloc (EB)	Allocation
>20 kg or >5 years old	SK	Standard allocation
>10–20 kg or >1–5 years old	EB first, then SK as directed	Standard allocation with default to offer as EB. Transplant unit has discretion to opt for SK, in which case second kidney to be offer on as SK.
>5–10 kg or >3–12 months	EB	Allocation proceeds only after pre-allocation discussion/medical suitability with local experts.
<5 kg or ≤3 months	EB	Allocation to dedicated centres, identified as such to the donation sector, with specific protocols and relevant expertise to accept. *Currently the Royal Prince Alfred and Westmead Hospitals in NSW have protocols for consideration of donors of this age and size range

Contacts for Renal Allocation

Please see Appendix C

Section 3

Heart Lung Bloc

3.1 General allocation procedures

- a In the event the home state declines BOTH the donor heart and lungs the heart/lung bloc is offered using the ADTCA/TSANZ Lung Allocation Rotation.
- b The first state on the Lung Allocation Rotation has the following options:
 - i Accept the heart/lung bloc for a single recipient
 - ii Accept the heart and lungs for two separate recipients
 - iii Accept one of the organs and decline the other
 - iv Decline both organs
- c When the first state on rotation accepts only one of the thoracic organs the remaining organ is offered as per that organ's allocation rotation.

For example:

- i Lungs are accepted: heart is offered to the next state on the Heart Allocation Rotation
 - ii Heart is accepted: lungs are offered to the next state on the Heart/Lung Allocation Rotation
- d When moving to the heart rotation the first state for offer may be the state that has declined the heart during the bloc offer process. Simply document this in the heart rotation comments for that state and offer to next state on rotation.
 - e When offering to Western Australia from Victoria, Western Australia are only offered the lungs from the heart lung bloc. **If the lungs are accepted**, the heart is offered to the next state on the Heart Allocation Rotation. **If the lungs are not accepted**, the heart lung bloc rotation continues.

N.B Western Australia may be offered the heart, from east coast heart/lung bloc offers in exceptional circumstances – such as urgent listings whereby the urgent listing principles are to be followed as per section 5.5

- f When offering a heart/lung bloc to Victoria or New South Wales both the paediatric and adult transplant units must be contacted before moving on to the next state on rotation. This is to remove any disadvantage to the paediatric heart transplant centres and to ensure the units receive the opportunity to accept the heart only from the bloc.

For example:

- i Victoria is first state on the heart/lung rotation with the paediatric unit at the Royal Children's Hospital to receive first offer of the bloc. The paediatric unit accepts the heart from the bloc offer. The lungs are then offered to the adult unit at the Alfred before offering to the next state on rotation.
 - ii However, when Victoria is the first state on the heart/lung rotation with the adult unit to receive first offer and they accept the heart and decline the lungs, the paediatric unit would not be offered the lungs (see section 4.1.e) In this scenario the lungs would be offered to the next state on rotation and the paediatric unit would be bypassed.
- g It is the responsibility of the donation coordinator to contact the appropriate person in each state and provide the heart/lung bloc offer referral.

3.2 Paediatric considerations

- a** Paediatric heart/lung transplants are performed by the Paediatric Heart/Lung Transplant Centre at the Alfred Hospital, Victoria.
- b** All donors who are ≤ 16 years of age and ≤ 50 kg are potentially suitable heart/lung bloc donors for paediatric recipients. It may be appropriate to notify the home state unit prior to referring to the Paediatric Heart-Lung Transplant program, for consideration.
- c** The ADTCA/TSANZ Heart/Lung Allocation Rotation are bypassed in this circumstance. The offer is recorded in the EDR.
- d** The Paediatric Heart/Lung Transplant Centre has the following options:
 - i Accept the heart/lung bloc for a single paediatric recipient
 - ii Accept the lungs for a paediatric recipient
 - iii Decline both organs
- e** When the lungs are accepted for a paediatric recipient, the heart must then be offered to the paediatric heart transplant centres as per [Appendix D](#).
- f** When both the heart and lungs are declined by all of the paediatric centres then the organs are offered to home state and/or on the ADTCA/TSANZ Heart/Lung Allocation Rotations.

3.3 Contacts for heart lung bloc allocation

State	Contact person for heart lung bloc offers	Contact numbers
QLD	The Heart Lung Recipient Coordinator On-Call via The Prince Charles Hospital switch board	07 3139 4111
NSW	Heart/Lung Transplant Coordinator via On-Call mobile at St Vincent's Hospital	0416 143 723
VIC	Heart Transplant Coordinator On-Call via Royal Children's Hospital switch board	03 9345 5522
	Heart/Lung Transplant Coordinator On-Call via the Alfred Hospital switch board	03 9076 2000
WA	1st Contact Advanced Lung Disease Unit Consultant on-call via Fiona Stanley Hospital Switchboard <i>If unavailable please contact Advanced Lung Disease Unit Nurse On-Call via Fiona Stanley Hospital Switchboard</i>	08 6152 2222
NZ	Heart/Lung Transplant Coordinator On-Call via Auckland City Hospital switch board	0011 649 307 4949

Section 4

Lung

4.1 General allocation procedures

- a** The lungs are offered to the home state first
- b** When there are national listings and/or paediatric donors, the home state unit is offered the potential donor PRIOR to offering to any national listings and/or paediatric transplanting program. If the home state waives the offer, the national notification and/or paediatric allocation procedures are to be followed, refer to section 4.2 and section 4.3 respectively.
- c** For donors between >8 kg and/or <120 cm and/or ≤16 years of age, refer to section 4.3 paediatric considerations.
- d** If the home state does not have a Cardiothoracic Transplant Unit the lungs are allocated via the Heart Lung Bloc Allocation Rotation (see section 3).
- e** If the home state declines the offer the ADTCA/TSANZ Allocation Rotation is utilised and offers are made in strict rotational order.
- f** It is the responsibility of the donation coordinator to contact the appropriate person in each jurisdiction across Australia and New Zealand and provide the lung referral.

4.2 National notification procedures

- a** Although there is no specific official national priority urgent lung listing category, under some circumstances, a lung transplant wait list patient from one state may be notified to other state Lung Transplant Programs in an attempt to increase their opportunities for lung allocation and transplantation. This process is termed National Notification by TSANZ.
- b** National notification for lung transplantation is at the discretion of the Lung Transplant Unit Director. It is the responsibility of the Lung Transplant Director (or their delegate) to notify all other Lung Transplant Units. It is not routine practice to notify DonateLife Agencies in Australia or Organ Donation New Zealand when a patient is placed on or removed from the national notification list.
- c** A national notification from one state is not binding on other states. A national notification does not override lung allocation standard procedures.
- d** The donation coordinator will be informed by the home state lung transplant unit at the time of offering the lungs if the home state will waive the offer for a patient on the national notification list.
- e** In this circumstance the ADTCA/TSANZ Allocation Rotation is bypassed and the acceptance or decline of offer is not recorded on the rotation. The donation coordinator will record this offer in the EDR.
- f** In the event the lungs are not accepted for the national notification patient, the lungs are offered back to the home state.
- g** A patient listed for national notification will remain active for four weeks. If a patient remains on national notification beyond four weeks, re-notification of all Lung Transplant units is required.

4.3 Paediatric considerations

- a** The Nationally Funded Centre (NFC) Paediatric Lung Transplantation program is based at the Alfred Hospital in Melbourne, Victoria.
- b** All paediatric donors who are >8kg and <120cm and/or ≤16 years of age are potentially suitable lung donors for paediatric recipients. It may be appropriate to notify the home state unit prior to referring to the Paediatric Lung Transplant program for consideration.
- c** The ADTCA/TSANZ Allocation Rotation is bypassed in this circumstance. The offer is recorded in the EDR.
- d** In the event the lung offer is declined, the lungs may be offered back to the home state and/or on the ADTCA/TSANZ Allocation Rotation.

4.4 Contacts for lung allocation

State	Contact person for lung offers	Contact numbers
QLD	The Heart Lung Recipient Coordinator On-Call via The Prince Charles Hospital switch board	07 3139 4111
NSW	Heart/Lung Transplant Coordinator via On-Call mobile at St Vincent's Hospital	0416 143 723
VIC	Adult and Paediatric Lung Transplant Program Heart/Lung Transplant Coordinator On-Call via the Alfred Hospital switch board	03 9076 2000
WA	1st Contact Advanced Lung Disease Unit Consultant on-call via Fiona Stanley Hospital Switchboard <i>If unavailable please contact Advanced Lung Disease Unit Nurse On-Call via Fiona Stanley Hospital Switchboard</i>	08 6152 2222
NZ	Heart/Lung Transplant Coordinator On-Call via Auckland City Hospital switch board	0011 649 307 4949

Section 5

Heart

5.1 General allocation procedures

- a** The heart is offered to the home state first.
All donors who are ≤ 17 years old AND/OR 3 kg – ≤ 50 kg are to follow paediatric offering principles outlined in 5.3
- b** When there are urgent listings, the home state unit is offered the donor heart PRIOR to offering to any urgent listings and/or paediatric transplanting programs. Once the home state waives the offer to the urgent listing, the urgent allocation procedures are to be followed, refer to section 5.5.1.
- c** Victoria and New South Wales each have two heart transplant units:
VIC
 - The Royal Children's Hospital
 - The Alfred HospitalNSW
 - Children's Hospital Westmead
 - St Vincent's Hospital
- d** When a heart is offered to Victoria or New South Wales both transplant units must receive the offer before moving to the next state on rotation. The rotation between the Paediatric and Adult units in Victoria and New South Wales is documented on the ADTCA/TSANZ Heart Allocation Rotation kept by each DonateLife Agency.
- e** The ADTCA/TSANZ Heart Allocation Rotation is utilised for all heart offers originating from South Australia and the Northern Territory as they do not have a home state/territory transplant unit. i.e., donor hearts from SA/NT are offered to the state first on rotation.
- f** New Zealand is included in the ADTCA/TSANZ Heart Allocation Rotation for QLD, NSW and VIC.
New Zealand heart offers that are declined by the New Zealand Heart Transplant Unit are to be offered to recognised heart transplant units in Australia as per the ADTCA/TSANZ Heart Allocation Rotation.
- g** It is the responsibility of the donation coordinator to contact the appropriate person in each state and provide the heart offer.

5.2 DCDD heart allocation procedures

- a** The St Vincent's Heart Lung Transplant Unit in NSW currently has the only Donation after circulatory determination of death (DCDD) Heart Transplant program in Australia.
- b** Potential DCDD heart donors are patients ≤ 55 years of age across Australia and New Zealand
- c** The ADTCA/TSANZ Heart Allocation Rotation is bypassed for all DCDD heart offers as NSW is the only unit currently able to consider these offers. The offer is recorded in the EDR.
- d** A DCDD heart offer is made directly to the St Vincent's NSW Heart Lung Transplant Coordinator On-Call.

5.3 Paediatric considerations

- a** Paediatric donor hearts are to be first offered to paediatric recipients. There are three Paediatric Heart Transplant programs located in Australia and New Zealand:
 - The Royal Children's Hospital (RCH) in Melbourne, Victoria
 - Children's Hospital Westmead (CHW) in Sydney, New South Wales
 - Auckland City Hospital (ACH) in Auckland, New Zealand.A paediatric donor heart is defined as being a donor ≤ 17 years old AND/OR 3 kg – ≤ 50 kg.
- b** The home state unit is notified of the potential paediatric donor. When there are no urgent listings, the heart is to be offered as per [Appendix D](#).
- c** In the event the paediatric heart offer is declined by all three paediatric units, the heart is offered back to the home state and/or on the ADTCA/TSANZ Heart Allocation Rotation.
- d** New Zealand Considerations
New Zealand paediatric donor hearts that are declined ACH are to be offered to RCH and then CHW for consideration.

5.4 Contacts for heart allocation

State	Contact person for heart offers	Contact numbers
QLD	The Heart Lung Transplant Coordinator On-Call via The Prince Charles Hospital switch board	07 3139 4111
NSW	Heart/Lung Transplant Coordinator via On-Call mobile at St Vincent's Hospital <i>For both adult & paediatric offers</i>	0416 143 723
VIC	Heart Transplant Coordinator On-Call via Royal Children's Hospital switch board	03 9345 5522
	Heart/Lung Transplant Coordinator On-Call via the Alfred Hospital switch board	03 9076 2000
WA	Consultant on On-Call for Cardiac Transplant via Fiona Stanley Hospital switch board	08 6152 2222
NZ	Heart/Lung Transplant Coordinator On-Call via Auckland City Hospital switch board	0011 649 307 4949

5.5 Urgent Listings

5.5.1 Listing urgent patient procedures

- a** Once a patient has been assessed as meeting urgent status for heart transplantation by the Transplant Unit Director, they (or their delegate) are responsible for notifying all other Cardiothoracic Transplant Unit Directors (or their delegate) in Australia and New Zealand. There may be instances where cardiothoracic transplant units do not accept a patient as meeting the urgent criteria listed by other jurisdictions. It is at the discretion of each transplanting unit to accept or decline an urgent listing and therefore waive any home state heart offers to the urgent listing.
- b** It is the responsibility of the Transplant Clinician to ensure the DonateLife Agencies, Organ Donation New Zealand and Cardiothoracic Transplant Units in Australia and New Zealand are notified of the urgent listing. A patient placed on the urgent heart listing will remain active for two weeks. In the event that a patient remains urgently listed beyond 2 weeks, re-notification to the above is required.
- c** In the event a patient is to be delisted (i.e., stabilised cardiac function, transplantation, or death) the notification process needs to occur as soon as possible.
- d** It is recommended that notification is by direct telephone conversations to the on-call Clinicians, though written documentation via email may also be requested as per local unit policy. This practice is to ensure that real-time notification occurs, avoiding the potential of a missed heart offer in the event a donation is occurring at the time of listing.
- e** The ADTCA/TSANZ Urgent Heart Listing templates are to be utilised for documenting and recording of the notification process. There are two templates to be utilised.
 - i** The Interstate and New Zealand Urgent Heart Listing template is for the Transplant Units and DonateLife Agencies to record details of interstate and New Zealand urgent heart listings.
 - ii** The state specific template e.g.: NSW Urgent Heart Listing is for each state and New Zealand that has a cardiothoracic Transplant Unit to record their notification process when listing a patient on the Urgent Heart List.

Section 5 / Heart

- f** BOTH the donor and transplant clinicians in each state / territory and New Zealand must be notified of the urgent listing and subsequent relisting/delisting. There is space on the templates to record the name of both clinicians who have received the listing details. The exception is in South Australia, Northern Territory and Tasmania, where only the donation coordinator is notified.
- g** The ADTCA/TSANZ Heart Allocation Rotation is bypassed when a heart is offered for a patient on the urgent listing. Acceptance or decline of an offer is not recorded on the rotation. In the event the heart is not accepted for any urgent listed patients the heart is offered back to the home state.

5.5.2 Multiple urgent listed patients

In the event that there are simultaneously listed urgent patients, the following process will be followed:

- 1** When there is more than one patient on the urgent heart listing, the compatible donor heart will be offered to the patient who was listed **first, however**
- 2** If a compatible donor becomes available in the same state as the urgently listed patient the heart will be offered first to the home state Transplant Unit, regardless of the order of listing.

For example:

There are two patients on the urgent heart listing, one from New South Wales (NSW) the other from Victoria (VIC). The patient from NSW was listed first and the VIC patient was listed two days later.

Scenario 1

Queensland (QLD) has a donor. The heart will be offered first to the home state, If QLD waives the offer, the offer is then made to the urgently listed patient in NSW. If NSW declines the offer for their urgent listing, the heart will be offered to the VIC urgently listed patient. If declined, then the heart will be offered back to the QLD home state transplant unit. If declined by home state, the heart will go back on rotational offer using the ADTCA/TSANZ Heart Allocation Rotation.

Scenario 2

VIC has a donor. The heart would be offered first to the VIC home state transplant unit for their urgent patient. If VIC decline the offer but are happy to waive to the NSW urgently listed patient, then the heart will be offered to the NSW urgent patient. If NSW decline, then the heart will be offered back to the VIC home state transplant unit. If declined by the home state, the heart will go back on offer utilising the ADTCA/TSANZ Heart Allocation Rotation.

5.5.3 Contact details for listing and delisting urgent patient

State	Transplant Coordinator Contacts	Contact numbers
QLD	The Heart Lung Recipient Coordinator On-Call via The Prince Charles Hospital switch board	07 3139 4111
NSW	Heart/Lung Transplant Coordinator via On-Call mobile at St Vincent's Hospital	0416 143 723
VIC	Heart Transplant Coordinator On-Call via Royal Children's Hospital switch board	03 9345 5522
	Heart/Lung Transplant Coordinator On-Call via The Alfred Hospital switch board	03 9076 2000
WA	Consultant on On-Call for Cardiac Transplant via Fiona Stanley Hospital switch board	08 6152 2222
NZ	Heart/Lung Transplant Coordinator On-Call via Auckland City Hospital switch board	0011 649 307 4949

State	Donation Specialist Coordinator Contacts	Contact numbers
QLD	Donation Specialist Coordinator On-Call	07 3176 2111
NSW	Donation Specialist Coordinator On-Call	02 9963 2801
VIC	Donation Specialist Coordinator On-Call	1300 358 842
WA	Donation Specialist Coordinator On-Call	08 6457 3333
SA	Donation Specialist Coordinator On-Call	08 8378 1671
NT	Donation Specialist Coordinator On-Call	08 8922 8888
TAS	Donation Specialist Coordinator On-Call	03 6166 8308
NZ	Donation Specialist Coordinator On-Call	0011 649 630 0935

Section 6

Liver

6.1 General allocation procedures

- a** There are two ADTCA/TSANZ Liver Allocation Rotations: Adult and Paediatric. An adult is defined as a donor 18 years or older. A paediatric is defined as a donor less than 18 years of age.
- b** The liver is offered to home state first, the home state may waive the offer under the following circumstances:
 - i** there is an urgent listing
 - ii** paediatric donor and home state do not have a paediatric liver transplant program (refer to section 6.3)
- c** When there are urgent listings, the home state unit is offered the potential donor PRIOR to offering to any urgent listings. It is mandatory for the home state to waive the offer to the Cat 1 urgently listed patient/s. Once the home state waives the offer, the urgent listing allocation procedures are to be followed (refer to section 6.4)
- d** If the home state declines the offer the appropriate ADTCA/TSANZ Liver Allocation Rotation is utilised, and offers are made in strict rotational order.

6.2 Adult liver allocation

- a** When the home state is unable to accept an adult donor liver the WHOLE liver will be offered on the ADTCA/TSANZ Adult Liver Allocation Rotation.
- b** The decision to split the liver is made by the accepting Liver Transplant Unit. In the event the accepting liver transplant unit decides to split the liver but can only transplant one recipient, the remaining right or left segment will be offered on the appropriate liver rotation.
 - i** Right segment to be allocated interstate: offer on Adult Liver Allocation Rotation
 - ii** Left segment to be allocated interstate: offer on Paediatric Liver Allocation Rotation

- c** The WA and SA Liver Transplant Units have an agreement supported by TSANZ in place when a liver is not accepted in either home state. The liver will be offered first to each other PRIOR to offering the liver on the ADTCA/TSANZ Liver Allocation Rotation. As a result, and for the purpose of the ADTCA/TSANZ Adult Liver Allocation Rotation, WA and SA are treated as two units from one state. The allocation process in this situation is identical to the heart offers to the two Victorian and New South Wales Transplant Units listed in 5.1.d.
- d** It is the responsibility of the donation coordinator to contact the appropriate person in each state and provide the liver offer referral.

6.2.1 DCDD Liver considerations

- a** Adult DCDD livers should first be offered to the home state and then offered to any urgently listed patient as per general allocation procedures described in 6.1.b
- b** If there is no suitable home state or urgent recipient, the liver can be offered interstate off rotation to both QLD and VIC who have machine perfusion programmes.
- c** Currently no other states are able to accept interstate DCDD Livers based on logistics/ ischaemic times and absence of organ perfusion programmes.
- d** The Liver Transplant Unit in the donor home state will advise the local donation coordinator whether to offer the liver to VIC or QLD (on an alternating rotation).

6.3 Paediatric Liver Allocation

- a** Paediatric donor livers MUST first be offered to paediatric recipients.
 - i** A paediatric donor liver is defined as being procured from a donor less than 18 years of age.
 - ii** A paediatric liver recipient is defined as a recipient less than 18 years of age.
- b** The paediatric liver transplant units are located in Queensland, New South Wales, Victoria and New Zealand (refer to section 1.4).

- c** The home state unit is notified of the potential donor. When the home state is unable to allocate a paediatric donor liver to a paediatric recipient the WHOLE liver will be offered on the ADTCA/TSANZ Paediatric Liver Allocation Rotation.
- d** Paediatric livers will only be considered for adult recipient in two circumstances:
 - i** In the event the paediatric liver rotation has been exhausted, the offer returns to home state and the home state can allocate to an adult recipient. In the event the home state do not have a suitable recipient the liver is offered on the ADTCA/TSANZ Adult Liver Allocation Rotation
 - ii** There is a very sick/dying potential adult recipient in the donor home state. Allocation in this circumstance requires discussion and consensus by the Paediatric Liver Transplant Units Directors (or their delegate)

6.3.1 Paediatric split liver

- a** In some cases, the paediatric donor liver is big enough to split into 2 grafts. In this circumstance the home state may allocate both left and right grafts to paediatric recipients on their waiting list.
- b** In the event the home state does not have a second suitable paediatric recipient, the remaining graft (either left or right) will be offered on the ADTCA/TSANZ Paediatric Liver Allocation Rotation.
- c** In the event the split liver segment cannot be allocated to a paediatric recipient within Australia and New Zealand, the home state may allocate to an adult recipient.

6.4 Contacts for adult and paediatric liver allocation

State	Contact person for adult and paediatric liver offers	Contact numbers
QLD	Donation Specialist Coordinator On-Call via the Princess Alexandra Hospital switch board	07 3176 2111
NSW	Liver Transplant Coordinator via Royal Prince Alfred Hospital switch board	02 9515 6111
VIC	Liver Transplant Coordinator via Austin Hospital switch board	03 9496 5000
WA	Donation Specialist Coordinator On-Call via Sir Charles Gairdner Hospital switch board	08 6457 3333
SA	Liver Transplant Coordinator via Flinders Medical Centre switch board	08 8204 5511
NZ	Liver Transplant Coordinator via Auckland City Hospital switch board	0011 649 375 3434 or 0011 649 307 4949

6.5 Urgent Listings

6.5.1 Urgent Listing Categories

- a** Livers available within Australia and New Zealand are normally allocated to patients within their home state. However, urgently listed patients may receive a liver from outside the home state as per national priority.
- b** Patients can be considered for urgent listing if they meet the appropriate listing criteria that are laid out in the TSANZ Clinical Guidelines for Category 1 and 2 urgent listings.
- c** It is the responsibility of the Liver Transplant Unit listing a patient on the urgent list or delisting a patient from the list to notify all Australian and New Zealand Liver Transplant Units, DonateLife Agencies, and Organ Donation New Zealand.

Category 1

- 1** Patients suitable for transplantation with acute liver failure who are ventilated and in risk of imminent death
- 2** Allocation to them is mandatory
- 3** Relisting is required every 72 hours

Category 2A

- 1** Patients with acute liver failure that are not yet ventilated but meet Kings College Criteria or paediatric patients with severe acute or chronic liver disease who have deteriorated and are in an intensive care unit
- 2** Allocation is usual but not mandatory. It is subject to discussion between directors (or delegates) of donor and recipient state/NZ transplant units
- 3** Relisting every 72 hours is required

Category 2B

- 1** Paediatric patients with severe metabolic disorders or hepatoblastoma for whom a limited time period exists during which liver transplantation is possible
- 2** Relisted on a weekly basis

Category 2C

- 1** Patients awaiting combined liver-intestine transplant by the National Intestinal Transplantation program in Victoria
- 2** Potential donors must be discussed with Victoria unless the home state has a liver recipient with a MELD score of 25 or greater
- 3** Exempt from relisting requirements

6.5.2 Allocation procedures

- a** When there is a Category 1 urgent listing, the home state will be informed of the donor liver but it is mandatory the liver is offered first to the urgently listed patient. If the offer is declined for the urgent listed patient, the liver is offered back to the home state.
- b** When there is a Category 2a or 2b urgent listing, allocation to the Category 2a/2b urgent listed patient is usual but not mandatory. It is subject to discussions between the liver transplant centres of the donor and recipient state/NZ. If the offer is declined for the urgent listed patient, the liver is offered back to the home state.
- c** If a Category 1 offer is declined, then any Category 2 listed patients must be considered prior to offering the liver back to the home state.
- d** If the home state declines the offer, then the appropriate ADTCA/TSANZ Interstate Liver Allocation Rotation is utilised and offers are made in strict rotational order.
- e** The ADTCA/TSANZ Liver Allocation Rotations are bypassed when a liver is offered for a patient on the urgent listing. Acceptance or decline of an offer is not recorded on the rotation. In the event the liver is not accepted for any urgent listed patients the liver is offered back to the home state.

6.5.3 Multiple urgent listed patients

In the event that there are simultaneous multiple Category 1 urgent liver listing, the Liver and Intestinal Transplant Advisory Committee (LITAC) have agreed to the following process;

- 1 If there is one Category 1 liver listed within Australia & New Zealand, then the donor liver is automatically offered to that state's liver unit first
- 2 If there are 2 or more Category 1 livers listed, with one of those being within the home state of the donor, the offer should be made to the home state first, regardless of when the listing was made
- 3 If there are 2 or more Category 1 livers listed, with no category 1 listing from within the home state of the donor, the first offer will go to the patient who was first listed as urgent.

Note: LITAC is the peak clinical advisory body within TSANZ for issues related to liver and intestine donation and transplantation in Australia and New Zealand. LITAC state that it is paramount that discussions occur between the unit receiving the Category 1 offer and any other unit with a simultaneous Category 1 listing to ensure the 'sickest' patient receives the potential transplant.

For example:

Two patients are listed as Category 1, one from Queensland (QLD) and one from South Australia (SA). The patient from QLD was listed first and the SA patient was listed two days later.

Scenario 1

The donor location is NSW

- 1 NSW waives offer to urgent Cat 1 listing in QLD
- 2 The QLD liver unit will have discussions with the SA liver unit regarding which unit will receive the offer based on urgency of each listed patient
- 3 QLD agree to waive the offer to SA
- 4 If SA decline the liver the offer would return to QLD for their urgent
- 5 If QLD decline the offer, then the offer would return to the NSW home state
- 6 If the NSW home state decline the offer, the liver is offered on the ADTCA/TSANZ Liver Allocation Rotation

Scenario 2

The donor location is SA

- 1 The liver would be offered to the SA liver unit first as the home state
- 2 The SA liver unit will have discussions with the QLD liver unit regarding which unit will receive the offer based on urgency of each listed patient
- 3 It is agreed that SA is to receive the offer
- 4 If SA decline the liver for their urgent patient the offer is then given to QLD
- 5 If QLD decline the offer, the offer would return to the SA home state
- 6 If the SA home state decline the offer, the liver is to be offered on the ADTCA/TSANZ Liver Allocation Rotation

6.5.4 Listing urgent patient procedures

- a When a patient has been assessed and meets the urgent status for a liver transplantation by the Transplant Unit Director they (or their delegate) are responsible for notifying the appropriate clinician in their transplant unit and providing the patient's details.
- b It is the responsibility of this clinician to ensure the appropriate donation and transplant clinicians in Australia and New Zealand are notified of the urgent listing.
- c It is recommended that notification is by direct telephone conversations and not sent via email. This practice is to ensure that notification is confirmed at the time of listing and to avoid the potential of a missed liver offer in the event a donation is occurring at the time of listing.
- d When a Category 2a patient is being listed an Australian and New Zealand Liver Transplant Registry (ANZLTR) Urgent Listing Data Form must be completed by the Liver Transplant Unit and provided to the ANZLTR Manager at the time of notification. When notification occurs outside of business hours it is acceptable to provide the ANZLTR Urgent Listing Data Form the next working day. The form may be emailed or faxed. This form is not required for Category 1 or 2b patients.

Section 6 / Liver

- e** The ADTCA/TSANZ Urgent Liver Listing templates are to be utilised for documenting and recording of the notification process. There are two templates to be utilised.
 - i** The Interstate and New Zealand Urgent Liver Listing template is for the Transplant Units and DonateLife Agencies to record details of interstate and New Zealand urgent liver listings.
 - ii** The state specific template e.g.: NSW Urgent Liver Listing is for each state and New Zealand that has a liver Transplant Unit to record the notification process when listing a patient on the Urgent Liver List.
- f** BOTH the donation and transplant clinicians in each state and New Zealand must be notified of the urgent listing. The names of both clinicians are required to be recorded in the above interstate and state specific templates, with the exception of Tasmania, Western Australia and the Northern Territory, where only the donation coordinator is notified.

6.5.5 Relisting and delisting urgent patient procedures

- a** It is the responsibility of the Transplant Unit or delegate to notify the appropriate donation and transplant clinicians in Australia and New Zealand when a patient is to be either relisted or delisted from the Urgent Liver List.
- b** In the event a patient is to be relisted the notification process must occur at the required time frames.
 - i** Category 1 and 2a every 72 hours
 - ii** Category 2b weekly
- c** A patient will be delisted as a result of receiving a transplant, improving, no longer fit for transplant or death occurring. In the event a patient is to be delisted the notification process is expected to be prompt to avoid unnecessary liver offers being made.
- d** The ADTCA/TSANZ Urgent Liver Listing templates are to be utilised for documenting and recording of the notification process when a patient is relisted or delisted.

6.5.6 Contact details for listing and delisting urgent patient

State	Transplant Coordinator Contacts	Contact numbers
NSW	Liver Transplant Coordinator On-Call via Royal Prince Alfred Hospital switch board	02 9515 6111
VIC	Liver Transplant Coordinator On-Call via Austin Hospital switch board	03 9496 5000
QLD	Liver Transplant Coordinator On-Call via Princess Alexandra Hospital switch board	07 3176 2111
SA	Liver Transplant Coordinator On-Call via Flinders Medical Centre switch board	08 8204 5511
NZ	Liver Transplant Coordinator On-Call	0011 649 375 3434 or 0011 649 307 4949 (switchboard)

State	Donation Specialist Coordinator Contacts	Contact numbers
QLD	Donation Specialist Coordinator On-Call	07 3176 2111
NSW	Donation Specialist Coordinator On-Call	02 9963 2801
VIC	Donation Specialist Coordinator On-Call	1300 358 842
WA	Donation Specialist Coordinator On-Call	08 6457 3333
SA	Donation Specialist Coordinator On-Call	08 8378 1671
NT	Donation Specialist Coordinator On-Call	08 8922 8888
TAS	Donation Specialist Coordinator On-Call	03 6166 8308
NZ	Donation Specialist Coordinator On-Call	0011 649 630 0935

Section 7

Intestinal/Multivisceral

7.1 General allocation procedures

- a** There is a single Intestinal Transplant program for Australia and New Zealand located at the Austin Hospital and the Royal Children's Hospital in Victoria.
- b** The Intestinal Transplant program treats both adult and paediatric patients from all over Australia and New Zealand. Patients may be listed for isolated small bowel or multivisceral which may be a combination of small bowel, pancreas, stomach, duodenum, liver and kidney.
- c** The Renal Transplant Advisory Committee (RTAC) has endorsed the allocation of a kidney (if required) to accompany the intestine (and other abdominal organs as necessary).
- d** The active Intestinal/Multivisceral transplantation national waiting list is for both adults and paediatrics is reviewed regularly and provided weekly to all liver transplant units in Australia and New Zealand, DonateLife agencies and Organ Donation New Zealand.
- e** As of November 2022, there is no requirement for an ADTCA/TSANZ Intestinal/multivisceral allocation rotation.

7.2 Intestine and liver/multivisceral allocation procedures

- a** Patients listed for a combined intestinal-liver transplant are Category 2c urgent listings.
- b** The procedure to offer a combined intestinal-liver to the Intestinal Transplant program begins with a clinical decision by the donor home state Liver Transplant unit and involves the following steps.
 - 1** A donor liver is offered as per the standard procedure to the home state Liver Transplant unit, providing there are no current Category 1 or 2a / 2b listed patients.
 - 2** The home state Liver Transplant Unit are reminded at the time of the liver referral of Category 2c patients on the Intestinal/multivisceral waiting list.
 - 3** The decision to waive the liver offer is discretionary and involves discussion between the home state transplant unit and the Intestinal Transplant program.
 - 4** If the home state unit agree to waive the liver for a Category 2c listing, a formal offer will be made directly to the Liver Transplant Coordinator on-call at the Austin Hospital.

7.3 Isolated intestine allocation procedures

- a** Donors aged < 50 years will be offered to the Intestinal Transplant Unit in Victoria.
- b** Both, intestine alone and intestinal and kidney combined offers, are made directly to the Liver Transplant Coordinator on call at the Austin Hospital.

7.4 Contact details for Intestinal/multivisceral allocation

State	Contact for intestinal/multivisceral offers	Contact numbers
VIC	Liver Transplant Coordinator On-Call via Austin Hospital switchboard	03 9496 5000

Section 8

Pancreas and Islets

8.1 General allocation procedures

- a** For combined pancreas/kidney transplants, the LEFT kidney is preferred.
- b** Offers of whole Pancreas may be made from donors <50 years old to NSW, VIC and SA. (SA/NT home state offers may be considered <60 years). Offers of pancreas for islets are only made when the whole organ has been declined for transplantation and/or when the potential donor is >3 and <65 years of age. Please see section 8.4 for Allocation process.
- c** When a suitable pancreas is donated for a simultaneous pancreas and kidney transplant, one of the donor kidneys is allocated for the recipient of the pancreas. If a second donor kidney is available, it is allocated according to the kidney Organ Offer List (OOL).
- d** However, if there are two kidney recipients who have a very good match at Level 1, 2 or 3 of the kidney allocation algorithm in OrganMatch, the allocation to the simultaneous pancreas and kidney patient will be overridden and both kidneys will be allocated to the kidney patients identified on the kidney OOL. The override is to be recorded in the monthly organ allocation audit report.
- e** It is the responsibility of the donation coordinator to contact the appropriate person in each state and provide the pancreas/islets referral.

8.2 Pancreas and islet allocation procedures

There are three solid pancreas transplant units in Australia

- i** Australian National Pancreas Transplant Unit, Westmead Hospital, NSW
- ii** Australian National Pancreas Transplant Unit, Monash Medical Centre, Victoria
- iii** South Australian & Northern Territory Pancreas and Islet Transplant Program, Royal Adelaide Hospital, South Australia

There are three islet transplant units in Australia:

- i** Westmead Hospital, NSW
- ii** St Vincent's Hospital Melbourne, VIC
- iii** Royal Adelaide Hospital, SA

8.3 Home State Transplant Units

All Australian states and territories have a pancreas and islet transplant unit as their recognised Home State Transplant Unit as per below (*please also refer to Appendix B – defining the home state*):

- a QLD, NSW, ACT and WA**
Home state transplant unit is Westmead Hospital, NSW
- b VIC and TAS**
Home state transplant unit is Monash Medical Centre and St Vincent's Hospital, VIC
- c SA and NT**
Home state transplant unit is Royal Adelaide Hospital, SA

8.4 Allocation process

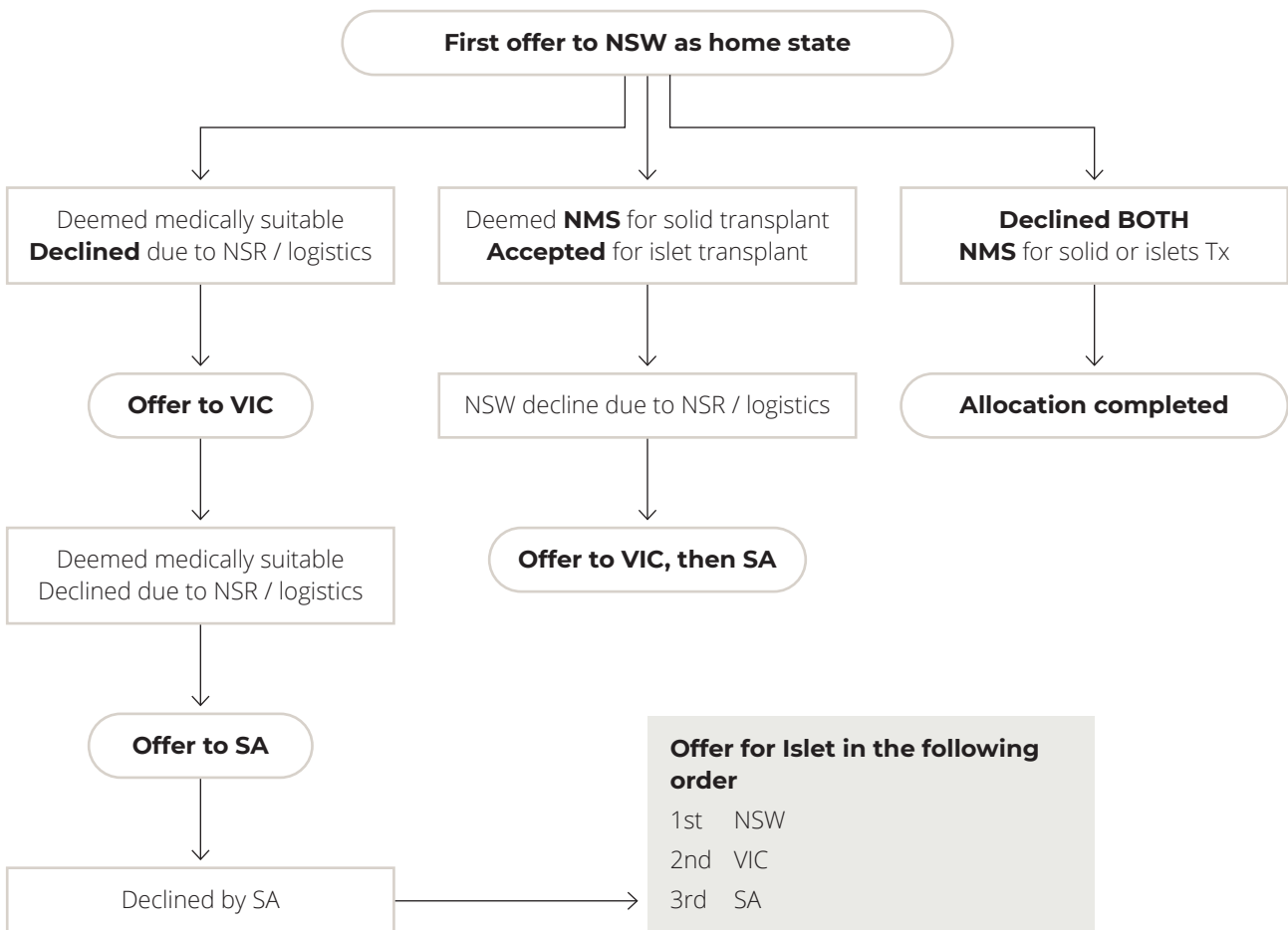
- a** There is no requirement for an ADTCA/TSANZ pancreas allocation rotation.
- b** Donor pancreas organs are allocated in the following state or territory specific way.

Section 8 / Pancreas and Islets

8.4.1 Allocation process QLD, NSW, ACT and WA

Home State Transplant Unit is Westmead Hospital NSW

Whole pancreas offered for consideration of simultaneous kidney and pancreas transplantation

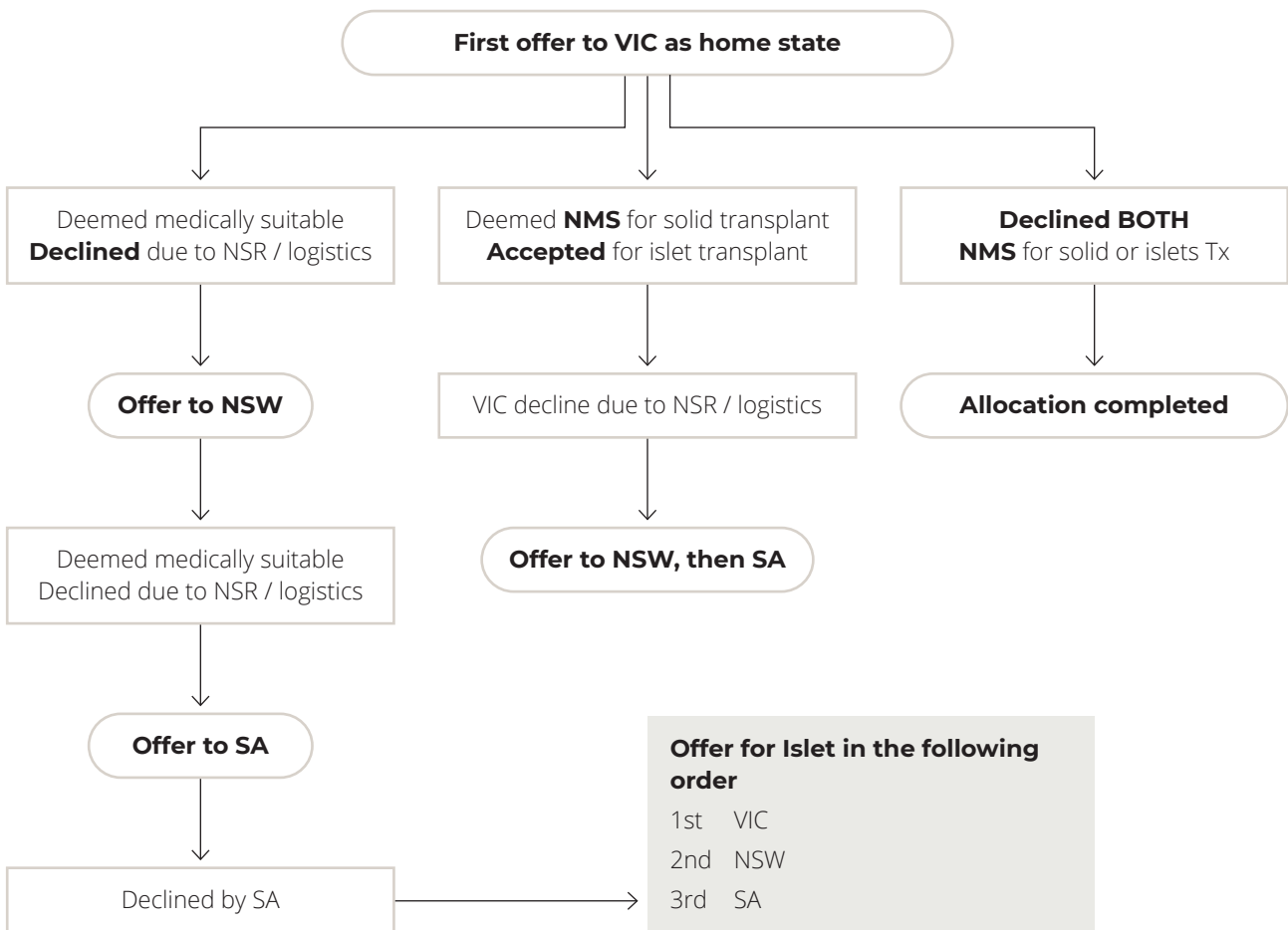


If all centres decline the pancreas for transplantation (whole and islet) it may be used for research if appropriate consent is obtained.

8.4.2 Allocation process for VIC and TAS

Home State Transplant Unit is Monash Medical Centre, VIC

Whole pancreas offered for consideration of simultaneous kidney and pancreas transplantation



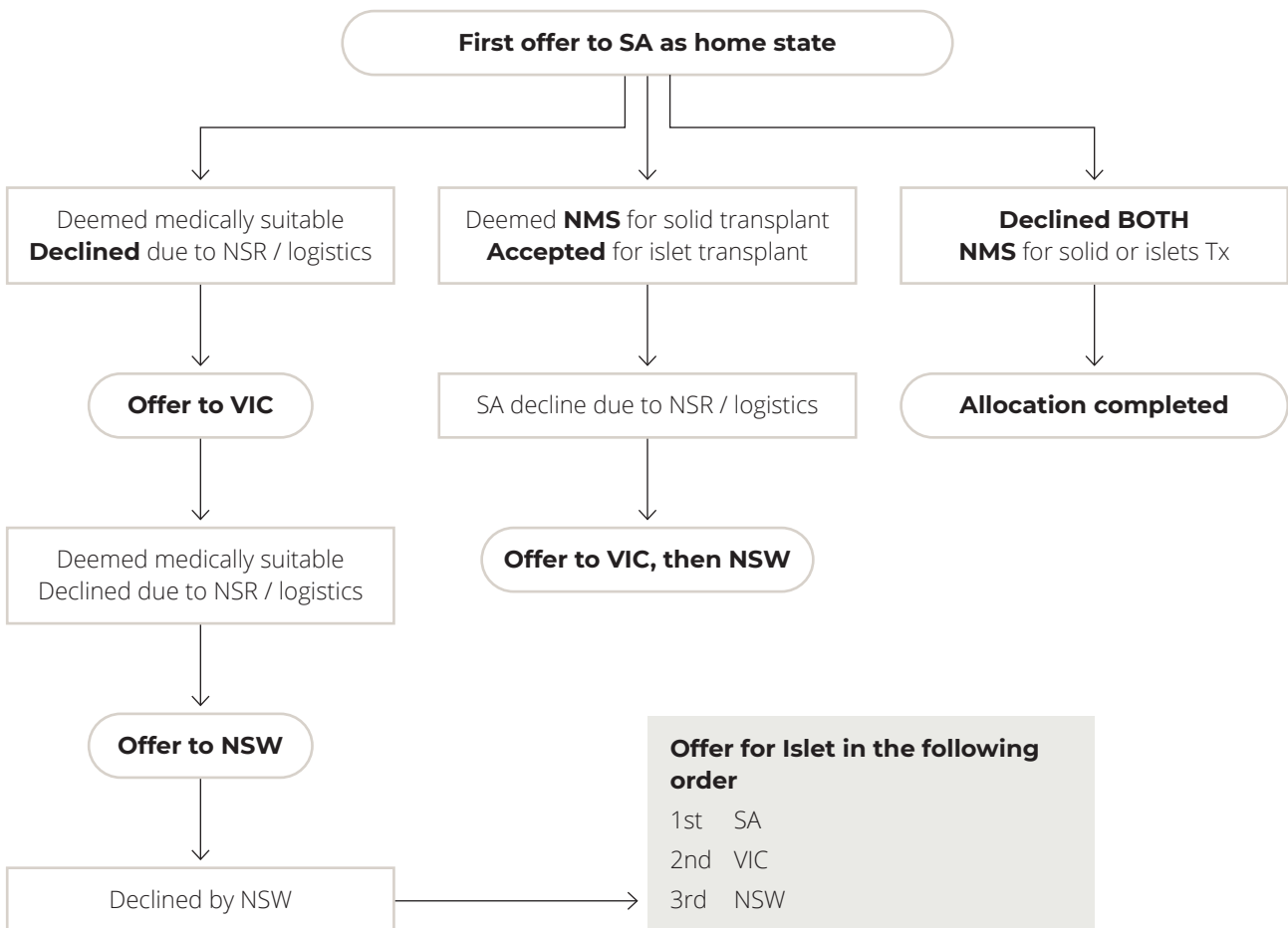
If all centres decline the pancreas for transplantation (whole and islet) it may be used for research if appropriate consent is obtained.

Section 8 / Pancreas and Islets

8.4.3 Allocation process SA and NT

Home State Transplant Unit is Royal Adelaide Hospital, SA

Whole pancreas offered for consideration of simultaneous kidney and pancreas transplantation



— The SA/NT DonateLife Agency is responsible for maintaining the internal rotation between Monash (VIC) and Westmead (NSW)

— If all centres decline the pancreas for transplantation (whole and islet) it may be used for research if appropriate consent is obtained.

8.4.4 Allocation process for New Zealand

Donor pancreases arising in New Zealand are initially offered to the Auckland National Pancreas Transplant Unit. If the Auckland Unit is unable to use the pancreas, then the Australian National Pancreas Transplant Units (Westmead, Monash, and Royal Adelaide Hospital) will receive the offer.

8.5 Contacts for pancreas and islet allocation

State	Contact for pancreas/islets offers	Contact numbers
NSW	Pancreas & Islet offer: Pancreas Transplant Coordinator via Westmead Hospital Switch Board	02 8890 5555
SA	Pancreas offer: Dr Shantanu Bhattacharjya/Surgical Consultant Islet offer: Renal On-Call Consultant via Royal Adelaide Hospital Switch Board	08 7074 0000
VIC	Pancreas offer: Switch Board at Monash Medical Centre and request to speak to Nephrologist on call Islet offer: Islet Transplant Coordinator via On-Call mobile St Vincent's Hospital	03 9594 6666 0426 875 987

Appendix A

ADTCA-TSANZ Organ Allocation Rotations

The below tables contain the specific state organ rotations with both the state transplant units included and order of rotation.

Queensland rotations

Heart	Lung	Heart Lung Bloc	Adult Liver	Paediatric Liver
NSW (Adult) NSW (Paediatric)	NSW	NSW (Adult) NSW (Paediatric)	NSW	NSW
VIC (Paediatric) VIC (Adult)	VIC	VIC (Adult) VIC (Paediatric)	VIC	VIC
NZ	NSW	NSW (Paediatric) NSW (Adult)	SA / WA	NZ
NSW (Paediatric) NSW (Adult)	VIC	VIC (Paediatric) VIC (Adult)	NZ	NSW
VIC (Adult) VIC (Paediatric)			NSW	VIC
NZ			VIC	NZ
			WA / SA	
			NZ	

New South Wales rotations

Heart	Lung	Heart Lung Bloc	Adult Liver	Paediatric Liver
QLD	QLD	QLD	QLD	QLD
VIC (Paediatric) VIC (Adult)	VIC	VIC (Adult) VIC (Paediatric)	VIC	VIC
NZ	QLD	QLD	SA / WA	NZ
QLD	VIC	VIC (Paediatric) VIC (Adult)	NZ	QLD
VIC (Adult) VIC (Paediatric)			NSW	VIC
NZ			VIC	NZ
			WA / SA	
			NZ	

Victoria rotations

Heart	Lung	Heart Lung Bloc	Adult Liver	Paediatric Liver
QLD	QLD	QLD	QLD	QLD
NSW (Adult) NSW (Paediatric)	NSW	NSW (Adult) NSW (Paediatric)	NSW	NSW
NZ	WA	WA	SA / WA	NZ
QLD	QLD	QLD	NZ	QLD
NSW (Paediatric) NSW (Adult)	NSW	NSW (Paediatric) NSW (Adult)	QLD	NSW
NZ	WA	WA	NSW	NZ
			WA / SA	
			NZ	

Tasmania rotations

Heart	Lung	Heart Lung Bloc	Adult Liver	Paediatric Liver
QLD	QLD	QLD	QLD	QLD
NSW (Adult) NSW (Paediatric)	NSW	NSW (Adult) NSW (Paediatric)	NSW	NSW
QLD	QLD	QLD	SA / WA	NZ
NSW (Paediatric) NSW (Adult)	NSW	NSW (Paediatric) NSW (Adult)	NZ	QLD
			QLD	NSW
			NSW	NZ
			WA / SA	
			NZ	

Appendix A / ADTCA-TSANZ Organ Allocation Rotations

South Australia rotations

Heart	Lung	Heart Lung Bloc	Adult Liver	Paediatric Liver
QLD	QLD	QLD	QLD	QLD
NSW (Adult) NSW (Paediatric)	NSW	NSW (Adult) NSW (Paediatric)	NSW	NSW
VIC (Paediatric) VIC (Adult)	VIC	VIC (Adult) VIC (Paediatric)	VIC	VIC
WA	WA	WA	NZ	NZ
QLD	QLD	QLD	QLD	QLD
NSW (Paediatric) NSW (Adult)	NSW	NSW (Paediatric) NSW (Adult)	NSW	NSW
VIC (Adult) VIC (Paediatric)	VIC	VIC (Paediatric) VIC (Adult)	VIC	VIC
WA	WA	WA	NZ	NZ

Western Australia rotations

Heart	Lung	Heart Lung Bloc	Adult Liver	Paediatric Liver
QLD	QLD	QLD	QLD	QLD
NSW (Adult) NSW (Paediatric)	NSW	NSW (Adult) NSW (Paediatric)	NSW	NSW
VIC (Paediatric) VIC (Adult)	VIC	VIC (Adult) VIC (Paediatric)	VIC	VIC
QLD	QLD	QLD	NZ	NZ
NSW (Paediatric) NSW (Adult)	NSW	NSW (Paediatric) NSW (Adult)	QLD	QLD
VIC (Adult) VIC (Paediatric)	VIC	VIC (Paediatric) VIC (Adult)	NSW	NSW
			VIC	VIC
			NZ	NZ

Northern Territory rotations

Heart	Lung	Heart Lung Bloc	Adult Liver	Paediatric Liver
QLD	QLD	QLD	QLD	QLD
NSW (Adult) NSW (Paediatric)	NSW	NSW (Adult) NSW (Paediatric)	NSW	NSW
VIC (Paediatric) VIC (Adult)	VIC	VIC (Adult) VIC (Paediatric)	VIC	VIC
WA	WA	WA	WA	NZ
QLD	QLD	QLD	QLD	QLD
NSW (Paediatric) NSW (Adult)	NSW	NSW (Paediatric) NSW (Adult)	NSW	NSW
VIC (Adult) VIC (Paediatric)	VIC	VIC (Paediatric) VIC (Adult)	VIC	VIC
WA	WA	WA	WA	NZ

New Zealand rotations

Heart	Lung	Heart Lung Bloc	Adult Liver	Paediatric Liver
QLD	QLD	QLD	QLD	QLD
NSW (Adult) NSW (Paediatric)	NSW	NSW (Adult) NSW (Paediatric)	NSW	NSW
VIC (Paediatric) VIC (Adult)	VIC	VIC (Adult) VIC (Paediatric)	VIC	VIC
QLD	QLD	QLD	SA / WA	QLD
NSW (Paediatric) NSW (Adult)	NSW	NSW (Paediatric) NSW (Adult)	QLD	NSW
VIC (Adult) VIC (Paediatric)	VIC	VIC (Paediatric) VIC (Adult)	NSW	VIC
			VIC	
			WA / SA	

Appendix B

Defining the ‘home-state’

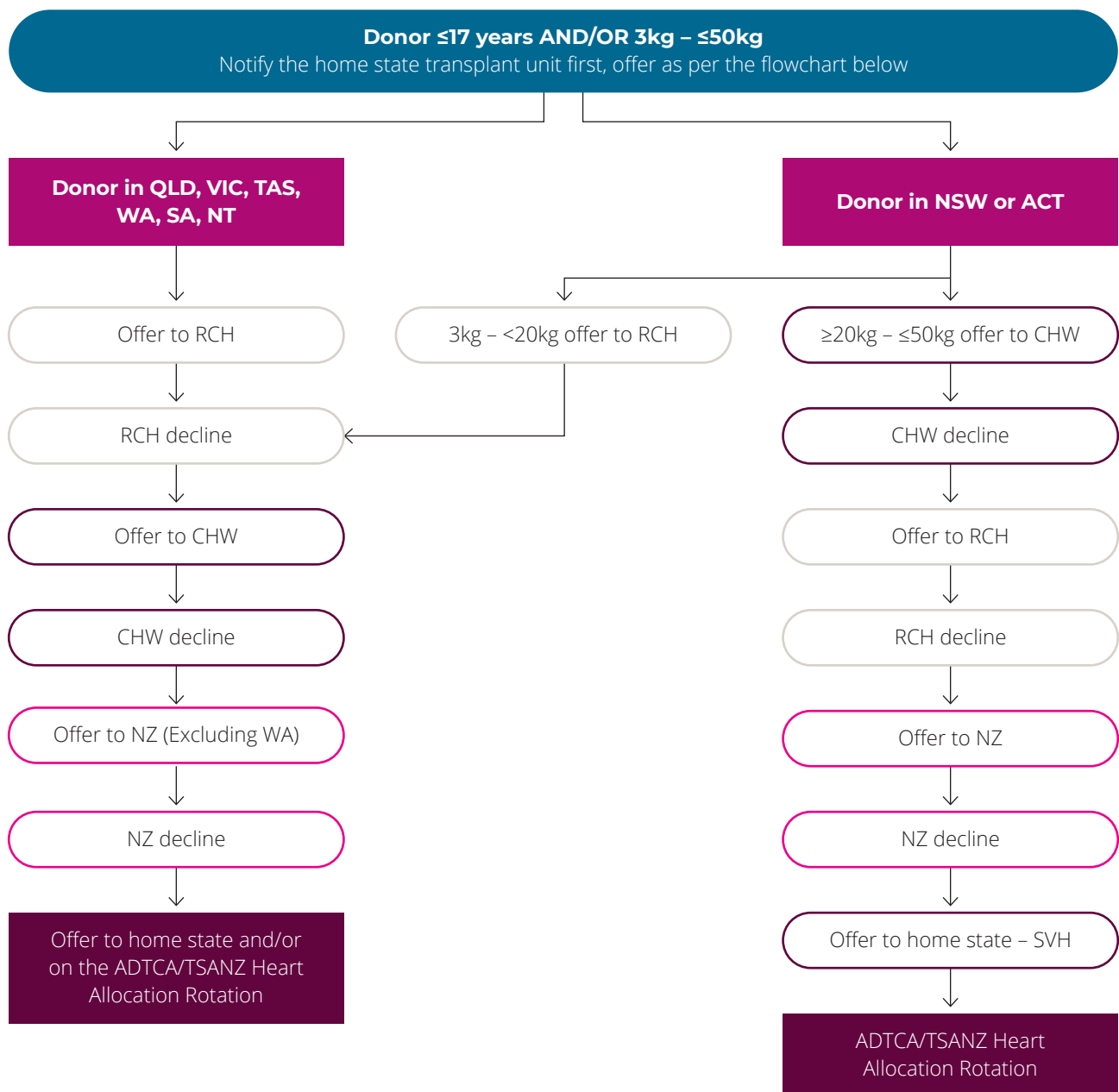
Organ	Donor Referral Jurisdiction	Home State / Transplanting Unit
Heart	QLD	QLD
	NSW / ACT	NSW
	VIC / TAS	VIC
	WA	WA
	NZ	NZ
	NT / SA	<i>No home state transplanting centre – offer 1st on rotation</i>
Kidney	QLD	QLD
	NSW / ACT	NSW
	VIC / TAS	VIC
	NT / SA	SA
	WA	WA
	NZ	NZ
Liver	QLD	QLD
	NSW / ACT	NSW
	VIC / TAS	VIC
	WA	WA followed by SA
	NT / SA	SA (followed by WA for SA only)
	NZ	NZ
Lung	QLD	QLD
	NSW / ACT	NSW
	VIC / TAS	VIC
	WA	WA
	NZ	NZ
	NT / SA	<i>No home state transplanting centre – offer 1st on rotation</i>
Pancreas & Islet	QLD/NSW/ACT/WA	NSW
	VIC/TAS	VIC
	NT/SA	SA
	NZ	NZ

Appendix C

Renal Transplant Unit Contacts

State	Hospital	Offer contact	Designation
SA	Royal Adelaide Hospital	(08) 7074 0000	Renal Transplant Physician
QLD	Princess Alexandra Hospital	(07) 3176 2111 or 1800 448 354	DonateLife Donor Coordinator
	Queensland Childrens Hospital	(07) 3176 2111 or 1800 448 354	DonateLife Donor Coordinator
WA	Sir Charles Gairdner Hospital	(08) 6457 3333	DonateLife Donor Coordinator
	Fiona Stanley Hospital	(08) 6457 3333	DonateLife Donor Coordinator
NSW	Westmead Hospital (Adults)	(02) 8890 5555	Renal Transplant Coordinator
	Children's Hospital Westmead	(02) 9845 0000	Renal Physician
	East Coast Transplant Service	(02) 9382 2222	Renal Transplant Physician
	St Vincent's Hospital – Sydney	(02) 8382 1111	Renal Transplant Physician
	Royal North Shore Hospital	(02) 9926 7111	Renal Registrar
	Royal Prince Alfred Hospital	(02) 9515 6111	In patient transplant registrar (office hours) Renal Registrar (after hours)
	Sydney Children's Hospital	(02) 9382 2222	Renal Transplant Physician
	John Hunter Hospital	0419 491 945	Renal Transplant Coordinator
	VIC	Alfred Hospital	(03) 9076 2000
Austin Hospital		(03) 9496 5000	Renal consultant on call
Box Hill Hospital		(03) 9895 3333	Renal consultant on call
Monash Children's Hospital		(03) 9594 6666	Pediatric nephrologist on call
Monash Medical Centre		(03) 9594 6666	Renal medical consultant on call for transplant
Royal Melbourne Hospital		(03) 9342 7000	Renal transplant consultant on call
St Vincent's Hospital – Melbourne		(03) 9288 2211	Renal transplant consultant on call
Royal Children's Hospital		(03) 9345 5522	Renal consultant on call

Appendix D Paediatric Heart Offering



Contacts for heart offering

RCH = Royal Children's Hospital, VIC. Heart/Lung Transplant Coordinator on call via the RCH switchboard: 03 9345 5522

CHW = Children's Hospital Westmead, NSW. Call SVH Heart/Lung Transplant Coordinator via on-call mobile: 0416 143 723 specifying offer is for paediatric waitlisted patient.

NZ = Auckland City Hospital. Call Heart/Lung Transplant Coordinator on call via the ACH switchboard: 0011 64 9307 4949.

N.B New Zealand paediatric donor heart offers that are declined by the New Zealand heart transplant unit may also be offered to RCH and then CHW for consideration of paediatric recipients.

This workflow process is reviewed regularly by CTAC as CHW establish their service. Once CHW has patients ≤20kg either actively listed and/or on durable mechanical support the workflow process will be altered accordingly.

