

Canadian Transplant Registry

IPOS Kidney Eligibility Updates

2022-08-12 – Addendum to CTR 5.1 and CTR 5.2 Change Documents

Confidential (C)

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Canadian Transplant Registry

Use of this Document



It is assumed that the user has valid access to CTR to perform the required functions of their role. In order to receive the proper level of access, a request may be made through Customer Support.

CTR currently has 7 User Acceptance Testing (UAT) environments available in addition to the main CTR Production environment. For information regarding these environments, please consult <https://ctrstatus.otdcalculators.ca/>. Information about the status of these environments, as well as the Canadian Transplant Registry Integration Guide, and Change Documents (Release Notes) may be found there.

CTR 5.1 Changes – 2022-03-24

Update to HSP Kidney Eligibility

CTR 5.1 includes functionality to support changes to a patient's eligibility for the Deceased Waitlist HSP Kidney program via Inter-Provincial Organ Sharing (IPOS). Changes to the eligibility criteria are controlled by a feature switch. When activated, the updated eligibility criteria will be used, allowing for more patient participation and acceptance in the Deceased Waitlist HSP Kidney Program.

As of 2022-08-12 this functionality has not yet been activated, and the current eligibility criteria is still in use to evaluate all patients.

A full scope of updates from this release may be found in the Version Change document for 5.1.19.1 at the following link: [CTR Version 5.1 – Version Changes](#).

CTR 5.2 Changes – 2022-09-19

KPD:

- In **CTR 5.1**, the system created a shell record in the end offer spot in the domino chain. The recipient coordinator at the applicable program could a) decline the current offer and reassign an existing recipient record into the offer, b) create the record within the existing shell record, or c) reassign transplant centre.
- In **CTR v5.2**, the system now allows a new recipient type “Waitlist Recipient” record to be created using the Patient Wizard. In addition, there is an update to the recipient type (Unconsented Recipient) assigned to the end offer in a domino chain.
- **CTR 5.2** functionality works as follows:
 - When creating an organ request for a recipient you must select the *recipient type* from the drop-down menu.
 - KPD Recipient Types will be as follows:
 - Registered Pair Recipient – Coordinator will create, and the system will allocate them to a chain if matched.
 - Waitlist Recipient – Coordinator will create and assign to the end offer in the associated domino chain.
 - Unpaired Recipient – may only be created by KPD Administrators
 - Unconsented Recipient – is created by the system in the end offer domino chain when a match run is published. Once the end offer exists, the unconsented recipient may be reassigned.
 - The Unconsented Recipient type may only be allocated to the end offer of a domino chain.
 - The data elements associated to an Unconsented Recipient are non-identifying and read-only with the exception of moving the recipient to a transplanted state.
- End Offer Assignment Process:
 - The Offer must always be declined to re-assign a new recipient in the end offer.
 - Coordinators will decline the end offer and then select their waitlist recipient or unpaired recipient to allocate to the end offer spot.

A full scope of updates from this release may be found in the Version Change document for 5.2.8.1 at the following link: [CTR Version 5.2 – Version Changes](#).

IPOS Kidney Eligibility Updates

Change 1

Ability to Identify Pre-Emptive Patients

This functionality is not yet available in the web service methods – planning is underway to include this in CTR version 5.3

The application provides the ability to identify a **pre-emptive** patient. The **pre-emptive** field is optional, therefore no impacts to existing/historical records. The application will enforce validation of the **Patient on Dialysis** and **Patient is Pre-Emptive** fields, ensuring only one is identified as **Yes**.

The **pre-emptive** field will be used to evaluate a patient's eligibility to participate in the IPOS Kidney program. Until a future date, which is to be determined, this field will be for informational purposes only.

KIDNEY HEALTH

* Has Recipient Previously Donated a Kidney?:

Note: Being a previous kidney donor can increase a recipient's chance for an offer.

Yes No

* Patient on Dialysis:

Yes No

Patient is Pre-Emptive:

Yes No

Biopsy Proven ESRD:

Yes No

Planning for CTR version 5.3 will include updates to the following CTR3 endpoint web service methods, to allow setting and retrieving a recipient's pre-emptive status:

- addRecipientByNationalRecipientId
- updateRecipientByNationalRecipientId
- findRecipientByNationalRecipientId

Change 2

IPOS Kidney Participation Eligibility

The Canadian Transplant Registry evaluates and defines a recipient's eligibility to participate in IPOS Kidney allocation.

When the IPOS Kidney changes are enabled – date to be determined – the eligibility rules will be updated, and each recipient will be re-evaluated. The following describes the eligibility criteria that will be included once the program changes are enabled:

- All recipients must have:
 - An Active Kidney organ request
 - Blood Group defined
 - HLA Typing results entered
 - HLA Serum results entered
- Plus, at least, one of the following:
 - Recipient is paediatric
 - Recipient is on dialysis and has a cPRA of 94.5% or greater
 - Recipient is pre-emptive and has a cPRA of 99.5% or greater

Change 3

HLA Willing to Cross

When the IPOS Kidney changes are enabled – date to be determined – the Kidney allocation will consider eligible Willing to Cross values during the virtual cross match process.

HLA Willing to Cross values are managed through the web application only – there are no web services available.

HLA Willing to Cross values may be entered for any Deceased Waitlist Kidney recipient, but the use of those values, for the purpose of allocation, are only permitted (eligible) when the recipient's Cumulative cPRA is 98.9% or greater, and the recipient's Adjusted cPRA is 94.5% or greater.

CUMULATIVE CPRA RESULTS					
Organ	Program	Cumulative	Willing to Cross for Allocation	Willing to Cross Eligible	Adjusted cPRA
Kidney	Deceased Waitlist	100%	Enabled	No	--
					cPRA Calculation Details

WILLING TO CROSS	
Last Modified By:	--
Last Reviewed By:	--
Most Recent Modification Date:	--
Most Recent Review Date:	--
Selected Unacceptable Antigens to Cross:	There are no Willing to Cross values selected for this patient.
<input type="button" value="Edit/Review"/>	

In the following CTR3 endpoint web service methods, the crossed antigens – the antibodies ignored during allocation – are included in the web service response, as well as the recipient's Adjusted cPRA:

- getHSPMatchOnDonor
- runHSPMatchOnDonor
- previewHSPMatchOnDonor

Change 4

cPRA Decimal Precision

When the IPOS Kidney changes are enabled – date to be determined – the cPRA calculation format for all Deceased Waitlist Kidney recipients will be updated to a 1-decimal precision. All recipients will have their cPRA recalculated.

The cPRA requirement for HSP Eligibility – participation in the IPOS Kidney allocation – will be updated to be 94.5% or greater. This is applicable to non-paediatric recipients.

The decimal cPRA value will be used in allocation ranking.

Impact Overview

Items for Consideration

The following describes areas to be considered when evaluating impacts to provincial interfaces, provincial systems, and business processes.

Pre-Emptive Patients and Eligibility

- Setting a recipient's pre-emptive status is not possible via web services, therefore the web service interface must be aware of possible business rule errors
 - For example: a recipient may not be on dialysis and pre-emptive
- The eligibility rules for pre-emptive recipients are more restrictive due to the higher cPRA requirement of 99.5% or greater

Paediatric Patients and Eligibility

- Paediatric recipients may be eligible for IPOS Kidney allocation, regardless of their cPRA
- Paediatric recipients may lose eligibility once they become 19 years of age
 - The eligibility changes, due to changes in age, will not be automatically sent to the provincial systems

Recipient cPRA Decimal Precision

- All Deceased Waitlist Kidney recipients will have their cPRA recalculated – these updates may not align with the values in the provincial system
- All Deceased Waitlist Kidney recipients will have their cPRA calculated to a 1-decimal precision – this is a change from the current integer value

Allocation including Willing to Cross

- Recipients who are eligible to participate in IPOS Kidney allocation using their HLA Willing to Cross values may be presented with an offer that would normally not be possible

Data Transfer from Provincial System to Canadian Transplant Registry

- It may be necessary to review and/or update the provincial system's rules for transferring recipient data to the Canadian Transplant Registry
 - The extended eligibility for non-HSP paediatric and pre-emptive recipients

Customer Support

For assistance with the information contained in this document, please contact ctr.ipos@blood.ca