



Communique: Update on Implementation of Inter-Provincial Organ Sharing of Hearts for High Status Recipients

Background

Building on foundational policy work by the Canadian Cardiac Transplant Network (CCTN), the Heart Transplant Advisory Committee (HTAC) led by Canadian Blood Services, developed policies outlining a consistent national approach that defines eligibility and prioritization of high status recipients in the interprovincial sharing of donor hearts. At present, heart transplant programs in Canada are listing all transplant candidates in the Canadian Transplant Registry (CTR) but would also like to use the CTR to allocate hearts interprovincially to sensitized ($\geq 80\%$ cPRA) and/or medically urgent (status 4) patients and improve the tracking of the outcomes of organ sharing in this patient population. The goals are to increase efficiencies in the system and improve transparency of interprovincial organ sharing of high status hearts.

Current Status

Canadian Blood Services (CBS) has entered the final implementation phase of the Interprovincial Organ Sharing of Hearts for High-Status Recipients. Currently, heart transplant recipients of all statuses are continuing to be listed through the National Organ Waitlist (NOW), however allocation and offers for medically urgent and highly sensitized patients will be conducted through the CTR once the implementation is completed.

IPOS High Status Heart (HSH) Project Timeline

On July 22, 2021, the IPOS Heart program was released into the production environment of the CTR (release 5.0) and is ready to go live when stakeholders in all jurisdictions are ready to launch. The functionality to support the organ sharing program can be turned on without impacting the regular operation of the CTR.

The IPOS HSH project must go live simultaneously across Canada; a phased implementation is not possible due to potential data synchronization issues between various technical systems that could result in critical missed transplant opportunities. As a result, the go-live date for the program is highly dependent on the capacity of provincial partners to implement updates to their respective provincial systems.

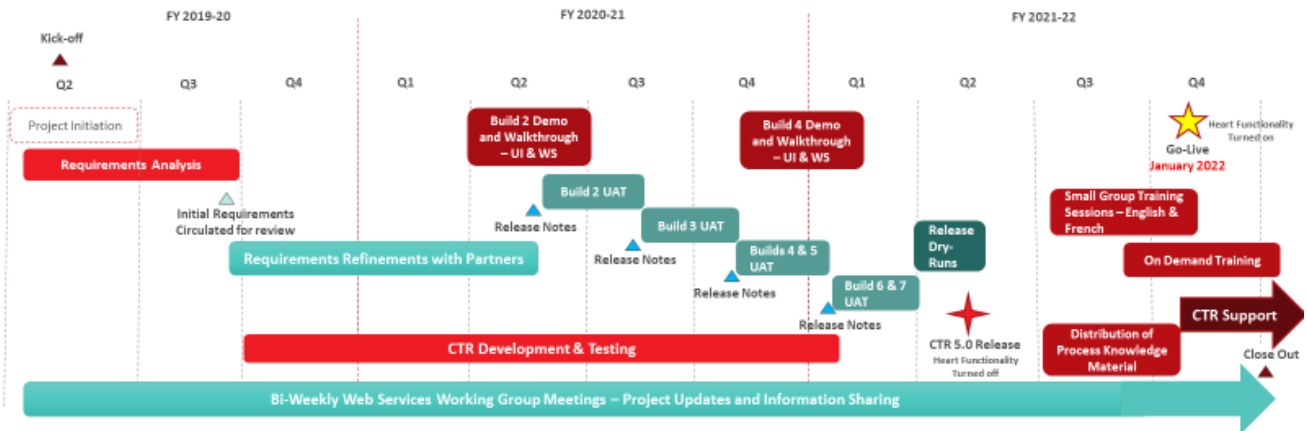


All provinces originally committed to a go-live date in July however one stakeholder is transitioning to a new organ allocation system and has requested an extension in the launch timeframe to enable them to complete the transition to their new system as it must be fully implemented before they can participate in the heart sharing program.

Given the potential for cascading impacts of additional delays, other jurisdictions have indicated a preference to set the go live for Jan 2022, and accordingly, the decision has been made for the **IPOS heart project to go live January 20, 2022**.

An overview of the current IPOS Heart Project timeline is included below:

IPOS High-Status Heart Project High-Level Project Milestone Timelines



Communication and Training

To support our provincial partners through this transition, CBS has developed an IPOS HSH project website that provides project updates and includes a resource section with the latest versions of the approved policies, reference documents and frequently asked questions. The website can be accessed [here](#).

Resource and training documents that can be found on the website include:



- [Allocation, Offer Management, Notification and Recusal Process](#)
- [High Status Heart End-to-End Process Map](#)
- [What Physicians Need to Know](#)
- [Frequently Asked Questions](#)

Offer/Allocation Notifications

As per policy CTR10.003 Requirement to Offer, an offer of a donor heart must first be proposed to the #1 ranked recipient on the allocation list and all other status 4 recipients included on the list must also be notified of the offer. To this effect, the CTR will generate two notifications when an offer is made:

1. DWL Offer Proposed notification: sent to the donor coordinator at the Recipient Organ Donor Organization (ODO) when an offer is made
2. DWL High-Status Heart Allocation notification: simultaneously sent to all donor coordinators at the ODOs of status 4 recipients on the allocation list, informing them of an offer in play, basic donor information, and their rank on the list.

In addition to the above, it is recommended that the offering ODO make a verbal offer and notify ODOs of the other listed status 4 recipients via phone call. We acknowledge the nuances in workflow in different jurisdictions and the impact this could have on local processes. We encourage any concerns/questions regarding this be brought at the ODO/Physician group meetings that will be held in November (please see “next steps” below).

All ODOs are encouraged to also follow up with their local transplant programs to determine the impact on local processes/workflow such as:

- Local notification requirements when a local donor heart is being offered
- What offers for medically urgent and highly sensitized recipients local transplant physicians do not want to be notified about due to factors such as geography and other donor characteristics.

Donor Acceptance Criteria

As interprovincial heart sharing policies were developed in discussion with HTAC the decision was not to utilize any filters that would screen eligible HSH recipients based on height, weight, and other criteria available in the CTR. This would ensure physicians were able to have full line of sight into all offers.



Through ongoing engagement ODOs concern was expressed about the number of unnecessary phone calls and delays to allocation if basic physician prescribed donor acceptance criteria such as weight will not be used in IPOS HSH allocation.

After further discussion with physicians and the project implementation steering committee, it was recently decided to include a recipient's acceptable minimum and maximum donor weight thresholds to the CTR matching algorithm; so as to reduce unnecessary offers and phone calls to recipient ODOs for whom the donor's weight is a known contraindication to transplant. When the HSH algorithm is run on a donor, any recipients who are not willing to accept the weight of this donor will be left off the donor's allocation results list.

As the minimum and maximum donor weight acceptance fields already exist in current web service methods and the CTR, we are hopeful the impact of integrating this functionality in local jurisdictions will be of minimal impact.

An amendment to policy CTR 10.002 – Heart Allocation, will be completed after go-live in January 2022 to align to the above.

Calculating Days at Current Medical Status

The 'Days at Current Medical Status' (DCMS) is a tier in the HSH allocation tie-breaking rules that the CTR is to use to produce a ranked list of IPOS HSH recipients who have matched the heart donor. Organ offers are made first to the recipient (s) who have ranked first on the list, then subsequently to lower ranked recipients. Guidelines have been developed in discussion with HTAC and are aimed at providing direction in the calculation of the eligible days at current medical status. The reference document can be found [here](#).

As a reminder of the rank at which Days at Current Medical Status (DCMS) is incorporated please refer to the **flow chart** below:

1. Heart first goes through Status 4 recipients **including highly sensitized status 4 recipients**
2. If multiple Status 4 recipients are listed, then the tiebreaking ranking would proceed as follows:
organ
 - a. Donor <19 years & Recipient < 19 years old Rank 1
 - b. Pediatric recipient <19 years of age Rank 2
 - c. **Number of days listed at Current medical Status Rank 3**
 - d. Donor / Recipient in the same region Rank 4



3. If no match or allocation within the status 4 patients (if any), the heart is then offered nationally through highly sensitized recipients with a hemodynamic status of 3.5 and below: nationally

- a. Donor <19 years & Recipient < 19 years old Rank 1
- b. Higher cPRA ranked above lower cPRA Rank 2
 - I. cPRA = 100
 - II. cPRA = 99
 - III. cPRA = 98
 - IV. cPRA 90-97
 - V. cPRA= 80-89
- c. Pediatric recipient <19 years of age Rank 3
- d. Medical Status Rank 4
 - i. 3.5
 - ii. 3
 - iii. 2
 - iv. 1
- e. **Number of days listed at current medical status** **Rank 5**
- f. Donor and Recipient are in the same region Rank 6

DCMS starts to accrue at the time a recipient becomes eligible for the IPOS HSH program (i.e. – status 4 or \geq 80% cPRA).

For further assistance in calculating the days at current medical status for a recipient, please call CBS’ customer support line (available 24 hours, 7 days a week) at 1-855-287-2889.

Recusal Process

In discussion with HTAC a need was identified to establish a process that would allow a physician to recuse a highly sensitized recipient (\geq 80% cPRA) from participating in the IPOS HSH program if deemed medically appropriate.

If such a request is received the process outlined in the document “[Allocation, Offer Management, Notification and Recusal Process](#)” found on the IPOS HSH Project website should be followed.

Please note the both the [Patient Recusal Form](#) and the [Patient Reinstatement Form](#) will need to be signed by a designated representative of the recipient’s transplant program before submitting to CBS customer support. We encourage ODOs and local transplant programs to develop an internal process to gain authorization for either recusing or reinstating a recipient.

This process can only be used for highly sensitized patients. If a physician expresses the need



to recuse a medically urgent (status 4) recipient from national sharing, the notes section in the CTR should be used.

Next Steps

Further discussion and education leading up to go live will be provided at three venues:

- The CCTN annual meeting scheduled for October 2021 to cascade this information to physicians that are not members of HTAC
- The next HTAC meeting that will be scheduled for early January 2022 to inform physicians of these processes and changes.
- Meetings with ODOs and representatives of the physician group are being scheduled for November (either individually or in small groups) to review processes, changes, and potential impacts to local processes
- Training sessions will begin in December and continue into January 2022. Further details to follow.

For any questions or concerns, please contact the CBS team at [listing.allocation @blood.ca](mailto:listing.allocation@blood.ca).