



CBS 2017:  
Patients, Programs and Services  
What's Next?

MP9f,2 16Xfj

# Your Presenters

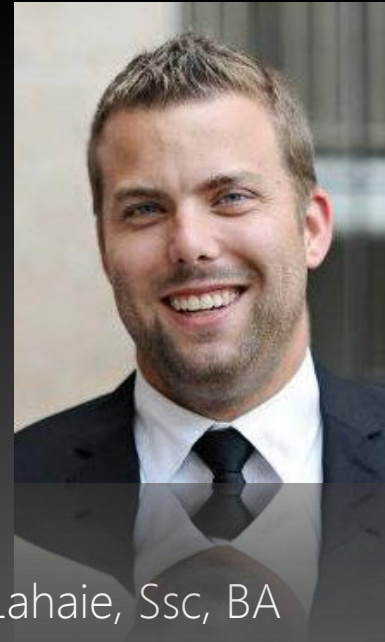
Sean



Sean Delaney, MHA

Associate Director, Listing & Allocation  
Canadian Blood Services

Nick



Nick Lahaie, Ssc, BA

Program Manager, Information Management  
Canadian Blood Services



# Canadian Transplant Registry

Canadian Transplant Registry



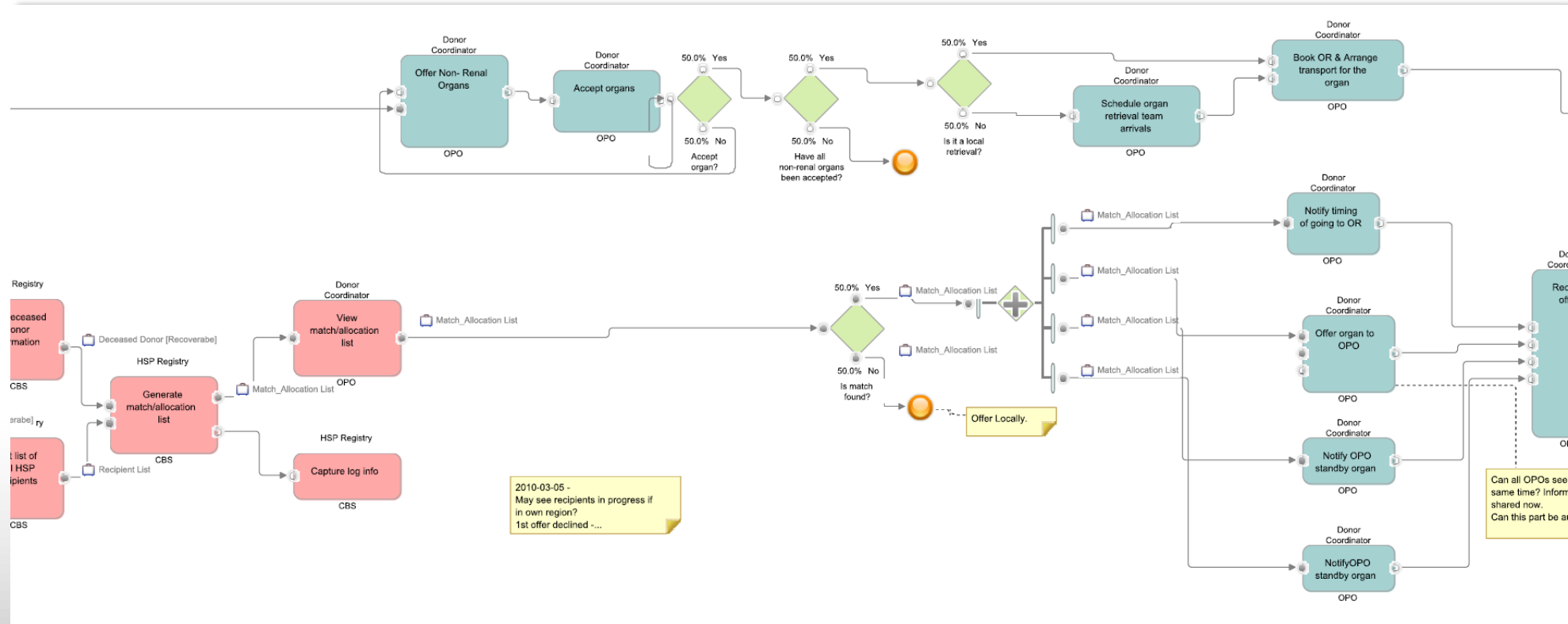
# Thank You!



1. Merica Chase – New Brunswick
2. France Leger – New Brunswick
3. Dawnelda Murray – Nova Scotia
4. Belinda McIntyre – Nova Scotia
5. Terry Reardon – Nova Scotia
6. Kate Storm – Nova Scotia
7. Kim Parsons – Newfoundland & Labrador
8. Sandra White – Newfoundland & Labrador

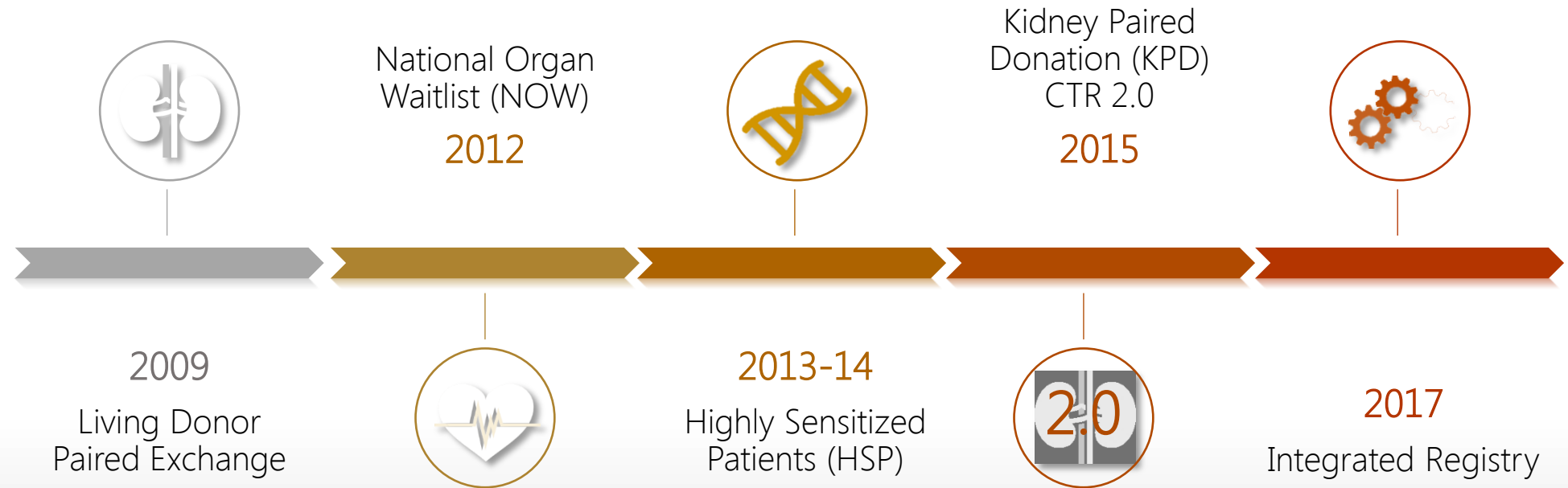


# Looking Back: HSP Process Mapping





# Canadian Transplant Registry Timeline



# Operations





# CTR National Programs

Kidney Paired Donation  
Launched 2008

National Organ Waitlist  
Launched 2012

National Kidney Allocation  
For Highly Sensitized Patient  
Launched 2013

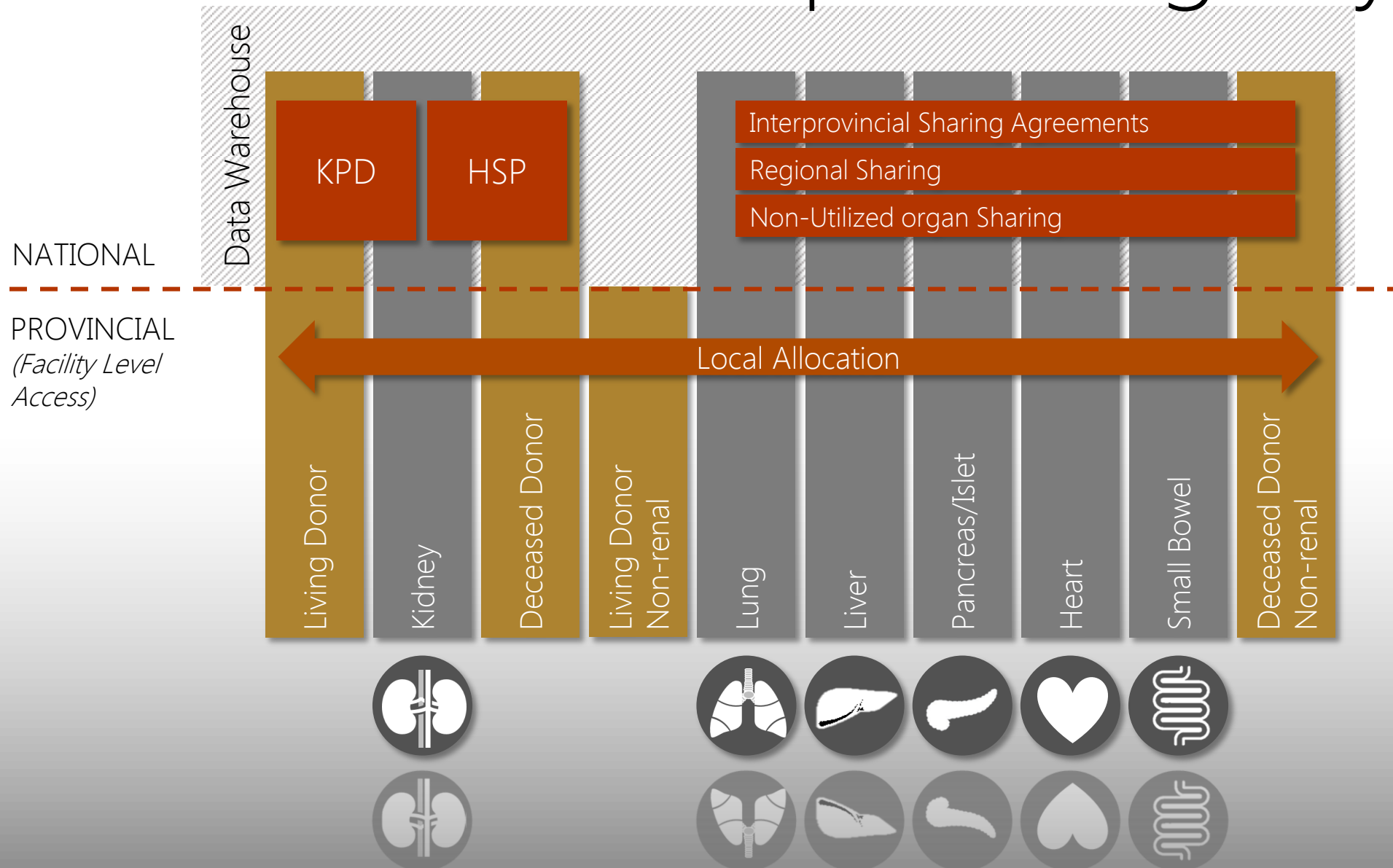
466

767

273



# Canadian Transplant Registry



# Canadian Transplant Registry

	Present		Future	
	National		National & Provincial	
Clinical Need	Policy	Technology	Policy	Technology
National Living Donation	✓	CTR 2.0	✓	CTR 2.0
National Waitlist	✓	CTR	✓	
National Sharing Agreements for:		CTR	Add International	
Heart	Draft		✓	
Lung	✗		✓	
Liver	Draft		✓	
Pancreas	✗		✓	
Kidney	✓ HSP		✓	
National Data Reporting	Annual Report	CTR/CTR 2.0	✓	

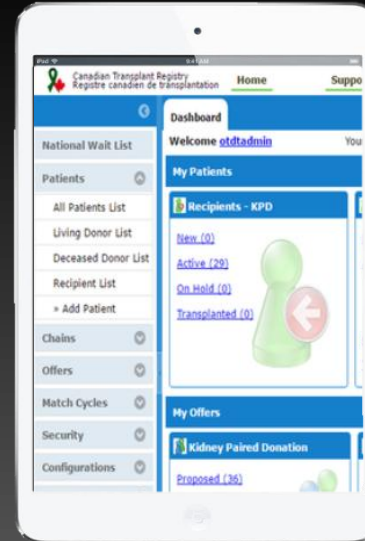


# Anywhere, any time...

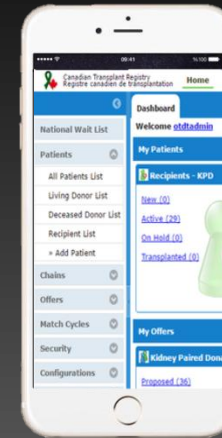
Desktop



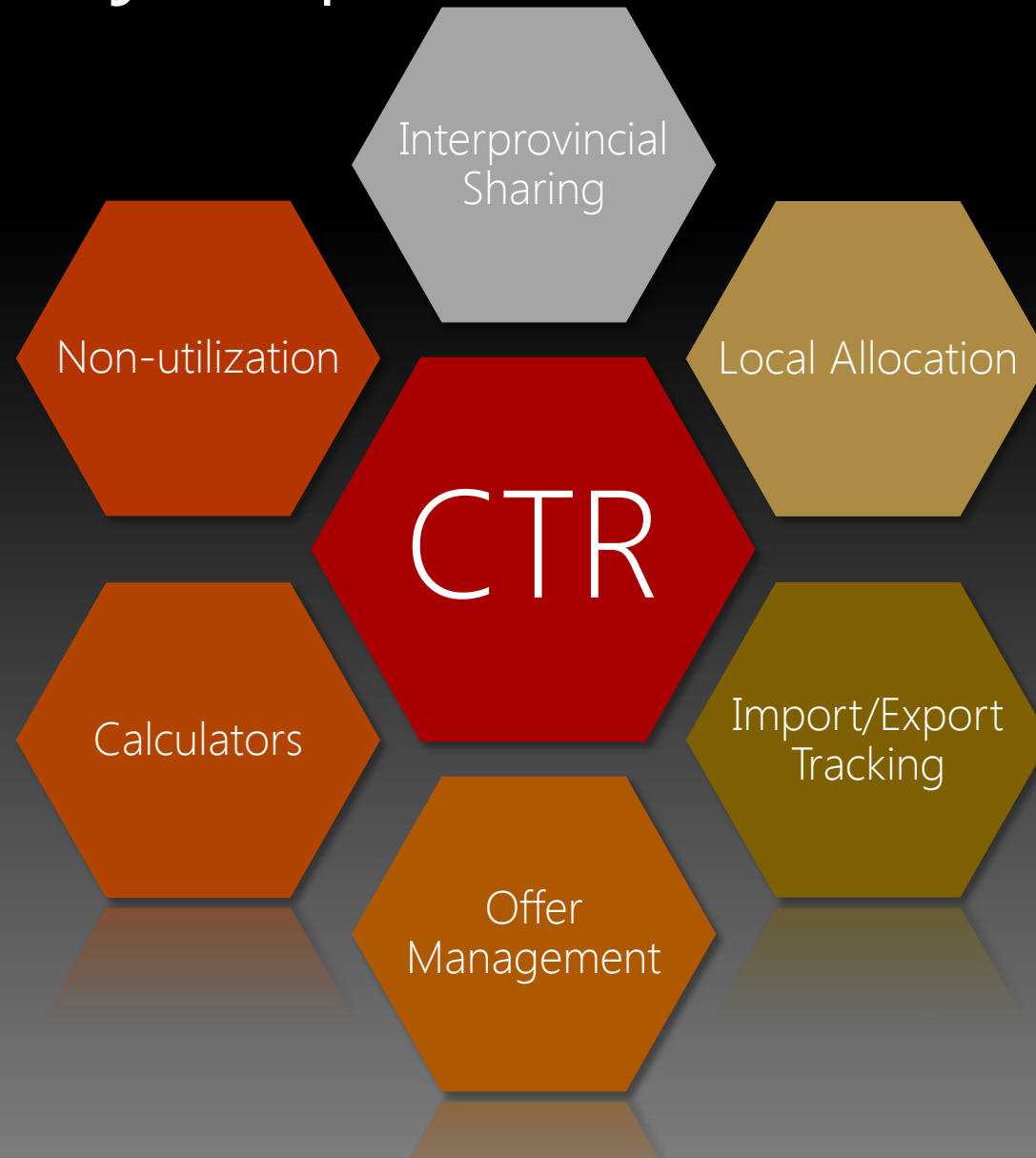
Tablet



Mobile



# Fully Operational CTR



# Allocation

JOHNSON, Morty. CTD000027. Local ID - Local002. ABO - A. 57 Years Old. Deceased Donor.

Save

Refresh

Print

Help

History

Close

Personal

Contact

Death

Consent

HLA

Assessment

Allocation

Offers

Recovery

Attachment Summary

ALLOCATION

HSP Kidney

Heart

Lung

Liver

Small Bowel

Stomach

Pancreas

Kidney

HSP Kidney Allocation Run On:  
2016-09-18 20:24:43

Allocate

Preview Allocation

Not Allocated Reason:  

Please Select

Action	Threshold	Rank	ODO	National Patient ID	Local ID	TX Type	Organ	MS	State	ABO	Age	cPRA
<div>View Offer</div>	No	1	ON-TGLN	CTR000014		Single	Kidney	1	Active	A	60.1	97.11
<div>View Offer</div>	No	2	ON-TGLN	CTR000030		Multiple	Kidney Stomach Small Bowel	1	Active Active Active	A	38.2	94.36 94 94

«

«

Page 1 of 1

»

»

Displaying 1 - 2 of 2

20

Items per page



# National, Provincial, Regional Allocation

THINN, DD-ONE. CTD000006. Local ID - LocalID01. ABO - A. 28 Years Old. Deceased Donor.

Save Refresh Print Help History

Personal Contact Death Consent HLA Assessment Allocation Offers Recovery Attachment Summary

ALLOCATION

HSP Kidney Heart Lung Liver Small Bowel Stomach Pancreas Kidney

VXM Run On: 2016-10-04 13:37:25 Last Refreshed: 2016-10-04 13:38:27

Offer To ODO Preview Allocation

Action	Rank	ODO	National Patient ID	Local ID	TX Type	Organ	MS	State	Eligibility	ABO	Age	Height	Weight	ABO Match	VXM	PRA	ListDate	MS Change Date
<a href="#">Make Offer</a>	1	ON-TGLN	CTR000079		Single	Heart	4	Active	National	A	40.2	177	89	Yes	POS	60	2016-09-19	2016-09-19
<a href="#">Make Offer</a>	2	AB-EDM-HOPE	CTR000081		Single	Heart	4S	Active	National	A	40.2	187	78	Yes	NEG	100	2016-09-20	2016-09-21
<a href="#">Make Offer</a>	3	NS-CCODP	CTR000089		Single	Heart	4S	Active	National	A	49.2	180	78	Yes	NEG	95	2016-09-28	2016-09-28
<a href="#">Make Offer</a>	4	ON-TGLN	CTR000086		Multiple	Heart Lung	3.5	Active	Local	A	38.1	176	78	Yes	NEG		2016-09-28	2016-09-28
<a href="#">Make Offer</a>	5	ON-TGLN	CTR000088		Single	Heart	3	Active	Local	A	38.1	188	176	Yes	POS		2016-09-28	2016-09-28
<a href="#">Make Offer</a>	6	ON-TGLN	CTR000014		Multiple	Heart Kidney	3	Active	Local	A	60.2	211.2	55.6	Yes	NEG	97	2016-09-28	2016-09-28
<a href="#">Make Offer</a>	7	BC-BCT	CTR000087		Single	Heart	3	Active	Local	O	46.1	177	82	No	NEG		2016-09-28	2016-09-28
<a href="#">Make Offer</a>	8	AB-EDM-HOPE	CTR000080		Single	Heart	3	Active	Local	A	40.2	187	78	Yes	NEG		2016-09-20	2016-09-21
<a href="#">Make Offer</a>	9	NS-CCODP	CTR000076		Single	Heart	3	Active	Local	A	49.2	180	78	Yes	NEG		2016-09-28	2016-09-28
<a href="#">Make Offer</a>	10	ON-TGLN	CTR000084		Single	Heart	3	Active	Local	A	38.1	176	78	Yes	NEG		2016-09-28	2016-09-28

Page 1 of 5

Page 1 of 5



# Patient and Program Specific Matching

JONES, Drew. CTR000089. ABO - A. 49 Years Old. Recipient.

Save Refresh Print Help History

Registration / Activation Personal Contact Health HLA Offers Transplant / Donation ATT Sh

Transplant Type:  
Single

Organ Requests - Select a row from the list to view details below

Primary Key ID	Organ	Organ Type	Program	Recipient Type	Medical Status	Medical Status Change Date / Time (ET)	State
66	Heart		Deceased Waitlist		4	2016-09-28 11:37:...	Active

Add Organ Request

ORGAN REQUEST DETAILS

Organ: Heart Program: Deceased Waitlist

Medical Status: 4 Medical Status Change Date / Time: 2016-09-28 11:37 ET

State: Active Reason for State: Recipient on Waitlist State Change Date / Time: 2016-09-28 11:38:35 ET

PROGRAM DETAILS

List Date/Time: 2016-09-28 00:00 ET

DONOR ACCEPTANCE CRITERIA

	Heart
Accept Incompatible ABO	<input type="radio"/> Yes <input checked="" type="radio"/> No
Accept Hepatitis B Core Antibody Positive Donor	<input type="radio"/> Yes <input checked="" type="radio"/> No
Accept Hepatitis C Positive Donor	<input type="radio"/> Yes <input checked="" type="radio"/> No
Accept DCD	<input checked="" type="radio"/> Yes <input type="radio"/> No
Cross Match Required	<input type="radio"/> Yes <input checked="" type="radio"/> No
Local Donor Only	<input type="radio"/> Yes <input checked="" type="radio"/> No
Max. Donor Age	<input type="text"/>
Min. Donor Age	<input type="text"/>
Max. Donor Weight (kg)	<input type="text"/>
Min. Donor Weight (kg)	<input type="text"/>
Max. Donor Height (cm)	<input type="text"/>
Min. Donor Height (cm)	<input type="text"/>
Additional Wait List Comments	





# Advanced HLA

**Willing to Cross Antibodies**

National Patient ID: CTR000075    Organ: Heart    Program: Deceased Waitlist

All values selected as Willing to Cross will not be used for the calculation of the Adjusted cPRA.

Unselect All

A	B	Bw	Cw	DR	DQA	DQ	DPA	DP
<input type="checkbox"/> 1	<input type="checkbox"/> 7	<input type="checkbox"/> 4	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 1
<input type="checkbox"/> 2	<input type="checkbox"/> 8	<input type="checkbox"/> 6	<input type="checkbox"/> 2	<input type="checkbox"/> 4	<input type="checkbox"/> 2	<input type="checkbox"/> 4	<input type="checkbox"/> 2	<input type="checkbox"/> 3
<input type="checkbox"/> 3	<input type="checkbox"/> 13		<input type="checkbox"/> 4	<input type="checkbox"/> 7	<input type="checkbox"/> 3	<input type="checkbox"/> 5	<input type="checkbox"/> 3	<input type="checkbox"/> 5
<input type="checkbox"/> 11	<input type="checkbox"/> 18		<input type="checkbox"/> 5	<input type="checkbox"/> 8	<input type="checkbox"/> 4	<input type="checkbox"/> 6	<input type="checkbox"/> 4	<input type="checkbox"/> 6
<input type="checkbox"/> 23	<input type="checkbox"/> 27		<input type="checkbox"/> 6	<input type="checkbox"/> 9	<input type="checkbox"/> 5	<input type="checkbox"/> 7		<input type="checkbox"/> 8
<input type="checkbox"/> 24	<input type="checkbox"/> 35		<input type="checkbox"/> 7	<input type="checkbox"/> 10	<input type="checkbox"/> 6	<input type="checkbox"/> 8		<input type="checkbox"/> 9
<input type="checkbox"/> 25	<input type="checkbox"/> 37		<input type="checkbox"/> 8	<input type="checkbox"/> 11		<input type="checkbox"/> 9		<input type="checkbox"/> 10
<input type="checkbox"/> 26	<input type="checkbox"/> 38		<input type="checkbox"/> 9	<input type="checkbox"/> 12				<input type="checkbox"/> 11
<input type="checkbox"/> 29	<input type="checkbox"/> 39		<input type="checkbox"/> 10	<input type="checkbox"/> 13				<input type="checkbox"/> 13
<input type="checkbox"/> 30	<input type="checkbox"/> 41		<input type="checkbox"/> 12	<input type="checkbox"/> 14				<input type="checkbox"/> 14
<input type="checkbox"/> 31	<input type="checkbox"/> 42		<input type="checkbox"/> 14	<input type="checkbox"/> 15				<input type="checkbox"/> 15
<input type="checkbox"/> 32	<input type="checkbox"/> 44		<input type="checkbox"/> 15	<input type="checkbox"/> 16				<input type="checkbox"/> 16
<input type="checkbox"/> 33	<input type="checkbox"/> 45		<input type="checkbox"/> 16	<input type="checkbox"/> 17				<input type="checkbox"/> 17

Update Cancel

Unselect All

Cancel



# Decision Making Tools

## Easy Offer Assessment

Offer CTR000046 - CTD000028 ( Local003 ). Proposed. 2016-09-20 15:10:53 (ET).

Offer Details Side-by-Side XM Details

Recipient: CTR000046 THINN, Rec-03  
Medical Status: 1  
HSP Eligible: No

Deceased Donor: Local003 CTD000028  
Exceptional Distribution Donor: Yes  
Exceptional Distribution Reasons: 19 - Persons with active infections of clinical significance  
Exceptional Distribution Comment: --

SEROLOGY

Last Updated: 2016-09-19 14:41:43

Sample Drawn On: 2016-09-19 00:00:00 ET  
Sample Dilution: Diluted  
Serology: Donor Mother

CMV: --

Hepatitis B Core Antibody: Hepatitis B Core Antibody Negative --

Hepatitis B Surface Antibody: Hepatitis B Surface Antibody -- --

Hepatitis B Surface Antigen: Hepatitis B Surface Antigen -- --

Hepatitis C: Hepatitis C Negative --

HIV I and II: HIV I and II -- --

HTLV I and II: HTLV I and II -- --

Toxoplasmosis: Toxoplasmosis -- --

West Nile: West Nile -- --

EBV: EBV -- --

## Attachments

TR1741, TR1741. CTR000044. ABO - O. 41 Years Old. Recipient.

Registration / Activation Personal Contact Health HLA Offers Transplant / Donation Attachment Summary

Hepatitis C Genotype: --  
HIV Genotype: --  
Serology Comments: --

KIDNEY HEALTH

Has Recipient Previously Donated a Kidney?: ☐ Yes ☒ No  
Patient on Dialysis: ☒ Yes ☐ No  
Most Recent Dialysis Start Date: 2015-07-13 448 days (14 months)  
Biopsy Proven ESRD: --

DIAGNOSIS

Organ Diagnosis - Please select a row to view details below:

Kidney

DIAGNOSIS DETAIL

Organ Primary Diagnosis: Please Select  
Organ Secondary Diagnosis: Please Select  
Organ Tertiary Diagnosis: Please Select

COMMENTS

ADD

ATTACHMENTS

File	Description	Updated By	Updated Date (ET)	Include on Side-By-Side	Delete
ChestXRay.jpg	test	otdadmin otdadmin	2016-10-03 10:33:00	Yes	



# Comprehensive Data

## Longitudinal Data Collection

228 - LAST NAME, 228 - First Name, TR00228, ABO - A, 42 Years Old, 95% Inactive, Recipient

Save Refresh Print Help History

Personal Contact Health HLA Registration/Activation Offers Transplant/Donation Attachment Summary

Select a row from the list to view details below.

Event	Organ	Date	Surgical Site	Graft Failure Date	Program
Transplant	Kidney	2008-07-14	BC-VAN-VGH		KPD

ADD

TRANSPLANT

Transplant Date:  
2008-07-14

Program:  
KPD

Donor:  
7310951

Organ:  
Kidney

Days In Hospital:  
-

Graft Failure Date:  
YYYY-MM-DD

Graft Failure Cause:  
Please Select

POST TRANSPLANT SERUM CREATININE

ADD

Collection Date	2015-11-03	2014-09-10	2013-11-03	2012-08-09	2011-03-10	2010-09-14	2009-09-26
Serum Creatinine (micromoles/L)	182	182	182	182	182	182	182
Height(cm)	173	173	173	173	173	173	173
Weight(kg)	73.6	76.5	75.1	75.2	74.3	75.2	75.0
Cockcroft Gault CrCl (ml/min/1.73m <sup>2</sup> )	43.637	44.153	43.343	44.261	44.155	45.120	45.429
eGFR-MDRD(ml/min/1.73m <sup>2</sup> )	28.185	28.472	28.472	28.778	28.939	29.105	29.277
eGFR-Schwartz (ml/min/1.73m <sup>2</sup> )							

POST TRANSPLANT BPAR

ADD

Date
BPAR
BPAR Type

## Donor Organ Disposition

JOHNSON, Morty. CTD000027. Local ID - Local002. ABO - A. 57 Years Old. Deceased Donor.

Save Refresh Print Help History

Personal Contact Death Consent HLA Assessment Organ Disposition Offers Recovery Attachment Summary

ORGAN DISPOSITION

Organ	Type	Consent	Offer	Recovery	Shipping	Transplant	Disposition	ODO	TXC	Intended Recipient
Heart	--	Consented	Offer Made	Recovered: Transplant	Shipped	Transplanted	CTR010338	AB-EDM-HOPE	AB-EDM-UAH	Yes
Lung	Bilateral	Consented	Offer Made	Not Applicable	Not Shipped: Not Recovered	Not Transplanted: Not Recovered	--	--	--	--
Lung	Right	Consented		Recovered: Medical Education	Not Shipped: Not Recovered	Not Transplanted: Not Recovered	--	--	--	--
Lung	Left	Consented	Offer Made	Recovered: Transplant	Shipped	Transplanted	CTR022398	AB-CAL-SAODP	AB-CAL-FMC	No: Organ not as described
Liver	Whole	Consented	Offer Made	Recovered: Transplant	--	--	--	--	--	--
Small Bowel	--	Consented	Offer Made	Recovered: Transplant	--	--	--	--	--	--
Stomach	--	Consented		Recovered: Medical Education	--	Not Transplanted: Not Recovered	--	--	--	--
Pancreas	Whole	Consented		Recovered: Transplant	--	--	--	--	--	--
Pancreas	Islets	Consented	Offer Made	Recovered: Transplant	--	--	--	--	--	--
Kidney	Right	Consented	Offer Made	Recovered: Transplant	--	--	--	--	--	--
Kidney	Left	Consented	Offer Made	Recovered: Transplant	--	--	--	--	--	--
Kidney	Dual	Consented	Offer Made	--	--	--	--	--	--	--

Close Case Open Case


Empty form for longitudinal data collection.

Empty form for donor organ disposition.



# Calculators

## cPRA Calculator

 Canadian cPRA Calculator  
Calculateur cPRA canadien

HelpFrançais

AboutLegalHelpVersion

The Canadian cPRA calculator is a component of the Canadian Transplant Registry (CTR), a web-based application used by the transplant community, to estimate the percentage of Canadian deceased organ donors with whom a transplant candidate may be incompatible.

This calculator uses the same formula and data as the CTR. It produces a value by comparing the unacceptable antigens entered below. If you are a transplant candidate, and have questions regarding the value generated by this calculator, please contact your transplant physician or coordinator.

**Attention:** The actual cPRA value assigned to a transplant candidate is calculated by the CTR based on the unacceptable antigens that are entered by the laboratory at the transplant candidate's transplant centre. The value produced by the cPRA calculator on this web-site is for your informational use only.

**Region(s)**

☐ Alberta ☐ Ontario ☐ Atlantic-Canada ☐ Quebec ☐ British-Columbia ☐ Saskatchewan ☐ Manitoba

**Blood Group(s)**

☐ A ☐ AB ☐ B ☐ O

**A**

☐ 1 ☐ 2 ☐ 3 ☐ 11 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 28 ☐ 29  
☐ 30 ☐ 31 ☐ 32 ☐ 33 ☐ 34 ☐ 36 ☐ 66 ☐ 68 ☐ 69 ☐ 74  
☐ 80 ☐ 0203 ☐ 2403

**B**

☐ 7 ☐ 8 ☐ 13 ☐ 18 ☐ 27 ☐ 35 ☐ 37 ☐ 38 ☐ 39 ☐ 41  
☐ 42 ☐ 44 ☐ 45 ☐ 46 ☐ 47 ☐ 48 ☐ 49 ☐ 50 ☐ 51 ☐ 52  
☐ 53 ☐ 54 ☐ 55 ☐ 56 ☐ 57 ☐ 58 ☐ 60 ☐ 61 ☐ 62 ☐ 63  
☐ 64 ☐ 65 ☐ 67 ☐ 70 ☐ 71 ☐ 72 ☐ 73 ☐ 75 ☐ 76 ☐ 77  
☐ 78 ☐ 81 ☐ 3901 ☐ 4402

**Bw**


☐ 4 ☐ 6 ☐ N/A

**Cw**

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10  
☐ 12 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18

CalculateReset

## MELD and MELD-Na calculator

 MELD-Na Calculator  
Canadian Transplant Registry

Français

About

MELD-Na score is used to predict mortality pre liver transplant, for patients who are 12 years of age and older. The SRTR calculation is used to derive the score.

*The Model for End-Stage Liver Disease (MELD-Na) calculator is a numerical scale used to estimate relative disease severity and likely survival of patients awaiting liver transplantation for patients 12 and up. It is based on the MELD-Na calculator developed by the Organ Procurement and Transplantation Network. **This calculator is intended for use by health care professionals.** The results of this tool should never be used alone to determine a patient's medical treatment. It is not a substitute for an individual treatment plan developed by a doctor with personal knowledge of a specific patient.*

Version: 1.0.5.0

FormulaReferences

Creatinine (μmol/L):  
130

Bilirubin (μmol/L):  
50

INR:  
2

Sodium (mmol/L):  
130

Had dialysis twice, or 24 hours of CVVHD, within a week prior to the serum creatinine test?  
☐ Yes ☒ No

MELD:  
22

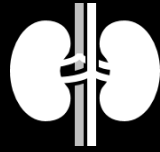
MELD-Na SRTR:  
26

Calculated On:  
2016-10-05

CalculateClear



# CTR Usage



KPD

HSP

Local

List transplant candidate and specify donor acceptance criteria



HLA Data for cPRA, VXM & Allocation



Recipient Data & Attachments



Deceased Donor Data & Attachments



Living Donor Data & Attachments



Dependent on data set

Dependent on data set

Allocation



By request

Dependent on policy

Dependent on policy

Dependent on policy

Dependent on policy

Offer Management (incl. make offer, assessment, accept, decline)



General Ledger (Import & Export counts)



# Listing & Allocation Services

Listing & Allocation Services



# Listing & Allocation



# Interprovincial Sharing



## HLA

Crossing  
Antibodies  
cPRA Calculator



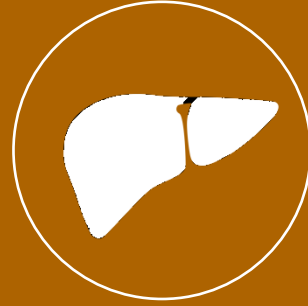
## Kidney

Advancing KPD  
HSP Policy  
Evaluation



## Heart

Policy  
Development



## Liver

Leading  
Practices Forum  
Policy  
Development



## Lung

Data Impact  
Assessment &  
Feasibility Study



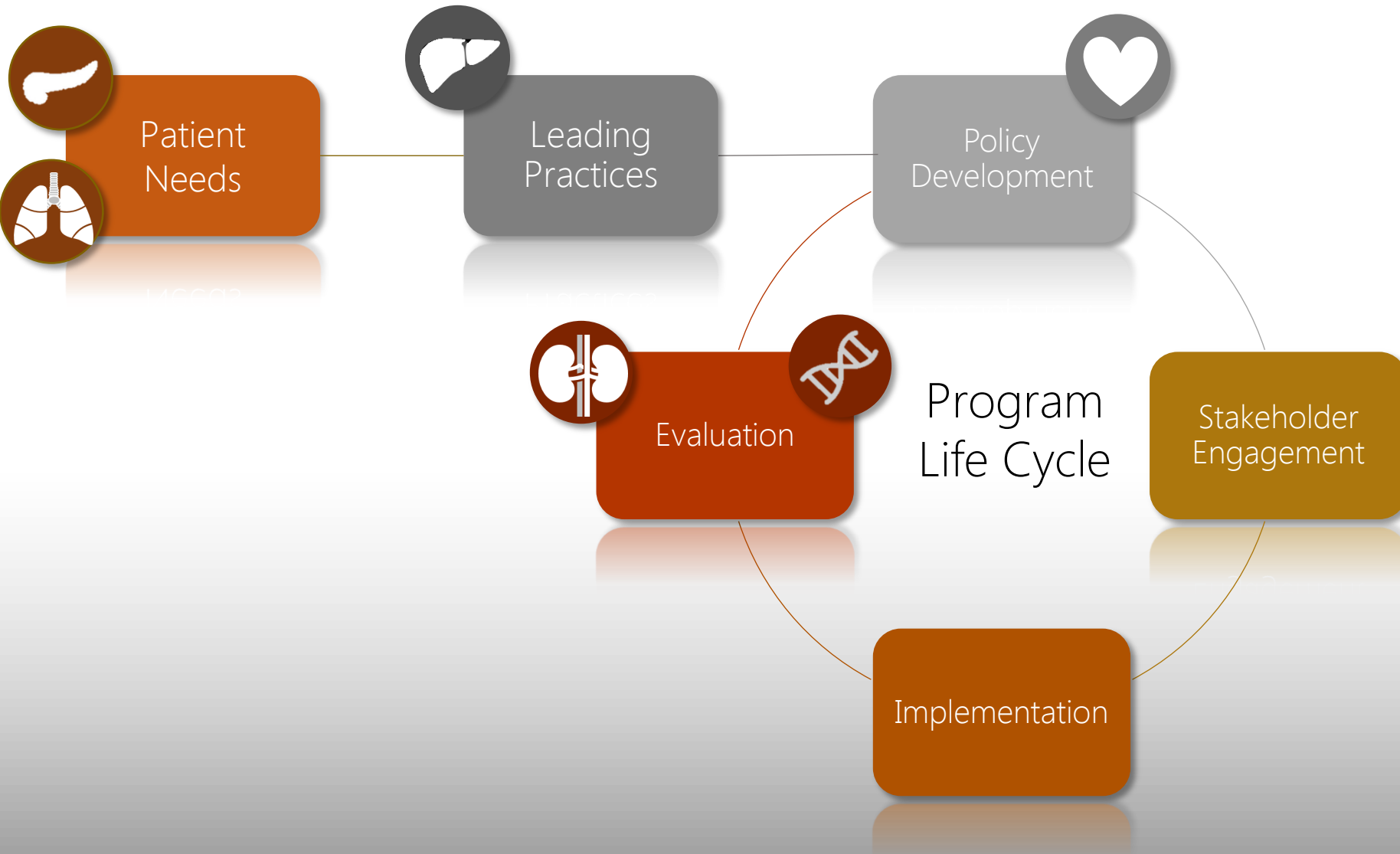
## Pancreas

Pancreas Data  
Working Group  
Report





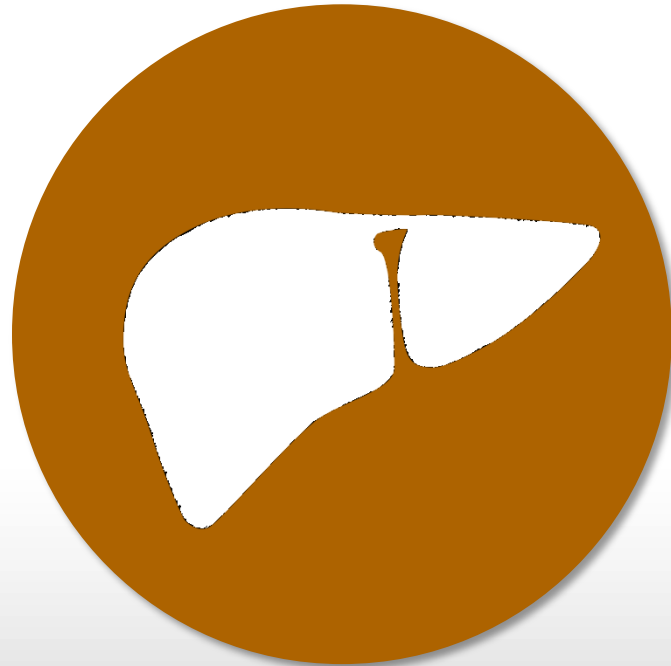
# Listing & Allocation Program Life Cycle



# Policy Review and Approval Process



# Liver Listing & Allocation



# Liver Listing & Allocation Leading Practices Forum

Vancouver, BC  
May 2016



# Forum: Areas of Consensus

Data Collection & Reporting	●
National Principles	●
Patient Prioritization	●
Pediatric Prioritization	●
HCC Eligibility Criteria	●
HCC Allocation/Exception Points	●
HCC Bridging Therapy	●
HCC Down-staging	●
HCC Down-staging	●
HCC Bridging Therapy	●



# LTAC

- Launched Oct 26<sup>th</sup>
- Chair Susan Gilmour
- Surgical and medical reps from each liver program
- Priorities:
  1. Implementation of liver forum recommendations
  2. Import/Export imbalances



# Heart Listing & Allocation



- 1 Recipient Eligibility Criteria
- 2 Requirement to Offer
- 3 Matching & Ranking
- 4 Inter-provincial Balancing Protocol



# Lung Listing & Allocation



Lung Data Collection  
Feasibility Pilot Project





# CTR Programs

## Advancing Patient Care

Advancing Patient Care



# Kidney Paired Donation (KPD) Program Data Activity Report

Data Activity Report

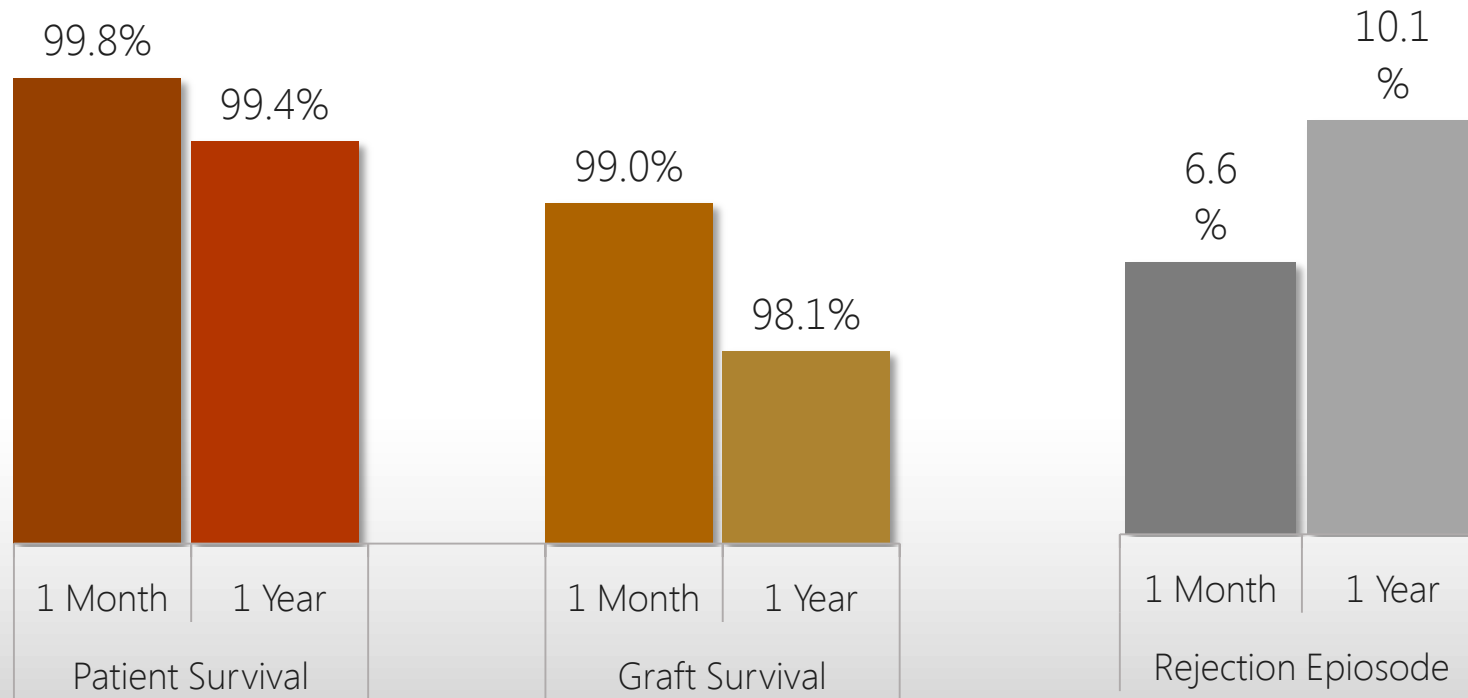


Match Cycles Executed	25 (Run on June 6, 2016)
Pairs Registered	884 (150 in last MC)
Candidates Registered	806 (138 in last MC)
NDADs* Registered	106 (2 in last MC)
<hr/>	
Transplants Completed	460
Candidates Transplanted	375
Wait List Transplants	85

Next Match Cycle: October, 2016

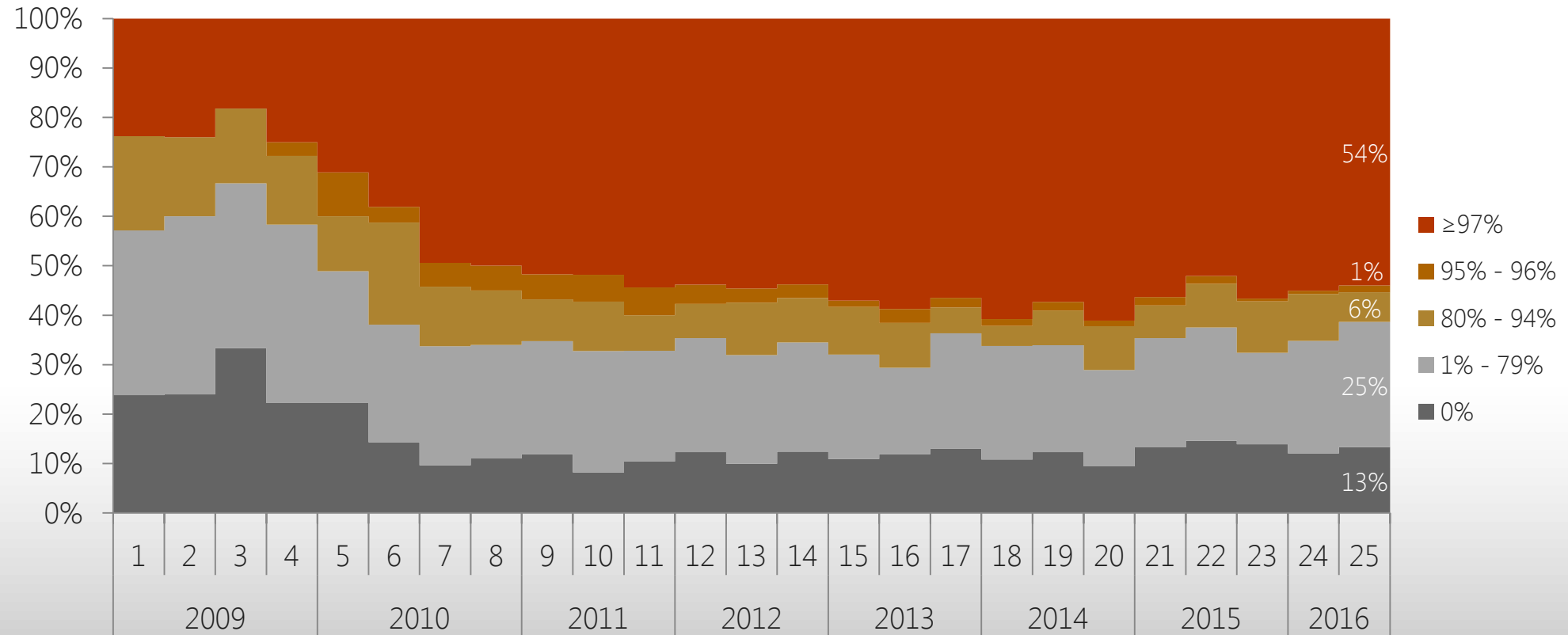


# Outcomes: Patient and Graft Survival





# cPRA of Candidates Through Time



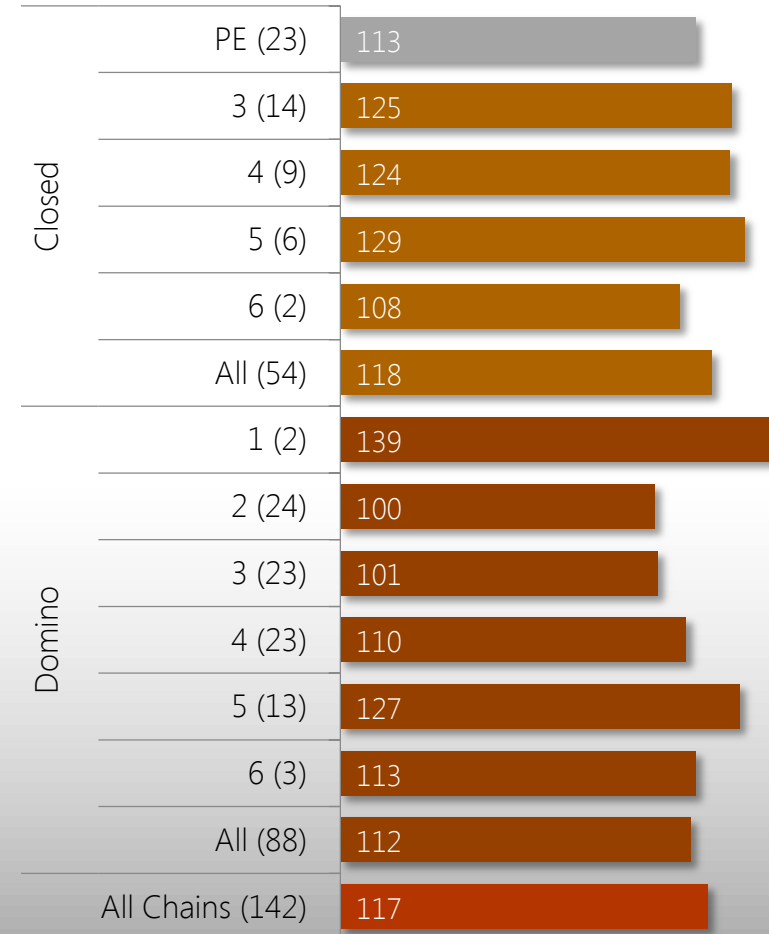
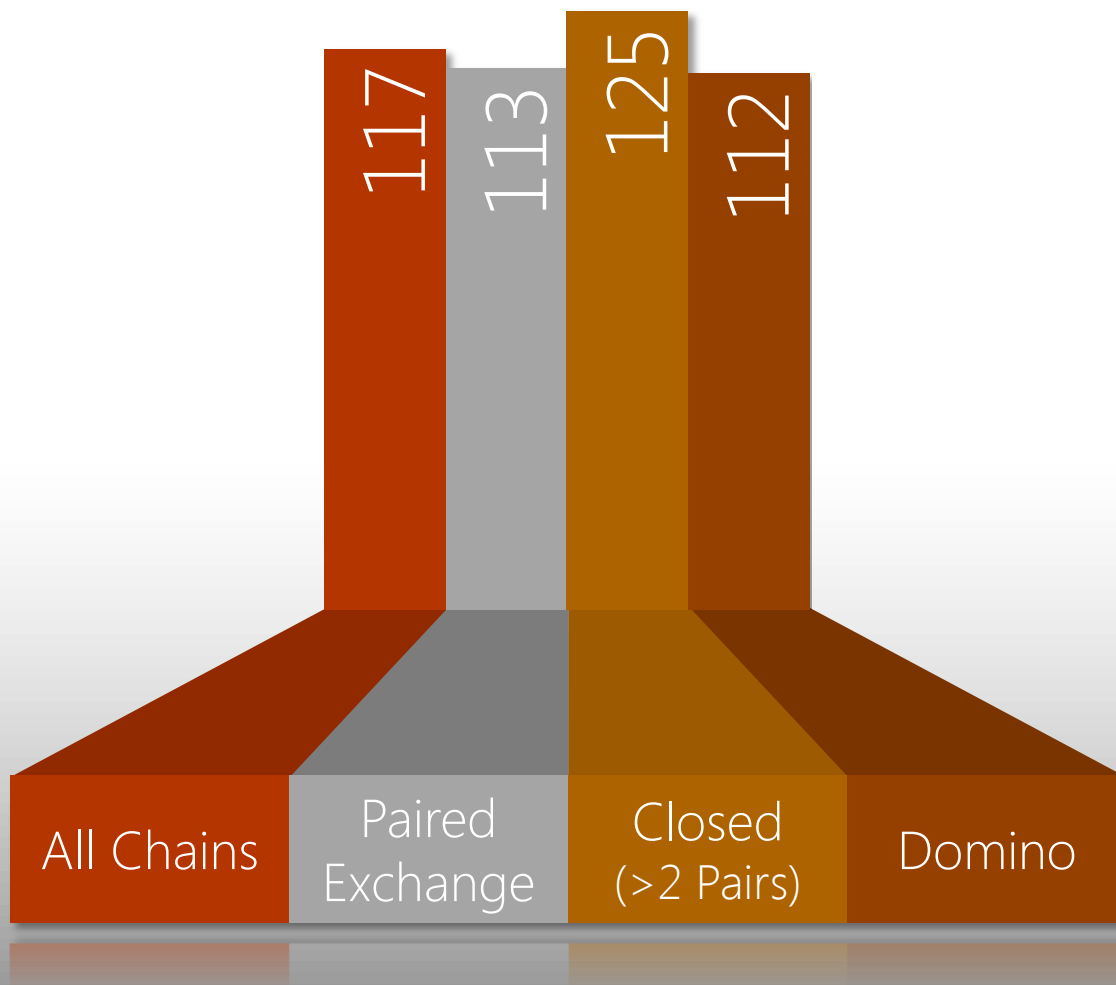








# Median Days to Surgery from Date of Proposal by Chain Type

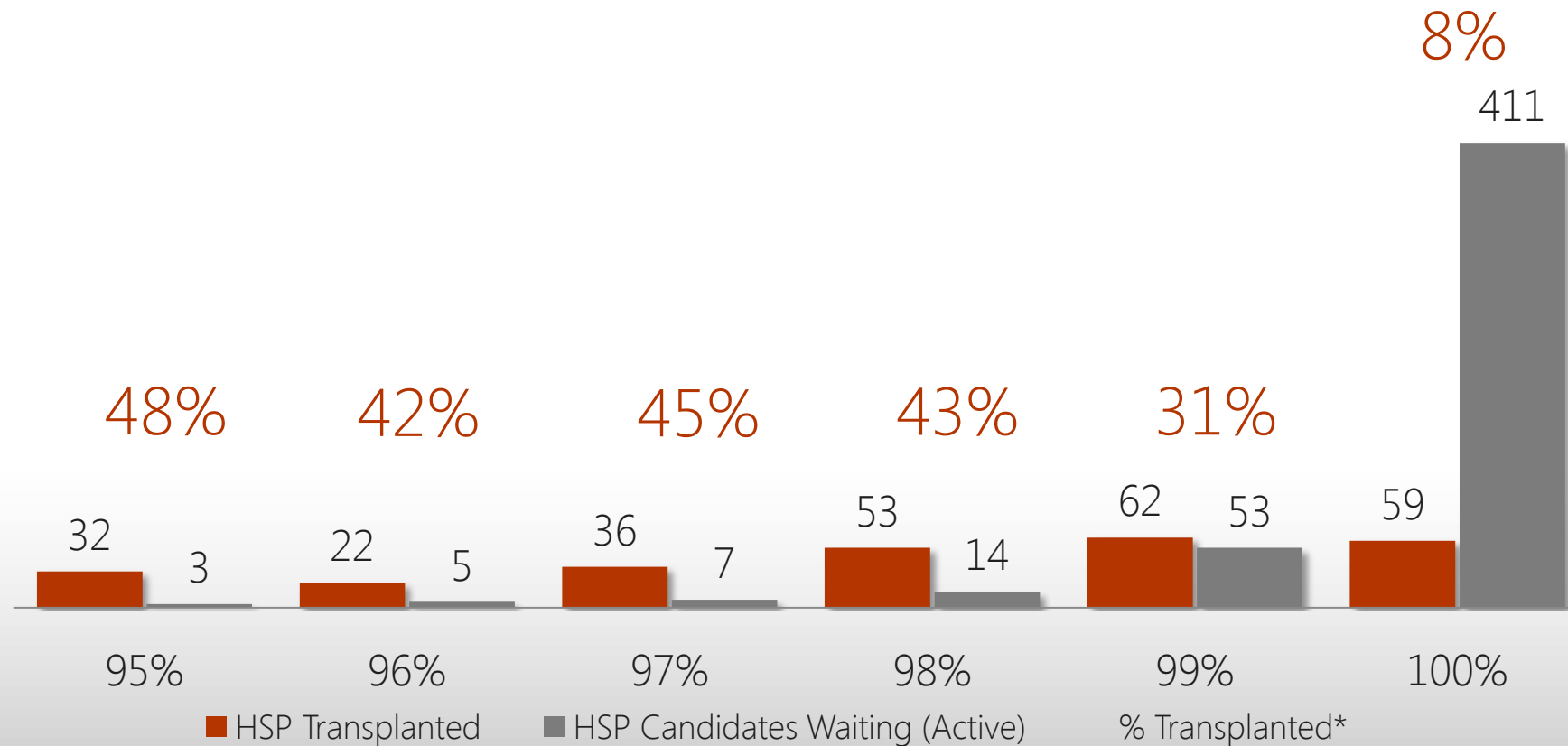


# Highly Sensitized Patient (HSP) Program Data Activity Report

Data Activity Report



# HSP Candidate Participation by cPRA





# HSP Transplant Recipients by Years on Dialysis

**115**   
*0 to <4 years on dialysis*

**89**   
*4 to <8 years on dialysis*

**28**   
*8 to <12 years on dialysis*

**12**   
*12 to <16 years on dialysis*

**5**   
*16 to <20 years on dialysis*

**4**   
*20+ years on dialysis*

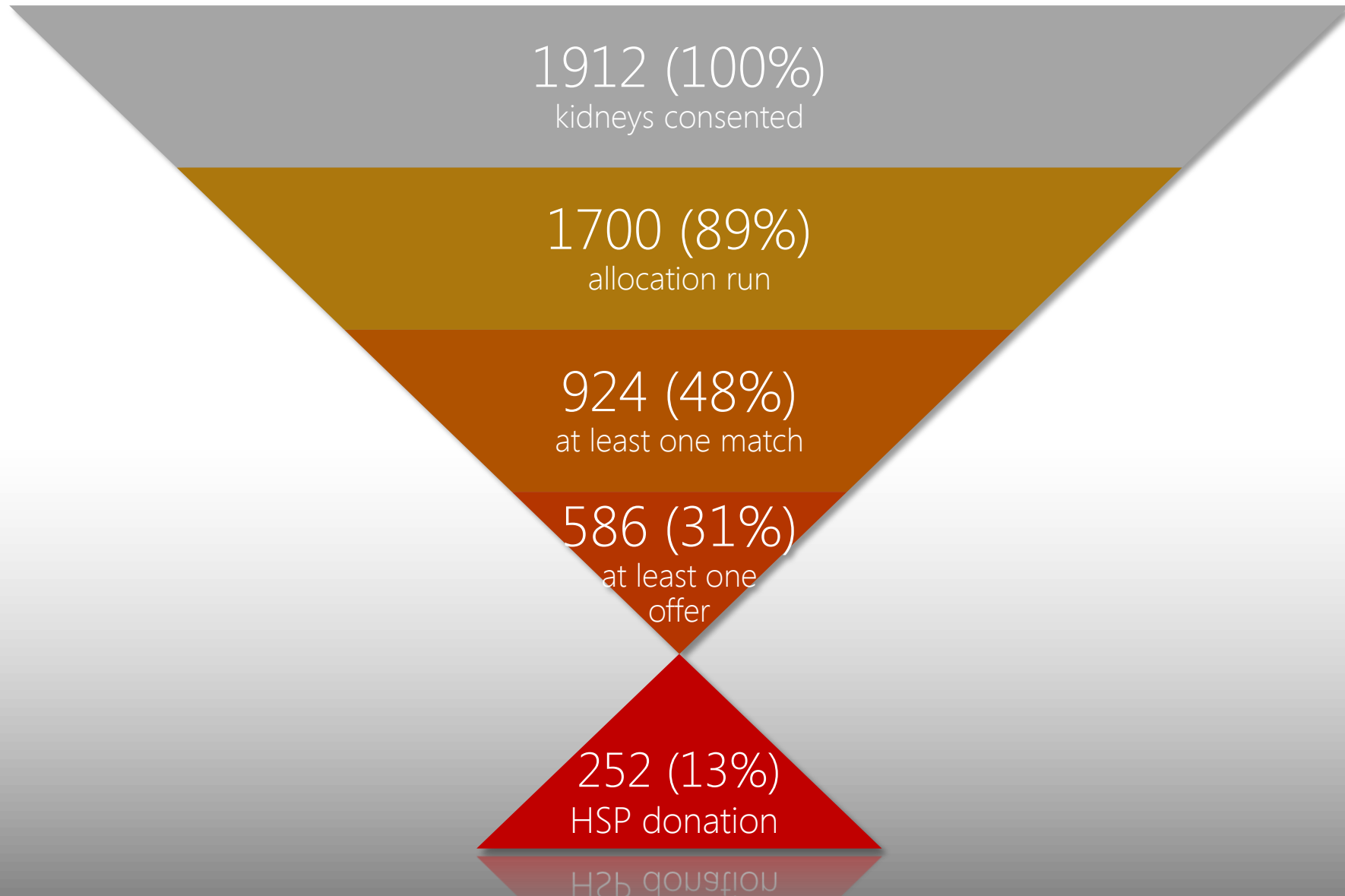
**4**   
*30+ years on dialysis*

**30.2** yrs  
Max waiting time  
nationally

**16.9** yrs  
Max waiting time in  
Atlantic Canada



# Overview of Donor Cases in CTR









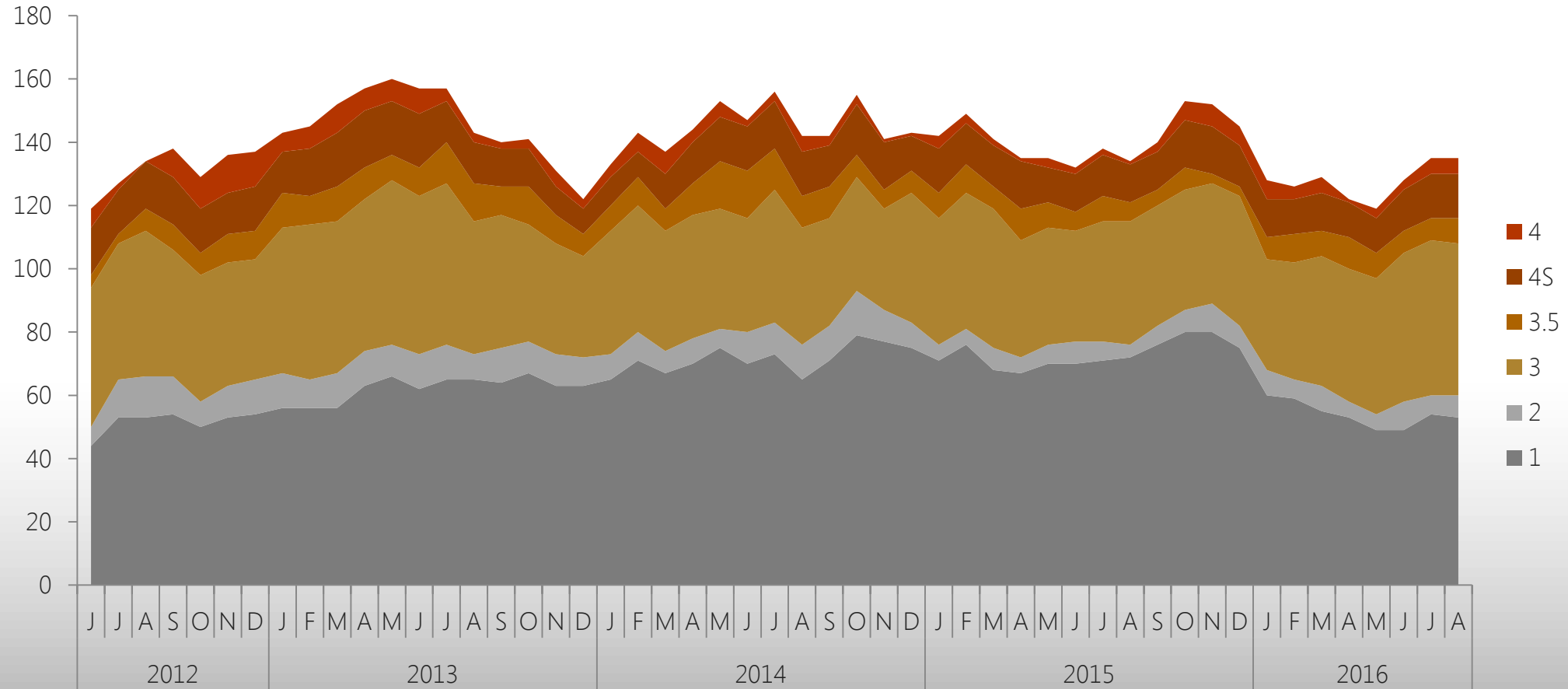


# Heart Waitlist

Heart Waitlist



# All Active Heart Patients by Medical Status







# Unprecedented Access to Transplants and Data

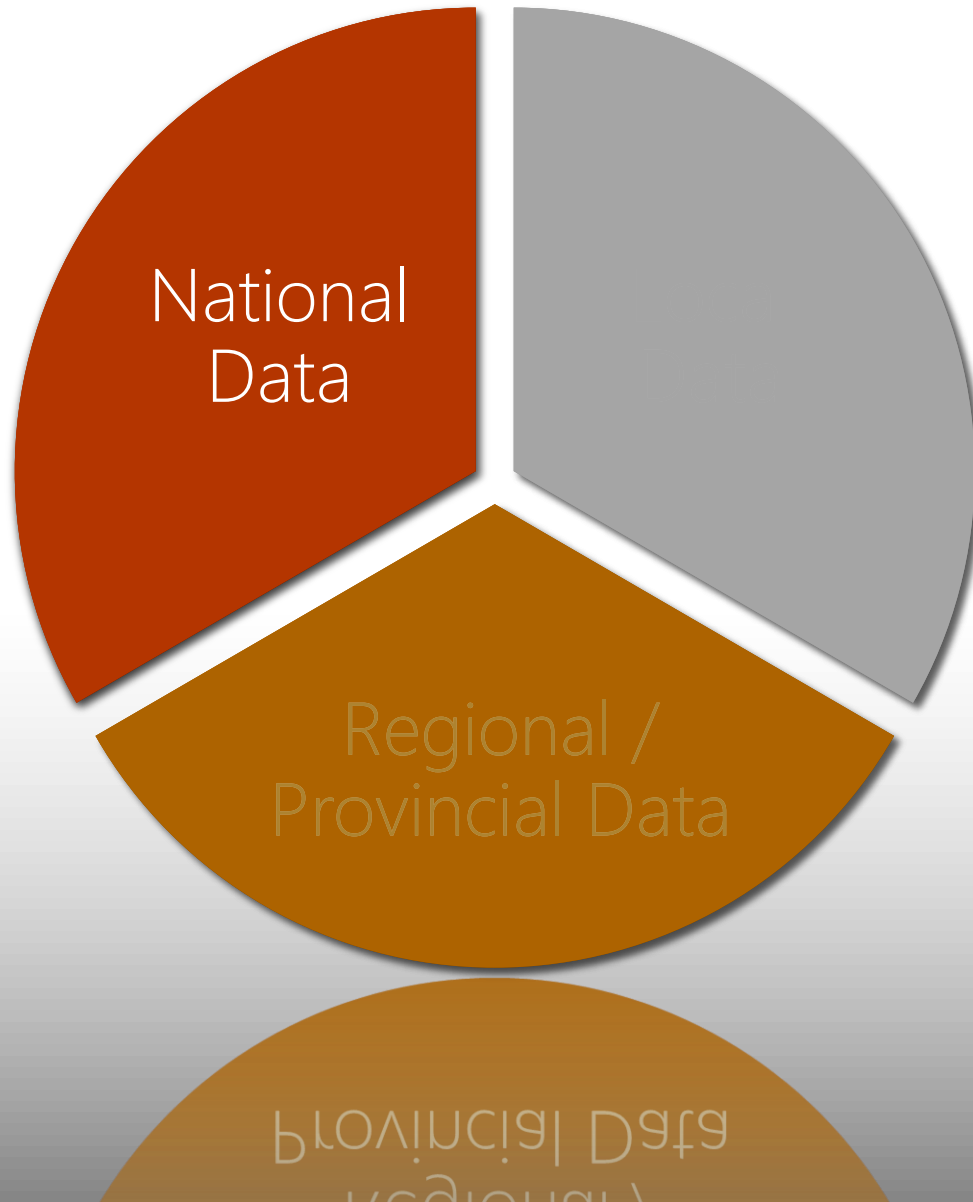


# ODT Data in Canada: The Present, the Future, and the Path Forward



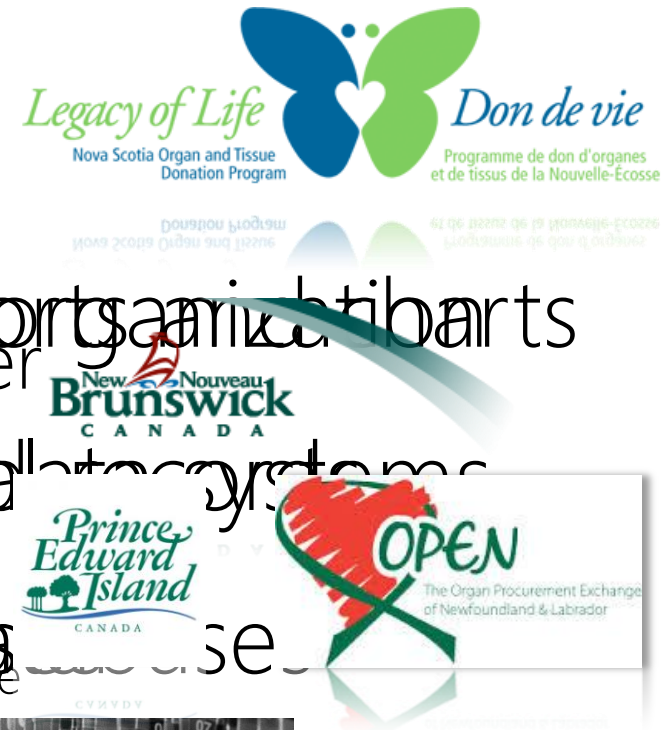


# Current State

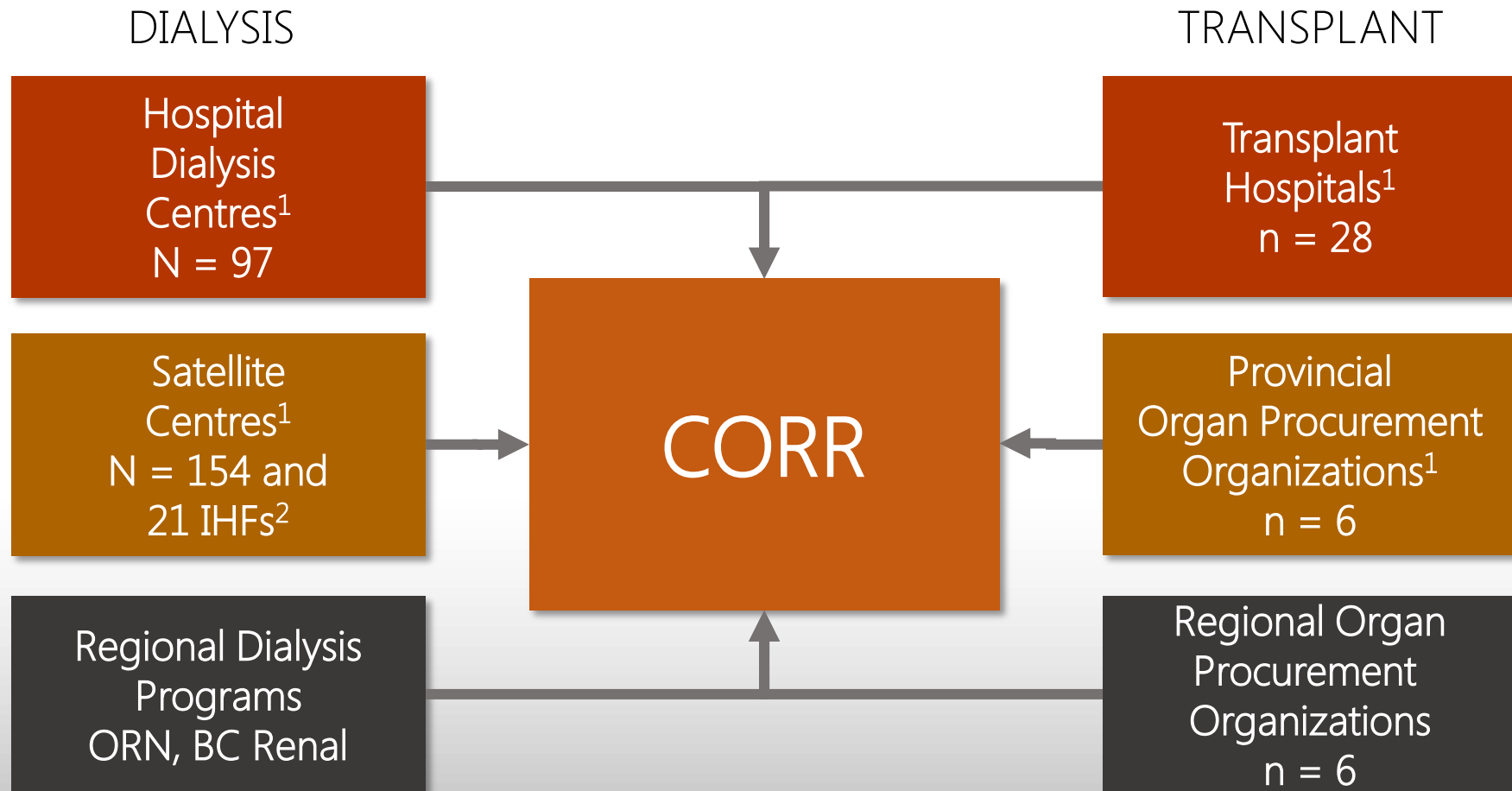


Canadian Organ Replacement Register (CORR)  
 Disease specific data systems  
 CIHI  
 Administrative databases  
 Discharge Abstract Database

National  
 Reports  
 Statistics  
 Vital Statistics  
 Canada



# CORR Data Sources



<sup>1</sup> Provinces reporting include: Atlantic, QC, ON, MB, SK, AB, and BC

<sup>2</sup> IHF=Independent Health Facility

# Future State: Proposed Vision For A National Data System

- Accurate, timely, transparent, comprehensive, and standardized
- Enables the ODT system to evolve policy, system design, patient care, and generate new knowledge
- Appropriately resourced with skilled personnel:
  - Front line data collection services
  - IT (hardware, software, infrastructure)
  - Data and project management
  - Analytics
- Accessible to all relevant stakeholders in Canada



# Data Sharing and Access Environmental Scan

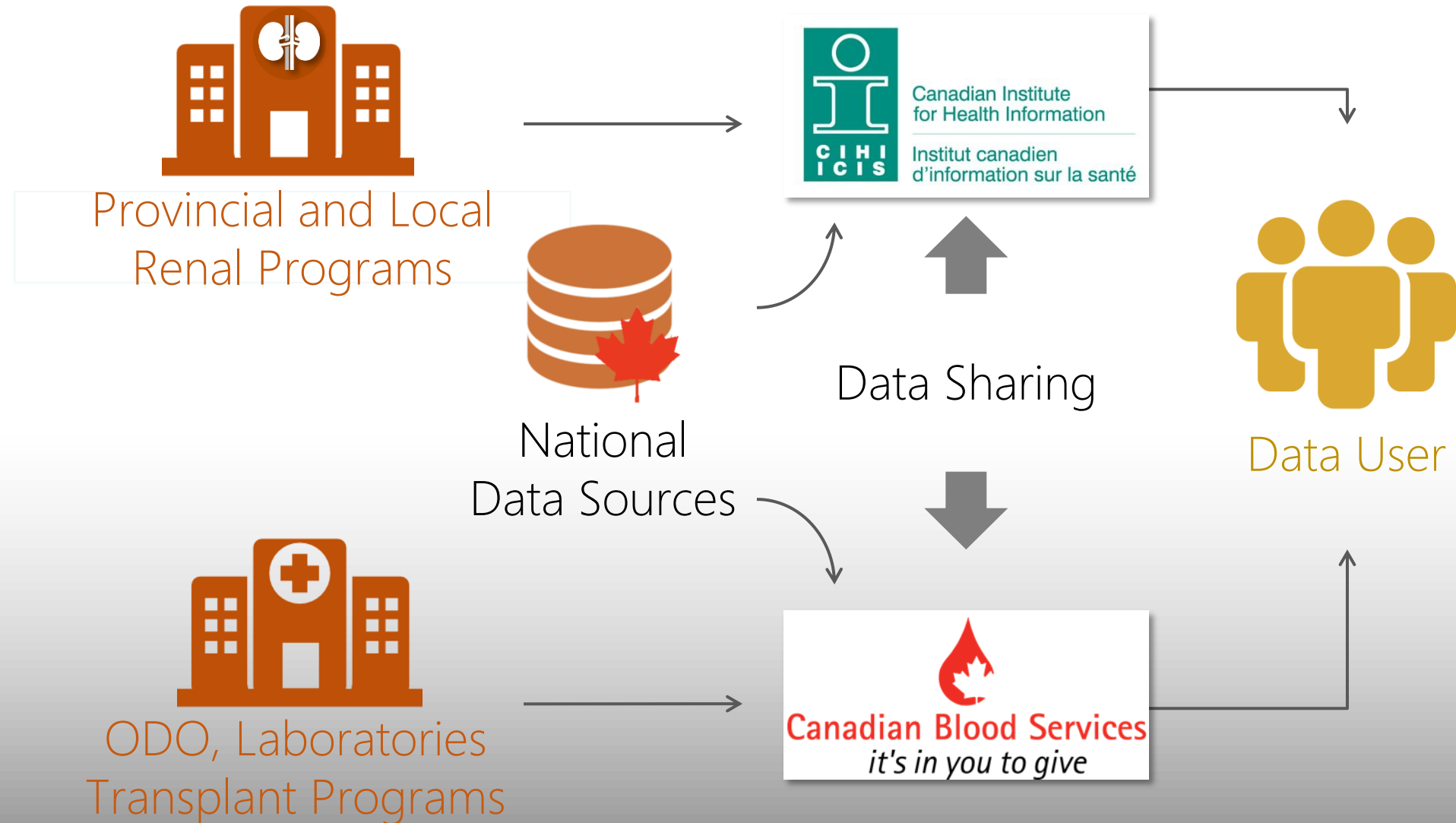


# Proposed Data System Principles

Data Governance	Working together to create and maintain a data system that responds to the needs of its users
Data Scope	Comprehensive, system-wide information generated throughout the entire ODT process
Data Compliance	Mandatory and timely comprehensive data collection and reporting
Data Standardization	Common definitions of data fields and documented standards
Data Quality	High quality, validated data (accurate, reliable, complete, and timely)
Data Stewardship	Patient and donor data that is collected by the system is protected
Data Accessibility	Data should be available to improve decision-making for the benefit of the ODT system
System Efficiency	Responsible use of public resources, as part of the public health care system



# National Data Model





# Predictive Analytics



# Challenges and Opportunities

Engaging stakeholders at all levels

Standardize work flow to improve efficiency, removing redundancies in the data collection process

Having the Resources to improve the management of data at transplant centres

Technology is no longer the limiting factor





# Thank You

