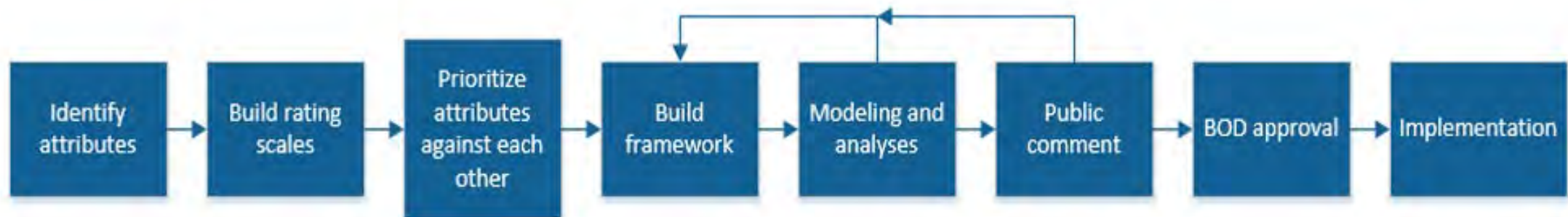


Continuous Distribution of Livers and Intestines Concept Paper

OPTN Liver and Intestinal Organ Transplantation Committee

Purpose of Paper

- Introduce the liver and intestinal organ transplant communities to continuous distribution
- Update the community on the progress to date
- Seek community feedback to help inform the new allocation framework



Concept Paper: Contents

- Provides an overview of continuous distribution and the policy development approach
- Summarizes attributes under consideration
- Outlines how attributes align with NOTA and the Final Rule
- Seeks community feedback on progress to date and path forward

Overview of Continuous Distribution

- Goal of continuous distribution is to **remove boundaries** between classifications that exist in the current allocation system
- Continuous distribution will result in:
 - Improved equity for candidates on the waitlist
 - Increased transparency in the allocation system
 - More potential for flexibility for future policy changes and implementation

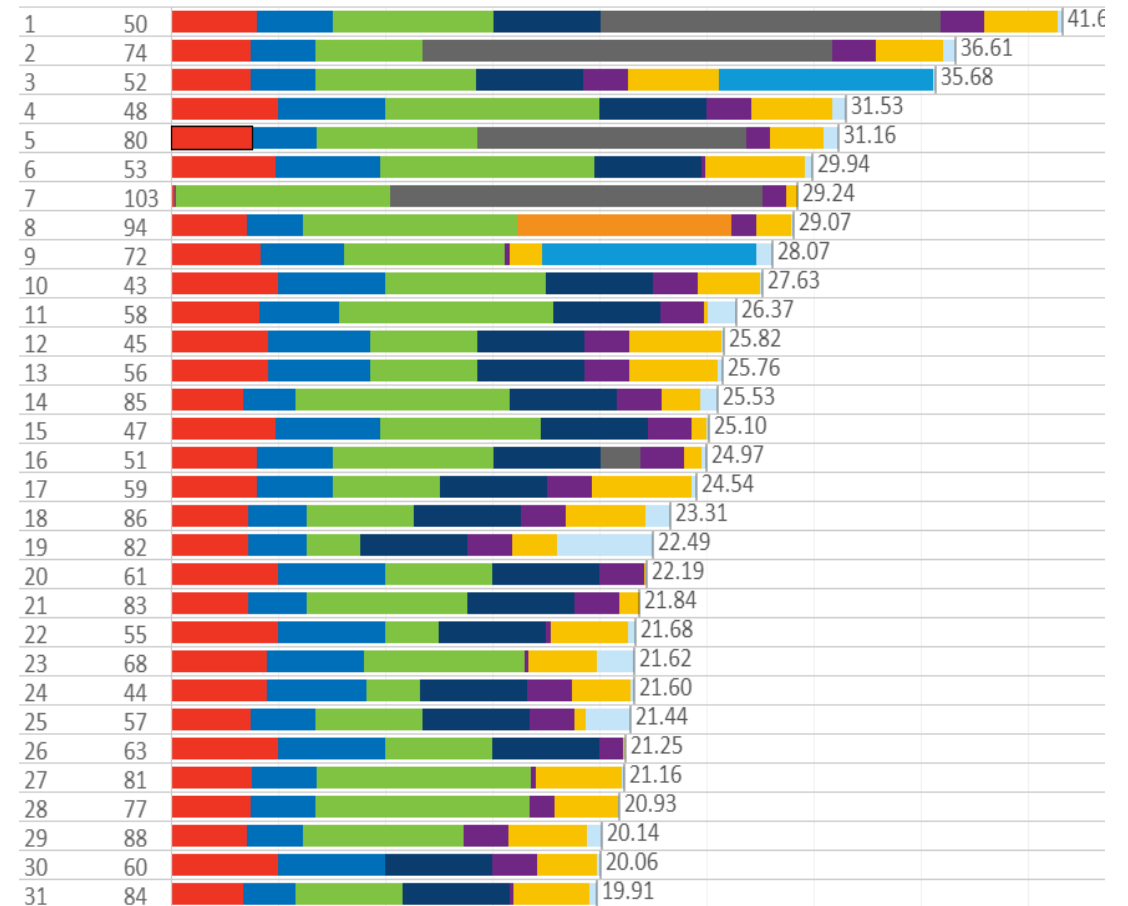
Current State vs. Future State

Classification Based System

Table 9-11: Allocation of Livers from Non-DCD Deceased Donors at Least 18 Years Old and Less than 70 Years Old

Classification	Candidates with a MELD or PELD score of at least	And registered at a transplant hospital that is at or within this distance from a donor hospital	Donor blood type	Candidate blood type
1	Status 1A	500NM	Any	Any
2	Status 1B	500NM	Any	Any
3	Status 1A	2,400NM and candidate is registered in Hawaii or 1,100NM and candidate is registered in Puerto Rico	Any	Any
4	Status 1B	2,400NM and candidate is registered in Hawaii or 1,100NM and candidate is registered in Puerto Rico	Any	Any
5	37	150NM	O	O or B
6	37	150NM	Non-O	Any

Points Based System

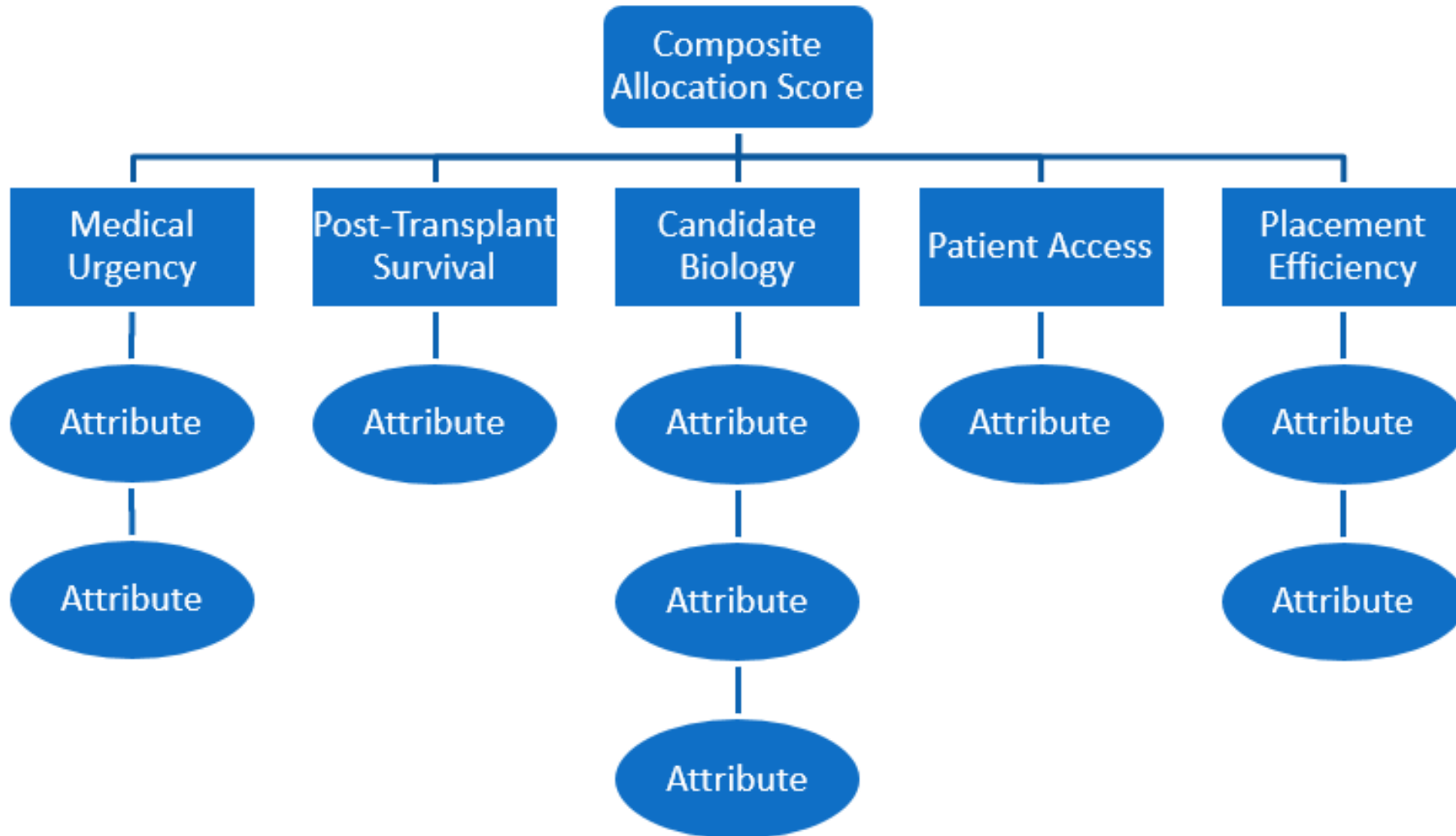


Overview of Continuous Distribution: CAS

- Continuous distribution will rank candidates based on a **composite allocation score**, or CAS, that aligns with the different requirements found in NOTA and the OPTN Final Rule:



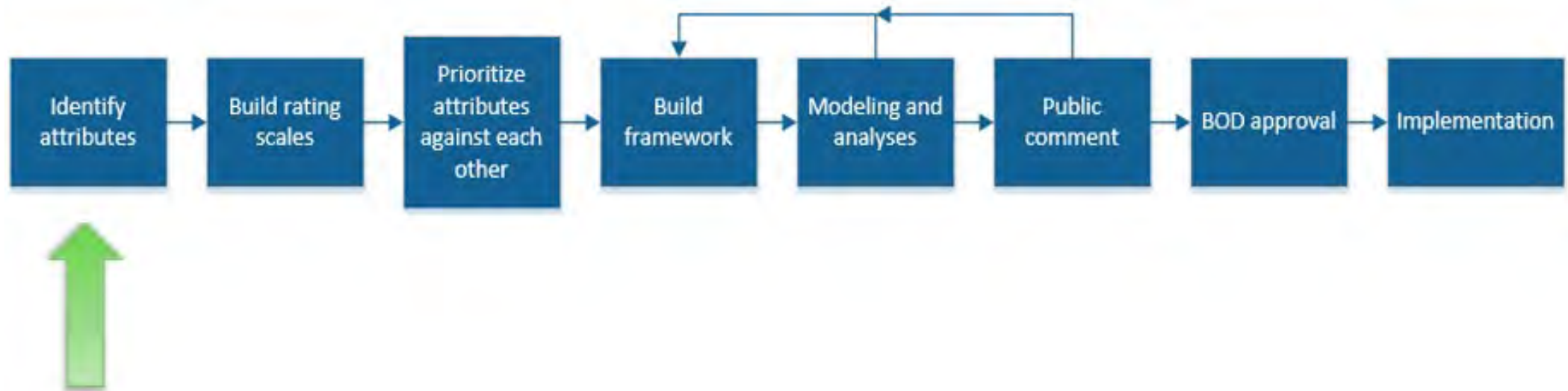
Continuous Distribution: Overview



Liver and Intestine Goals

Goals	Medical Urgency	Post-Transplant Survival	Candidate Biology	Patient Access	Placement Efficiency
Definition	Prioritize those with high mortality on the waitlist	Increase graft and recipient post-transplant survival/longevity matching	Increase transplant opportunities for candidates who are medically harder to match	Promote appropriate transplant access for all candidates	Consider resource requirements needed to match, transport, and transplant an organ

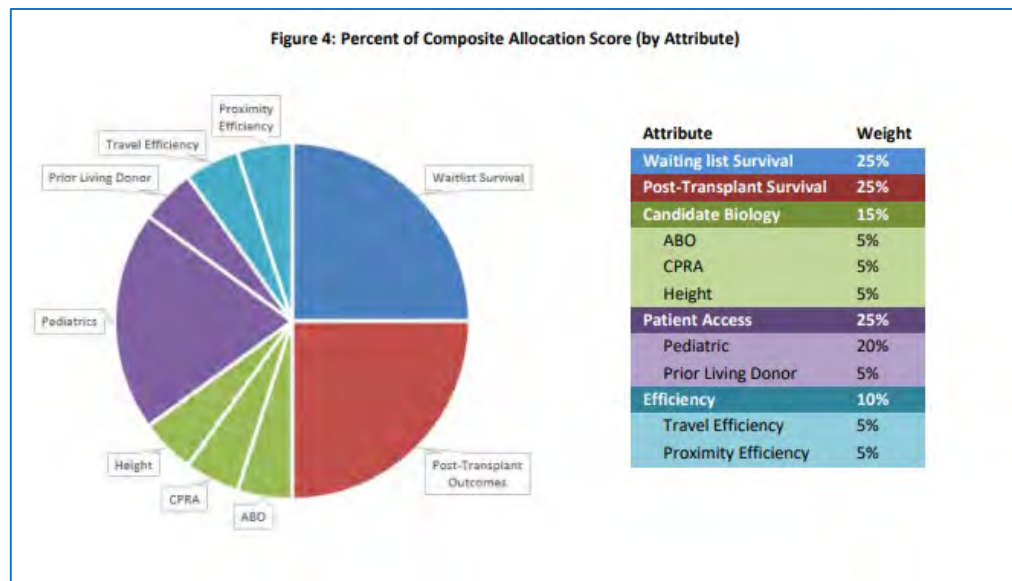
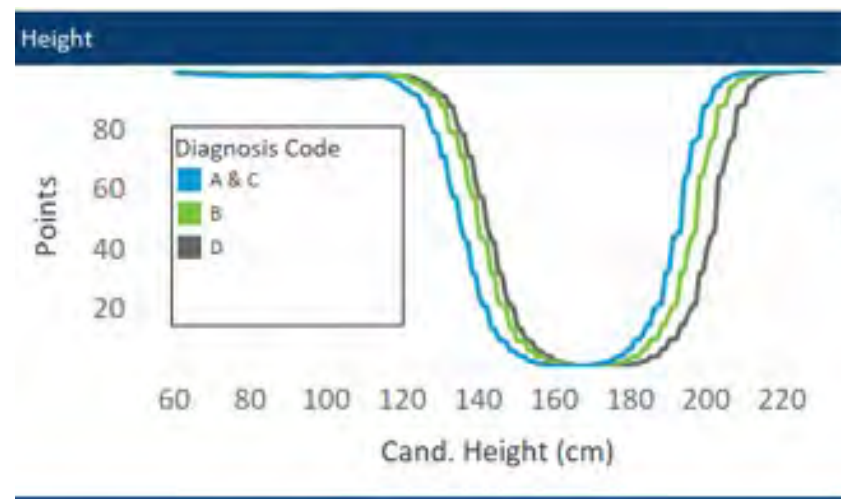
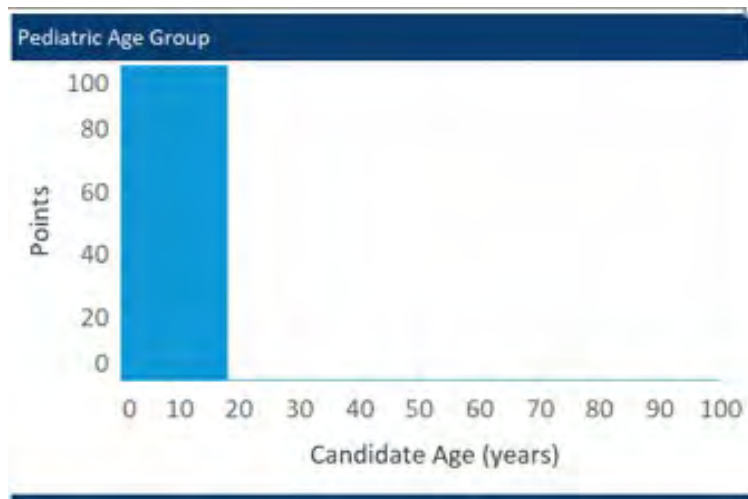
Project Progress



Identify Attributes

- Attribute: Criteria used to classify, sort and prioritize candidates
- Examples of attributes:
 - Model for end-stage liver disease (MELD) or Pediatric end-stage liver disease (PELD) score
 - Blood type compatibility
 - Distance between transplant program and donor hospital

Rating scales + weights: Lung examples



Identified Attributes

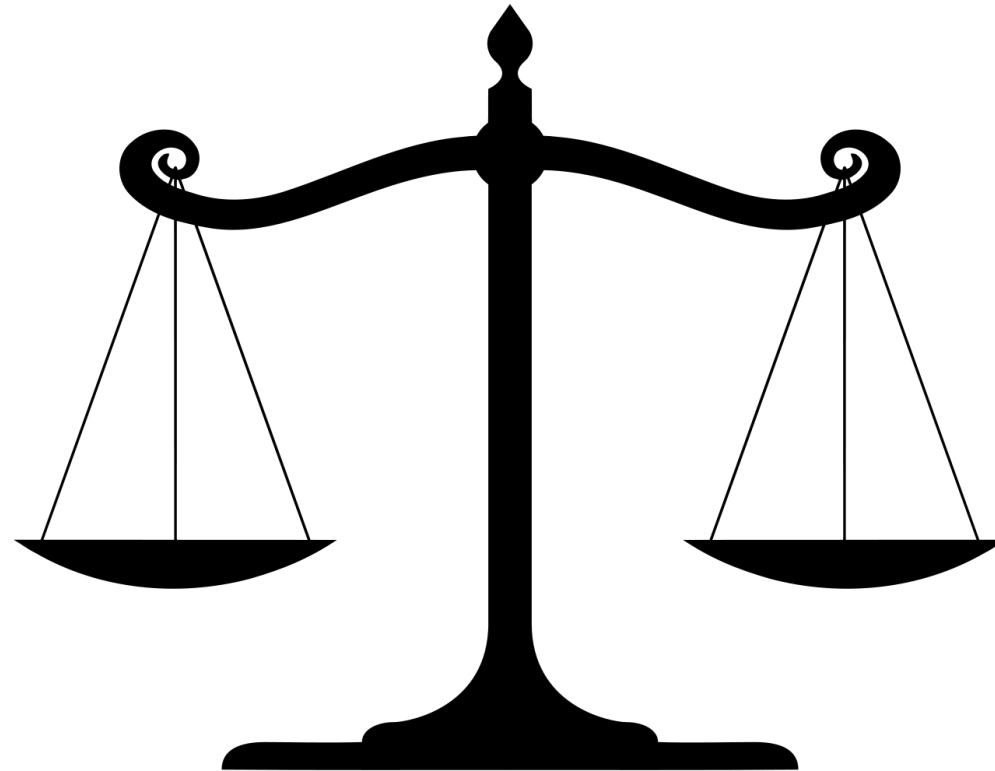
	Medical Urgency	Post-Transplant Survival	Candidate Biology	Patient Access	Placement Efficiency
In Current Policy	<ul style="list-style-type: none"> Status 1A/1B, MELD, PELD Candidate Diagnosis points (Status 1B) Liver-intestine registration 		<ul style="list-style-type: none"> Candidate blood type 	<ul style="list-style-type: none"> Candidate age Waiting time Liver-intestine registration 	<ul style="list-style-type: none"> Travel Efficiency Proximity Efficiency
Not in Current Policy	<ul style="list-style-type: none"> Hepatocellular carcinoma (HCC) stratification Optimized prediction of mortality (OPOM) 	<ul style="list-style-type: none"> Post-transplant survival 	<ul style="list-style-type: none"> Donor-recipient size matching Frailty Surgical complexity/re-transplant HLA sensitization 	<ul style="list-style-type: none"> Candidate Social Determinants of Health (SDoH) Prior living donor Willingness to accept a split liver transplant Supply/demand 	

Attribute Discussion, continued

What is the committee trying to balance?

Feasibility

- Time
- Resources
- Community consensus
- Impact on other organs



Benefit

- Size of impacted population
- Size of benefit for impacted population

Attribute Discussion, continued

- Attribute questions to consider:
 - What solutions, if any, have already been developed?
 - Are there competing solutions to this problem?
 - What research exists to show this is an effective solution(s)?
 - What would the committee need to do to develop a solution?

Attribute Discussion, continued

- Attribute questions to consider:
 - How complex are potential solutions?
 - Are there options that can be more easily incorporated than others?
 - How does the solution align with Final Rule, NOTA, committee/community sentiment?
 - Does the OPTN currently collect necessary data? If not, what needs to be collected?
 - Would the attribute benefit from additional time and research before incorporating into liver allocation?

What do you think?

- Which **new** attributes should the Committee consider including in the **first** iteration of continuous distribution?
 - HCC stratification
 - OPOM
 - Post-transplant survival
 - Donor-recipient size matching
 - Frailty
 - Surgical complexity or re-transplant
 - Candidates social determinants of health
 - Prior living donor
 - Willingness to accept a split liver transplant
 - Supply/demand