

**OPTN/UNOS Ad Hoc Geography Committee
Meeting Minutes
February 26, 2018
Conference Call**

Kevin O'Connor, MS, PA, Chair

Introduction

The OPTN/UNOS Ad Hoc Geography Committee met via teleconference on 02/26/2018 to discuss the following agenda items:

1. Polling Results for Organ Distribution Principle Statements
2. Frameworks/Models Discussion & Education

The following is a summary of the Committee's discussions.

1. Polling Results for Organ Distribution Statements

Summary of discussion:

The Committee Chair "Chair" introduced the Committee's previous discussions on geographic principles. It was reiterated that apart from the principle statements, there are considerations that must be taken into account when discussing organ distribution. These include:

- Allocation versus organ distribution
- Final Rule alignment
- Organ system resources and utilization
- Ethical principles
- Fair access for all

The Chair also stated that following the previous conference call, it is important to call attention to the over-arching principle identified by the Committee. This principle states that:

Any geographic constraints pertaining to the principles of organ distribution must be rationally determined and consistently applied to minimize the effect of geography on a candidate's access to transplantation.

A committee member stated that this principle may be self-evident, but it's important to have an overarching principle that emphasizes rationally determined and consistently applied geographic constraints. It was reiterated that this over-arching principle ensures alignment with the Final Rule and allows for a defensible system of distribution. A committee member stated that this over-arching principle is important for organ-specific committees to use when addressing the other principles identified by the Committee. The principles of distribution under the overarching principle were reviewed by the Committee. There were no additional comments on the principles previously developed by the Committee.

2. Frameworks/Models Discussion & Education

Summary of Discussion:

The Chair introduced that the purpose of the next segment of the conference call was to ensure sufficient understanding of the models of distribution reviewed in advance by the Committee and for the Committee to assess the alignment of these models with the principles developed by the Committee.

The Committee reviewed the "Neighborhoods" model. The details of the model were presented by Dr. Sanjay Mehrotra. The concept proposes that an organ be allocated to the DSA, along with all adjacent DSAs to the original DSA. The concept was subsequently modified with

“Optimized Neighborhoods” which built upon the DSA-Neighborhood concept by removing the DSA as the unit upon which the neighborhoods are built and uses other pre-determined geographical units. A committee member asked why the use of adjacent DSAs is different from the concept of concentric circles. It was stated that maintaining the DSA as a unit of distribution is beneficial and by utilizing adjacent DSAs, you essentially have a concentric circle but with defined boundaries. There were no additional questions for the Neighborhoods models. Dr. Mehrotra introduced the KSHARE model that uses DSA first distribution, followed by non-local distribution to low supply DSAs to balance geographic access. There were no questions regarding the KSHARE model.

The Committee reviewed the Optimized Districts model. The details of the model were presented by Dr. Sommer Gentry. The concept proposes mathematically optimized districts that balance supply to demand while minimizing organ travel. The districts are composed of DSAs that select the best solution of balancing supply to demand. A committee member asked for clarification on how the districts were modeled. It was reiterated that the difference in supply and demand across the districts would be minimized, and the constraints (travel time) would be maintained as the maximum amount of travel within the district solution. Dr. Gentry then presented the concept of population based circles. The concept proposes distribution circles based on the population density around a donor. A committee member asked how the population is measured in a given area. It was stated that the circles are based on census data within a zip code, so the circle is not a perfect circle, but have disrupted edges based on the zip code boundaries. A committee member stated that agreeing on a supply and demand metric is difficult and that a distribution system absent of supply/demand metrics may be advantageous. A committee member asked if it was premature to discuss models of distribution which utilize a supply metric, when currently there are new metrics for OPO performance that are being examined. The Chair stated that balancing supply and demand is a laudable goal, but it is not the current focus of the Committee which is to discuss distribution models and how they align with the principles of distribution.

The Committee reviewed the Distribution without Boundaries concept. The details of the model were presented by Dr. Jon Snyder. The concept proposes removing absolute geographic boundaries and instead use an allocation priority score which is defined as a medical priority score, plus a proximity score. The medical priority score is based on some medical urgency score (MELD, LAS, etc.) and the proximity score would be developed based on considerations for organ travel. A committee member stated that this concept is appealing because the pieces of the score appear to be something that is easily modifiable as time goes on. Another committee member agreed with that and added that this concept would be highly defensible from a legal perspective. A committee member stated that simplicity of the concept is appealing, but the details of how to arrive at a medical priority score and proximity score would require a lot of discussion.

The Committee reviewed the “hybrid approach” concept. These concepts include the idea of adding a geographic proximity circle to current regional boundaries. This concept is utilized in the recently board approved changes to liver distribution. The other concept uses population distance points to provide priority based on the distance between donor hospitals and transplant centers. The Committee also reviewed 3 additional models that include the “OrganJet” model which focuses on demand for transplant by moving candidates to organs rather than changing the distribution of organs. Perfusion shipping, which detailed shipping organs to perfusion centers before their final destination, and finally, the current method of distribution that utilizes DSAs, Regions, and national distribution. A committee member asked if the group should assume that all of these concepts discussed today are as readily programmable compared to one another. The Chair stated that this shouldn’t be assumed and clearly some models would likely be more complicated than others, and this should continue to be a topic for discussion moving forward.

Upcoming Meetings

- March 20, 2018 Teleconference
- March 26 and 27, 2018 in-person meeting in Chicago
- April 13th, 2018 Teleconference