

Metrics of Disparity and Optimization of Distribution

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First, a thanks to the Ad Hoc members

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The Ad Hoc Subcommittee on Metrics of Disparity and Optimization of Distribution seeks to

further define the parameters that should be employed for a *patient based* distribution system.

Areas of Interest

- How exactly is disparity defined?
- How do we define supply to demand ratios?
- Should candidates with exception points be excluded in the modeling for broader sharing?
- Is MELD the appropriate metric which determines a fair allocation system
- What other metrics beyond median MELD at transplant should be incorporated into a fair distribution system?
- Should changes be made to the constraints previously set by the Committee?
- Should some local level of priority be considered?
- How will minority or economically disadvantaged populations be affected?
- How will small programs in isolated areas be affected?

The Definition of Disparity

- OPTN/UNOS Board of Directors, November 2012 Resolution specifically addresses geographic disparity.

“Geography is often thought of as the generation and interpretation of maps that describe the physical world. Geography is far more than that, but the physical description of boundaries has a great deal to do with how we view communities and how we construct society (Giddens 1984).”

Geographic Disparity in Access to Transplantation

A preventable difference in opportunity to achieve optimal health due to geographical variation in access to transplantation.

Metrics

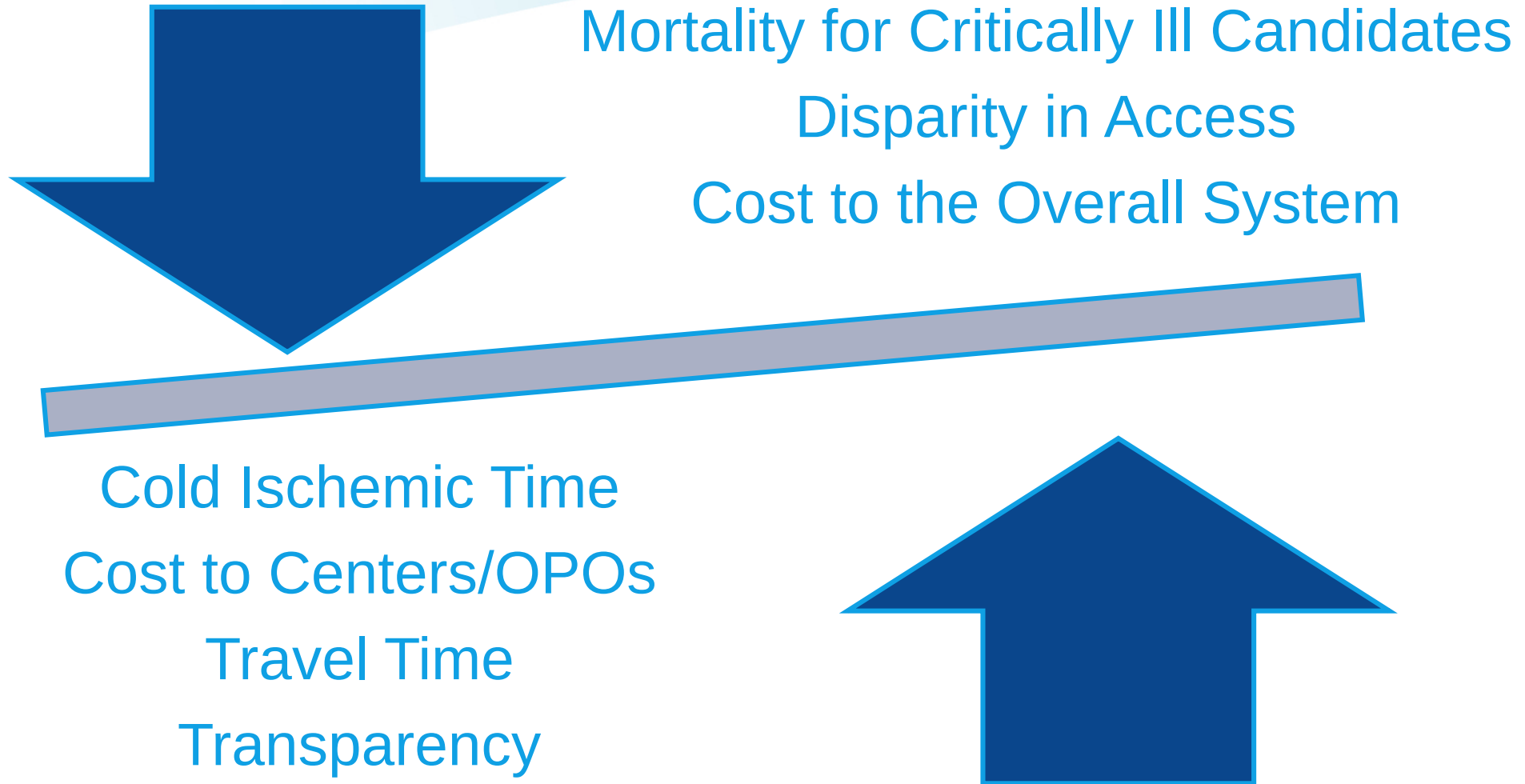
Disparity metrics such as differences in the median/mean MELD at transplant, rates of death on the waiting list, total deaths due to liver disease, or transplant rates by DSA or Region.

Summative metrics such as total deaths or transplants.

The Final Rule lists both summative and disparity metrics.

But there may be **trade-offs** such as the increase in transport time and distance traveled required to achieve a reduction in disparities.

Tradeoffs, What is acceptable?



Exclusion of Exceptions

Lab MELD

vs.

**Match
MELD**

Metrics Beyond MELD at Transplant

Actual liver donors	Eligible Deaths	Total Deaths	Variation
• Actual liver donors • Actual liver donors/total waitlisted patients with MELD/PELD > 15	• Eligible deaths/total waitlisted patients • Eligible deaths/total waitlisted patients with MELD/PELD > 15	• Total deaths/total waitlisted patients • Total deaths/total waitlisted patients with MELD/PELD > 15	• Variation in eligible deaths/total waitlisted patients with MELD/PELD > 15 across DSAs • Variation in total deaths/total waitlisted patients with MELD/PELD > 15 across DSAs

The Issue of Supply to Demand

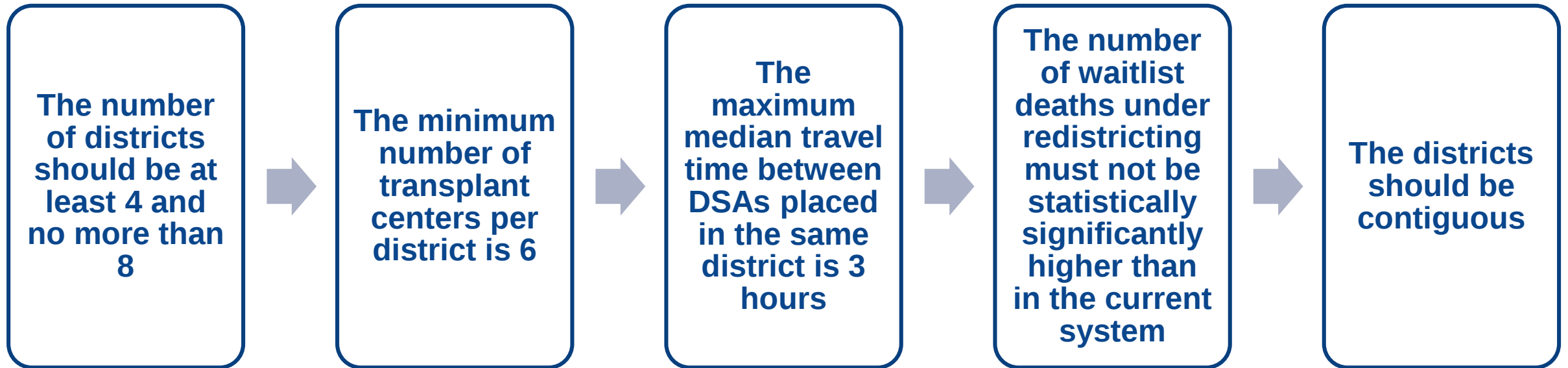
Supply:

Actual liver donors, eligible donors for purposes of transplant (as defined by OPTN and reported by OPOs), and total deaths.

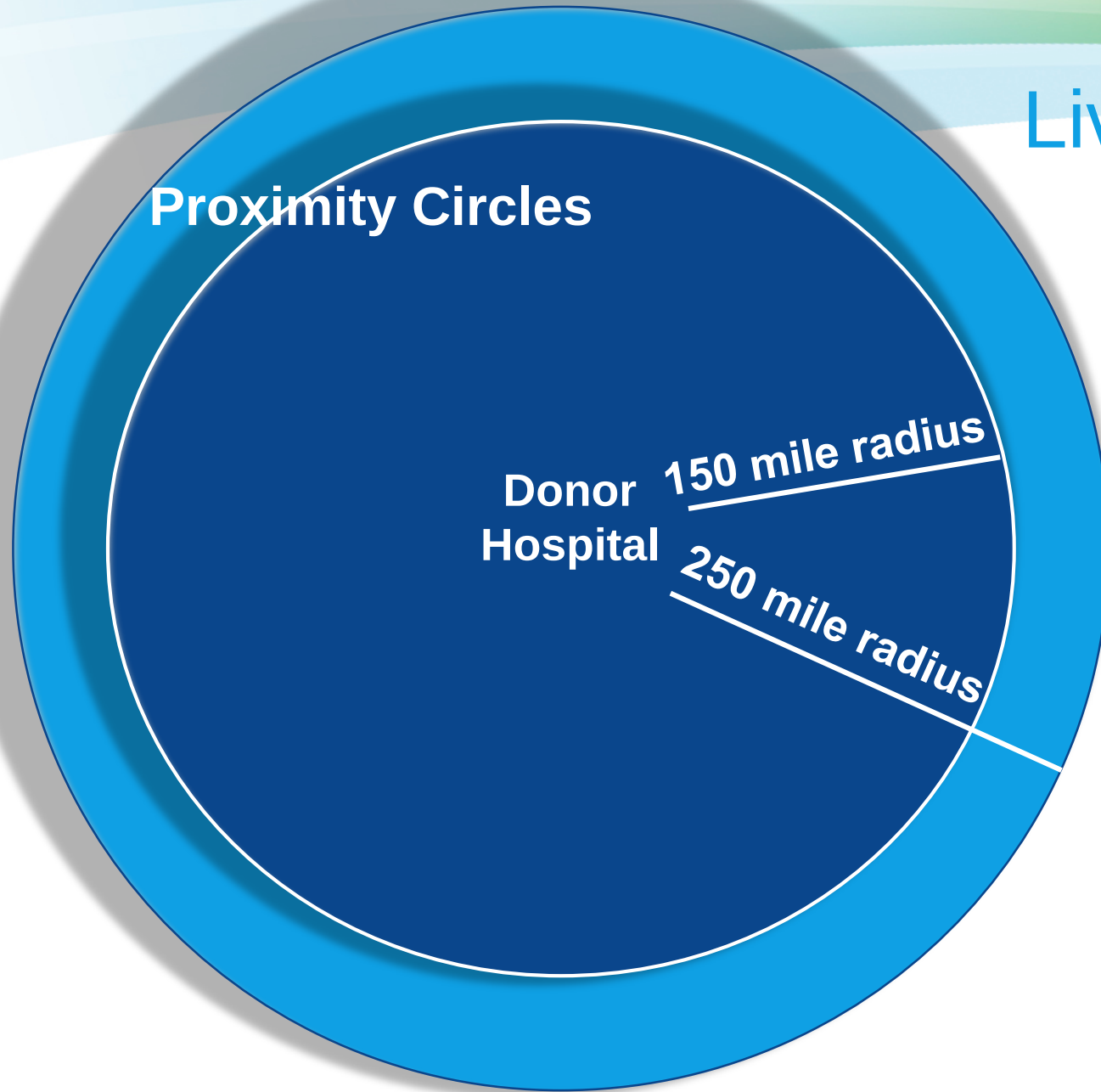
Demand:

Total waitlisted patients, total waitlisted patients with MELD > 15.

Could Changes to the Constraints be Beneficial?



Priority for Proximity



Liver Proximity Score
(LPS)
MELD+ X Points

Now the SRTTR will present the updated findings.
Thank you!