

# **Redistricting – Another Perspective**

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**The status quo is intolerable**

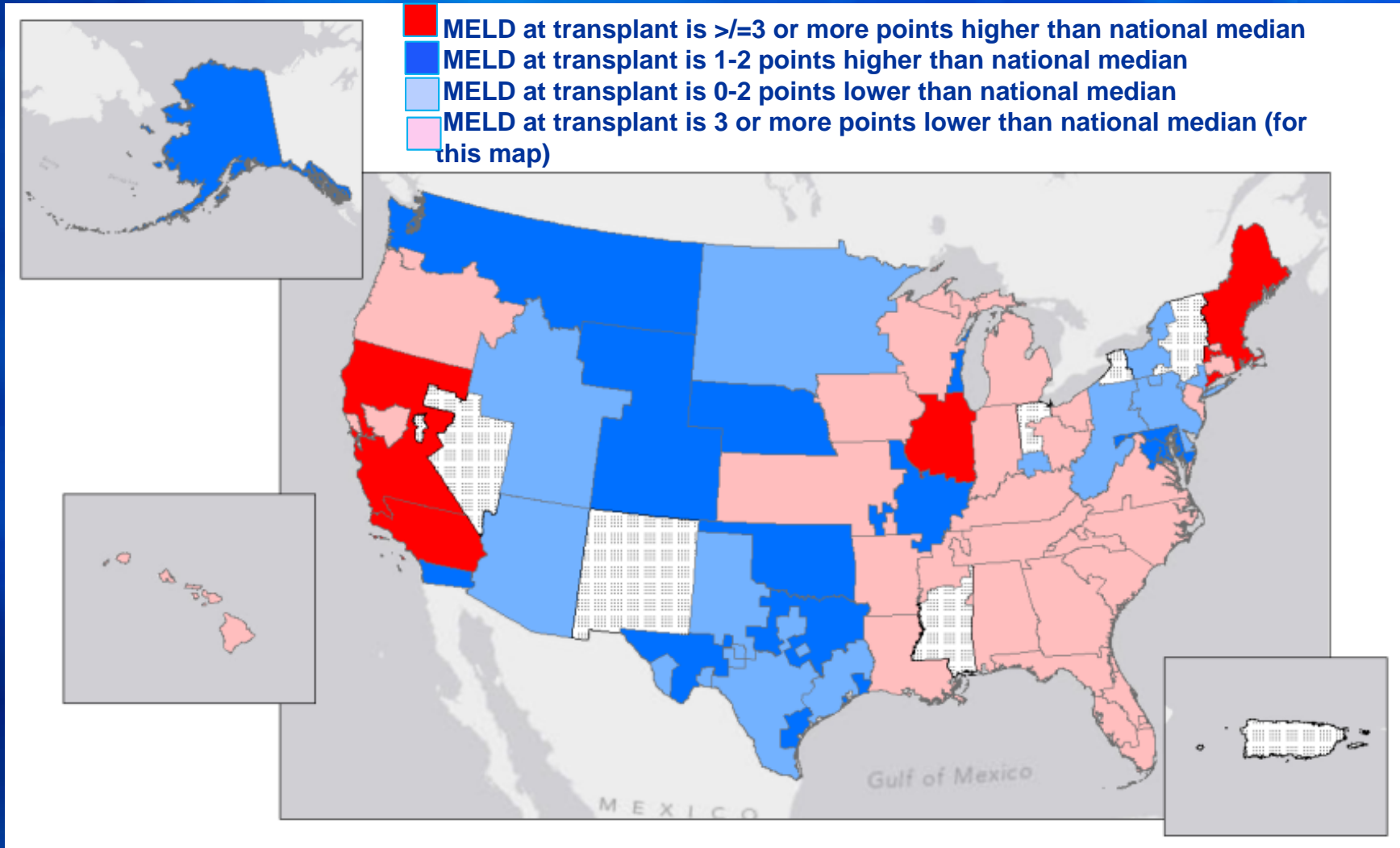
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**There is too much geographic  
disparity.**

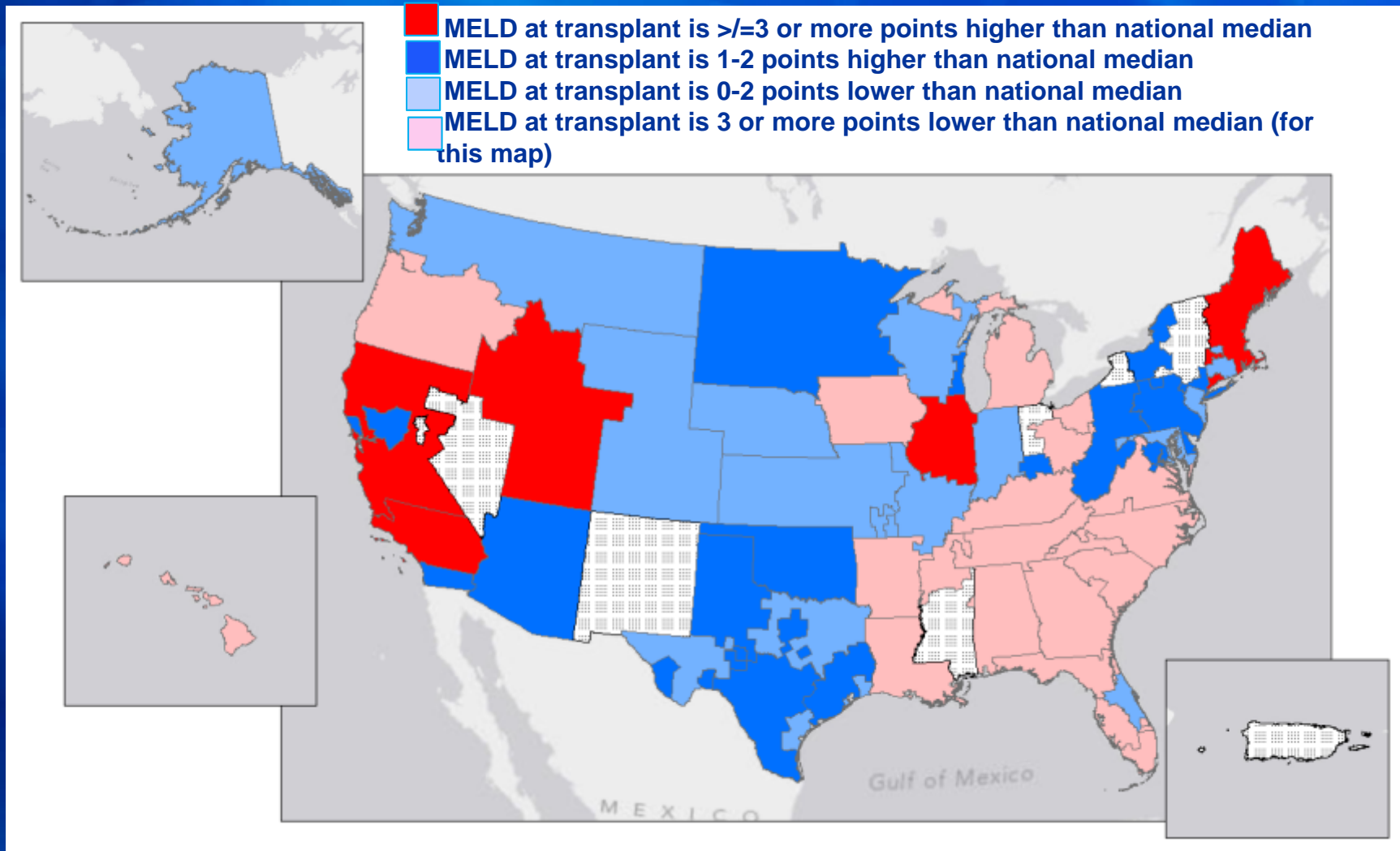
**Did Share 35 achieve its goals of:**  
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# Existing geographic disparity



# Impact of “Share 35”



## Share 35 and Geographic Disparity in MELD at LTx

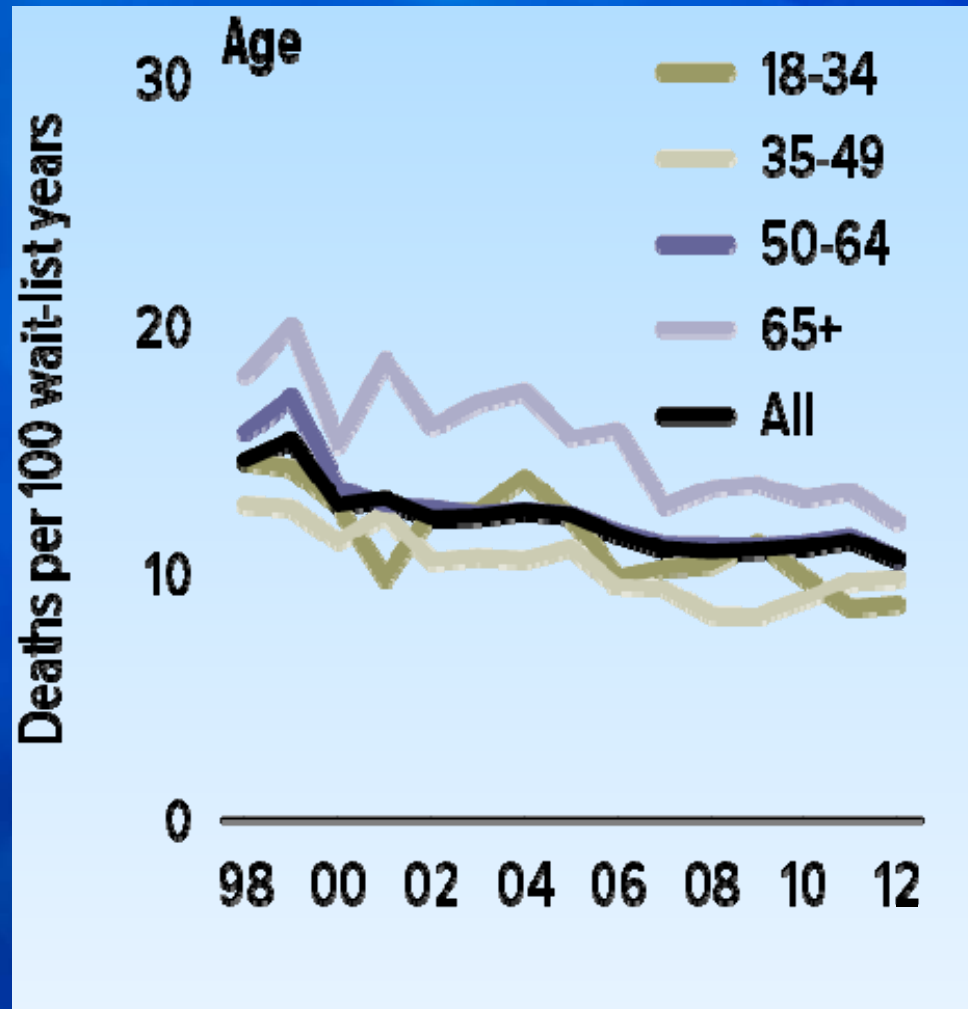
- Variance across DSAs in pre-Share 35 era: 14.3
- Variance across DSAs in post-Share 35 era: 17.6

*Geographic disparity **worsened** under Share 35.*

**Did Share 35 achieve its goals of:**  
***1) diminishing geographic disparity?***  
***2) decreasing waitlist mortality?***



# Pre-transplant mortality for patients wait-listed for a liver transplant



Waitlist mortality has fallen from 15% in 1999 to 10% in 2012

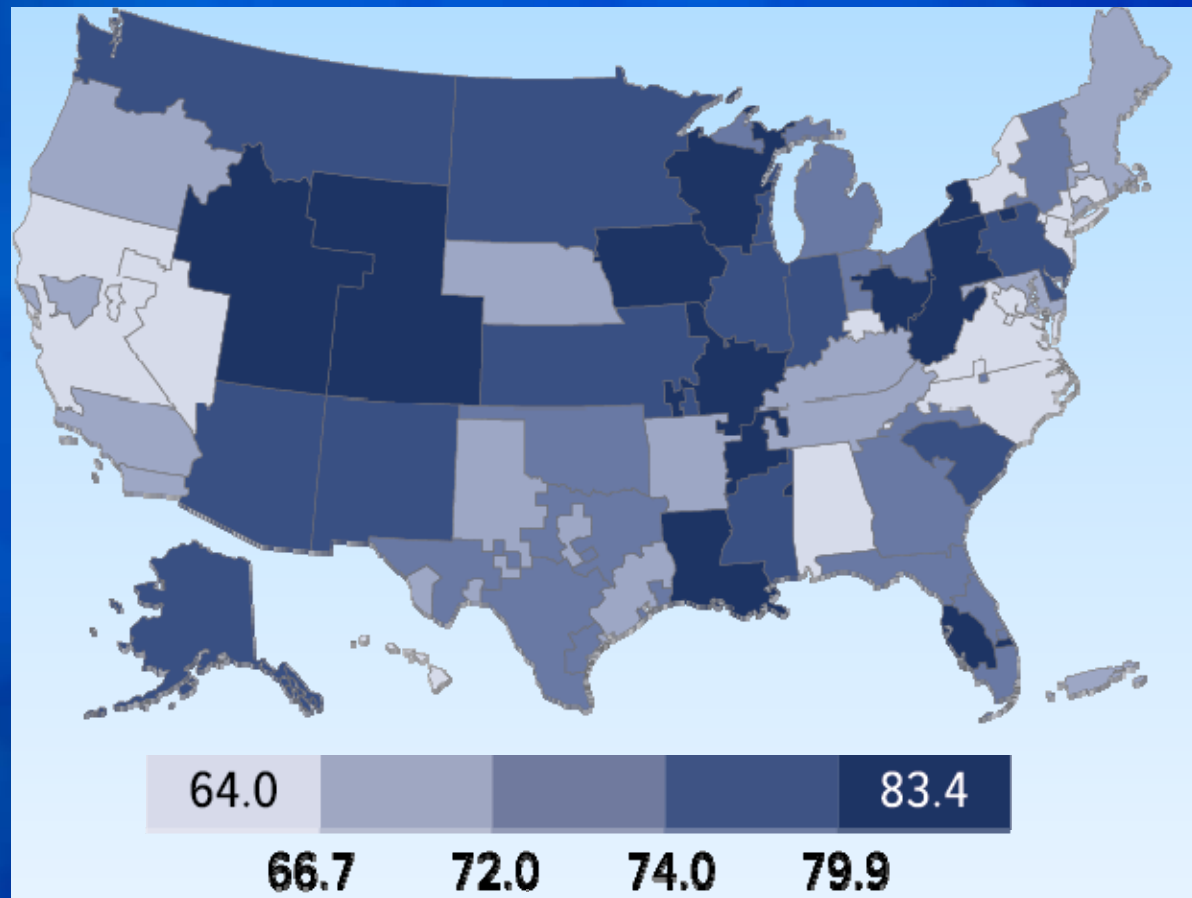
# Share 35 and Pre-LTx Mortality

Despite an additional 326 donors (6,029 pre vs. 6,357 post):

- Numerically increased regions 1, 3, 4, 6, 7
- Numerically decreased in regions 2, 5, 8, 9, 10, 11

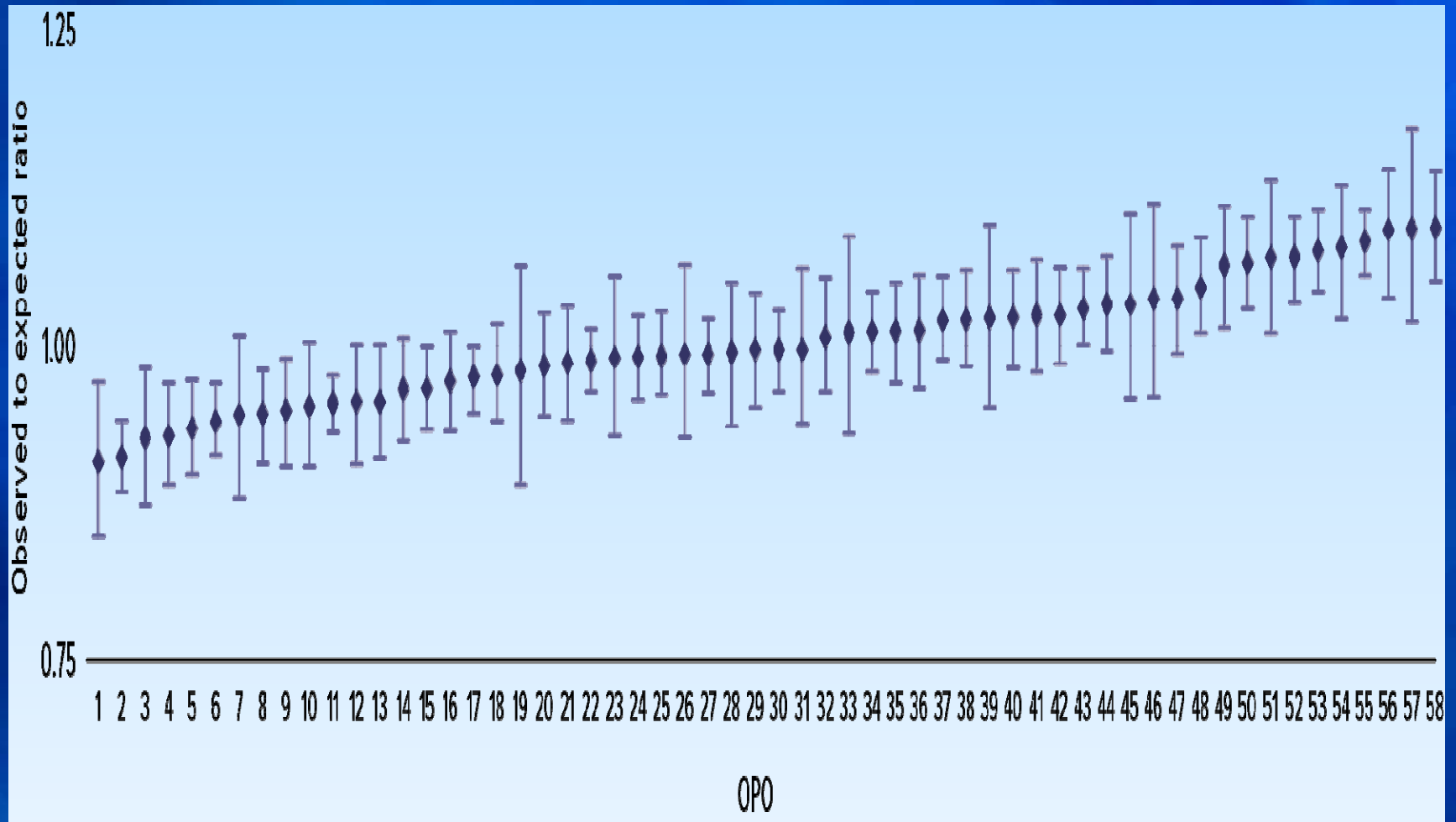
*The impact of Share 35 on waitlist mortality depends on where you live and needs to be adjusted for existing temporal trends.*

# Overall donation rates (per 100 eligible deaths), by DSA

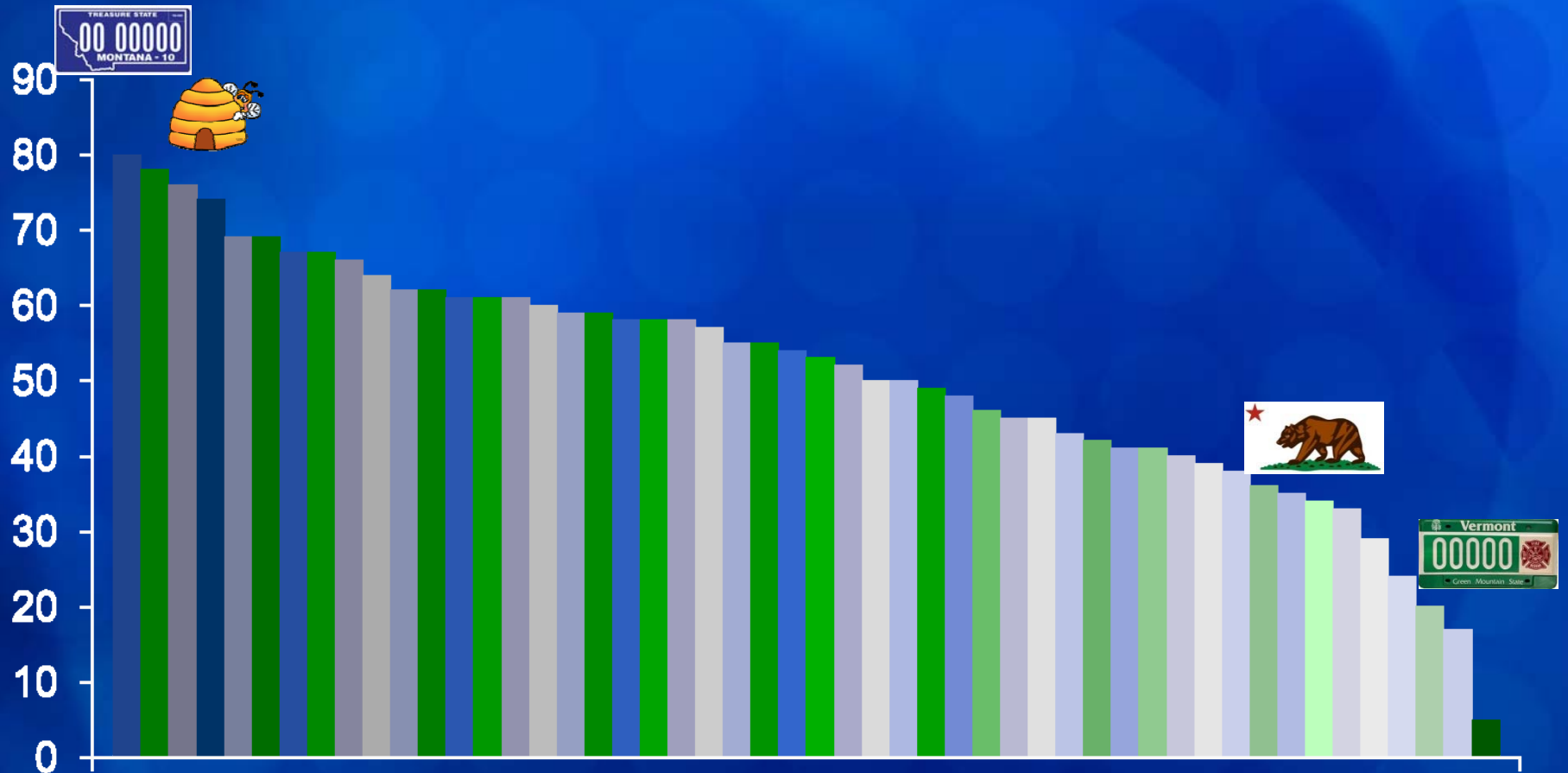


Donation rate varies by 30% between OPOs

# Donor yield: observed to expected ratio (O/E), 2011–2012



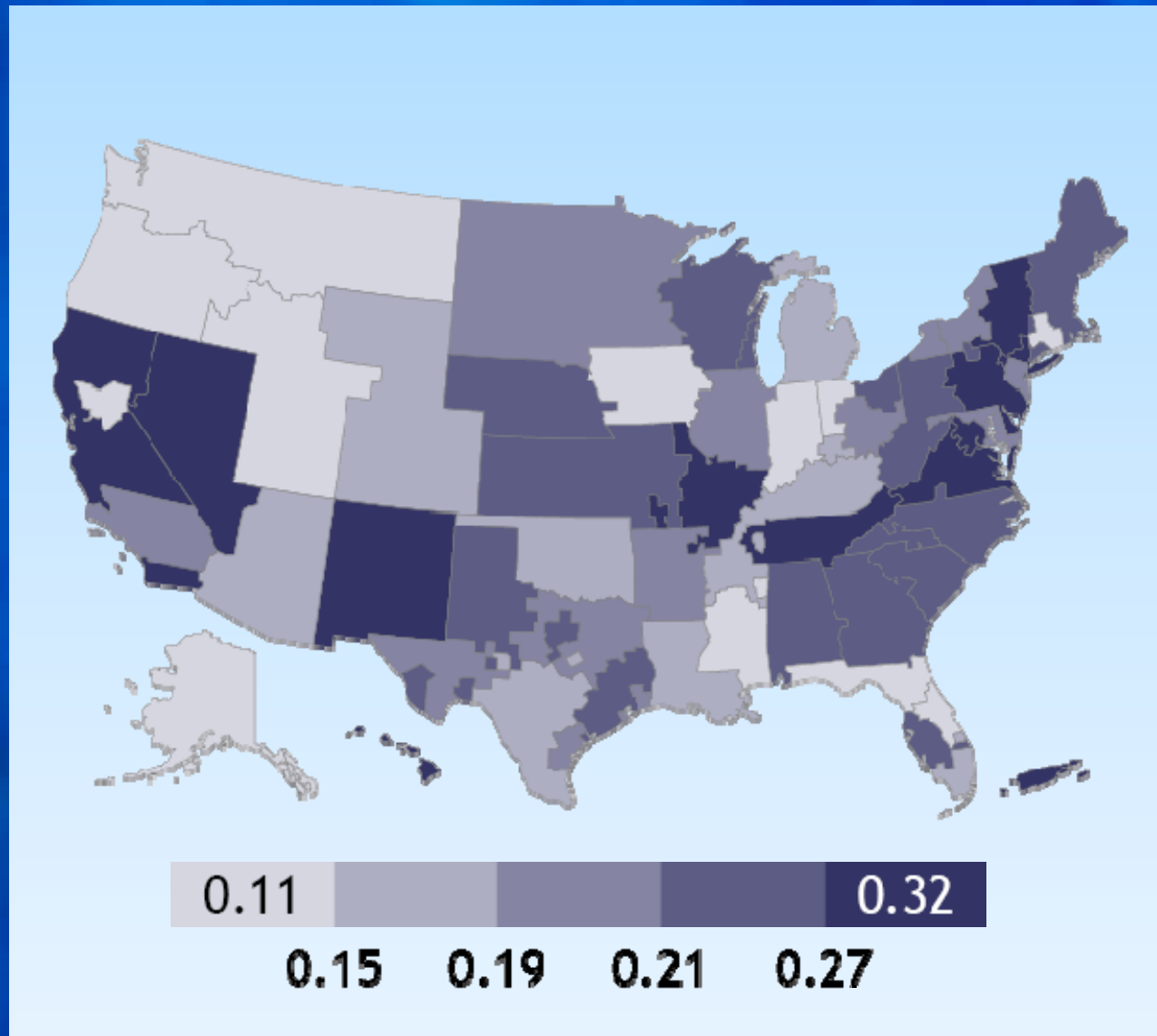
# Organ Donor Registration Rates



**State**

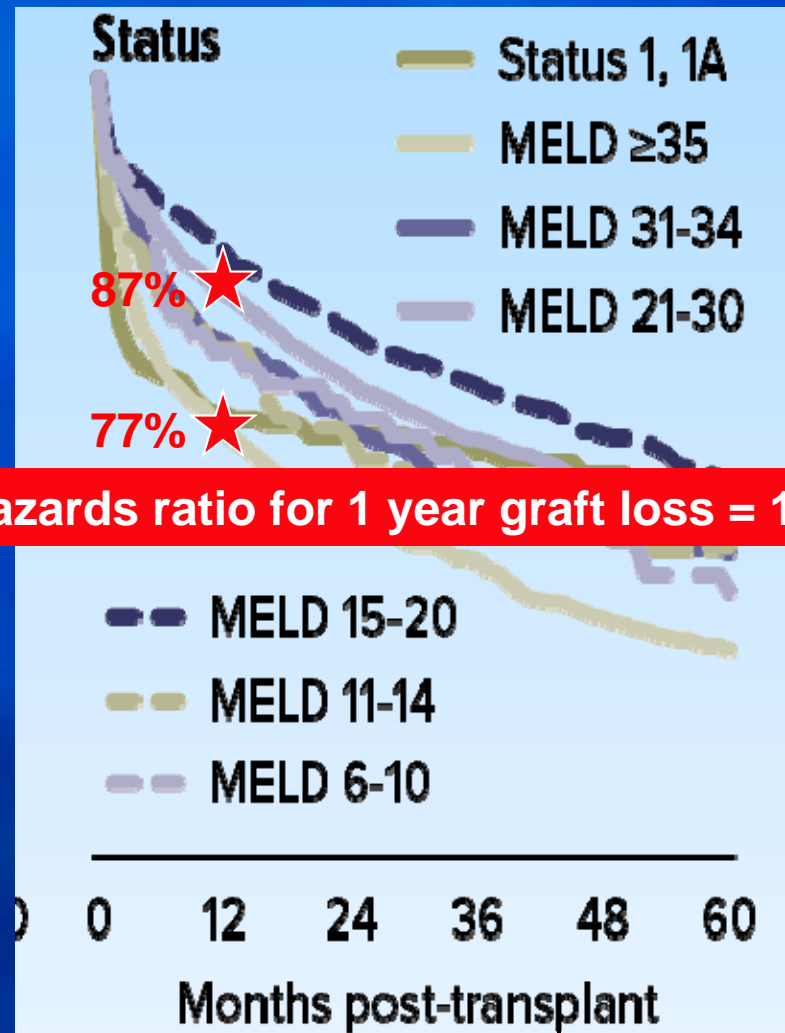
Donate Life America. "2014 National Donor Designation Report Card." June 2014.

# Variation in the use of ECD donors by DSA



# Impact on Post-LTx Outcomes

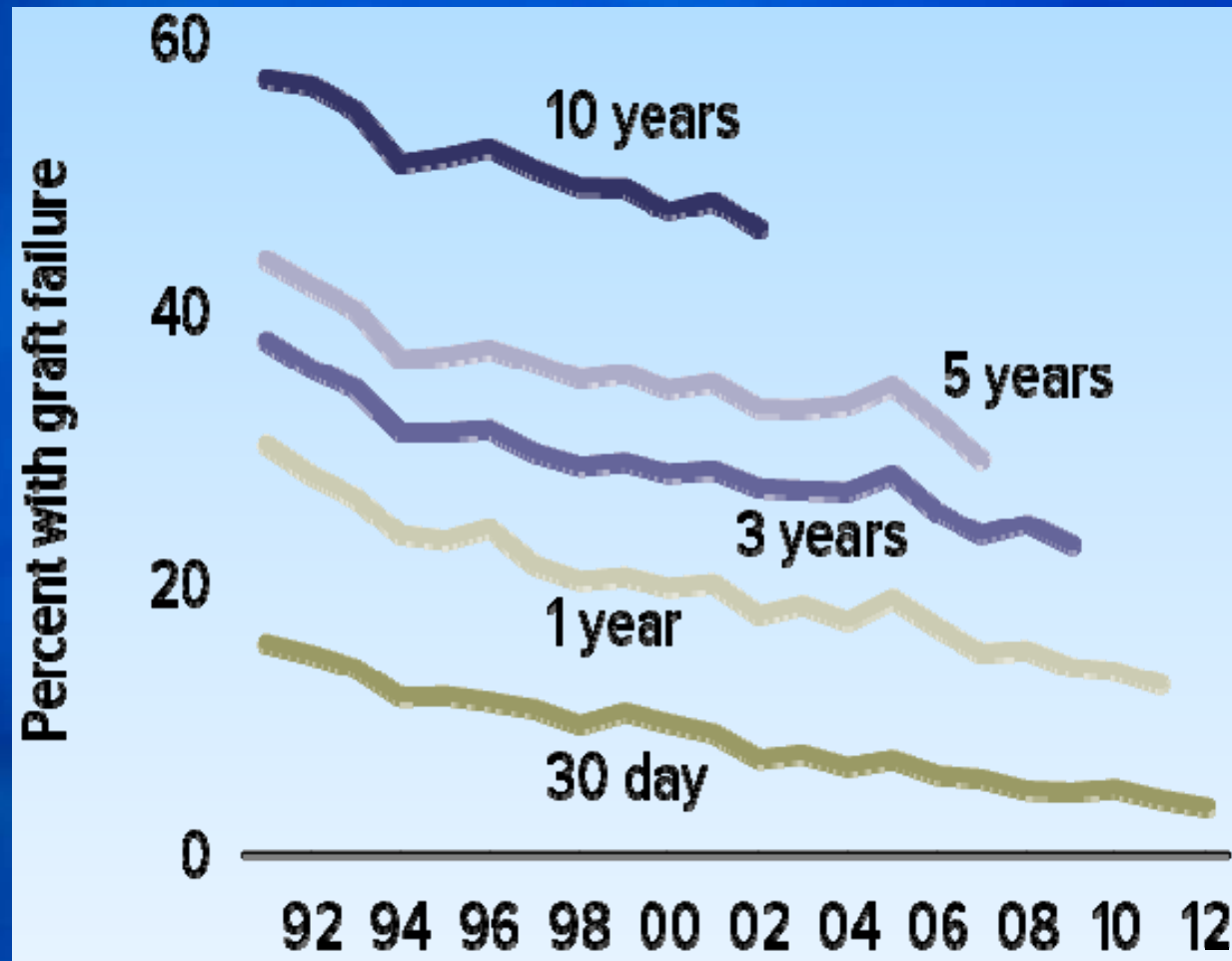
# Graft survival among adult liver transplant recipients transplanted in 2007: deceased donors



Hazards ratio for 1 year graft loss = 1.7



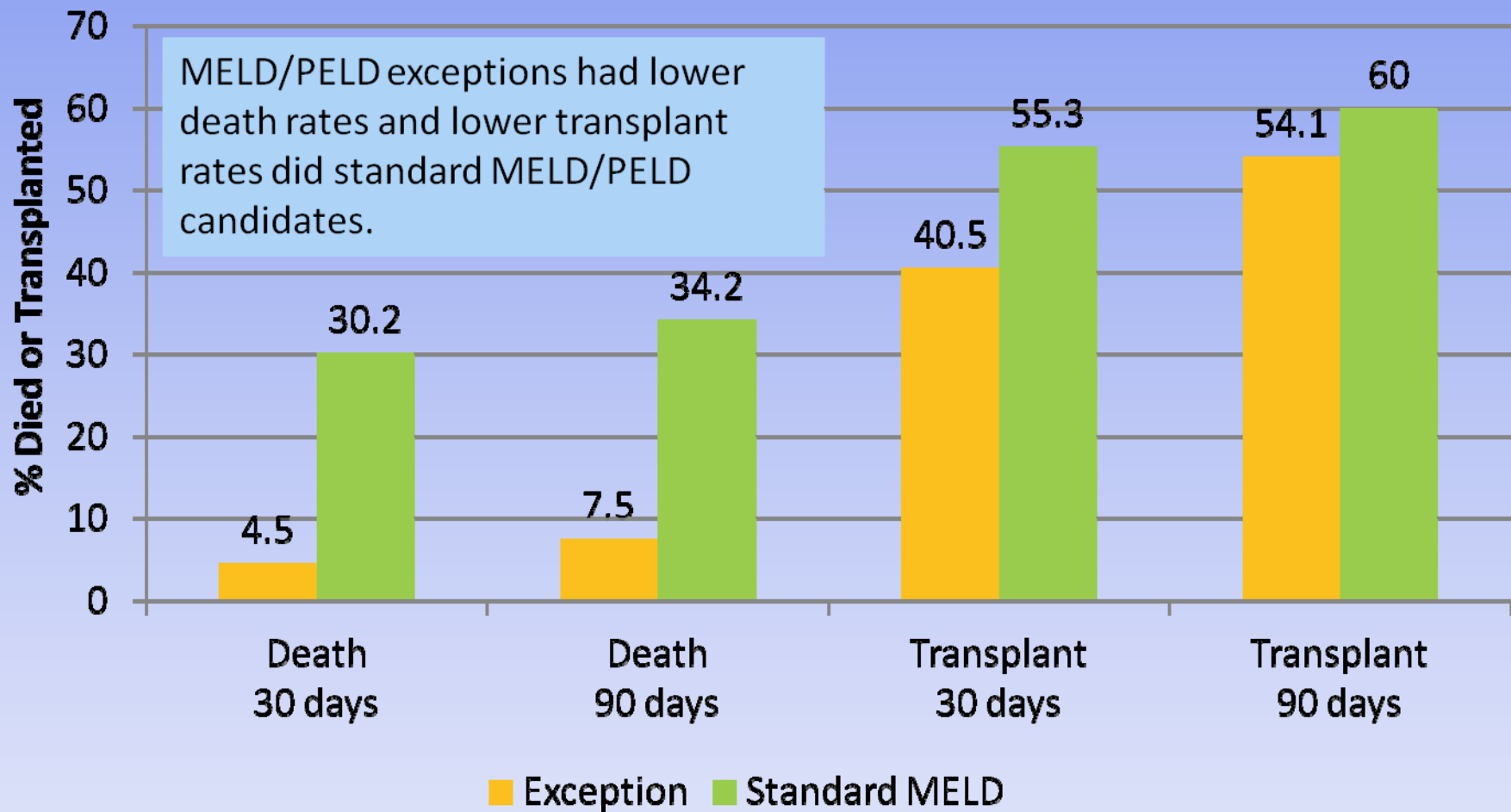
# Graft failure among adult liver transplant recipients: deceased donor



**Impact on graft loss is still evolving  
and will need to be adjusted for  
temporal trends.**

# **Benefit, Cost and Conflict of Interest**

# MELD/PELD 35+ Candidates: Rates of Death\* and Transplant for Exceptions and Standard Candidates



\*Includes candidates removed for too sick

**There is an indisputable need for  
redistricting *but.....***

# Summary of Concerns

- The use of legacy data may not be reflective of current practices.
- Negative effects of a proposed policy change on outcomes need to be fully considered, e.g. on posttransplant mortality and removal from waitlist due to illness.
- Neither “Share 35” nor the proposed redistricting accounts for the one item that could solve the donor shortage: improved organ donation rates. A new allocation system should **preserve and enhance local accountability** for Organ Procurement Organization (OPO) performance (e.g. for donations per 100 eligible deaths).

# Summary of Concerns

- Reallocating livers to larger metropolitan transplant centers on the East and West Coasts has the unintended consequence of shifting resources away from rural, relatively poorer populations, and centers, thereby decreasing access for communities with high donation rates and potentially affecting the viability of smaller programs in geographically remote areas.
- Sharing for higher MELD scores should confer a survival benefit. **Sharing should, in general and with few exceptions, be limited to patients with laboratory value-based MELD scores.** More proximate local recipients should be favored if their MELD score is similar (e.g. differential  $\leq 2$ ) to a more geographically remote recipient.
- Insufficient consideration has been given to cost.

# Summary of Concerns

- A new allocation policy should produce a meaningful improvement in outcomes, including waitlist mortality, posttransplant mortality, graft loss and cost.

**We propose that *a priori* requirements be set for projected and actual improvements** (e.g.  $\geq 5\%$  change in a key outcome and benchmarked against standard economic metrics, such as cost per QALY).



# Reform in allocation – Two Requests

- UNOS release data that will allow individual transplant centers to determine the effect the modeling scenario(s) will have on their volumes and potential future sustainability
- More time be allowed to not only fully understand the implications of the current “Share 35” policy but also to meaningfully address the concerns outlined above.