



More Money and More Miles: The Hidden Costs of Donor Procurement with the New Heart Allocation System

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Relevant Disclosures

- B.C. Lampert, A.K. Ravichandran, C. Patel, P. Shah, W. Hiesinger, D.A. Campbell, J. Slivnick, A.K. Hasan, C. Salerno, J. Thomas, E. Seasor, A.M. Ganapathi, B.A. Whitson: None
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Background

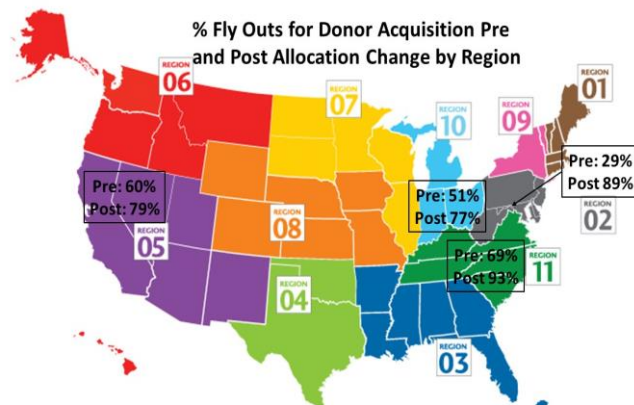
- Extensive changes to UNOS adult heart allocation policy were implemented October 2018
 - Better stratify medically urgent patients
 - Provide more equitable geographic distribution of donor hearts
 - Local donor service areas were eliminated
 - Hearts now first considered by highest status patients within 500 nautical miles
- Evaluated the impact of the new system on the mode and associated expense of procurement travel

Methods

- Retrospective analysis from 5 centers
 - 5 different states
 - 4 different UNOS regions (2, 5, 10, 11)
- Pre-allocation (10/1/2016-10/17/2018) compared to post-allocation (10/18/18-8/31/2019):
 - Share of procurements requiring flight vs. local transportation (all centers)
 - Distance from donor hospital to transplant center (4 centers)
 - Cost of transportation (4 centers)

Results

- 693 transplants – 477 pre-change and 216 post-change
- Significant increase in flights:
 - 274 pre-change (57%) vs 182 post-change (84%)
 - All centers with increase, but notable geographic variation



Results

- Average travel distance (excluded center from region 5)
 - Pre-change: 193 miles
 - Post-change: 269 miles
 - $p < 0.0001$
- Average transportation costs (excluded center from region 5)
 - Pre-change: \$6,812.07
 - Post-change: \$12,383.64
 - $p < 0.0001$

Conclusions

- Following the 2018 UNOS heart allocation change, proportion of flights and distance traveled significantly increased
- Average travel cost for procurement nearly doubled
- Increased procurement resources or improved cooperation for local organ procurement should be considered in the new allocation system

Thank You



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