

Researchers identify critical need for standardized organ donation metrics

July 20 2017

Across the country, there are 58 Organ Procurement Organizations (OPO), which are responsible for recovering and distributing organs and tissues for life-saving and life-enhancing transplants. Each OPO is designated to serve a specific geographic area and works with the transplant centers in their area to match donors with recipients. With more than 117,000 people awaiting a lifesaving organ transplant, these OPOs work very hard to identify as many organ donors as possible to help save these lives. But according to a study published today in the *American Journal of Transplantation*, there seem to be significant differences in the results of these efforts.

Researchers from the Perelman School of Medicine at the University of Pennsylvania, in partnership with ORGANIZE—a non-for-profit organization based in New York which leverages health data to end the organ donor shortage by applying smarter technologies, utilizing social media, building more creative partnerships, and advocating for data-driven policies—The Bridgespan Group—a global nonprofit organization that collaborates with mission-driven leaders, organizations, and philanthropists to break cycles of poverty and dramatically improve the quality of life for those in need—and Gift of Life Donor Program—an OPO which serves the eastern half of Pennsylvania, southern New Jersey, and Delaware—evaluated the metrics and criteria used to measure OPOs across the country, and found significant discrepancies in how potential donors are evaluated and identified.

"Our data demonstrates that thousands of people eligible to become a

deceased-organ donor every year never realize that opportunity, and current measures of OPO performance fail to capture these lost opportunities," said lead author, David S. Goldberg, MD, MSCE, an assistant professor of Medicine and Epidemiology at Penn.

In this study, researchers utilized national data on inpatient deaths in the United States to estimate the potential supply of deceased organ donors, and used these data, in combination with State Inpatient Databases (SIDs) to develop new metrics of OPO performance that better reflect the true deceased donor supply in each geographic area. The research team identified potential deceased donors based on specific criteria such as a ventilated inpatient death of a patient 75 years or younger, without multi-organ system failure, sepsis, or cancer, and whose cause of death was consistent with organ donation—which includes neurologic determination of death (DNDD) or circulatory determination of death (DCDD). To validate their estimates of a potential deceased donor in administrative data, the team compared their approximations to patient-level data from two large OPOs in order to determine the potential for donation

"The need for organ donation continues to grow with ongoing advancements in transplantation, making the need for standardization increasingly imperative," said study co-author Howard M. Nathan, president and CEO of Gift of Life Donor Program. "Our mission as OPOs is to save lives and we are all committed to doing everything we can to make donation possible. As the nation's leader in the number of donations, Gift of Life is proud to participate in this important study and strongly supports the recommendation for standardization of organ donation metrics."

Currently, methods of measuring OPO performance and [donation rates](#) rely on self-reported numbers of "eligible deaths," which fails to capture all potential deceased donors, with 20 to 25 percent of actual deceased

donors not meeting eligible death criteria. Due to this discrepancy, there has not been a reliable way to compare and benchmark OPOs.

Furthermore, because classification of "eligible deaths" fail to capture the number of actual donors, it has been nearly impossible to accurately quantify the potential gains in lifesaving transplants with increased [organ donation](#) rates across the country. As a result, researchers agree that a standardized set of metrics will allow for comparisons of OPO performance and donation rates in different regions, and they will help to identify areas where proven best practices can be implemented in order to improve donation rates.

"During our data analysis, we found that using our new metrics, we could identify the geographic areas with the greatest potential gains in lifesaving organ transplants with maximized donation rates," said Goldberg. "These OPOs with the greatest potential gains with maximized performance serve major metropolitan areas with very large populations, and thus interventions to improve donation rates could result in significant benefits, in the order of hundreds to thousands of more lives saved every year through organ transplantation. Importantly though, the donation rates in these areas were lower than adjacent metropolitan areas with similar demographics, highlighting that variable donation rates at a macro-level is based on variable OPO performance and community-level engagement in donation, and not the underlying demographics of the population, which is often what many OPOs cite as the cause of lower donation numbers. This could mean that implementing practices or protocols utilized in high performing OPOs could dramatically improve donation rates."

Based on the results, researchers suggest two new metrics, which should be standardized, for measuring OPO performance: evaluating donation percentage—the percentage of possible deceased-donors who become actual donors—and tracking organs transplanted per possible [donor](#). Ultimately, the researchers stress, the need to standardize the way

possible donors are identified, how OPO's are evaluated, to most importantly, bring more lifesaving transplants to those in need.

Provided by Perelman School of Medicine at the University of Pennsylvania

Citation: Researchers identify critical need for standardized organ donation metrics (2017, July 20) retrieved 9 April 2024 from <https://medicalxpress.com/news/2017-07-critical-standardized-donation-metrics.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--