
CBE ID

5603

Title

Authorization Rate for Organ Donation Among Approached, Referred Potential Organ Donors in the Organ Procurement Organization's Donation Service Area in a Calendar Year

Project

Management of Acute Events, Chronic Disease, Surgery, and Behavioral Health

Endorsement Status

New

Is Under Review

Yes

Next Maintenance Cycle

Spring 2026

Steward

Other

1.0 New or Maintenance

New

1.1 Measure Structure

Single Measure

1.3 Electronic Clinical Quality Measure (eCQM)

No

1.6 Measure Description

This measure calculates the authorization rate for organ donation (defined as authorizations per 100 approaches) among referred potential organ donors or their next of kin within the Organ Procurement Organization's (OPO's) donation service area (DSA) in a calendar year.

1.7 Measure Type

Intermediate Outcome

1.8 Level of Analysis

Other

1.8b Other Level of Analysis

Organ Procurement Organization - a non-profit organization responsible for the evaluation and procurement of deceased-donor organs for transplantation. OPOs also educate the public to

increase awareness and participation in organ donation.

1.9 Care Setting

Other

1.9b Other Care Setting

The OPO is the care setting for which this measure is specified and tested.

1.10 Measure Rationale

This measure calculates the Authorization Rate for organ donation (defined as authorizations per 100 approaches) among referred potential organ donors or their next of kin within the Organ Procurement Organization's (OPO's) donation service area (DSA) in a calendar year. We will refer to this measure as the Authorization Rate measure in this report. The goal of this measure is to provide OPOs with data about the rate of authorizations which can be used to better understand how effective their process is. Each organ donation is initially triggered by contact from the donor hospital as they identify a potential donor (a referral). OPO staff determine medical suitability for donation and, if appropriate, conduct an approach conversation with the referred potential organ donor or their next of kin to discuss the possibility of organ donation. It is critical to ensure that families are given the time, information, and support needed to make informed decisions. While donations must occur within specific medical timeframes for organs to remain viable for transplant, highly skilled OPO professionals are trained to approach these discussions with compassion and respect during moments of profound loss (AOPO, 2026).

Obtaining authorization for organ donation requires delicate and nuanced conversations that involve multiple factors. Emotions, timing, trust, communication, knowledge, and social and cultural implications all influence the authorization outcome. Siminoff et al. (2024) highlighted the importance of clinician training related to donor authorization conversations, due to the need for both technical expertise and strong relational communication skills. The authors noted that families who interact with clinicians with poor communication skills are more likely to perceive the patient's care as poor, experience negative arousal, have inhibited grief processes, and report post-traumatic stress. Witjes et al. (2019) found that Authorization Rates for organ donation are higher when donation conversations are conducted by trained donation practitioners who guide families in making well-considered decisions.

The proposed Authorization Rate measure will help OPOs identify the effectiveness of approaches to referred donors by quantifying the outcome (authorizations) of approach conversations. OPOs can use this information to identify ways to improve their authorization processes. For example, OPOs can further evaluate their authorization outcomes by donor registration status (registered and non-registered) and by type of potential organ donor—Donation after Brain Death (DBD) or Donation after Circulatory Death (DCD)—allowing for the development of more targeted interventions within these groups.

Although OPOs currently track Authorization Rates, there is no standardized approach for this metric. The 2022 consensus study report by the National Academies of Sciences, Engineering, and Medicine (NASEM) noted the importance of using standardized measures to understand system variations and make meaningful performance comparisons. A standardized Authorization Rate measure would enhance transparency, facilitate benchmarking, and encourage the sharing of best

practices. Efforts at improving Authorization Rates will help yield more donated organs and improve the quality of life for patients awaiting life-saving transplants.

References:

Association of Organ Procurement Organizations (AOPO). (2026, March 13). *AOPO Statement on CMS Guidance Reinforcing Safeguards* [Press Release]. [AOPO Statement on CMS Guidance Reinforcing Safeguards - AOPO](#).

National Academies of Sciences, Engineering, and Medicine. (2022). *Realizing the promise of equity in the organ transplantation system*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26364>.

Siminoff, L. A., Alolod, G. P., McGregor, H., et al. (2024). Developing online communication training to request donation for vascularized composite allotransplantation (VCA): Improving performance to match new US organ donation targets. *BMC Med Educ*, 24, 77. <https://doi.org/10.1186/s12909-024-05026-9>.

Witjes, M., Jansen, N. E., van Dongen, J., Herold, I. H. F., Otterspoor, L., Haase-Kromwijk, B. J. J. M., van der Hoeven, J. G., & Abdo, W. F. (2020, September). Appointing nurses trained in organ donation to improve family consent rates. *Nurs Crit Care*, 25(5), 299–304. doi:10.1111/nicc.12462. Epub 2019 Jul 11. PMID: 31294520; PMCID: PMC7507830.

1.11 Measure Webpage

None.

1.13 Data Dictionary

Attached

1.13a Attach Data Dictionary

[CBE-5603-1.13a-Authorization-Rate-Data-Dictionary-Attachment-A-Spring2026.pdf](#)

1.14 Numerator

The numerator is the number of authorizations from referred potential donors in the OPO's DSA in a calendar year.

1.14a Numerator Details

The numerator for the Authorization Rate measure uses data shared directly by six OPOs. The numerator is the number of authorizations from referred potential donors in the OPO's DSA in the calendar year. Authorization is defined as written first-person authorization (FPA) (donor designation), agreement by the next of kin (or by Uniform Anatomical Gift Act (UAGA) hierarchy) of a donor to continue with FPA for organ donation, or agreement by the next of kin on behalf of a donor to donate organs. An approach must also have occurred for authorization to occur.

Referrals are attributed to the calendar year (time between 12:00 a.m. on January 1 of a calendar year and 11:59 p.m. on December 31 of that same year) based on the referral date.

OPOs capture the ventilator status in their Electronic Donor Record (EDR) at the time of referral from the donor hospital.

Please refer to Attachment B for a list of definitions and acronyms associated with this measure submission.

1.15 Denominator

The denominator is the number of approaches made to referrals or their next of kin for organ donation in the OPO's DSA in a calendar year.

1.15a Denominator Details

The denominator for the Authorization Rate measure is the number of approaches made to referrals or their next of kin for organ donation in the OPO's DSA in a calendar year.

An approach is defined as any type of conversation in person, over the telephone, or via telehealth with the intent to make donation a possibility after preliminary suitability has been determined by the OPO staff. The patient must have been referred to the OPO for an approach to occur.

Preliminary suitability situations include those in which the patient appears to meet DBD criteria but is not formally declared, the patient is declared to be brain dead and appears to be a suitable donor (at least one organ), or the OPO has determined that the patient is a suitable DCD candidate and has talked to the family about organ donation.

The approach definition does not change by outcome or rule-out circumstances (e.g., family declines, patient expiration, medical examiner denial, or other rule-out status). An approach does not include courtesy calls where a family has requested information about donation but the OPO had already chosen not to investigate further or pursue donation.

1.15b Denominator Exclusions

An approach must have occurred for the referral to be eligible for inclusion. Additionally, only ventilated referrals are used, and the patient's age must be between 0 and 80 years old. Note that prior measures used 75 years as the age cut-off; however, literature shows that organs from donors up to age 80 can be effectively used in many transplant situations, which is why we have updated the age cut-off (Aubert et al., 2019). If data on "age" are missing, those observations are also excluded.

Reference:

Aubert, O., Reese, P. P., Audry, B., et al. (2019). Disparities in acceptance of deceased donor kidneys between the United States and France and estimated effects of increased US acceptance. *JAMA Intern Med*, 179(10), 1365–1374. doi:10.1001/jamainternmed.2019.2322.

1.15c Denominator Exclusions Details

Not all referrals result in actual approaches to a potential donor, as many factors need to be aligned for an approach to be warranted. Therefore, approaches are a subset of all referrals. Only referrals that led to an approach are used for the Authorization Rate denominator; the Approached variable is used in the calculation. In addition, only ventilated referrals with patients aged 0 to 80 years old are included.

1.15d Age Group

Other

1.15e Age Range in Years

Patients who are 0 to 80 years of age.

1.16 Type of Score

Rate/proportion

1.17 Measure Score Interpretation

Better performance = Higher score

1.18 Calculation of Measure Score

To calculate the numerator for the measure, begin with the set of referrals for an OPO in a calendar year and filter the data to include only referrals where the patient was ventilated and aged 0 to 80 years old. Next, filter these referrals to referrals in which an approach occurred, then filter these referrals to only include referrals in which authorization was obtained. Count the number of unique referrals from this subset; this is the number of authorizations.

To calculate the denominator for the measure, begin with the set of referrals for an OPO in a calendar year and filter the data to include only referrals where the patient was ventilated and aged 0 to 80 years old. Next, filter to referrals in which an approach occurred. Count the number of unique referrals from this subset; this is the number of approaches.

To calculate the measure, divide the numerator (the number of authorizations for the OPO in the calendar year) by the denominator (the number of approaches for the OPO in the calendar year) to determine the Authorization Rate. This value is multiplied by 100, as the rate is expressed as X per 100 approaches. In addition to calculating the overall measure score, we stratified by demographic information for gender, race, and age.

Please refer to Exhibit 2: Measure Score Calculation Diagram in Attachment B for additional details.

1.19 Measure Stratification Details

We stratified this measure by race, gender/sex, and age.

We stratified by race to better understand whether different populations are served disproportionately relative to the proportions of potential donors in the DSA. Due to the nature of the data shared by OPOs, we compare “Non-Hispanic White” and “Non-White” populations. People

of Hispanic ethnicity are included in the “Non-White” category because some OPOs coded “Hispanic” as a mutually exclusive “race” category.

We stratified by gender/sex to evaluate whether the authorizations and referrals received by the OPO reflect the gender/sex proportions of deaths in the population in the OPO’s DSA.

Finally, we stratified this measure by age. Stratification by age permits evaluation of the population breakdown of the authorizations and referrals received by the OPO as compared to the proportions of potential donors in the OPO’s DSA.

Additional stratification information is covered in Section 5.4.

1.20 Types of Data Sources

Electronic Health Records

1.21a Data Collection Tool URL(s)

<http://example.com>

1.25 Data Source Details

Once a referral and an approach to a referral are recorded in the OPO’s EDR system, OPO staff record the authorization status as a result of the approach. This includes a record of authorization through written FPA (donor designation), agreement by the next of kin of a donor to continue with FPA, or agreement by the next of kin on behalf of the donor.

The data for the numerator and denominator of the Approach Rate measure were gathered at the OPO test sites. Of our six OPO test sites, four used LifeLogics/TrueNorth EDR and two used iTransplant/InVita Health EDR. Both systems permit data capture via an application programming interface (API) linked to hospital Electronic Health Records (EHRs)—where available and in coordination with donor hospitals—for the input of patient data, including demographic and clinical data. Each OPO performs standardized quality assurance (QA) completeness checks of each donor case file in their EDR.

Prior to measure testing, we discussed the nature of the variables with OPOs to understand the data elements and workflows that generated the data points. We learned that OPOs were not systematically coding demographic values in the same way, such as collecting age instead of date of birth, or collecting multiple race categories that differ from the census categories. We did not find differences in the authorization variable itself, although some OPOs capture additional authorization detail. Through reviews of the OPO data, their dictionaries, the logic behind calculated fields, and—in some cases—additional data submissions, we learned how each OPO captured and reported their data. We clarified the measure specifications and definitions and engaged in discussions with each OPO to ensure that we obtained and analyzed the necessary data. Other clarifications included alignment on how missing data were handled. However, overall, we found that it was relatively straightforward to harmonize the data when we had clarifications on the data dictionary and field names.

1.26 Minimum Sample Size

There is no minimum sample size.

2.1 Attach Logic Model

[CBE-5603-2.1-Authorization-Rate-Logic-Model-Attachment-C-Spring2026.pdf](#)

2.2 Evidence of Measure Importance

To validate the importance of the Authorization Rate measure and ensure accurate and comprehensive information when developing the measure, we performed an environmental scan of literature about the organ donation and transplant ecosystem (Rahman et al., 2025). We reviewed relevant literature for any measures or data sources that had already been explored and had potential as candidate measures. Based on this review, no appropriate measures were identified, and the team continued exploring alternative evidence for measures and amplified importance.

A thorough review of existing measures in the CMS Measures Inventory Tool (CMIT) also indicated that there were no measures comparable to the one proposed for endorsement (CMIT, n.d.). Therefore, we continued identifying potential measures using the CMS Blueprint Measure Lifecycle as a validated measure development framework.

The CMS Blueprint Measure Lifecycle was used to guide our work due to its rigorous and established approach to measure development and validation (CMS, n.d.). Econometrica operationalized the Blueprint by systematically integrating the conceptualization, specification, testing, implementation, measure use, evaluation, and maintenance phases into the project plan.

To better understand OPO operations, identify considerations for measure development, and reinforce measure importance, we conducted 7 site visits to U.S. OPOs, including organizations with Donor Care Units, totaling 45 individual interviews with OPO leadership, directors, managers, and other essential OPO frontline staff. Econometrica conducted a qualitative analysis of all interviews that informed the development of the ecosystem map and logic model (Rahman et al., 2026a).

We convened four meetings with a Technical Expert Panel (TEP) (Rahman et al., 2026b) and assembled an OPO stakeholder group (Rahman et al., 2026c) to gather targeted, informed feedback over five sessions (June 2025 to February 2026). The purpose of the TEP was to provide expert guidance on project strategy, measure development, and recommendations for new measures. The OPO stakeholder group served to engage OPOs in informing and testing measures and supporting the development of a shared logic model. In Fall 2025, our team solicited feedback from OPO stakeholders on a list of structural, process, and outcome measure candidates. This activity narrowed the list of measure candidates, with the Authorization Rate measure receiving a high percentage of agreement for advancement to the testing phase (Rahman et al., 2026c). During OPO Stakeholder Meeting 3, Econometrica continued in-depth discussions with stakeholders, further solidifying the final measures selected for the testing phase, including Authorization Rate (Rahman et al., 2026c).

We also conducted a qualitative study to explore the perspectives of donor families, transplant

recipients, and OPO stakeholders to better understand the emotional, practical, and systemic aspects of organ donation and transplantation (Arellano et al., 2025). Although we did not identify findings with direct implications for the Authorization Rate measure, the importance of developing appropriate measures was emphasized.

In collaborative sessions with our TEP and OPO stakeholder group, and in accordance with the CMS Blueprint Measure Lifecycle, we identified measure selection criteria to guide the development and testing of quality measures (Rahman et al., 2026b; Rahman et al., 2026c; CMS, n.d.). These criteria were refined and prioritized to evaluate whether a measure was regarded as meaningful, actionable, and feasible. Our TEP and OPO stakeholders also emphasized that measures under consideration should improve upon current CMS measures and be rigorously developed, evidence-based, replicable, and verifiable. In addition to these standards, our TEP and OPO stakeholders recognized the need for flexibility in new measures to reflect the evolving science and medicine of organ donation. They identified that new measures should be aligned across the transplantation system (i.e., hospitals, OPOs, and transplant centers), oriented toward optimizing transplant outcomes, developed inclusively, and assessed for the potential to promote unethical behavior (induce individuals or organizations to seek out organs that will not be used). During our OPO site visits, we heard similar feedback among sites about the delicate nature of the approach conversation and how tracking is significant in understanding authorization decisions. This evidence is consistent with findings identified by Siminoff et al. (2024) and Valikodath et al. (2023), respectively. We took these guiding criteria into account as we developed and tested the Authorization Rate measure.

Measuring Authorization Rates provides OPOs with valuable insight into their performance, helping identify specific areas where improvement is needed. Identifying gaps and areas for improvement in the authorization process helps OPOs develop targeted interventions for quality improvement. Such gaps are described in a 2023 study by Valikodath et al., where researchers utilized the donor conversion rate to understand the relationship between donor registration rates and next-of-kin authorization. Using a multivariate model, the researchers found that increases in the number of deceased organ donors over time are largely due to organ donor registration and that there continues to be a high degree of variability in next-of-kin consent rates, independent of population demographics. In addition, U.S. consent rates lag in comparison to many European nations, which have an opt-out model, in contrast to the opt-in model used in the United States. Despite this, the authors found that there remain opportunities to optimize next-of-kin Authorization Rates. They recommended standardized training and educational initiatives related to registration and consent as viable performance improvement strategies.

OPO stakeholders highlighted the importance of the unique variables and challenges that impact authorization decisions, particularly in regard to the DCD pathway (Rahman et al., 2026c). The timing and sensitivity surrounding authorization conversations with families was noted. Since the potential donor is not brain dead, these conversations may need to occur over a longer period of time. The need to cultivate rapport, provide adequate education, and offer ongoing support with potential DCD donor families was emphasized as an important component. The importance of tracking the differences in authorization related to first-person DCD, registered, and non-registered donors was also identified as essential in understanding the variance in authorization patterns within an OPO's DSA. One OPO identified first-person registration as a major driver of authorization, with an Authorization Rate average of 88 to 100 percent for registered donors,

versus 25 to 55 percent for unregistered donors. This OPO noted that a state where the registry is well-supported with a high density of registered donors will render better Authorization Rates.

During site visits, OPOs noted the importance of community and family engagement to disseminate the donation message (Rahman et al., 2026a). OPOs engage and educate the community about organ donation through conversations with donor families and transplant recipients, media involvement, community events, and outreach efforts with community organizations, religious organizations, businesses, schools, etc. Engagement is critical for providing education and factual information to correct public misconceptions about organ donation, improve donor registration and family authorization, build public trust, and address cultural or religious myths and taboos regarding donation and transplantation.

OPOs also discussed the importance of donor registration programs to engage the community and increase the donor pool. These efforts included participating in Donate Life programs, partnering with Departments of Motor Vehicles, and reviewing non-registered populations to identify where resources and efforts can be focused. By engaging communities routinely, OPOs aim to build trust and cultural sensitivity before a potential case is approached for donation.

These findings collectively indicate the importance of the Authorization Rate measure in advancing the mission of OPOs to provide a compassionate and vital link between donors and patients awaiting lifesaving organ transplants (AOPO, 2026).

References:

Arellano, O., Rahman, M., O'Connor, J., & Rajakannan, T. (2025). *Perspectives and experiences in organ donation and transplantation: A qualitative study* [Internal document]. Econometrica, Inc., Bethesda, MD.

Association of Organ Procurement Organizations. *OPO services*. Retrieved April 6, 2026, from <https://aopo.org/opo-services/>.

Centers for Medicare and Medicaid Services. (n.d.). *Centers for Medicare and Medicaid Services Measures Inventory Tool (CMIT)*. <https://cmit.cms.gov/cmit#1/>.

Centers for Medicare and Medicaid Services (CMS) Measures Management System. (n.d.) *Blueprint Measure Lifecycle*. <https://mmshub.cms.gov/blueprint-measure-lifecycle-overview>.

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Rahman, M., Arellano, O., Lind, C., Newton, L., O'Connor, J., & Paraboschi, J. (2026a, April 7). *OPO site visit final report* [Internal document]. Econometrica, Inc., Bethesda, MD.

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Rahman, M., Arellano, O., & O'Connor, J. (2026c). *Organ Procurement Organization (OPO)*

stakeholder group meetings 1-5 summary overview [Internal document]. Econometrica, Inc., Bethesda, MD.

Siminoff, L. A., Alolod, G. P., McGregor, H., et al. (2024). Developing online communication training to request donation for vascularized composite allotransplantation (VCA): Improving performance to match new US organ donation targets. *BMC Med Educ*, 24, 77. <https://doi.org/10.1186/s12909-024-05026-9>.

Valikodath, N., Lambert, A. N., Butler, A., Lebovitz, D. J., Chapman, G., Xu, M., Slaughter, J. C., Menachem, J. N., & Godown, J. (2023). The impact of donor consent mechanism on organ procurement organization performance in the United States. *The Journal of Heart and Lung Transplantation*, 42(5), 627–636. <https://doi.org/10.1016/j.healun.2022.12.023>. PMID: 36868968.

2.3 Anticipated Impact

The proposed Authorization Rate measure will provide OPOs with a standardized mechanism to measure authorization rates, with the desired outcome of increasing the availability of organs for donation. As noted previously, OPOs already collect and monitor authorization data as part of routine practice, but there is no standardized approach to tracking. During measure testing, we found that OPOs can collect and provide these data with limited burden. OPOs track authorization through multiple mechanisms, including interactive dashboards, time-based data scorecards, and working groups (Rahman et al., 2026a). As an intermediate outcome measure, the Authorization Rate measure can alert OPOs when further investigation of authorization causality is needed. If an OPO is underperforming on this metric, they can investigate the reason(s) behind the decline in authorization.

For example, evaluating Authorization Rates by registration status may provide insight into areas to increase donations, such as donations authorized within diverse populations and by legal next of kin. Other variables to explore may include approach conversation repetition and cultural or racial influence. The literature showed that Black and American Indian/Alaska Native individuals donate at lower rates than White individuals, which may be attributed to how sensitively these groups are approached about organ donation. Kernodle et al. (2021) found that, among Black families, those who declined donation were more likely to report feeling pressured and to have received less thorough discussions compared to Black families who authorized donation. Furthermore, Bodenheimer et al. (2021) found that donation authorization was higher when coordinators and donor families shared the same racial background, and although the effect of racial mismatch decreased after accounting for coordinator training and experience, the findings highlighted the need for better education and communication to address race-associated perceptions in the donation process.

The OPO relationship with donor hospitals is another critical factor that influences authorization. During our site visits, OPOs indicated that when hospitals support donation conversations, Authorization Rates are higher for non-registered donors (Rahman et al., 2026a). Conversely, hospitals that delay donation conversations and are late on referrals experience a decrease in authorization. By measuring authorization, OPOs can approach partner hospitals with real-time data to help address barriers and discuss remediation to improve donation efforts.

If implemented, we anticipate that measuring Authorization Rates will lead to the short-term outcome of an increase in the number of donation authorizations. Intermediate outcomes include identification and resolution of process gaps and improved effectiveness in the OPO authorization process. Ultimately, all of these efforts align to promote the long-term outcome of more donated organs being offered to transplant centers to improve the quality of life for patients awaiting life-saving transplants.

References:

Bodenheimer, H. C., Jr., Okun, J. M., Tajik, W., Obadia, J., Icitovic, N., Friedmann, P., Marquez, E., & Goldstein, M. J. (2012). The impact of race on organ donation authorization discussed in the context of liver transplantation. *Trans Am Clin Climatol Assoc*, 123, 64-77, discussion 77-8. PMID: 23303969; PMCID: PMC3540608.

Kernodle, A. B., Zhang, W., Motter, J. D., Doby, B., Liyanage, L., Garonzik-Wang, J., Jackson, K. R., Boyarsky, B. J., Massie, A. B., Purnell, T. S., & Segev, D. L. (2021, April 1). Examination of racial and ethnic differences in deceased organ donation ratio over time in the US. *JAMA Surg*, 156(4), e207083. doi: 10.1001/jamasurg.2020.7083. Epub 2021 Apr 14. PMID: 33566079; PMCID: PMC7876622.

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2.4 Performance Gap

The measure is being submitted for initial endorsement.

A measure of Authorization Rates provides essential information to OPOs to support quality improvement efforts directed at increasing authorizations for their approaches.

The data source is the OPO EHR. The data are presented by OPO for our six test site OPOs:

- OPO 1 provided data from 1/1/2021 through 12/31/2024.
- OPO 2 provided data from 1/1/2021 through 12/31/2024.
- OPO 3 provided data from 1/1/2022 through 12/31/2024.
- OPO 4 provided data from 1/1/2021 through 12/31/2024.
- OPO 5 provided data from 1/1/2021 through 12/31/2024.
- OPO 6 provided data from 1/1/2021 through 12/31/2024.

The Authorization Rates per 100 for our 6 test site OPOs are presented in Exhibit 3: Authorization Rates by OPO in Attachment B.

Table 1. Performance Scores by Decile

The Authorization Rates per 100 for our 6 test site OPOs are presented in Exhibit 3: Authorization Rates by OPO in Attachment B.

2.5 Health Care Quality Landscape

A standardized metric for measuring OPO Authorization Rates does not currently exist. NASEM (2022) called for the creation of standardized performance measures, based on a consensus-driven process with limited reporting burden on health professionals or patients. As noted earlier, although OPOs may internally track Authorization Rates, the metrics are not standardized nor endorsed by the CMS Consensus-Based Entity (CBE). The proposed Authorization Rate measure, developed through the validated and rigorous CMS Blueprint Framework, offers a solution for OPOs to accurately track performance authorization for organ donation.

CMS currently uses two measures, Donation Rate and Organ Transplantation Rate, to measure OPO performance. OPO stakeholders have indicated that the current CMS measures, specifically denominators for measures, do not capture donor potential. Across the 2020 CMS rule-making public comment period, during our 2025 site visit interviews, and in our discussions with OPO stakeholders (2025-2026), we repeatedly heard concerns about these metrics (CMS Final Rule, 2020; Rahman et al., 2026a; Rahman et al., 2026c). One such concern is that the measures do not fall under the OPO scope of control. This was mentioned repeatedly by stakeholders. In the OPO Site Visit Report: “Several OPOs expressed concern about performance measures tying directly to activities within the control of the OPO itself” (Rahman et al., 2026a).

The CMS measures, although valuable, have limitations and do not provide the specificity and nuance required by OPOs to address the complexity of the authorization process for organ donation. As noted by the TEP, there is “agreement that there are many systematic problems in the (CMS) metrics, such as clear statistical fallacies” (Rahman et al., 2026b).

References:

Medicare and Medicaid Programs; Organ Procurement Organizations Conditions for Coverage: Revisions to the Outcome Measure Requirements for Organ Procurement Organizations. Final Rule. Published in the Federal Register on December 2, 2020, as 85 Fed. Reg. 77898. [Federal Register: Medicare and Medicaid Programs; Organ Procurement Organizations Conditions for Coverage: Revisions to the Outcome Measure Requirements for Organ Procurement Organizations](#).

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2.6 Meaningfulness to Target Population

There was significant agreement among OPOs that the conversion of potential donors to donors (i.e., Authorization Rate) should be considered a key measurement area. Because authorization data are routinely collected, this measure is not only feasible but also supports OPOs in converting approaches to authorizations. The Authorization Rate measure is meaningful to the target population of patients and families of organ donation by increasing the accountability of OPOs to improve their processes for obtaining donation authorization.

As detailed in Section 2.2, we conducted numerous meetings, OPO site visits, and interviews with OPO stakeholders, donor family members, and transplant recipients, validating that the target population views the proposed Authorization Rate measure as meaningful (Arellano et al., 2025; Rahman et al., 2026a; Rahman et al., 2026c). In one interview, a donor family member noted that the ICU nurse caring for their loved one may have been inconvenienced by the extra work related to donation and that their palliative care doctor was unreceptive to donation. Additionally, once the family agreed to donation, they were required to complete extensive paperwork to authorize the donation process, which took time away from their loved one at the end of life. The family indicated that the donor hospital would have benefited from better training on how to discuss and support donation and emphasized the importance of measures that drive performance improvement. This feedback demonstrates that a hospital culture supportive of organ donation (Gibson et al., 2023) and clinician training related to donor authorization conversations (Siminoff et al., 2024) directly impact the authorization process and donor conversion rates.

During our conversations with families of organ donors, organ donation and transplantation were described as profoundly emotional experiences for both donor families and transplant recipients. For donor families, the process was often traumatic, particularly when donation followed the unexpected death of a family member and required rapid decisions under strict time constraints. Despite these challenges, many families reported strong internal support and positive interactions with OPOs (Arellano et al., 2025).

These findings collectively highlight the meaningfulness of the Authorization Rate measure to the target population and its use as a key metric for providing information that can inform care decisions.

References:

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- Rahman, M., Arellano, O., & O'Connor, J. (2026c). *Organ Procurement Organization (OPO) stakeholder group meetings 1-5 summary overview* [Internal document]. Econometrica, Inc., Bethesda, MD.

Siminoff, L. A., Alolod, G. P., McGregor, H., et al. (2024). Developing online communication training to request donation for vascularized composite allotransplantation (VCA): Improving performance to match new US organ donation targets. *BMC Med Educ*, 24, 77. <https://doi.org/10.1186/s12909-024-05026-9>.

3.1 Contributions Towards Closing Care Gaps

This domain is optional for the Spring 2026 cycle.

4.1a Data Structure and Availability

All OPOs track their data electronically in EDRs. All data elements for the Authorization Rate measure are available in structured fields. During measure testing, some standardization of data elements was necessary to allow comparisons across OPOs.

OPOs use a combination of real-time data validation to catch missing data at the point of entry and conduct QA checks on a routine basis, often during monthly reviews. OPOs indicated that missing data are infrequent, identified through routine QA checks, and completed after following up with the coordinator or staff member familiar with that stage of the OPO activity. OPOs noted that donor records that lead to an organ donation are the most complete, as they have moved through each step of the donation workflow. In contrast, potential donors that do not result in a donation may have less complete records if the donation was authorized and not recovered, there was no authorization, or the referral was medically ruled out and otherwise did not proceed through the referral-approach-authorization-management-recovery pathway. This type of missing data limits the OPO's ability to understand patterns, evaluate missed opportunities, and assess process performance at key decision points.

While these issues do not impede Authorization Rate measure calculations, they can limit the OPO's internal visibility into possible operational improvements. All of this underscores the importance of identifying and resolving missing, incongruent, irregular, or incomplete data issues in a methodical, predictable, and timely manner.

4.1b Implementation Costs and Burden

Our test sites indicated that there will be no additional cost or burden imposed by this measure implementation as defined. Most OPOs noted that there will be minimal to no impact on clinician/provider workflow. One OPO indicated that implementation of the measure could encourage clinicians to be more intentional in how they speak to potential donor families and improve the family experience. Some OPOs expressed that there is a lack of standardized data requiring additional resources for data QA, which can be addressed with standardized templates.

4.1c Confidentiality

The data are collected by OPOs as part of their routine care and captured in alignment with the Health Insurance Portability and Accountability Act privacy regulations in secure systems. There

are no patient confidentiality concerns. For measure testing, the data analysis did not depend on any confidential patient information beyond age (or birthdate). Therefore, unique case IDs were used for each patient record. When our team received the data, no patient names were included. All of our measures are calculated based on patient populations large enough that it would be almost impossible to identify an individual.

4.3 Feasibility Informed Final Measure

All data elements used in the measure are collected routinely by OPOs. For some data items, additional coding or details from the OPO were required before the final measure could be constructed. Thus, while initially there were some challenges in constructing some of the variables needed for the measures, with a clearer understanding of measure requirements and definitions, these variables are routinely constructed in OPOs' current data management processes.

As noted in Section 2.2, we used our extensive collaboration with OPOs, the TEP, and site visits to ensure that an Authorization Rate measure provided meaningful information to OPOs about their efforts to obtain authorization for donation following their approach conversations (Rahman et al., 2026a; Rahman et al., 2026b). Further, these collaborations ensured that the data elements were captured in EDRs and that many OPOs were already tracking these data points for internal performance benchmarking and improvement efforts, further demonstrating the feasibility of this measure.

We refined our initial definition of an authorization to reflect that the authority to agree to a donation is guided by the UAGA hierarchy (Verheijde et al., 2006). Our research and conversations with OPO staff and the TEP revealed the role of UAGA in aligning permissions for donation regardless of state laws regarding organ donation. We added this guidance to the definition of an authorization in the measure. We confirmed definitions and the variables used for authorizations with each OPO in order to calculate the measure rate consistently.

References:

Rahman, M., Arellano, O., Lind, C., Newton, L., O'Connor, J., & Paraboschi, J. (2026a, April 7). *OPO site visit final report* [Internal document]. Econometrica, Inc., Bethesda, MD.

Rahman, M., Arellano, O., & O'Connor, J. (2026b). *Organ Procurement Organization (OPO) performance measurement technical expert panel (TEP) meetings 1-4 summary overview* [Internal document]. Econometrica, Inc., Bethesda, MD.

Verheijde, J. L., Rady, M. Y., & McGregor, J. L. (2007, September 12). The United States revised uniform anatomical gift act (2006): New challenges to balancing patient rights and physician responsibilities. *Philos Ethics Humanit Med*, 2(19). doi: 10.1186/1747-5341-2-19. PMID: 17850664; PMCID: PMC2001294.

4.4 Proprietary Information

Not a proprietary measure and no proprietary components

5.1.1 Data Used for Testing

The OPO test sites provided data for testing, which were exported from their EDRs into Excel workbooks. As noted in Section 1.25 Data Source Details, we received testing data from six OPO test sites. Of these, four sites used LifeLogics/TrueNorth EDR and two sites used iTransplant/InVita Health EDR for donor record management. The data were quantitative, providing patient profile and demographic information for patients referred by a donor hospital to the OPO. The data included information on the referral date, approach conversation date and outcome, authorization outcome, and donation result. Gender, age, and race were also used for stratification.

5.1.1a Dates of Testing Data

All data is for a calendar year (1/1 through 12/31):

- OPO 1: 2021-2024.
- OPO 2: 2021-2024.
- OPO 3: 2022-2024.
- OPO 4: 2021-2024.
- OPO 5: 2021-2024.
- OPO 6: 2021-2024.

5.1.2 Differences in Data

The reliability testing and stratification used the same data that were used to construct this measure. No specific exclusions were made.

5.1.3 Characteristics of Measured Entities

There are 56 OPOs currently meeting the Conditions for Coverage under CMS regulations as of 2023 (CMS, 2020b). CMS categorizes OPOs by population size of their DSA. Six of the 56 OPOs volunteered to participate in measure testing by submitting anonymized patient data, data dictionaries, and definitions and by participating in surveys and discussions about their submitted data, definitions, data capture processes, and data quality checks.

Of the six test sites that contributed data, one was in the “less than 2.9 million” size, one was in the “2.9–5 million” size, one was in the “5–7.2 million” size, and three were in the “greater than 7.2 million” size (OPTN, 2025).

Our six test sites were from six states and included OPOs that were ranked as “underperforming” (three OPOs) and “passing” (three OPOs) under the current CMS performance tiers for the existing Donation Rate and Transplant measures (based on 2023 CMS data) (OPTN, 2025; CMS, 2025). Five of the 6 OPOs have DSA coverage in more than 1 state, bringing the total count of states in this analysis to 13 states.

Exhibit 4 in Attachment B includes the characteristics of the six test OPOs. The 6 sites are

reasonably representative of the 56 OPOs.

References:

Centers for Medicare & Medicaid Services. (2020b). Medicare and Medicaid programs; organ procurement organizations conditions for coverage; revisions to the outcome measure requirements for organ procurement organizations. A rule by the Centers for Medicare & Medicaid Services. <https://www.federalregister.gov/d/2020-26329/p-195>.

Centers for Medicare & Medicaid Services (CMS). (2025, July). *OPO public performance report. quality, certification & oversight reports*. <https://qcor.cms.gov/OPOs>.

Organ Procurement and Transplantation Network (OPTN) and Scientific Registry of Transplant Recipients (SRTR). OPTN/SRTR 2023 Annual Data Report. U.S. Department of Health and Human Services, Health Resources and Services Administration; 2025. Accessed February 2026. <https://srtr.transplant.hrsa.gov/annualdatareports>.

5.1.4 Characteristics of Units of the Eligible Population

Please refer to Exhibit 5 in Attachment B for the OPO demographic information.

5.2.1 Level(s) of Reliability Testing Conducted

Person or encounter level (i.e., data element) (e.g., inter-abstractor reliability), Accountable entity level (i.e., measure score) (e.g., signal-to-noise analysis)

5.2.2 Method(s) of Reliability Testing

Authorization is a highly sensitive issue for OPOs. Authorization information is subject to audit for payment purposes and is essential to documenting that organ procurement was done appropriately and legally. Due to the high-cost, high-consequence nature of authorization, documentation of whether authorization took place (a binary variable found in the donor record) is highly reliable at (1) the patient or encounter level, (2) the hospital to OPO level, and (3) the entity level.

Person or Encounter Level

Authorization is a yes/no variable, with additional variables recording whether the source of authorization was first-person (some states allow the expression of intent of donation on a driver's license or other registry to serve as documentation) or whether it was provided by the next of kin. Because donation should never be done without authorization and secondary verification of authorization, nearly all OPOs use a double-documentation system, where the staff member obtaining the authorization enters that data into the donor record and that authorization is supported by additional documentation, such as a copy of the registry record, a driver's license, or a signed authorization by the next of kin.

As required in 42 CFR 486.342, OPOs must have a written protocol for organ donation decision-making. They must provide the family member or other person responsible for making the

donation decision with a list of specific information and a physical copy of the signed consent form when it is completed. If the organ donor has provided first-person authorization and that is consistent with donation under state law and therefore no family authorization is needed, OPOs must also provide that information to the family and retain copies of this documentation. This information is all subject to review during CMS site surveys.

All OPOs we spoke with also reported conducting a quality assurance check on their records at least annually to ensure that the records are completed, and that all authorizations have all required documentation to match. In seeking reports that indicated the inter-rater reliability or match between the donor records and the authorization back-up documentation, OPOs provided screenshots demonstrating 100-percent record completion for donors, which are not provided here to protect the names of the donors.

While we are aware that some prior studies have found that OPO data cannot easily be harmonized across OPOs (Adam et al., 2026), we did not find this to be true. We found similar or identical fields for approach and authorization. This may be because OPOs have implemented an internal project called UNION that promotes the standardization of their data. The paper by Adam et al. (2026) uses older data from 2015 through 2021 while our measure testing used data from 2021 through 2024. Additionally, as OPOs roll out this authorization measure, OPO electronic donor record providers are participating in an activity to further standardize the capture of demographic data on donors and will use a self-auditing tool to validate their authorization data uniformly across all OPOs.

Accountable Entity Level

Reliability testing was conducted using the repeated split-sample methodology described by Nieser and Harris (2024), as recommended by the PQM Endorsement and Maintenance Guidebook (2025).

For each of the six OPOs and for each year in the range 2021–2024, the data used to compute the numerator (count of authorizations meeting all applicable inclusion and exclusion criteria, obtained from OPO data) and the denominator (count of approaches meeting all applicable inclusion and exclusion criteria, also obtained from OPO data) were repeatedly resampled to create pairs of half-sample datasets, with each record randomly assigned to one half-sample or the other. The number of repetitions was 200, which is the approximate size of the smallest OPO-year dataset used for reliability analysis. The Authorization Rate was then computed for each half-sample. This allowed the creation of a dataset containing 200 records for each OPO and year, with each record containing the OPO and year, and the rates for each of the two half-samples.

The data for each of the 200 sets of OPO-year pairs were then analyzed separately to obtain the correlation between the rates of the two randomly assigned half-samples. The measure of correlation used was the intraclass correlation coefficient (ICC) for a one-way random effects model—ICC(1)—obtained from the covariance estimates provided by a hierarchical generalized linear model. The ICC(1) provides a measure of the total proportion of total variance of the Authorization Rate that is explained by the OPO and year. (We do not currently have data from a sufficient number of OPOs to compute a statistically valid measure of correlation by OPO alone.) The average value of ICC(1) across the 200 repetitions, which is the measure of reliability, was then computed.

References:

Adam, H., Pollard, T., Suriyakumar, V., et al. (2026). Organ retrieval and collection of health information for donation: The ORCHID dataset. *Scientific Data*, 13, Article 120.
<https://doi.org/10.1038/s41597-025-06435-1>.

Nieser, K. J., & Harris, H. S. (2024). Comparing methods for assessing the reliability of health care quality measures. *Statistics in Medicine*, 43(23).

Partnership for Quality Measurement, Endorsement and Maintenance Guidebook, National Consensus Development and Strategic Planning for Health Care Quality Measurement, October 2025, p.71.

U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. (2026). 42 C.F.R. § 486.342: Condition: Requesting consent.
<https://www.ecfr.gov/current/title-42/part-486/section-486.342>.

5.2.3 Reliability Testing Results

Person or Encounter Level

Please refer to Section 5.2.2 Methods of Reliability Testing.

Accountable Entity Level

The Authorization Rate reliability as estimated by the average ICC(1) value has a mean value of 0.9147, with a 95-percent confidence interval of [0.9106, 0.9187].

5.2.4 Interpretation of Reliability Results

Person or Encounter Level

Please refer to Section 5.2.2 Methods of Reliability Testing.

Accountable Entity Level

The estimated Authorization Rate reliability is 0.9147, which surpasses the minimum reliability threshold of 0.6. Therefore, this measure meets the CBE requirements for reliability.

Table 2a. Accountable Entity Level Reliability Testing Results by Denominator, Target Population Size

Please refer to Section 5.2.2 Methods of Reliability Testing and Section 5.2.3 Reliability Testing Results.

Table 2b. Accountable Entity Level Reliability Testing Results by Reliability Score

Please refer to Section 5.2.2 Methods of Reliability Testing and Section 5.2.3 Reliability Testing Results.

5.3.1 Level(s) of Validity Testing Conducted

Person or encounter level (i.e., data element) (e.g., sensitivity and specificity), Accountable entity level (i.e., measure score) (e.g., criterion validity)

5.3.2 Type of Accountable Entity Level Validity Testing Conducted

Systematic assessment of face validity of the measure's performance score as an indicator of quality or resource use

5.3.3 Method(s) of Validity Testing

Authorization is a highly sensitive issue for OPOs. Authorization information is subject to audit for payment purposes and is essential to documenting that organ procurement was done appropriately and legally. Due to the high-cost, high-consequence nature of authorization, documentation of whether authorization took place (a structured, binary variable found in the donor record) is highly reliable and valid at (1) the patient or encounter level, (2) the hospital to OPO level, and (3) the entity level.

Person or Encounter Level

Authorization is a yes/no variable, with additional variables recording whether the source of authorization was first-person (some states allow the expression of intent of donation on a driver's license or other registry to serve as documentation) or whether it was provided by the next of kin. Because donation should never be done without authorization and secondary verification of authorization, nearly all OPOs use a double-documentation system, where the staff member obtaining the authorization enters that data into the donor record and that authorization is supported by additional documentation, such as copy of the registry record, a driver's license, or a signed authorization by the next of kin.

As required in 42 CFR 486.342, OPOs must have a written protocol for donation decision-making (authorization). They must provide the family member or other person responsible for making the donation decision with a list of specific information outlined in 42 CFR 486.342 and must provide a physical copy of the signed consent form to the family when it is completed. If the organ donor has provided first-person authorization, and that is consistent with donation under state law and therefore no family authorization is needed, OPOs must also provide that information to the family and the OPO retains copies of this documentation to ensure they are compliant with the regulation. This information and documentation is also subject to review during CMS site surveys.

All OPOs we spoke with also reported conducting a quality assurance check on their records at least annually to ensure that the records are completed and that all authorizations have all required documentation to match. In seeking reports that indicated the inter-rater reliability or match between the donor record and the authorization back-up documentation, OPOs provided screenshots demonstrating 100-percent record completion for donors; these are not included here to protect donor confidentiality. The records therefore have a high degree of face-validity.

Accountable Entity Level

We considered both face validity, which is the assumption that the measure reflects what it says it does, and criterion validity.

Face validity: The data used for this measure represents the only source of information on donation authorization—all such data are ultimately provided by OPOs. These are the only data that can be used to measure this concept. For this measure, the direct counts of authorizations were provided by the six participating OPOs, and they are not subjective or constructed. The denominator is the number of approaches. For these datasets, missing values were mostly not an issue.

Criterion validity: Criterion is the extent to which the measure relates to or predicts an outcome. Criterion validity includes both concurrent validity, which compares the measure in question to another outcome assessed at the same time such as from another data source, and predictive validity, which compares the measure to an outcome assessed at a later time.

To test concurrent validity, we compared it to other external data sources. Publicly available versions of the SRTR data provide the number of organ donors as opposed to the number of authorizations and therefore cannot be used for direct comparison with OPO data. However, given that the magnitude is similar and that authorization does not always lead to donation for a variety of reasons, SRTR provides evidence that OPOs are likely providing accurate authorization data since we observed that OPO authorization counts are always higher than the SRTR counts for organ disposition.

We also compared the approach data to the referral data to ensure that the approach numbers were less than referrals, as expected (see Table below). We queried OPOs to request information on the magnitude of the difference, and the OPOs provided an explanation regarding how they determine if an approach should be made from a referral. This added confidence that the OPO is capturing the expected approaches in their DSA in their referrals.

Table 1. Criterion Validity

	OPO 1	OPO 2	OPO 3	OPO 4	OPO 5	OPO 6
MCOD Deaths	11,604	15,800.18	3,314	9,329	6,341	4,793.58
Max Vent Referrals	3,017.04	4,108.05	861.64	2,425.54	1,648.66	1,246.33
Reported Referrals # by OPO	18,734	19,199	7,131	12,887	13,511	8,634
Approach # Reported by OPOs	2,909	6,890	953	2,407	2,395	1,560
Authorization # Reported by OPOs	1,869	3,204	558	1,244	1,739	976
Difference (Count) between Approach reported by OPOs and Authorization	1,040	3,686	395	1,163	656	584
Difference %	44%	73%	52%	64%	32%	46%

Predictive Validity: We understand the gold standard to demonstrate validity is to determine the degree to which the performance on the measure predicts an outcome. For this measure, we chose donation rate as the outcome. Donation rate is an outcome, and the higher donations are, the more effective the organ procurement system is considered to be by CMS and the OPTN. We

used simple regression to determine if authorization rate predicts donation rate. While a small N is a significant limitation of this analysis, we conducted it to ensure that all avenues for analysis were pursued.

Table 2. Authorization Rate vs. Donation Rate, R-Squared Value = 0.0355

	OPO 1	OPO 2	OPO 3	OPO 4	OPO 5	OPO 6
Authorization Rate	64	47	59	52	73	63
Donation Rate	12	17	11	11	18	15

Reference:

U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. (2026). 42 C.F.R. § 486.342: Condition: Requesting consent.
<https://www.ecfr.gov/current/title-42/part-486/section-486.342>.

5.3.4 Validity Testing Results

Person or Encounter Level

Please refer to Section 5.3.3 Methods of Validity Testing. We relied on OPO unpublished audits of their authorization records showing 99 to 100 percent authorization record completion. OPOs are implementing a uniform system of auditing for data validity moving forward. The audit tool is available upon request.

Accountable Entity Level

The comparison in Exhibit 6 in Attachment B shows the number of donations authorized by the OPO and the number of recovered organs recorded in SRTR. The numbers are consistently lower for the recovered organs than the number of authorizations. We also compared the authorization counts received directly from the OPO to what was reported in the SRTR file (these files were used in the development of other measures).

Please refer to Exhibit 6 in Attachment B.

5.3.5 Interpretation of Validity Results

Person or Encounter Level

Please refer to Section 5.3.3 Methods of Validity Testing.

Accountable Entity Level

As discussed in Section 5.3.4, the results are consistent with the expectations for how the measure should work. Logically, the count of authorized donors should be less than the count of donors who were approached (after a referral), and this is how the measure functions. It is a reasonable validation of the measure.

Please refer to Exhibit 6 in Attachment B for the results.

5.4.1 Methods Used to Address Risk Factors

Stratification by risk factor category

5.4.2 Conceptual Model Rationale

Because this is an intermediate outcome measure, risk adjustment may obscure critical information. There is some debate in the literature about donation regarding the appropriateness of risk adjustment in general (Goldberg et al., 2020). We followed the Office of the Assistant Secretary for Planning and Evaluation's recommendation not to risk-adjust process measures and extended that logic to this measure because of the risk of confounding factors. Risk adjustment of process measures is also not necessary if the measure is used purely for informational purposes and not used alone for certifying or decertifying an OPO. While the Authorization Rate is an intermediate outcome measure, we think the same considerations apply as for process measures.

Therefore, to better understand the underlying dynamics and to provide information without definitely deciding to risk adjust, we calculated stratified rates. The stratified rates allow us to understand how the OPOs differed across groups of interest and where there are some historical patterns of different donation rates (ASPE, 2020).

We stratified by age, race, and gender. We considered that different age concentrations for the different OPO DSAs could affect Authorization Rates. The goal was to test if and how age, race, and gender composition differed and how they could affect the measure outcomes. Specifically, areas with older ages may have higher death rates, but that may not translate directly to higher Authorization Rates. Stratifying by age allows us to observe if Authorization Rates differ by age. One issue for OPOs is obtaining full participation in the donation process for all races. We have stratified the rates by race to better understand if there are racial differences in donation rates and if minorities have lower Authorization Rates. For gender, generally men have higher death rates at younger ages. Observing the differences by gender will allow us to see if there are noticeable differences in authorizations by gender and understand if gender composition affects the measure (CMS, 2025; CMS, 2023; NQF, 2014; Vogel & Chen 2018).

References:

Centers for Medicare & Medicaid Services. (2023, August). *Risk adjustment and risk stratification in quality measurement*. Supplement material to the CMS Measures Management System (MMS) Hub. <https://mmshub.cms.gov/sites/default/files/Risk-Adjustment-in-Quality-Measurement.pdf>.

Centers for Medicare & Medicaid Services. (2025, May). *Ways to account for risk*. CMS Measures Management System (MMS). <https://mmshub.cms.gov/measure-lifecycle/measure-specification/risk-adjustment/ways-to-account-for-risk>.

Goldberg, D., Doby, B., & Lynch, R. (2020, August). Addressing critiques of the proposed CMS metric of organ procurement organ performance: More data isn't better. *Transplantation*, 104, 8.

National Quality Forum. (2014, August). *Risk adjustment for socioeconomic status or other sociodemographic factors*. National Quality Forum.

<https://digitalassets.jointcommission.org/api/public/content/ed011a6479574761b11211d55eae0bc3?v=67b20abf>.

Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. (2020). *Second report to Congress on social risk factors and performance in Medicare's Value-Based Purchasing Program*.

https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/195191/Second-IMPACT-SES-Report-to-Congress.pdf.

Vogel, W. B., & Chen, G. J. (2018). An introduction to the why and how of risk adjustment. *Biostatistics & Epidemiology*, 4, 84–97. <https://doi.org/10.1080/24709360.2018.1519990>.

5.4.2a Attach Conceptual Model

[CBE-5603-5.4.2a-Authorization-Rate-Conceptual-Model-Attachment-D-Spring2026.pdf](#)

5.4.3 Variable Distribution Across Measured Entities

Please refer to Exhibit 7 in Attachment B.

The Authorization Rate measure was stratified by age, race, and gender. The distributions for those variables are shown in Exhibit 7.

5.4.4 Risk/Case-Mix Adjustment Modeling and/or Stratification Results

We selected the stratification variables based on what OPOs, our TEP, and the literature indicated would impact the organ donation process.

5.4.4a Attach Risk/Case-mix Adjustment Modeling and/or Stratification Specifications

[CBE-5603-5.4.4a-Authorization-Rate-Risk-Factor-Stratification-Specification-Attachment-E-Spring2026.pdf](#)

5.4.6 Interpretation of Risk/Case-mix Factor Findings

In this section, we present Authorization Rates stratified by age, race, and gender. Please refer to Exhibits 8–13 in Attachment B for the interpretation of our results.

5.4.7 Final Approach to Address Risk Factors

Stratification by risk factor category

6.1.1 Current Status

Not in use

6.1.2 Current or Planned Use(s)

Public Reporting, Regulatory and Accreditation Programs, Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Quality Improvement (Internal to the specific organization)

6.1.4 Attributes for Accountability Use

The Authorization Rate measure calculates the authorization rate for organ donation, or authorizations per 100 approaches, among referred potential donors or their next of kin within the Organ Procurement Organization's (OPO's) donation service area (DSA) in a calendar year. The goal of this measure is to provide OPOs with data about the rate of authorizations that can be used to better understand the effectiveness of their process.

The donor hospital triggers contact with the OPO as they identify a potential donor (a referral). OPO staff determine medical suitability for donation and, if appropriate, conduct an approach conversation with the referred potential organ donor or their next of kin to discuss the possibility of organ donation. While donations must occur within specific medical timeframes for organs to remain viable for transplant, highly skilled OPO professionals are trained to approach discussions with compassion and respect (AOPO, 2026). Clinician training on communication skills is crucial in this area (Siminoff et al., 2024); highly trained practitioners are more likely to have higher authorization rates (Witjes et al., 2019).

Risk adjustment for this measure can cause patterns or other information to be obscured due to confounding factors and it being an intermediate outcome measure. In lieu of risk adjustment, this measure is stratified by race, gender/sex, and age, in order to understand any differences in these categories. For race, this means a division into "Non-Hispanic White" and "Non-White" populations. (People of Hispanic ethnicity are included in the "Non-White" category because some OPOs coded "Hispanic" as a mutually exclusive "race" category.) Stratification by age permits evaluation of the population breakdown of the authorizations and referrals received by the OPO as compared to the proportions of potential donors in the OPO's DSA. As men have higher death rates at younger ages, gender composition may affect this measure and stratifying for gender allows those insights (Vogel & Chen, 2018).

Ultimately, the Authorization Rate measure can be used to identify ways to improve authorization processes. Since it quantifies the outcome (i.e., authorizations) of approach conversations, OPOs can use this rate to, for example, break down outcomes by grouping such as donor registration status or type of organ donor (Donation after Brain Death (DBD) vs. Donation after Circulatory Death (DCD)) and consider more targeted approaches and interventions.

References:

Association of Organ Procurement Organizations (AOPO). (2026, March 13). *AOPO Statement on CMS Guidance Reinforcing Safeguards* [Press Release]. [AOPO Statement on CMS Guidance Reinforcing Safeguards - AOPO](#).

Siminoff, L. A., Alolod, G. P., McGregor, H., et al. (2024). Developing online communication training to request donation for vascularized composite allotransplantation (VCA): Improving performance to match new US organ donation targets. *BMC Med Educ*, 24,

77. <https://doi.org/10.1186/s12909-024-05026-9>.

Vogel, W. B., & Chen, G. J. (2018). An introduction to the why and how of risk adjustment. *Biostatistics & Epidemiology*, 4, 84–97. <https://doi.org/10.1080/24709360.2018.1519990>.

Witjes, M., Jansen, N. E., van Dongen, J., Herold, I. H. F., Otterspoor, L., Haase-Kromwijk, B. J. J. M., van der Hoeven, J. G., & Abdo, W. F. (2020, September). Appointing nurses trained in organ donation to improve family consent rates. *Nurs Crit Care*, 25(5), 299–304. doi:10.1111/nicc.12462. Epub 2019 Jul 11. PMID: 31294520; PMCID: PMC7507830.

6.2.1 Actions of Measured Entities to Improve Performance

The literature and TEP and OPO stakeholder group feedback indicated that poor performance of the Authorization Rate measure can result from a lack of cultural sensitivity or ineffective communication skills used by OPO staff when conducting emotional conversations with families (Bodenheimer et al., 2012; Rahman et al., 2026b; Rahman et al., 2026c; Siminoff et al., 2024). Providing both initial and additional training to staff is a viable mechanism to overcome these variables. Additionally, OPOs described conducting case reviews to provide further insight and developing a targeted action plan when performance is suboptimal (Rahman et al., 2026a). Furthermore, stakeholders suggested strengthening collaboration with hospitals and other partners and improving public perception of donation to improve performance on this measure.

A robust internal quality improvement program can assist OPOs in identifying root causes and developing targeted strategies to improve their Authorization Rate metric. By using a Plan, Do, Study, Act framework, OPOs can implement small tests of change and alter authorization strategies for broader implementation. The following list of potential activities or tests of change is realistic and attainable for OPOs. Collectively, these activities are achievable within existing OPO structures and workflows, and they are expected to be implemented with minimal difficulty, as they largely build upon established practices, ongoing training frameworks, and existing partnerships.

- Strengthening collaboration with hospital staff and clinical partners.
- Enhancing community outreach and public education efforts.
- Implementing family readiness and engagement assessments.
- Conducting comprehensive case reviews for both authorized and not authorized outcomes.
- Providing initial and ongoing staff training.

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6.2.5a Potential Unintended Consequences

The benefits of this measure being available for use and endorsed outweigh the potential unintended consequences associated with its use. However, there are two potential unintended consequences we identified through discussions with OPOs.

One potential unintended consequence is that hospitals may support families in not honoring (FPA), creating friction and resistance between the OPO and donor family that could result in poor performance of the measure. However, this can be addressed through hospital staff training and education, relationship-building, and sufficient time for conversations with the family. It is imperative that obtaining authorization involves informed, voluntary decision-making for families making the decision for donation.

A second potential unintended consequence is that authorization may be perceived by the family as coercive (Siminoff et al., 2024). If OPO staff are overly focused on obtaining consent, it may create implicit pressure that could cause an unintentional shift in the conversation toward persuasion rather than support. This can be addressed by ensuring that OPO staff involved in authorization receive specialized training and education on communication skills and maintain demonstrated competence in authorization conversations. Courses on authorization practices such as those provided by the North American Transplant Coordinators Organization help ensure that OPO staff approach authorization in a skilled and consistent manner.

Overall, there was consensus among the OPO test sites that the benefits of implementing an endorsed Authorization Rate measure far outweigh any unintended consequences, which can be mitigated through the strategies described above.

Reference:

Siminoff, L. A., Alolod, G. P., McGregor, H., et al. (2024). Developing online communication training to request donation for vascularized composite allotransplantation (VCA): Improving performance to match new US organ donation targets. *BMC Med Educ*, 24, 77.
<https://doi.org/10.1186/s12909-024-05026-9>.

7.1 Supplemental Attachment

[CBE-5603-7.1-Authorization-Rate-Supplemental-Attachment-B-Spring2026.pdf](#)

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