

# What a formula change may mean for Black patients in need of a kidney transplant

August 3 2022, by Heather Carlson Kehren

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Experts are hoping a [new requirement](#) that all U.S. transplant centers use a race-neutral formula to determine eligibility for a kidney transplant will improve African American access to lifesaving transplants.

"This is an essential step toward reducing racial inequity in access to [kidney transplantation](#)," says Naim Issa, M.D., a Mayo Clinic nephrologist. "The inclusion of race in the calculation of [kidney function](#) has been linked to disparities in care for African Americans, including delays in diagnosis of kidney disease and eligibility to be put on the waiting list for a kidney transplant."

## Role of race in estimating kidney function

The new requirement, which was recently approved by the Organ Procurement & Transplantation Network's board, centers on how a patient's glomerular filtration rate, or GFR, is calculated. This rate estimates how much blood the kidneys' filtering units clean every minute based on a person's body size.

Some transplant centers, including Mayo Clinic, directly measure the glomerular filtration rate to determine a patient's kidney function. But direct measurement of kidney function is not widely available across laboratories and is cost-prohibitive for routine clinic use. Therefore, many [health care professionals](#) rely on calculated estimates of the glomerular filtration rate known as eGFR. This estimate is important because it determines whether a patient qualifies to be put on the

transplant waiting list.

Some formulas commonly used to estimate kidney functions include a [Black race variable](#). Those formulas report higher eGFRs for Black people, compared to non-Black people with similar characteristics. Recent research has found that these race-based calculations can end up overestimating a Black patient's kidney function by as much as 16%.

### **What change means for health equity**

Racial disparities surrounding access to kidney transplants remain an issue. African Americans are more than [three times as likely](#) to have kidney failure than [white people](#) and less likely to be put on a waiting list for a kidney transplant.

Once on a waiting list, Black patients often [end up waiting longer](#) than white patients for a kidney transplant. The reason behind these disparities is complex.

African Americans are at high risk for [kidney failure](#) due in part to high rates of diabetes and high blood pressure. Recent research also has discovered a genetic predisposition to kidney disease for some people with Western African ancestry. Economic and social conditions also play a role, as does a lack of access to health care and structural racism.

"African Americans are markedly overrepresented among patients on dialysis and are less likely to be referred for or receive a kidney transplant," Dr. Issa says.

### **Encouraging more diverse donors**

Experts are optimistic this transplant policy change will encourage more people, especially people of color, to [consider becoming organ donors](#).

August is [National Minority Donor Awareness Month](#). Of the nearly 90,000 people in the U.S. on the waiting list for a [kidney transplant](#), more than one-third are Black.

While organs are not matched based on race and ethnicity, people will generally have a better chance of matching with someone from a similar racial or ethnic background. While most people in need of a transplant in the U.S. are people of color, 30% of donors come from communities of color.

Provided by Mayo Clinic

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