Nationally, heart failure patients who receive specialized cardiology care after admission tend to have better outcomes, including lower readmission rates and lower rates of death. But not all patients may have equal access to cardiology services. As part of an initiative by the Department of Medicine Health Equity Committee at Brigham and Women's Hospital, Brigham investigators conducted a retrospective cohort study of patients admitted to the Brigham with a diagnosis of heart failure. They evaluated whether race and other factors, such as age and gender, influenced whether the patient was admitted to either the specialized cardiology service or general medicine service, as well as the subsequent relationship between admission service and outcomes. The team found that patients who self-identified as black, Latinx, female or over the age of 75 were less likely to be admitted to the cardiology service, even after adjusting for demographic and clinical factors. Their results are published in *Circulation: Heart Failure*.

"This analysis reflects our institution's strong tradition of self-reflection and transparency to make care better for all our patients," said co-
senior author Eldrin Lewis, MD, MPH, the director of the Cardiovascular Clerkship Program at the Brigham and a cardiovascular medicine and heart transplantation specialist. "We hope other institutions and clinicians will be equally committed to addressing inequities in their own contexts, systems, and care settings. Ongoing institutional insistence on self-critique and recognition of the pervasiveness of structural racism and bias will increase the likelihood of success in achieving health equity at all U.S. institutions."

The results are from one of the first projects undertaken by the Department of Medicine Health Equity Committee, a multidisciplinary group formed in 2017. The committee chose to focus on patients admitted with heart failure, one of the most frequent medical admission diagnoses at the Brigham and the second most common reason for hospital admission in the U.S. among older adults. Heart failure is a condition for which there are known racial inequities in outcomes.

The study included patients who came to the Brigham's Emergency Department and were admitted with a principal diagnosis of heart failure to either the general medicine or cardiology service from September 2008 to November 2017. During this period, 1,147 patients were admitted to the general medicine service and 2,117 patients were admitted to the cardiology service. In total, 872 patients identified as black, 340 as Latinx, and 1,921 as white.

Even after adjusting for demographic and clinical factors, Lewis and colleagues found that black and Latinx patients with heart failure were significantly more likely to be admitted to the general medicine service compared to white patients. While there was no difference in rates of death within 30 days of admission, patients admitted to the general medicine service had higher rates of readmission within 30 days.
"Taken together, our findings suggest that racial inequities in admission patterns may contribute, in part, to the well-documented racial inequities in heart failure readmissions in the U.S," said corresponding author Michelle Morse, MD, MPH, an associate physician in the Division of Global Health Equity, a hospitalist in the Department of General Internal Medicine and the assistant program director for the Internal Medicine Residency Program at the Brigham. "Future research on health inequities should seriously consider looking beyond biological differences between races to critical issues of inequities in access to care as key drivers of racial disparities."

The authors note that their study is limited by its observational nature. They also could not account for differences in severity of heart failure. In addition, there were very few deaths in the study overall, and the authors note that their findings regarding deaths within 30 days of admission should be interpreted with caution.

At the Brigham, the committee has begun work to address these demonstrated inequities. In one project, investigators are conducting real-time surveys of the physicians involved in the admissions process, as well as the patients being admitted, to better understand what drives the decision as to which service a patient is admitted. The results of these surveys will inform the creation of objective admission service guidelines for patients with heart failure. Additionally, the committee is acting to improve care for patients with heart failure who have been admitted to the general medicine service by reducing barriers for patients to see a cardiologist after discharge from the general medicine service. Black and Latinx patients were less likely to have an outpatient cardiologist at our institution, which was the strongest predictor of admission to the inpatient cardiology service. Heart failure patients tend to be admitted repeatedly so reducing inequities in subsequent admission service may help improve care for these patients.

"It has been pivotal to work in an institution that is willing to both reflect on inequities and to invest in addressing them," said Lewis. "At a macrolevel, recognizing that inequities like those we identified are pervasive, we believe that collaboration across services and provider roles, shared definitions and analysis of structural drivers of inequity, and a collective commitment to improvement are essential to minimizing these gaps."

Provided by Brigham and Women's Hospital