The study by Eberly and colleagues, uses an administrative database of commercially-insured patients to identify racial/ethnic differences from 2015 to 2019 in treatment with rate vs rhythm control for paroxysmal atrial fibrillation (AF). Eberly et al\(^1\) find that although there was an increase over time, the overall incidence of rhythm control, with either antiarrhythmic drugs (AADs) or catheter ablation (CA), was relatively low for all patients during the study, regardless of race/ethnicity: of 109,221 included patients, only 19,362 patients (17.7\%) were treated with AADs, and only 3,500 patients (3.2\%) underwent CA.\(^1\) However, compared with White patients, Black patients were significantly less likely to be treated with rhythm control (adjusted odds ratio [aOR], 0.89 [95\% CI, 0.83-0.94]; \(P < .001\)), and those of Latinx ethnicity were significantly less likely to undergo CA (aOR, 0.73 [95\% CI, 0.60-0.89]; \(P = .002\)).\(^1\) Patients with lower zip code-linked household income were also significantly less likely to be treated with rhythm control (aOR for <$50,000: 0.83 [95\% CI, 0.79-0.87]; \(P < .001\); aOR for $50,000-$99,999: 0.92 [95\% CI, 0.88-0.96]; \(P < .001\); compared with \$	ext{\geq}100,000\)). This study by Eberly et al\(^1\) is an important addition to a large and increasing body of literature that highlights significant racial/ethnic differences in AF treatment, including both anticoagulation and rhythm control.\(^2,3\)

Several important points should be made when placing these findings in context. The first pertains to the choice of rate vs rhythm control during the period of analysis. A fundamental assumption when interpreting data such as these is that a clear preference exists for one form of treatment over another and that, in this case, racial/ethnic differences in utilization of rhythm control for Black and Latinx patients may signal lower quality care. While data from a 2020 study\(^4\) do suggest a benefit to rhythm control, during the period studied by Eberly and colleagues,\(^1\) there was much greater equipoise regarding rate vs rhythm control, and rate control could have been considered very reasonable treatment for most patients with AF and left ventricle ejection fraction (LVEF) within reference range.\(^5\) The fact that most patients in the study by Eberly et al,\(^1\) regardless of race/ethnicity, were treated with rate control reflects the lack of a clear preference for rhythm control during the time frame studied. The decision to pursue rhythm control can be complicated and should incorporate several important factors, such as symptoms, burden of AF, and LVEF, none of which are well-captured in claims data. This highlights one of the important challenges with using administrative data to understand racial/ethnic disparities and inequities of care. Although administrative data can identify high-level trends in utilization, this type of data is not well-suited to understanding the appropriateness of treatment decisions for individual patients or groups of patients, particularly when there is not a clear preference for one form of treatment over another.

In circumstances in which there is not a clear benefit for one treatment over another, it is also difficult to know what the appropriate level of utilization for rhythm control should have been. For instance, in the final year of study in this analysis (ie, 2019), 2.8\% of Black patients, 2.5\% of Latinx patients, and 4.2\% of White patients underwent CA. From a health system point of view, should the goal be to have rates of CA for Black and Latinx patients be on par with White patients? Or, should the goal be to increase rates of rhythm control for all patients? Additionally, although the racial differences in rhythm control in this analysis were statistically significant, were they clinically important? What magnitudes of difference in utilization of AADs and CA are likely to have a meaningful impact on overall health at a population level? Administrative data can help identify
differences between groups, but understanding what degrees of difference are clinically important and what levels of utilization should be considered appropriate are far more complicated questions.

When placing these findings in context, it is also important to bear in mind that the median (interquartile range) age of patients in this cohort was 75 (68-82) years, and most patients were enrolled in Medicare Advantage plans. Therefore, the findings in this study by Eberly et al.1 pertain primarily to older patients with AF, for whom decisions to pursue rhythm control may be tempered by concerns regarding toxic effects of AADs or procedural risks associated with CA.5 Whether similar differences based on race/ethnicity with regard to rate vs rhythm control would be observed in younger cohorts with AF requires further study. The fact that a much larger percentage of patients in this cohort who underwent CA had commercial insurance, as opposed to Medicare Advantage, supports the idea that age factors prominently into the decision to pursue rhythm control, and it may also modify apparent differences based on race/ethnicity.

Lastly, and perhaps most importantly, although the study by Eberly et al1 clearly identifies racial/ethnic differences in the utilization of rhythm control, administrative data cannot tell us why these differences exist. There are many potential contributors to racial disparities in health care6: systemic biases within the health care system and society writ large, social determinants of health, differences in trust between patients and clinicians, varying levels of health literacy, and real or perceived biological differences in response to therapy, to name a few. It is crucial to understand the extent to which these or other factors contribute to racial/ethnic differences in treatment so that targeted approaches can be developed to address racial/ethnic disparities. For instance, in this study by Eberly et al,1 were Black, Latinx, and White patients offered rhythm control at similar incidences, with Black and Latinx patients less commonly choosing to pursue rhythm control? Or, were Black and Latinx patients less likely to be offered rhythm control in the first place? Understanding these more subtle differences is beyond the scope of administrative data sets and will require studies with a much richer and fuller description of the interactions between individual patients and clinicians to determine why racial/ethnic disparities exist and how they can be addressed.

ARTICLE INFORMATION
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