

### Racial disparities in surgical treatment of renal masses: initial analysis of a statewide registry

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**INTRODUCTION AND OBJECTIVE:** Nephron-sparing approaches and surveillance are increasingly popular strategies to manage clinical T1 renal masses (cT1RM). It is well known that social and racial disparities affect access to healthcare resources and even oncological outcomes. Our objective in the project was to gain insight into potential racial disparities in initial management of cT1RM to guide our future quality improvement efforts.

**METHODS:** The MUSIC-KIDNEY (Michigan Urological Surgery Improvement Collaborative – Kidney mass: Identifying and Defining Necessary Evaluation and Therapy) registry commenced data collection in June 2017. Data abstractors recorded clinical and follow-up data for patients with newly diagnosed cT1RMs at 16 MUSIC practices with >90 physicians. Practices with at least 5 White and 5 African-American (AA) patients were included in the analysis. Bivariate analysis and multivariable regression model were performed to assess association between race and treatment decision.

**RESULTS:** Our cohort included 2932 patients including 2231 (76%) White, 433 (15%) AA, and 268 (9.1%) patients with other/unknown race. AA patients were more likely to be female, have public insurance, higher comorbidity when compared to white patients ( $p < 0.05$  for each). Overall, AA patients were more likely to undergo surveillance when compared to white patients (61% vs 51%,  $p < 0.01$ ) and less likely to undergo a partial nephrectomy (PN) (21% vs 31%,  $p < 0.01$ ); rates of RN and ablation/other were not statistically different ( $p > 0.05$ ) (Figure). We continued to observe a similar trend across practices despite the observed variation. Controlling for patient and tumor characteristics, AA were more likely to undergo surveillance compared to White patients (OR=1.55,  $p < 0.01$ ).

**CONCLUSIONS:** Our data provide an initial assessment of the effect race may play in decision-making associated with management of cT1RM in a statewide registry. This is consistent with other publications showing disparities in initial management for small renal masses in which AA patients were less likely to receive PN; we add to these data by identifying an increased proportion receiving surveillance. These data will provide a benchmark as we further investigate potential disparities as one component of MUSIC's quality improvement efforts.

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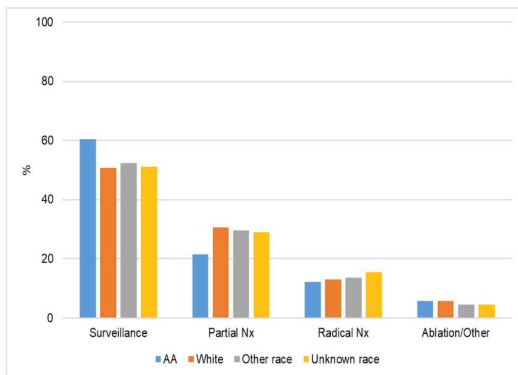


Figure. Initial management strategy for cT1 renal masses stratified by race