

Disparities in dual x-ray absorptiometry (DEXA) scan utilization across race/ethnic groups prior to and after hip fractures

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Introduction

Methods

Results

- Geriatric hip fractures are common events that provide insight about bone health
- Dual x-ray absorptiometry (DEXA) scans are a standard tool to determine bone density
- Current study sought to analyze the use of DEXA scans PRIOR TO and AFTER hip fragility fractures in geriatric patients across different race/ethnic groups

- Data from the 2014 to 2016 Medicare Standard Analytic Files (SAF) PearlDiver dataset
- Geriatric patients who had a hip fracture were identified and those who had a DEXA scan PRIOR TO or AFTER their hip fracture were defined and characterized
- The cohort was compared with univariate and multivariate analyses

- Of 58,099 hip fracture patients, 19.8% had a DEXA scan PRIOR TO their hip fracture and 3.9% had a DEXA scan AFTER their hip fracture
- 91.0% of the cohort population identified as white and 9.0% identified as non-white (Native American, Black, Hispanic, Asian, or other).
- PRIOR TO hip fracture and controlling for other variables, all non-white categories were at lesser odds of having had a DEXA scan
- AFTER hip fracture, Black, Hispanic, and other patients were at a lesser odds of having had a DEXA scan

Total hip fracture cohort breakdown by race/ethnicity

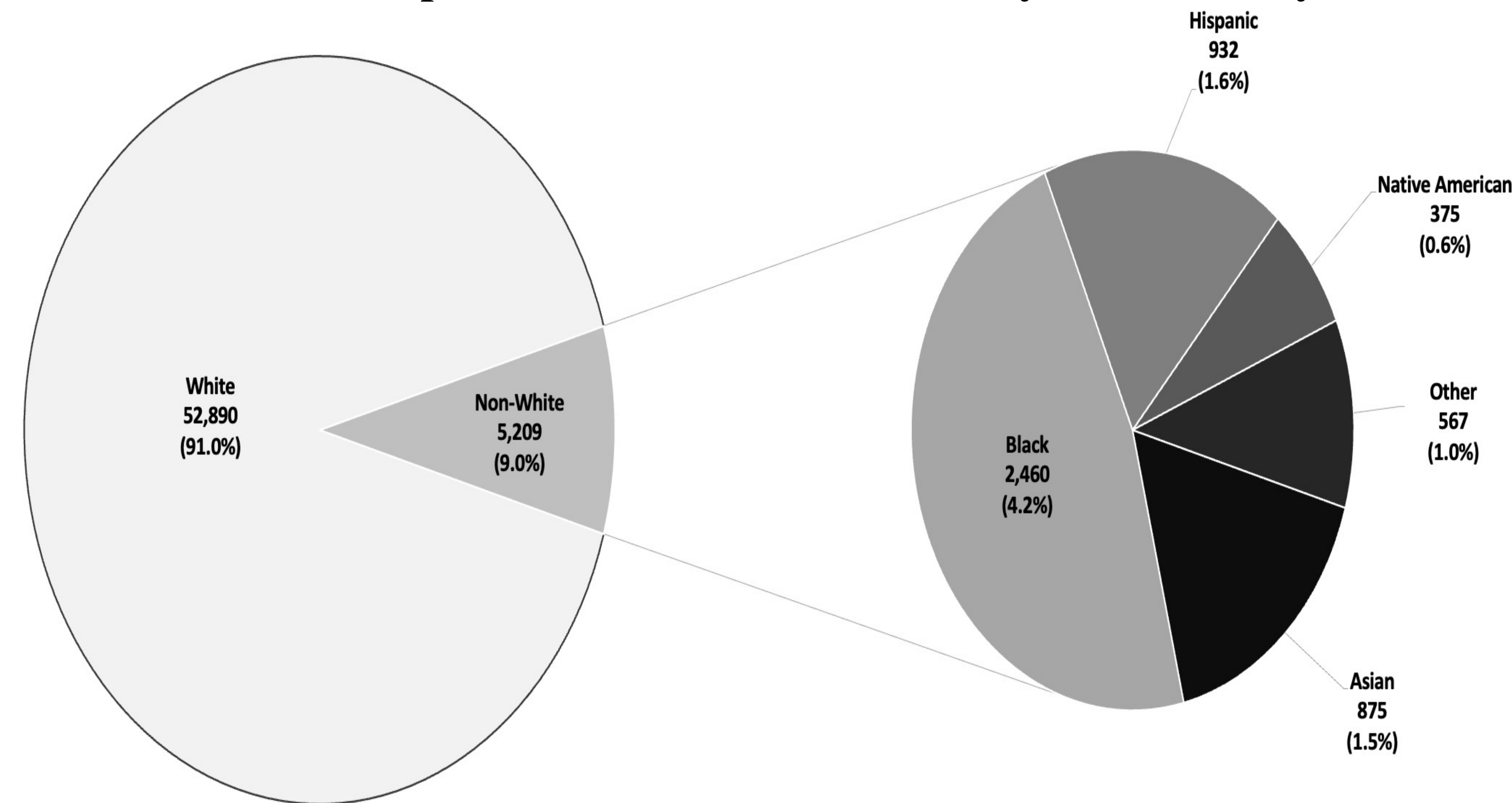


Figure 1. Study cohort breakdown of patients who had a hip fragility fracture by race/ethnicity

Predictive Factors for DEXA scan utilization PRIOR TO hip fracture from multivariable analysis

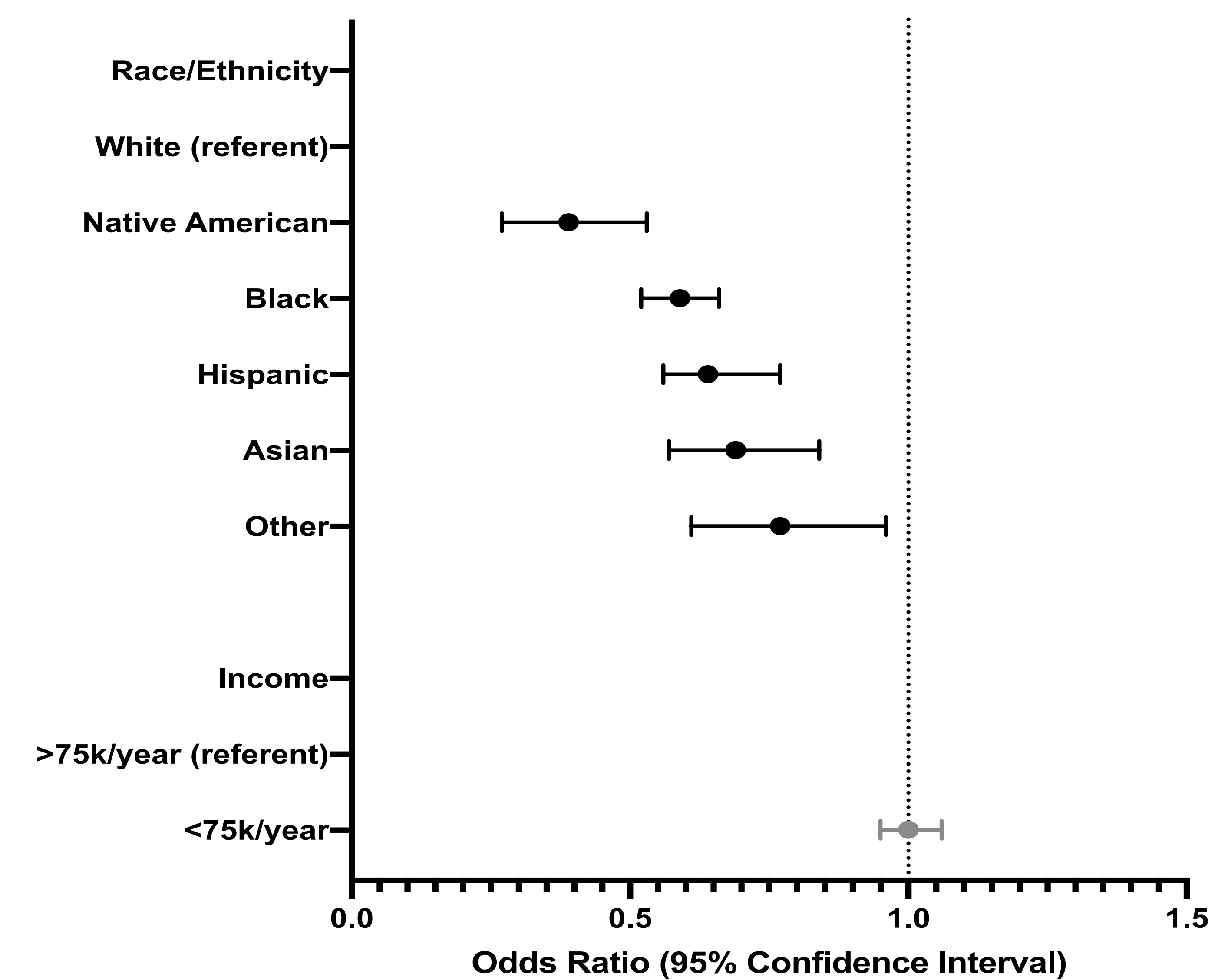


Figure 2. Multivariate logistic regression analysis for predictive factors for having a total spine MRI for patients presenting to the ED

Conclusions

- For the large study cohort of hip fracture patients, 9.0% identified as non-white
- Multivariate analysis identified individuals who identified as non-white were less likely to have had a DEXA scan prior to hip fracture, while income was not predictive of whether a patient would have had a DEXA scan
- Identification of these disparities represents an area where medical access/care can be improved for ALL patients at risk for a hip fracture