

BACKGROUND

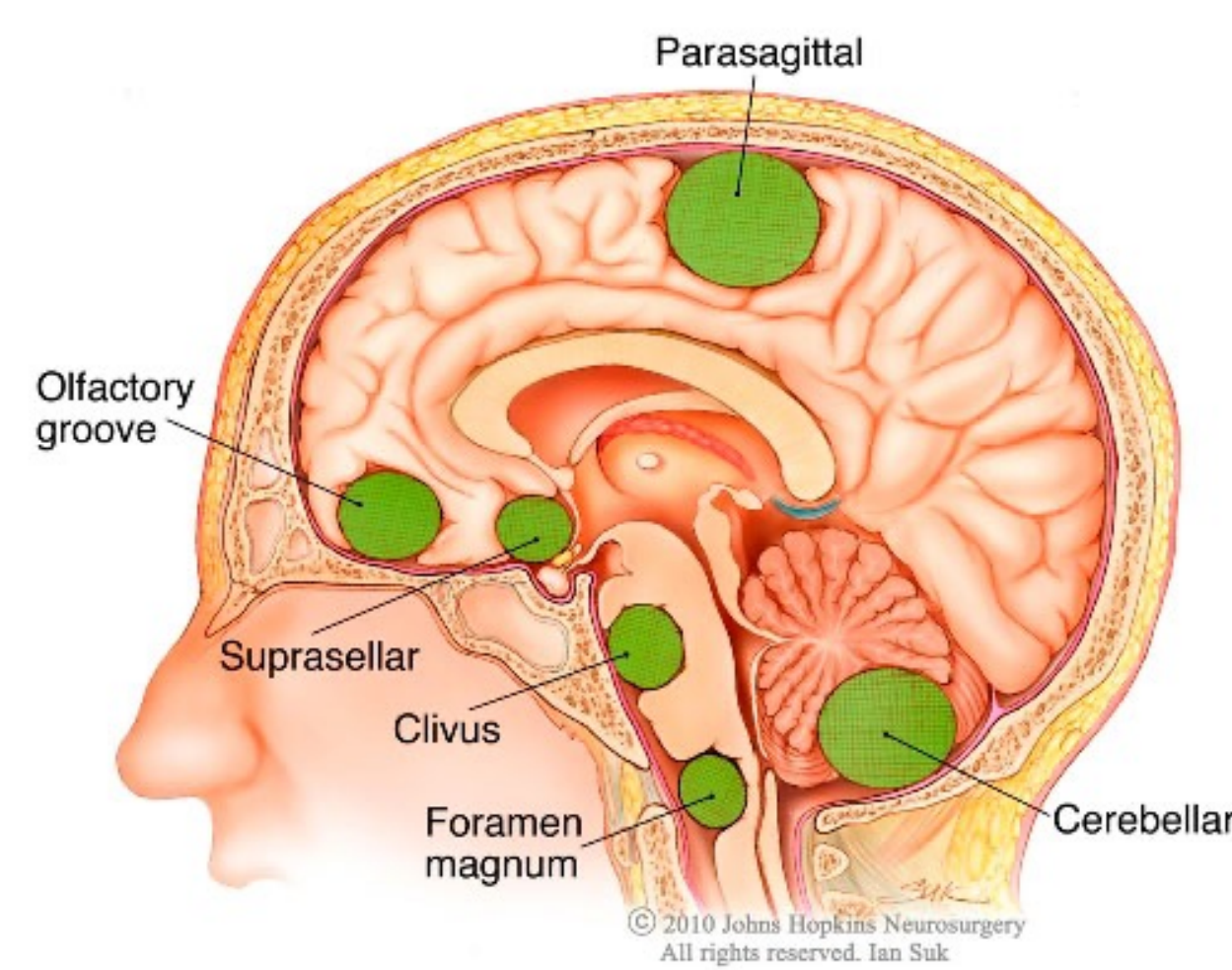
- Meningiomas are the most common primary central nervous system tumor.
- Make up 36.6% of intracranial tumors
- Standard of care:
 - If <3cm and asymptomatic → closely monitor
 - If >3cm → surgical resection
- Timely, effective care is important for good outcomes
- Previous studies limited and this study can help pave the way for future related studies at this single institution and more generally.

STUDY OBJECTIVE

- Our study sought to determine and analyze the social determinants of health in patients with meningioma at a single institution.

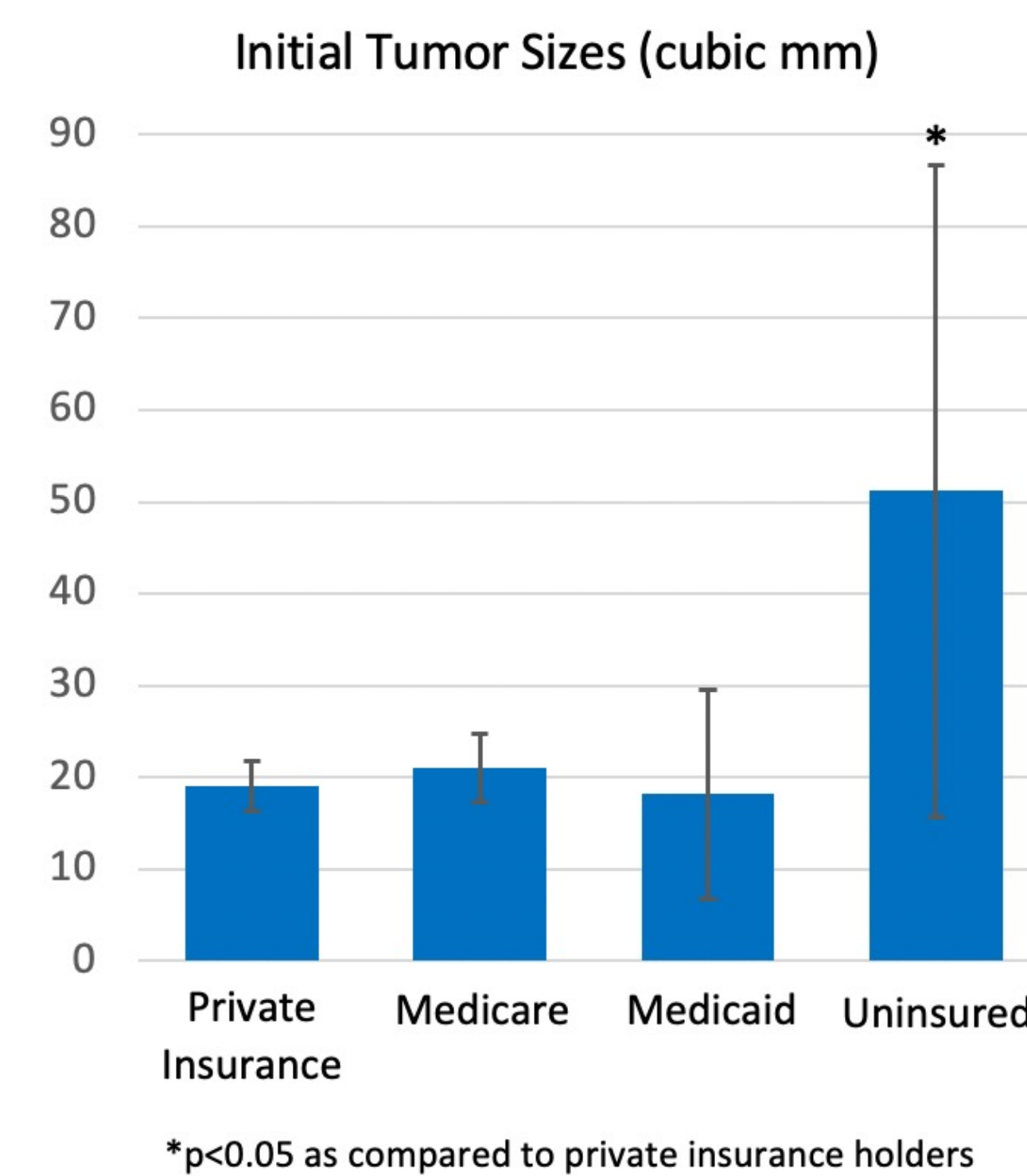
METHODS

- Study Design: Retrospective cohort analysis
- Setting: JHH and Hopkins Bayview
- Population
 - Inclusion criteria: patient diagnosed with and receiving surgical care for meningioma at JHH or Hopkins Bayview between 2016-19; 18 years or older
- Data Collection
 - Chart Review of 517 patients undergoing meningioma surgery between 2016 and 2019
- Main socioeconomic categories:
 - Race
 - Ethnicity
 - Insurance Type
 - Median Income
 - PCP care
- Main Outcomes
 - Initial tumor size
 - Admission type
 - Length of stay
- Secondary Outcomes
 - Hospital charges
 - Discharge disposition
- Statistical Analysis
 - RStudio analysis of social determinants of health on pre-surgical presentation and hospital care

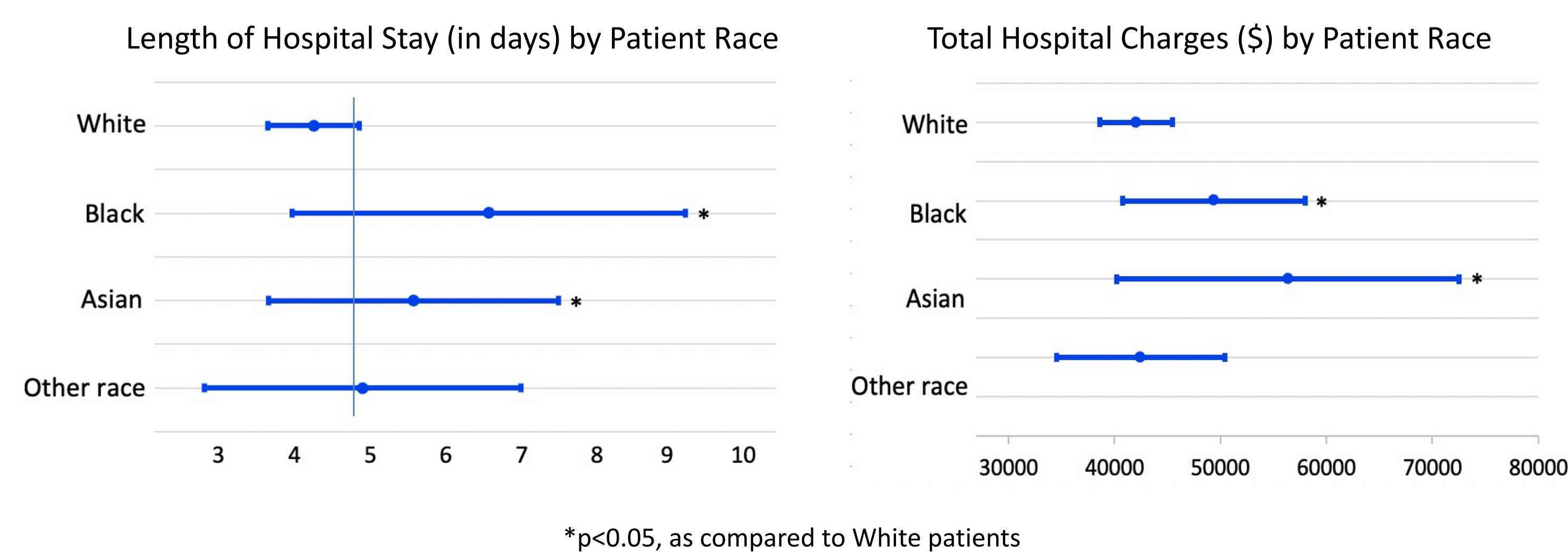
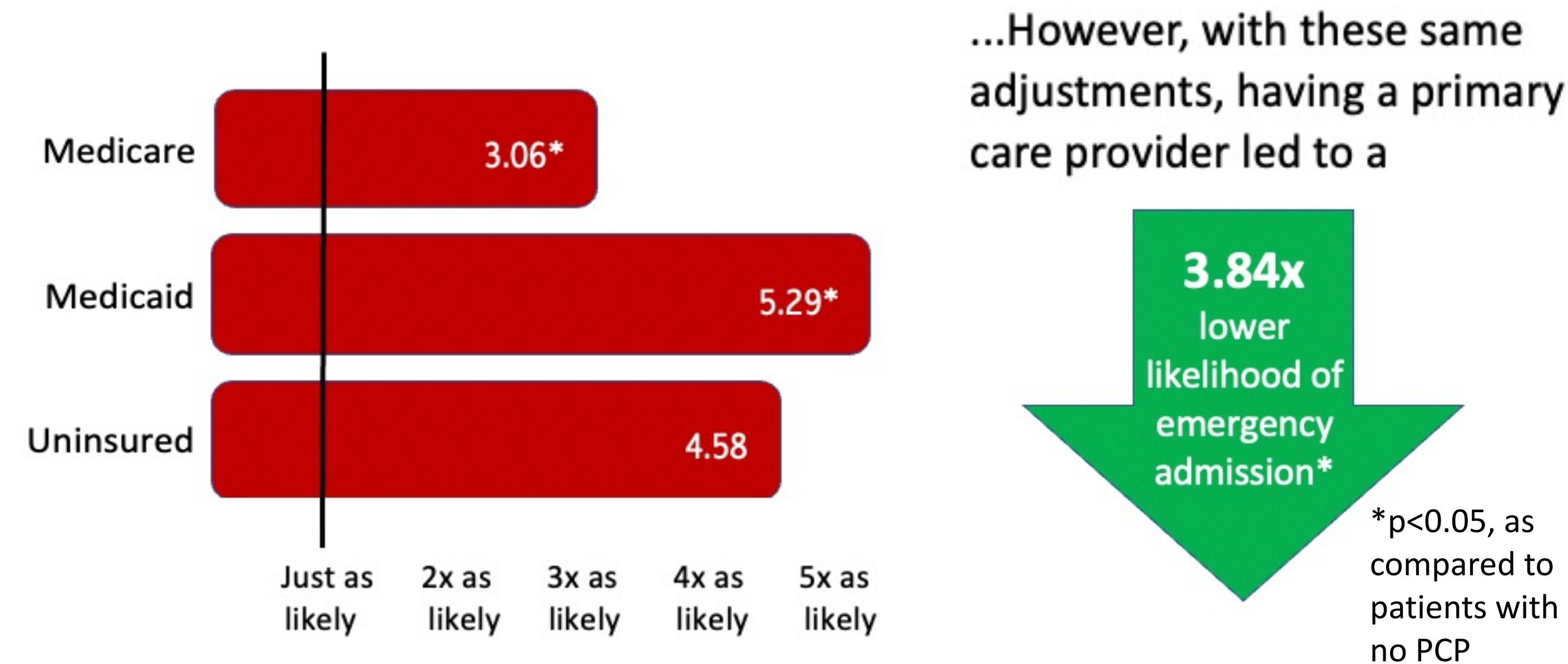


RESULTS

	n (%)
Race	
White	348 (67.3)
Black	91 (17.6)
Asian	36 (7.0)
Other	42 (8.1)
Ethnicity	
Non-Hispanic	497 (96.1)
Hispanic	20 (3.9)
Sex	
Male	134 (25.9)
Female	383 (74.1)
Insurance Type	
Private	337 (65.2)
Medicare	169 (30.8)
Medicaid	13 (2.5)
Uninsured	8 (1.5)
Median Household Income	
1st quartile	94 (18.2)
2nd quartile	248 (48.0)
3rd quartile	155 (30.0)
4th quartile	5 (9.67)



After adjustments for race, ethnicity, sex, and median household income, patients on non-private insurance are more likely to be admitted to the hospital on **EMERGENCY...**



Other Analyses

- Patients on Medicare are also more likely to have significantly longer length of hospital stay and total hospital charges than patients on private insurance.
- No significant associations between median income nor ethnicity and main/secondary outcomes.

CONCLUSIONS

- Medicare and uninsured patients were more likely to come in for surgery with larger tumor sizes than private insurance holders.
- Medicaid and Medicare patients were significantly more likely to be admitted to the hospital on an emergency.
- Medicare patients were more likely to have a longer length of hospital stay and higher total hospital charges.
- Black and Asian patients were significantly more likely to have a longer length of stay and higher hospital charges than White patients.
- Having no primary care provider was strongly associated with an emergent admission type even while controlling for other demographic features of patients.

LIMITATIONS

- Median household income was not directly measured; rather it was estimated based on patient zip-code.
- There was a small sample size for uninsured and Hispanic patients.
- Confounding variables regarding incidental findings versus work-up findings, sub-type of meningioma, etc. were not analyzed.

IMPLICATIONS

- Findings encourage a further analysis of factors that lead uninsured patients to leave the hospital more quickly and have less total cost despite higher initial tumor size and higher emergency admission rates.
- Future studies needed to determine the post-hospital effect of these pre-hospital and hospital care-related variables (i.e. emergency admission).
- Future studies also recommended to determine the role of other related demographic and/or primary care-related variables that might alter outcomes.