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Racial Disparities in Electroconvulsive Therapy Utilization 2016 to 2021

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Racial Disparities in Electroconvulsive Therapy Utilization
2016 to 2021

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No Relevant Dislosures

Psychiatry

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Electroconvulsive Therapy is Effective

- Induction of seizure with electric current
- Numerous indications
- Safe and Efficacious

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Racial Disparities in ECT Utilization

- Disparities observed
  - Asian
  - Black
  - Hispanic
- Weaknesses
- Hypothesis
  - Confounding
  - Response
  - Presentation
  - Bias

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Objective

To determine if disparities in ECT utilization among patients with Major Depressive Disorder persist when controlling for covariates despite attempts to rectify racial inequities

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Retrospective Cohort Design

- HCA Depression Database
  - Severe Depression
  - ICD 10: F32-33
  - 2016-2021
- Cohorted by race
- Covariates measured
- Chi-Squared
  - $\alpha=0.05$
- Logistic Regression
  - Odds ratio point estimates constructed

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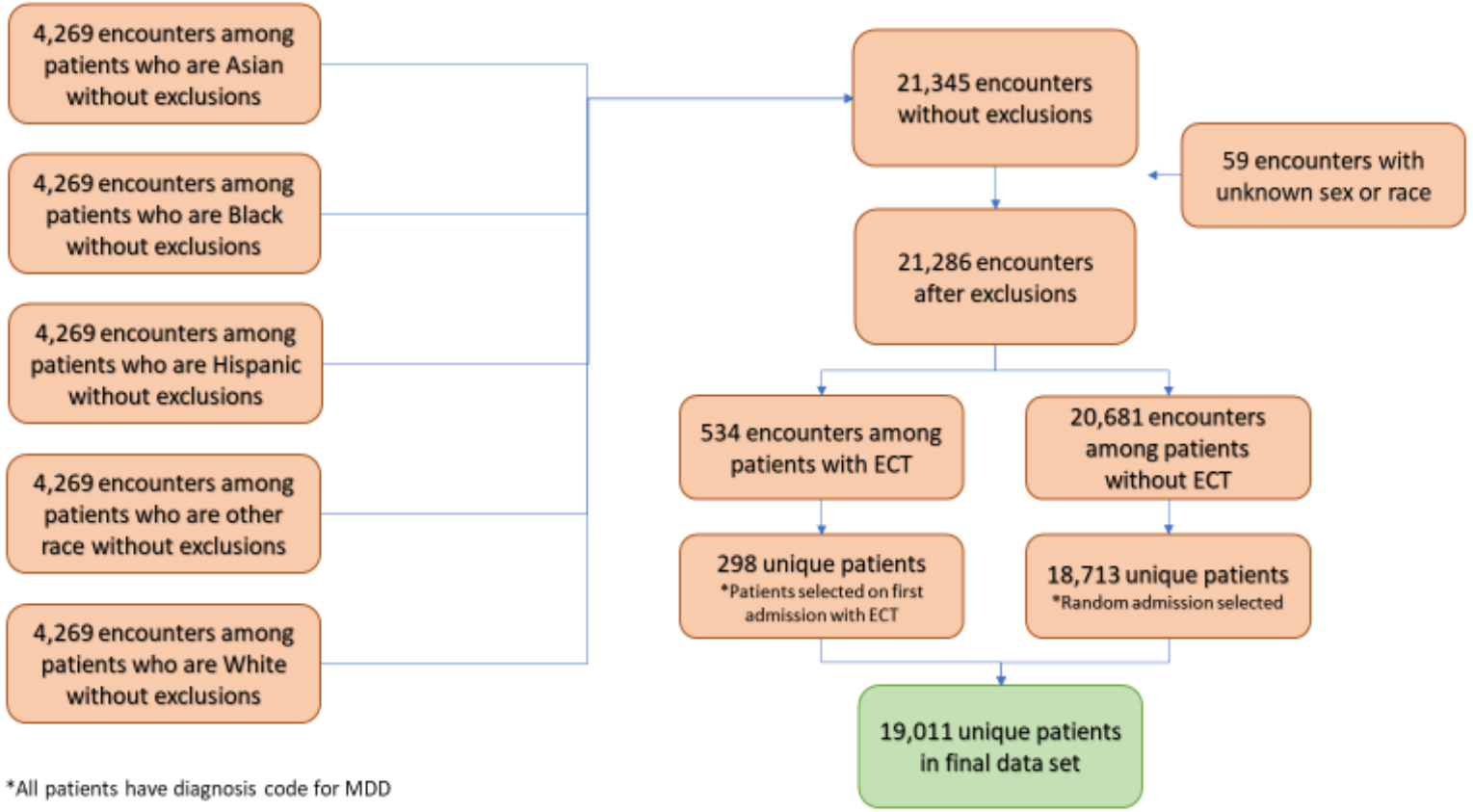
Selection and Demographics



*All patients have diagnosis code for MDD

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Racial disparity in Covariates

Characteristic	Asian N (%)	Black N (%)	Hispanic N (%)	Other N (%)	White N (%)
Total	3135 (16.49%)	3985 (20.96%)	4042 (21.26%)	3659 (19.25%)	4190 (22.04%)
ECT					
No	3096 (98.76%)	3957 (99.30%)	4000 (98.96%)	3608 (98.61%)	4052 (96.71%)
Yes	39 (1.24%)	28 (0.70%)	42 (1.04%)	51 (1.39%)	138 (3.29%)
Age group					
18-34	1451 (46.28%)	1573 (39.47%)	1566 (38.74%)	1696 (46.35%)	1162 (27.73%)
35-44	489 (15.60%)	782 (19.62%)	698 (17.27%)	608 (16.62%)	614 (14.65%)
45-54	395 (12.60%)	713 (17.89%)	668 (16.53%)	506 (13.83%)	753 (17.97%)
55-64	301 (9.60%)	603 (15.13%)	569 (14.08%)	415 (11.34%)	798 (19.05%)
65-74	254 (8.10%)	213 (5.35%)	301 (7.45%)	261 (7.13%)	536 (12.79%)
75+	245 (7.81%)	101 (2.53%)	240 (5.94%)	173 (4.73%)	327 (7.80%)
Sex					
Female	1976 (63.03%)	2305 (57.84%)	2430 (60.12%)	2220 (60.67%)	2526 (60.29%)
Male	1159 (36.97%)	1680 (42.16%)	1612 (39.88%)	1439 (39.33%)	1664 (39.71%)
Insurance					
Medicaid	406 (12.95%)	1150 (28.86%)	830 (20.53%)	754 (20.61%)	637 (15.20%)
Medicare	590 (18.82%)	835 (20.95%)	915 (22.64%)	680 (18.58%)	1324 (31.60%)
No insurance	405 (12.92%)	791 (19.85%)	916 (22.66%)	652 (17.82%)	592 (14.13%)
Other	332 (10.59%)	314 (7.88%)	376 (9.30%)	388 (10.60%)	311 (7.42%)
Private	1402 (44.72%)	895 (22.46%)	1005 (24.86%)	1185 (32.39%)	1326 (31.65%)
Substance use					
No	2406 (76.75%)	2124 (53.30%)	2416 (59.77%)	2251 (61.52%)	2386 (56.95%)
Yes	729 (23.25%)	1861 (46.70%)	1626 (40.23%)	1408 (38.48%)	1804 (43.05%)
Personality disorder					
No	3035 (96.81%)	3873 (97.19%)	3924 (97.08%)	3505 (95.79%)	3972 (94.80%)
Yes	100 (3.19%)	112 (2.81%)	118 (2.92%)	154 (4.21%)	218 (5.20%)

- Rate: 0.7-3.3%
- Age
- Sex
- Insurance
- Comorbidity
- Readmission

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ECT Utilization by Race

- Regression
  - OR 1.89
  - (P<0.0001)

Race	OR vs White
Asian	0.427
Black	0.274
Hispanic	0.386
Other	0.528

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Discussion: Finding the Cause

- Confounding
- Access
- Treatment setting
- Response
- Presentation
  - Psychosis
- Bias
- Stigma

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Conclusion: Disparities Persist

- Covariates
- Strengths
- Weaknesses
- Future Directions

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Questions

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