

Bariatric Run Notebook

An analysis of the MBSA-QIP Dataset

Pranav Kumar Mishra

Wednesday, May 29, 2024

Table of contents

Import Data	2
Data Processing	2
Filtering for CPT: ['43644', '43755']	2
Generate Figures and Tables	2
Save the run dataset	6

The computer's name is pminformatics.rush.edu The current directory has been set to /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management

Caution: The run directory already exists for Run # 002 A figures directory is already present: /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management/data/analysis/bariatric/runs/run_002/figures/ A tables directory is already present: /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management/data/analysis/bariatric/runs/run_002/tables/ A notebook directory is already present: /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management/data/analysis/bariatric/runs/run_002/notebooks/ A text directory is already present: /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management/data/analysis/bariatric/runs/run_002/text/

```
{'run_num': '001',  
 'CPT_filter': ['43644'],  
 'year_start': 2018,  
 'year_stop': 2022,  
 'years': array([2018, 2019, 2020, 2021, 2022]),  
 'verbosity': True,
```

```
'repository_root': '/home/pranav/work/pranavmishra90/courses/by-mishra/research-  
data-management',  
'notebook_file': './code/jupyter/bariatric.ipynb',  
'image_filetypes_output': ['jpg'],  
'data_source_alpha': 0,  
'watermark_text_alpha': 0,  
'watermarks': True,  
'errorbartype': ('ci', 95),  
'save_figures': True,  
'table_filetypes_output': ['parquet', 'csv'],  
'save_tables': True}
```

Import Data

Statistics for Main dataframe

There are 1,021,936 cases with 245 variables (columns).

Data Processing

Subset the data

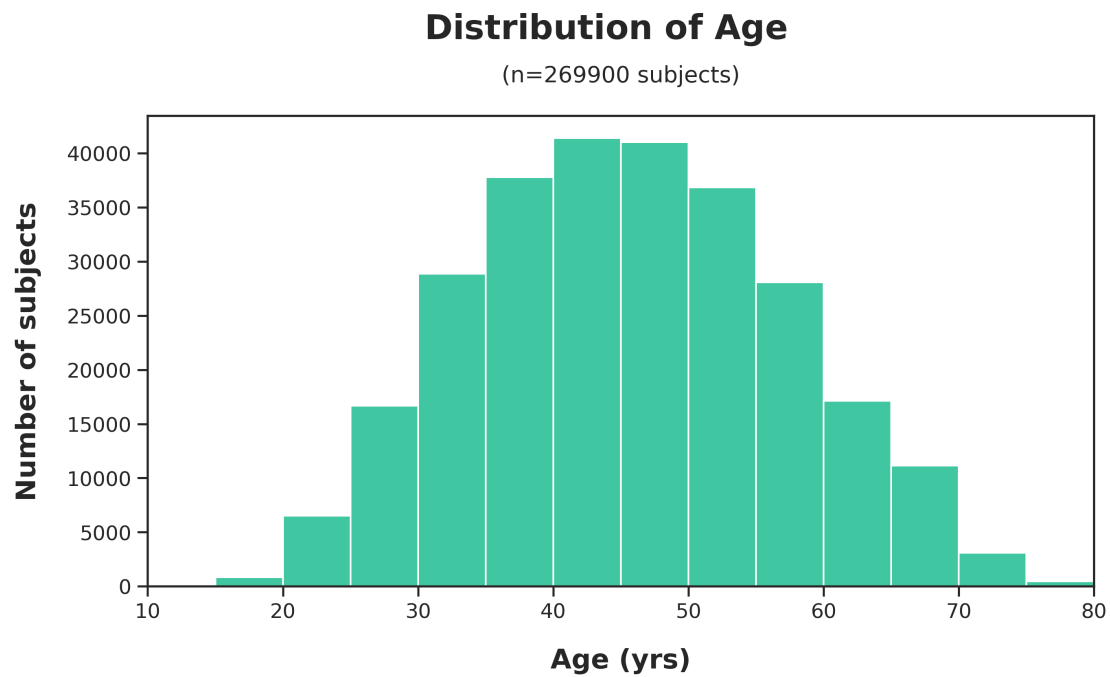
Filtering for CPT: ['43644', '43755']

The total MBSA-QIP dataset `mbsa_main_df` has 1,021,936 cases.

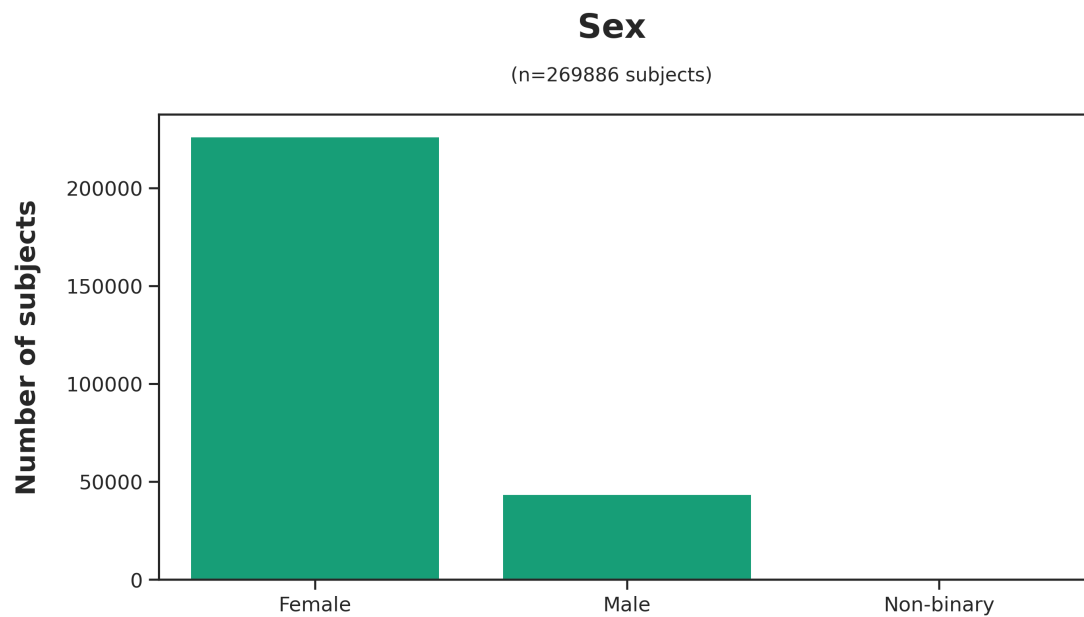
After filtering, 269,926 cases remain in the dataset `mbsa_df`

Generate Figures and Tables

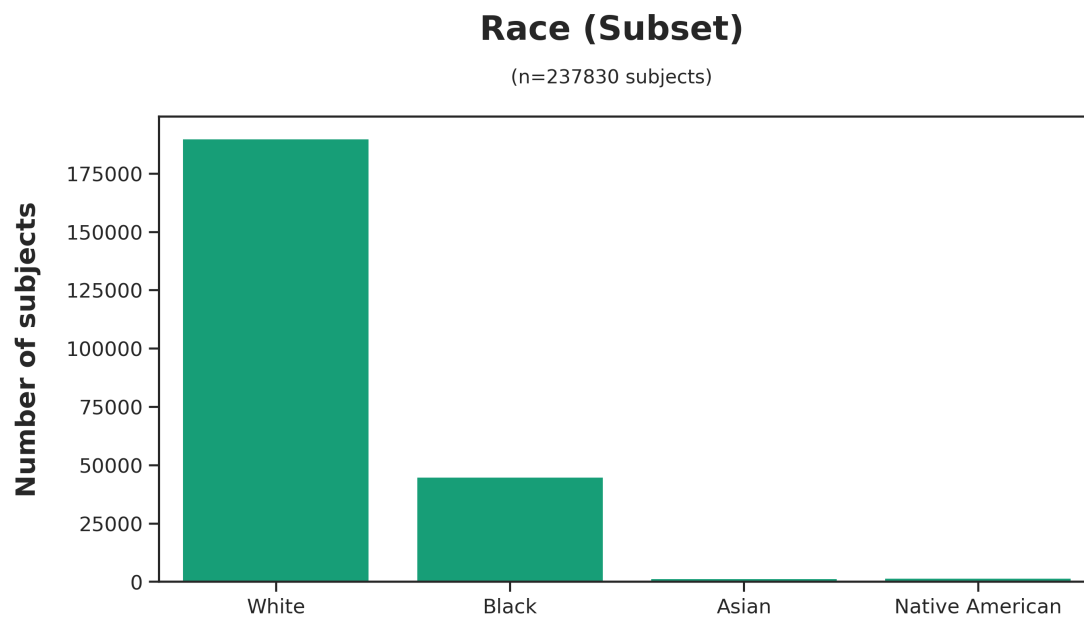
Age



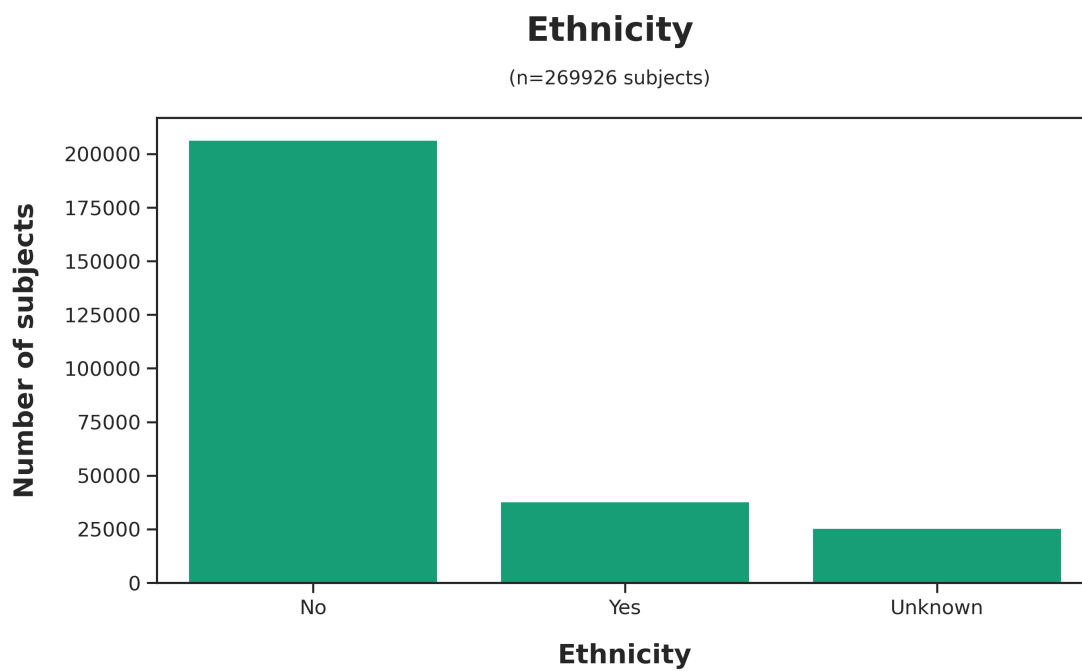
'Figure saved to /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management/data/analysis/bariatric/runs/run_002/figures//demographics/Run002_Demographics_Donor_Sex.jpg'



'Figure saved to /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management/data/analysis/bariatric/runs/run_002/figures//demographics/Run002_DemographicRace.jpg'



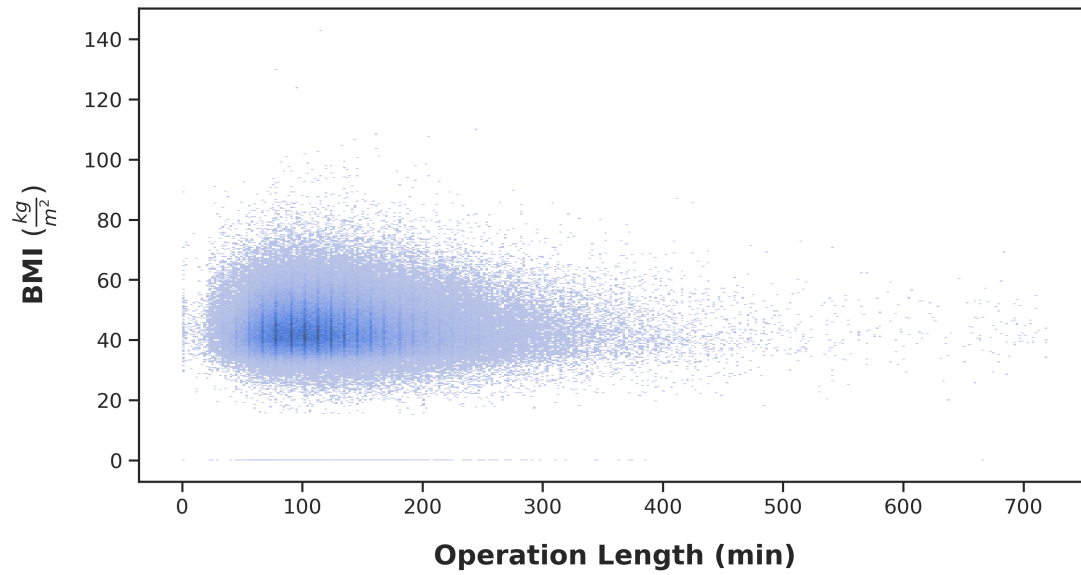
'Figure saved to /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management/data/analysis/bariatric/runs/run_002/figures//demographics/Run002_Demographics_Ethnicity.jpg'



'Figure saved to /home/pranav/work/pranavmishra90/courses/by-mishra/research-data-management/data/analysis/bariatric/runs/run_002/figures//surgery/Run002_Sx-OPLENGTH_PREVSURG.jpg'

Operation Length

(n=269926 subjects)



Save the run dataset