Final Project

CP

2022-12-06

```
## [1] 189510
```

Table 1

Mental Health Services Needed but Not Recived by Region

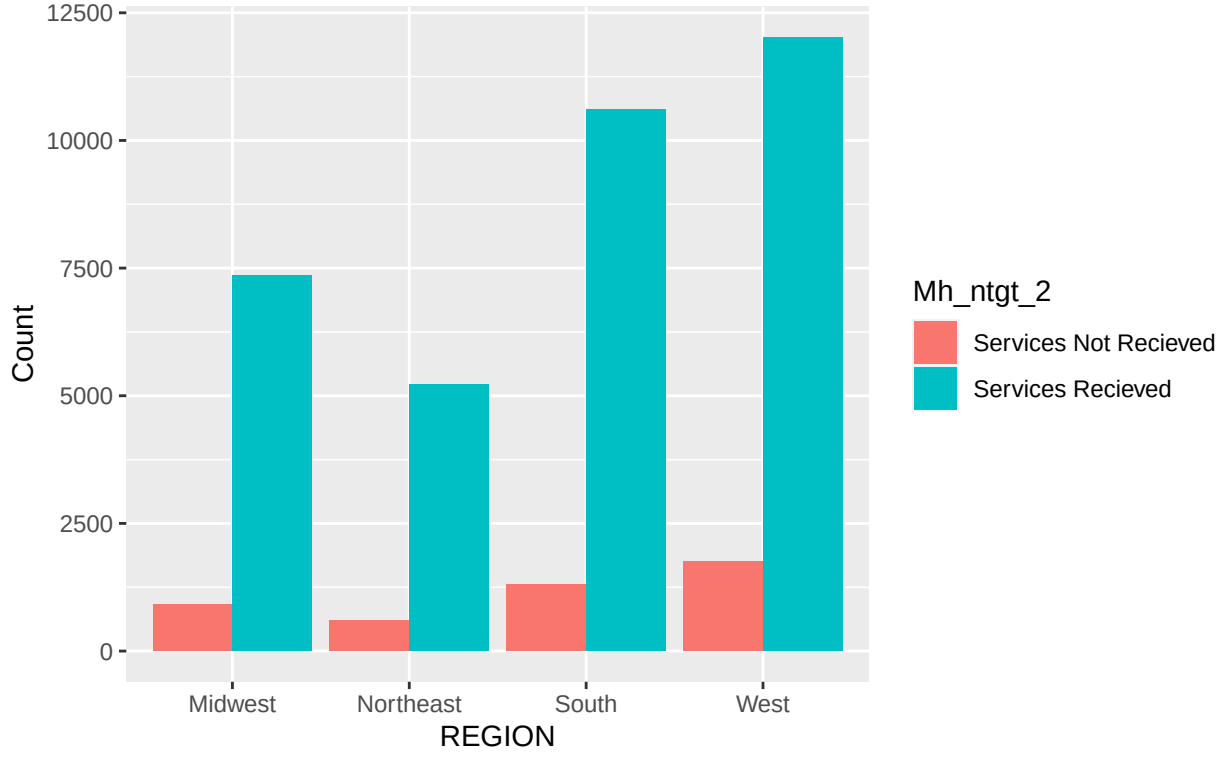


Table 2

Mental Health Services Needed but Not Recived by Insurance

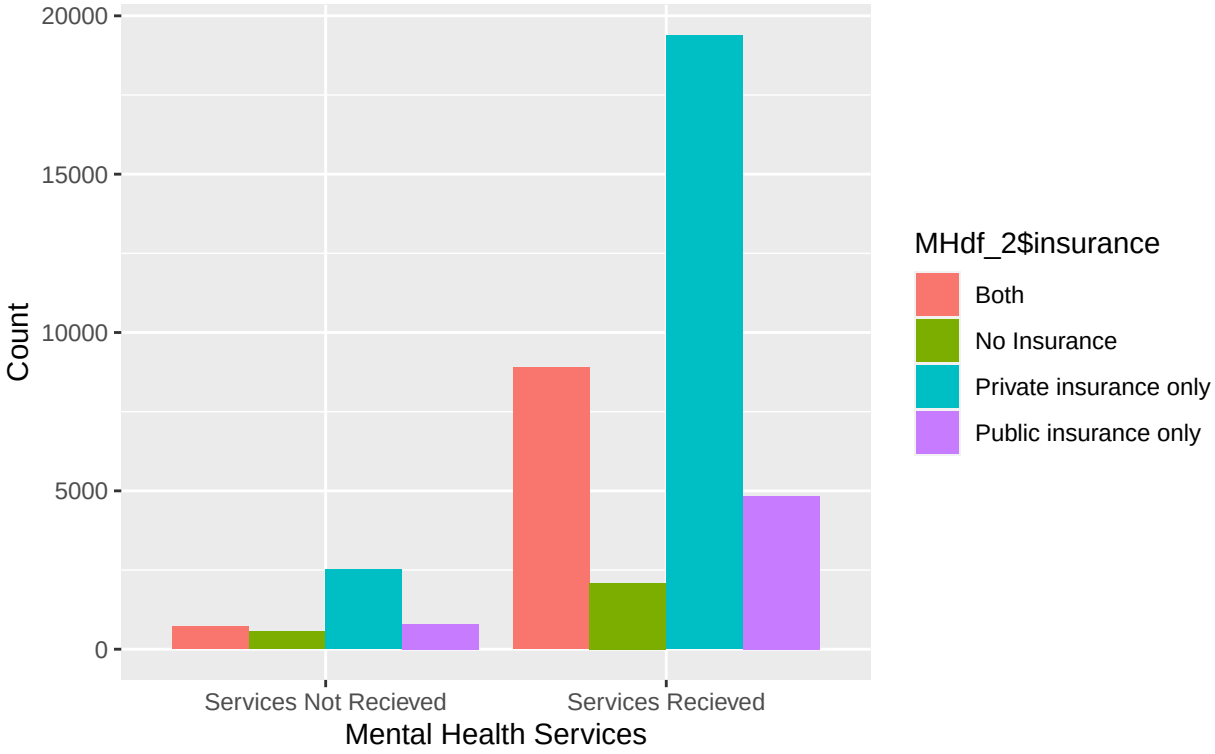
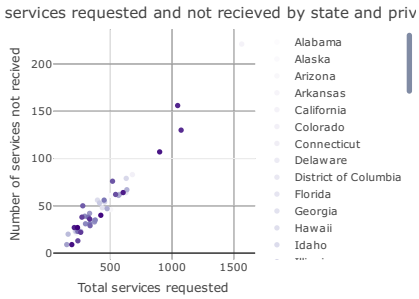
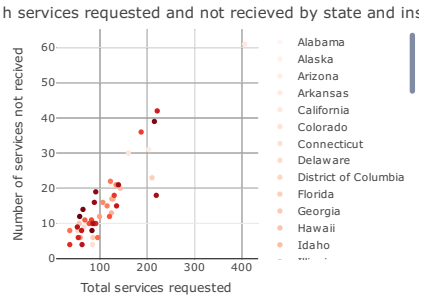
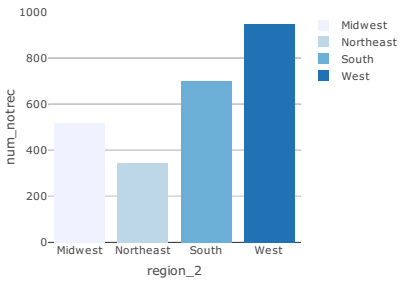


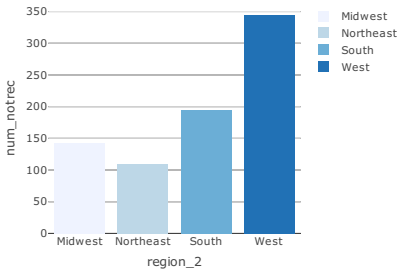
Table 3

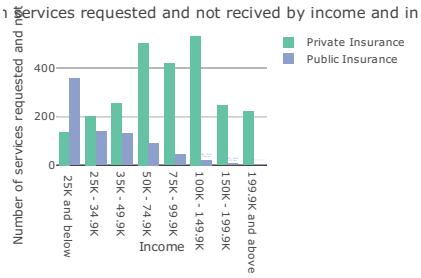
Mental Health Services Needed but Not Recived by Region and Insurance

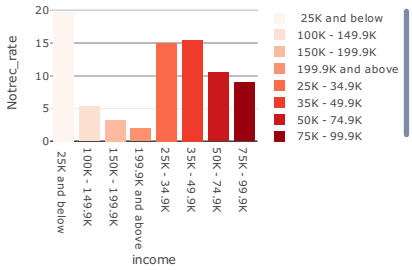

services requested and not recieved by state and priv
Number of services not recived
200
150
100
50
0
500
1000
1500
Total services requested
Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Idaho


h services requested and not recieved by state and ins
Number of services not recived
60
50
40
30
20
10
0
100
200
300
400
Total services requested
Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Idaho


1000
800
600
400
200
0
num_notrec
Midwest
Northeast
South
West
region_2
Midwest
Northeast
South
West


350
300
250
200
150
100
50
0
num_notrec
Midwest
Northeast
South
West
region_2
Midwest
Northeast
South
West

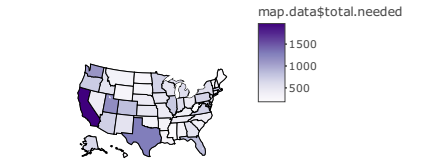

Services requested and not recived by income and in
Number of services requested and not
400
200
0
Private Insurance
Public Insurance
25K and below
25K - 34.9K
35K - 49.9K
50K - 74.9K
75K - 99.9K
100K - 149K
150K - 199K
199.9K and above
Income




```
##                  state usa_state_latitude usa_state_longitude usa_state_code
##  1:              Kansas           39.01190           -98.48425             KS
##  2:             Florida           27.66483           -81.51575             FL
##  3:              Kansas           39.01190           -98.48425             KS
##  4:            Illinois           40.63312           -89.39853             IL
##  5:            Illinois           40.63312           -89.39853             IL
##  6:            Kentucky           37.83933           -84.27002             KY
##  7:             Arizona           34.04893          -111.09373             AZ
##  8:            Illinois           40.63312           -89.39853             IL
##  9:                Iowa           41.87800           -93.09770             IA
## 10:             Florida           27.66483           -81.51575             FL
## 11:         Connecticut           41.60322           -73.08775             CT
## 12:              Kansas           39.01190           -98.48425             KS
## 13:                Iowa           41.87800           -93.09770             IA
## 14:                Iowa           41.87800           -93.09770             IA
## 15:                Iowa           41.87800           -93.09770             IA
## 16:             Florida           27.66483           -81.51575             FL
## 17:              Hawaii           19.89868          -155.66586             HI
## 18:              Hawaii           19.89868          -155.66586             HI
## 19:             Georgia           32.15743           -82.90712             GA
## 20:            Illinois           40.63312           -89.39853             IL
## 21:            Illinois           40.63312           -89.39853             IL
## 22:             Florida           27.66483           -81.51575             FL
## 23:                Iowa           41.87800           -93.09770             IA
## 24:            Kentucky           37.83933           -84.27002             KY
## 25:            Colorado           39.55005          -105.78207             CO
```

```
## 26:                Maine           45.25378           -69.44547             ME
## 27:              Georgia           32.15743           -82.90712             GA
## 28:              Georgia           32.15743           -82.90712             GA
## 29:              Georgia           32.15743           -82.90712             GA
## 30:              Indiana           40.55122           -85.60236             IN
## 31:               Hawaii           19.89868          -155.66586             HI
## 32:                 Iowa           41.87800           -93.09770             IA
## 33:            Louisiana           31.24482           -92.14502             LA
## 34:              Florida           27.66483           -81.51575             FL
## 35:                 Iowa           41.87800           -93.09770             IA
## 36:              Florida           27.66483           -81.51575             FL
## 37:              Georgia           32.15743           -82.90712             GA
## 38:            Louisiana           31.24482           -92.14502             LA
## 39:              Georgia           32.15743           -82.90712             GA
## 40:                 Iowa           41.87800           -93.09770             IA
## 41:             Colorado           39.55005          -105.78207             CO
## 42:               Kansas           39.01190           -98.48425             KS
## 43:              Georgia           32.15743           -82.90712             GA
## 44: District of Columbia           38.90599           -77.03342             DC
## 45:             Illinois           40.63312           -89.39853             IL
## 46:        Massachusetts           42.40721           -71.38244             MA
## 47:             Kentucky           37.83933           -84.27002             KY
## 48:             Kentucky           37.83933           -84.27002             KY
## 49:             Delaware           38.91083           -75.52767             DE
## 50:             Maryland           39.04575           -76.64127             MD
##                    state usa_state_latitude usa_state_longitude usa_state_code
##     Total_sv_needed num_notrec services_rec Notrec_rate  per.rate
##  1:              81         10           71  0.12345679 12.345679
##  2:             210         23          187  0.10952381 10.952381
##  3:              81         10           71  0.12345679 12.345679
##  4:             128         17          111  0.13281250 13.281250
##  5:             128         17          111  0.13281250 13.281250
##  6:              99         12           87  0.12121212 12.121212
##  7:             203         31          172  0.15270936 15.270936
##  8:             128         17          111  0.13281250 13.281250
##  9:             125         17          108  0.13600000 13.600000
## 10:             210         23          187  0.10952381 10.952381
## 11:              84          4           80  0.04761905  4.761905
## 12:              81         10           71  0.12345679 12.345679
## 13:             125         17          108  0.13600000 13.600000
## 14:             125         17          108  0.13600000 13.600000
## 15:             125         17          108  0.13600000 13.600000
## 16:             210         23          187  0.10952381 10.952381
## 17:              56         10           46  0.17857143 17.857143
## 18:              56         10           46  0.17857143 17.857143
## 19:              85          6           79  0.07058824  7.058824
## 20:             128         17          111  0.13281250 13.281250
## 21:             128         17          111  0.13281250 13.281250
## 22:             210         23          187  0.10952381 10.952381
## 23:             125         17          108  0.13600000 13.600000
## 24:              99         12           87  0.12121212 12.121212
## 25:             160         30          130  0.18750000 18.750000
## 26:              58          6           52  0.10344828 10.344828
## 27:              85          6           79  0.07058824  7.058824
```

```
## 28:               85          6           79  0.07058824  7.058824
## 29:               85          6           79  0.07058824  7.058824
## 30:              124         13          111  0.10483871 10.483871
## 31:               56         10           46  0.17857143 17.857143
## 32:              125         17          108  0.13600000 13.600000
## 33:               85         10           75  0.11764706 11.764706
## 34:              210         23          187  0.10952381 10.952381
## 35:              125         17          108  0.13600000 13.600000
## 36:              210         23          187  0.10952381 10.952381
## 37:               85          6           79  0.07058824  7.058824
## 38:               85         10           75  0.11764706 11.764706
## 39:               85          6           79  0.07058824  7.058824
## 40:              125         17          108  0.13600000 13.600000
## 41:              160         30          130  0.18750000 18.750000
## 42:               81         10           71  0.12345679 12.345679
## 43:               85          6           79  0.07058824  7.058824
## 44:               53          8           45  0.15094340 15.094340
## 45:              128         17          111  0.13281250 13.281250
## 46:              134         21          113  0.15671642 15.671642
## 47:               99         12           87  0.12121212 12.121212
## 48:               99         12           87  0.12121212 12.121212
## 49:               66          9           57  0.13636364 13.636364
## 50:              106         16           90  0.15094340 15.094340
##     Total_sv_needed num_notrec services_rec Notrec_rate  per.rate
```



Characteristic	**N = 39,778**
Region	
Midwest	8,272 (21%)
Northeast	5,824 (15%)
South	11,918 (30%)
West	13,764 (35%)
Income	
25K and below	3,947 (9.9%)
100K - 149.9K	7,456 (19%)
150K - 199.9K	3,603 (9.1%)
199.9K and above	4,187 (11%)
25K - 34.9K	3,337 (8.4%)
35K - 49.9K	4,339 (11%)
50K - 74.9K	6,979 (18%)
75K - 99.9K	5,930 (15%)
Insurance_Type	
Both	9,613 (24%)
No Insurance	2,641 (6.6%)
Private insurance only	21,890 (55%)
Public insurance only	5,634 (14%)