

```
1  *1. merging the raw SEDD databases*
2  use "P:\read_write\NC\Analyses\RAW\SEDD\NC_SEDD_2019_CORE.dta"
3  append using
   "P:\read_write\NC\Analyses\RAW\SEDD\NC_SEDD_2020_CORE.dta"
4  append using
   "P:\read_write\NC\Analyses\RAW\SEDD\NC_SEDD_2021_CORE.dta"
5  append using
   "P:\read_write\NC\Analyses\RAW\SEDD\NC_SEDD_2022_CORE.dta"
6
7  save
   "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFile.dta"
   ", replace
8  *starting with Merged Sedd File*
9  *2. drop unnecessary variables*
10 sum AYEAR
11 sum YEAR
12 *It will show the minimum being 2018, therefore drop those
   observations*
13 drop if AYEAR == 2018
14 drop YEAR
15 drop if AGE < 19 | AGE > 64
16 drop AGEDAY AGEMONTH AHOUR AWEEKEND
17 drop CPT*
18 drop DHOUR DMONTH DQTR
19 drop DISP*
20 drop DX*
21 drop I10_DX_Visit_Reason2 I10_DX3 I10_DX4 I10_DX5 I10_DX6 I10_DX7
   I10_DX8 I10_DX9 I10_DX10 I10_DX11 I10_DX12 I10_DX13 I10_DX14
   I10_DX15 I10_DX16 I10_DX17 I10_DX18 I10_DX19 I10_DX20 I10_DX21
   I10_DX22 I10_DX23 I10_DX24 I10_DX25
22 drop KEY
23 drop LOS_X
24 drop NCPT
25 drop PAY2 PAY3 PAY1_X PAY2_X PAY3_X
26 drop POA*
27 drop RACE_X
28 drop STATE_ED STATE_OS
29 drop TOTCHG
30 drop TOTCHG_X
31 drop BMONTH
32 drop year
33 drop HCUP_SURGERY_BROAD_CPT HCUP_SURGERY_NARROW_CPT SASD_SEDD
34 drop HCUP_ED HCUP_OS
35 drop HISPANIC_X
36 drop PointOfOrigin_X PointOfOriginUB04
37 drop STATE_AS
38 drop BYEAR
39 drop ZIP3
```

```
40 drop OS_TIME
41 drop PL_CBSA PL_RUCC PL_UIC PL_UR_CAT4 PSTC0
42 drop I10_DX_Visit_Reason1 I10_DX2 I10_PROCTYPE
43 drop DURATION
44 drop PSTC0 PSTC0_GEO
45 drop ZIPINC_QRTL
46
47 *wanted to check if BILLTYPE was important/ had varying numbers,
  deemed it unimportant*
48 destring BILLTYPE, replace
49 sum BILLTYPE
50 drop BILLTYPE
51
52 *look at PSTC0*
53 drop if PSTATE_GEO != "NC"
54 drop if PSTATE != "NC"
55 assert PSTATE == PSTATE_GEO
56 count if missing(PSTATE_GEO)
57 count if missing(PSTATE)
58 *if assertion is true then drop PSTATE_GEO because they say the
  same thing*
59 drop PSTATE_GEO
60
61 *making sure the hospital is in NC, if true then can drop the
  variable*
62 assert HOSPST == "NC"
63 drop HOSPST
64
65 sum RACE_PCT_MISS_HOSP
66 drop RACE_PCT_MISS_HOSP
67
68 *3.Drop observations where key variable are missing*
69 count if missing(I10_DX1)
70 drop if missing (I10_DX1)
71
72 count if missing(PAY1)
73 drop if missing (PAY1)
74
75 count if missing(ZIP)
76 drop if missing(ZIP)
77
78 count if missing(RACE)
79 drop if missing(RACE)
80
81 count if missing(PL_NCHS)
82 drop if missing(PL_NCHS)
83
84 *dataset saved as Merged Sedd file v1*
```

```
85  save
    "P:\read_write\NC\Analyses\Temporary\02.22\MergedSeddFilev1.dta"
86
87  *4. edit Zip Code – County Excel*
88  import excel "P:\read_write\NC\Analyses\RAW\NC County
    Population.zipcodelevel.xlsx", sheet("Sheet1") clear
89  drop in 1/1
90  rename A ZIP
91  rename B COUNTY
92  drop C D E
93  save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\ZipCounty.dta"
94
95  use P:\read_write\NC\Analyses\Temporary\02.22updated\
    MergedSeddFilev1.dta, clear
96  merge m:1 ZIP using
    "P:\read_write\NC\Analyses\Temporary\02.22updated\ZipCounty.dta"
97  keep if _merge==3
98  drop _merge
99
100 *5. Add in the RURAL/URBAN designation*
101 generate LOCATION = ""
102 replace LOCATION = "urban" if inlist(PL_NCHS, 1, 2, 3, 4)
103 replace LOCATION = "rural" if inlist(PL_NCHS, 5, 6)
104
105 *save as merged file vs2*
106 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev2.d
    ta"
107
108 *now opening County – Urban/Rural and cleaning dataset*
109 import excel "P:\read_write\NC\Analyses\RAW\CountyUrbanRural.xlsx",
    sheet("Sheet1") clear
110 drop in 1/1
111 rename A COUNTY
112 replace COUNTY = trim(COUNTY)
113 rename B UrbanRural
114 drop C D
115 replace UrbanRural = lower(UrbanRural)
116 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\CountyUrbanRural.d
    ta"
117
118 *merge ED dataset with Urban/Rural dataset to crosscheck that
    PL_NCHS aligns with the county on urban/rural designation*
119 use P:\read_write\NC\Analyses\Temporary\02.22updated\
    MergedSeddFilev2.dta, clear
120 replace COUNTY = trim(COUNTY)
```

```
121 merge m:1 COUNTY using
    "P:\read_write\NC\Analyses\Temporary\02.22updated\CountyUrbanRural.d
    ta"
122 drop _merge
123
124 assert LOCATION == UrbanRural
125 *assertion was proven wrong, therefore deciding to use ZipCounty
    as the master for rural urban delineation*
126 drop LOCATION
127 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev3.d
    ta"
128
129 *adding unique identifier for each ED visit*
130 gen VISIT_ID = _n
131 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev3.d
    ta"
132
133 *6. Edit NC Population + Race by County file*
134 import delimited "P:\read_write\NC\Analyses\RAW\NC county pop +
    race final.txt"
135 drop se_a01001_001 se_a01001_002 se_a01001_003 se_a01001_004
    se_a01001_005 se_a01001_006 se_a01001_007 se_a01001_008
    se_a01001_009 se_a01001_010 se_a01001_011 se_a01001_012
    se_a01001_013 se_c01001_001 se_c01001_002 se_c01001_003
    se_c01001_004 se_c01001_005 se_c01001_006 se_c01001_007
    se_c01001_008 se_c01001_009 se_c01001_010 se_c01001_011
    se_c01001_012 se_c01001_013 se_c01001_014 se_c01001_015
    se_c01001_016 se_c01001_017 se_c01001_018 se_c01001_019
    se_c01001_020 se_c01001_021 se_c01001_022 se_c01001_023
    se_c01001_024
136 rename geo_qname COUNTY
137 rename geo_name COUNTY1
138 rename geo_fips FIPS
139 rename geo_county countygeo
140 drop geo*
141 rename se_b01001_001 TOTALPOP
142 rename se_b01001_002 under18
143 rename se_b01001_003 AGE1834
144 rename se_b01001_004 AGE3564
145 rename se_b01001_005 AGE650
146 drop se_a03001_001
147 rename se_a03001_002 White
148 rename se_a03001_003 Black
149 rename se_a03001_004 AIAN
150 rename se_a03001_005 Asian
151 rename se_a03001_006 NativeHawaiian
```

```
152 rename se_a03001_007 OtherRace
153 rename se_a03001_008 TwoMore
154 drop se_a04001_001
155 rename se_a04001_002 TotalNonHispan
156 rename se_a04001_003 WhiteNonHispan
157 rename se_a04001_004 BlackNonHispan
158 rename se_a04001_005 AIANNonHispan
159 rename se_a04001_006 AsianNonHispan
160 rename se_a04001_007 NativeHawaiianNonHispan
161 rename se_a04001_008 OtherNonHispan
162 rename se_a04001_009 TwoMoreNonHispan
163 rename se_a04001_010 TotalHispan
164 rename se_a04001_011 WhiteHispan
165 rename se_a04001_012 BlackHispan
166 rename se_a04001_013 AIANHispan
167 rename se_a04001_014 AsianHispan
168 rename se_a04001_015 NativeHawaiianHispan
169 rename se_a04001_016 OtherHispan
170 rename se_a04001_017 TwoMoreHispan
171 label variable White "Total White population"
172 label variable Black "Total Black Population"
173 label variable AIAN "Total American Indian and Alaska Native"
174 label variable Asian "Total Asian"
175 label variable NativeHawaiian "Total Native Hawaiian and other
    pacific islander"
176 label variable OtherRace "Total Other Race"
177 label variable TwoMore "Two or More Races Population"
178 label variable WhiteNonHispan "White non- Hispanic"
179 label variable BlackNonHispan "Black non-Hispanic"
180 label variable AIANNonHispan "AmericanIndian and Alaska Native
    Non-hispanic"
181 label variable AsianNonHispan "Asian Non Hispanic"
182 label variable NativeHawaiianNonHispan "Native Hawaiian and Other
    Pacific Islander non Hispanic"
183 label variable OtherNonHispan "Other Race non hispanic"
184 label variable TwoMoreNonHispan "Two or more races non-hispanic"
185 label variable TotalHispan "Total Hispanic Population"
186 drop COUNTY
187 rename COUNTY1 COUNTY
188 replace COUNTY = substr(COUNTY, "County", "", .)
189 replace COUNTY = trim(COUNTY)
190 drop AGE650
191 drop White Black AIAN Asian NativeHawaiian OtherRace TwoMore
192 drop WhiteHispan BlackHispan AIANHispan AsianHispan
    NativeHawaiianHispan OtherHispan TwoMoreHispan
193 gen A1864 = AGE1834 + AGE3564
194 gen OtherNonHispanx = ""
195 destring OtherNonHispanx, replace
```

```
196  replace OtherNonHispanx = AIANNonHispan + AsianNonHispan +  
NativeHawaiianNonHispan + OtherNonHispan + TwoMoreNonHispan  
197  drop AIANNonHispan AsianNonHispan NativeHawaiianNonHispan  
OtherNonHispan TwoMoreNonHispan  
198  drop under18 AGE1834 AGE3564 FIPS countygeo  
199  save  
"P:\read_write\NC\Analyses\Temporary\02.22updated\CountyPopulationRa  
ce.dta", replace  
  
200  
201  *8. additional data updates / cleaning*  
202  gen RACE_X = ""  
203  replace RACE_X = "2" if RACE == 2  
204  replace RACE_X = "1" if RACE == 1  
205  replace RACE_X = "0" if RACE > 2  
206  drop RACE  
207  save  
"P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev3.d  
ta", replace  
  
208  
209  *9. add CCIR*  
210  use P:\read_write\NC\Analyses\Temporary\02.22updated\  
MergedSeddFilev3.dta, clear  
211  merge m:1 I10_DX1 using "P:\read_write\NC\Analyses\RAW\CCIR MAP  
(icd+0.1).dta"  
212  keep if _merge ==3  
213  drop _merge  
214  drop I10_DX1  
215  save  
"P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev4.d  
ta", replace  
216  destring CCIR, replace  
217  gen CCIR_0 = (CCIR ==0)  
218  gen CCIR_1 = (CCIR ==1)  
219  destring RACE_X, replace  
220  gen RACE_0 = (RACE_X ==0)  
221  gen RACE_1 = (RACE_X ==1)  
222  gen RACE_2 = (RACE_X ==2)  
223  save  
"P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev5.d  
ta", replace  
  
224  
225  *10. create sub datasets*  
226  *PART A -- create MC ED visits only dataset -- MergedSeddFilev5*  
227  use "P:\read_write\NC\Analyses\Temporary\02.22updated  
MergedSeddFilev5.dta", clear  
228  drop if PAY1 != 2  
229  save  
"P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev6.d
```

```
ta", replace
230 *PART B -- create everthing but MC
231 use "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSedd
Filev5.dta", replace
232 drop if PAY1 == 2
233 save "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSed
dFilev5B.dta"
234
235 *11. do collapsed sums for all ED visits data by county*
236 *PART A*
237 use P:\read_write\NC\Analyses\Temporary\02.22updated\
MergedSeddFilev5.dta
238 preserve
239 collapse(count) VISIT_ID (first) CCIR UrbanRural (sum) CCIR_0
CCIR_1 RACE_0 RACE_1 RACE_2, by(AYEAR AMONTH COUNTY)
240 drop CCIR
241 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\TotalEDVisitsbyCou
ntyv1.dta", replace
242
243 *PART B now merge collapsed sum with population data*
244 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\TotalEDVisitsbyCou
ntyv1.dta", clear
245 merge m:1 COUNTY using
"P:\read_write\NC\Analyses\Temporary\02.22updated\CountyPopulationRa
ce.dta"
246 drop _merge
247 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\TotalEDVisitsbyCou
ntyv2.dta", replace
248 *PART C*
249 gen EDpercapita = ""
250 destring EDpercapita, replace
251 replace EDpercapita = VISIT_ID / A1864
252 drop TOTALPOP
253 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\TotalEDVisitsbyCou
ntyv3.dta", replace
254 *TotalEDVisitsbyCountyv3 is now collapsed sum for Total ED visits
per capita*
255 *PART D -- now doing my CCEDpercapita*
256 gen CCEDpercapita = ""
257 destring CCEDpercapita, replace
258 replace CCEDpercapita = CCIR_1 / A1864
259 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\TotalEDVisitsbyCou
ntyv4.dta", replace
```

```
260
261 **NOW DOING THE SAME THING AS ABOVE BUT FOR EVERYTHING BUT MC
    DEMOGRAPHIC*
262 use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev5B.
    dta", clear
263 preserve
264 collapse(count) VISIT_ID (first) CCIR UrbanRural (sum) CCIR_0
    CCIR_1 RACE_0 RACE_1 RACE_2, by(AYEAR AMONTH COUNTY)
265 drop CCIR
266 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv1.dta", replace

267
268 *PART B now merge collapsed sum with population data*
269 use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv1isitsbyCountyv1.dta", clear
270 merge m:1 COUNTY using
    "P:\read_write\NC\Analyses\Temporary\02.22updated\CountyPopulationRa
    ce.dta"
271 drop _merge
272 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv2.dta", replace
273 *PART C*
274 gen EDpercapita = ""
275 destring EDpercapita, replace
276 replace EDpercapita = VISIT_ID / A1864
277 drop TOTALPOP
278 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv3.dta", replace
279 *SINMCEDVisitsbyCountyv1 is now collapsed sum for everything but
    MC ED visits per capita*
280 *PART D -- now doing my CCEDpercapita*
281 gen CCEDpercapita = ""
282 destring CCEDpercapita, replace
283 replace CCEDpercapita = CCIR_1 / A1864
284 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv4.dta", replace
285 gen EDper = ""
286 destring EDper, replace
287 replace EDper = EDpercapita * 1000
288
289 gen CCEDper = ""
290 destring CCEDper, replace
```



```

291  replace CCEDper = CCEDpercapita * 1000
292  save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv5.dta", replace
293
294  *now doing collapsed sum for ED visits of all counties across
    month and counties, will then do another based off of urban and
    rural*
295  use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv5.dta", clear
296  preserve
297  collapse (sum) VISIT_ID CCIR_0 CCIR_1 RACE_0 RACE_1 RACE_2
    TotalNonHispan WhiteNonHispan BlackNonHispan A1864 OtherNonHispan,
    by (AYEAR AMONTH)
298  save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbymon
    thyear.dta", replace
299  *ED visits by urban and rural for non MC*
300  use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv5.dta", clear
301  preserve
302  collapse (sum) VISIT_ID CCIR_0 CCIR_1 RACE_0 RACE_1 RACE_2
    TotalNonHispan WhiteNonHispan BlackNonHispan A1864 OtherNonHispan,
    by (AYEAR AMONTH UrbanRural)
303
304  gen EDperthousand = ""
305  destring EDper, replace
306  replace EDper = (VISIT_ID / A1864) * 1000
307
308  gen CCEDperthousand = ""
309  destring CCEDper, replace
310  replace CCEDper = (CCIR_1/A1864) * 1000
311  save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbymon
    thyearlocation.dta", replace
312
313  *12. do collapsed sums for just MC ED visits by county*
314  use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev6.d
    ta"
315  preserve
316  collapse(count) VISIT_ID (first) CCIR UrbanRural (sum) CCIR_0
    CCIR_1 RACE_0 RACE_1 RACE_2, by(AYEAR AMONTH COUNTY)
317  drop CCIR
318  save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MCTotalEDVisitsbyC

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```
    ountyv1.dta", replace
319
320 *13. Edit MC enrol master*
321 use "P:\read_write\NC\Analyses\Temporary\02.22updated\MC Enrol
    Master.dta"
322 rename MONTH AMONTH
323 rename YEAR AYEAR
324 replace COUNTY = trim(COUNTY)
325 replace COUNTY = proper(COUNTY)
326 drop if COUNTY == "Totals"
327 drop if COUNTY == ""
328 save "P:\read_write\NC\Analyses\Temporary\02.22updated\MC Enrol
    Master.dta", replace
329
330 *14. merge MC enrol master with ED mc collapsed sum*
331 *PART A*
332 use P:\read_write\NC\Analyses\Temporary\02.22updated\
    MCTotalEDVisitsbyCountyv1.dta, clear
333 tostring AMONTH AYEAR, replace
334 replace COUNTY = proper(COUNTY)
335 *to show that Clay county has no 1 less ED visit (i.e. 11) in 2020
    because had no MC Ed visits in Jun 2020*
336 tab COUNTY YEAR
337 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MCTotalEDVisitsbyC
    ountyv1.dta", replace
338
339 *PART B -- actually merging*
340 use P:\read_write\NC\Analyses\Temporary\02.22updated\
    MCTotalEDVisitsbyCountyv1.dta, clear
341 tostring AMONTH AYEAR, replace
342 merge 1:m AMONTH AYEAR COUNTY using
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MC Enrol
    Master.dta"
343 keep if _merge == 3
344 drop _merge
345 *there were 2 obs that did not merge from using (i.e. _merge ==2).
    The first was some note I had in the using dataset that was
    deleted (line5001). The second was 06/2020 Clay county because
    there were no MC ED visits in that county in 06/2020, so also
    dropped that.*
346 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MCTotalEDVisitsbyC
    ountyv2.dta", replace
347
348 *15. generate MC EDpercapita*
349 gen EDpercapita = ""
350 destring EDpercapita, replace
```

```
351 replace EDpercapita = VISIT_ID / MCENR0LTOT
352 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\MCTotalEDVisitsbyC
ountyv3.dta", replace
353
354 *16. generate MC CC EDpercapita*
355 gen CCEDpercapita = ""
356 destring CCEDpercapita, replace
357 replace CCEDpercapita = CCIR_1 / MCENR0LTOT
358 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\MCTotalEDVisitsbyC
ountyv4.dta", replace
359
360 *17. doing UrbanRural Collapsed Sum*
361 *PART A -- creating dataset that has county and population*
362 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\CountyUrbanRural.d
ta"
363 replace COUNTY = proper(COUNTY)
364 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\CountyUrbanRural.d
ta", replace
365 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\CountyPopulationRa
ce.dta", replace
366 drop TOTALPOP TotalNonHispan WhiteNonHispan BlackNonHispan
TotalHispan OtherNonHispanx
367 replace COUNTY = trim(COUNTY)
368 replace COUNTY = proper(COUNTY)
369 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\County1864pop.dta"
, replace
370 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\CountyUrbanRural.d
ta", replace
371 merge 1:1 COUNTY using
"P:\read_write\NC\Analyses\Temporary\02.22updated\County1864pop.dta"
372 drop _merge
373 preserve
374 collapse (sum) A1864, by (UrbanRural)
375 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\urbanruralpopv1.dt
a", replace
376
377 *PART B -- merging datasets*
378 use "P:\read_write\NC\Study Data\TotalEDVisitsbyCountyv4.dta", clear
379 preserve
380 collapse(count) VISIT_ID (sum) CCIR_0 CCIR_1 RACE_0 RACE_1 RACE_2,
```

```

by(AYEAR AMONTH UrbanRural)
381 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\UrbanRuralCollapse
.bymonthyear.v1.dta", replace
382 merge m:1 UrbanRural using
"P:\read_write\NC\Analyses\Temporary\02.22updated\urbanruralpopv1.dta"
383 gen EDpercapita = ""
384 destring EDpercapita, replace
385 replace EDpercapita = VISIT_ID / A1864
386 drop _merge
387 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\UrbanRuralCollapse
.bymonthyear.v2.dta"
388 , replace
389
390 *18. merging MC-CountyED visits with total ED*
391 *PART A - renaming MC variables*
392 use "P:\read_write\NC\Study Data\MCTotalEDVisitsbyCountyv4.dta",
clear
393 rename VISIT_ID MCvisits
394 rename CCIR_0 MCCCIR_0
395 rename CCIR_1 MCCCIR_1
396 rename RACE_0 MCRACE_0
397 rename RACE_1 MCRACE_1
398 rename RACE_2 MCRACE_2
399 rename EDpercapita MCEDpercapita
400 rename CCEDpercapita MCCCEDpercapita
401 save "P:\read_write\NC\Study Data\MCTotalEDVisitsbyCountyv5.dta",
replace
402 *PARB B -- merge MC-County ED with total ED*
403 use "P:\read_write\NC\Study Data\TotalEDVisitsbyCountyv4.dta", clear
404 tostring AMONTH AYEAR, replace
405 replace COUNTY = proper(COUNTY)
406 merge 1:1 AMONTH AYEAR COUNTY using "P:\read_write\NC\Study
Data\MCTotalEDVisitsbyCountyv5.dta"
407 replace MCvisits = 0 if MCvisits == .
408 replace MCCCIR_1 = 0 if MCCCIR_1 == .
409 replace MCCCIR_0 = 0 if MCCCIR_0 == .
410 replace MCRACE_0 = 0 if MCRACE_0 == .
411 replace MCRACE_1 = 0 if MCRACE_1 == .
412 replace MCRACE_2 = 0 if MCRACE_2 == .
413 replace MCENROLTOT = 0 if MCENROLTOT == .
414 replace MCEDpercapita = 0 if MCEDpercapita == .
415 replace MCCCEDpercapita = 0 if MCCCEDpercapita == .
416 drop _merge
417 save "P:\read_write\NC\Study Data\MasterEDv1.dta", replace
418 *19. changing per capita to per 1000 peoples*

```

```
419 gen EDper = ""
420 destring EDper, replace
421 replace EDPER = EDpercapita * 1000
422
423 gen CCEDper = ""
424 destring CCEDper, replace
425 replace CCEDper = CCEDpercapita * 1000
426
427 gen MCEDper = ""
428 destring MCEDper, replace
429 replace MCEDper = MCEDpercapita * 1000
430
431 gen MCCCEDper = ""
432 destring MCCCEDper, replace
433 replace MCCCEDper = MCCCEDpercapita * 1000
434
435 save "P:\read_write\NC\Study Data\MasterEDv2.dta", replace
436
437 *creating old people dataset*
438 use
439 "P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFile.dta", clear
440
441 drop if AYEAR == 2018
442 drop YEAR
443 drop if AGE < 65
444 drop AGEDAY AGEMONTH AHOUR AWEEKEND
445 drop CPT*
446 drop DHOUR DMONTH DQTR
447 drop DISP*
448 drop DX*
449 drop I10_DX_Visit_Reason2 I10_DX3 I10_DX4 I10_DX5 I10_DX6 I10_DX7
450 drop I10_DX8 I10_DX9 I10_DX10 I10_DX11 I10_DX12 I10_DX13 I10_DX14
451 drop I10_DX15 I10_DX16 I10_DX17 I10_DX18 I10_DX19 I10_DX20 I10_DX21
452 drop I10_DX22 I10_DX23 I10_DX24 I10_DX25
453 drop KEY
454 drop LOS_X
455 drop NCPT
456 drop PAY2 PAY3 PAY1_X PAY2_X PAY3_X
457 drop POA*
458 drop RACE_X
459 drop STATE_ED STATE_OS
460 drop TOTCHG
461 drop TOTCHG_X
462 drop BMONTH
463 drop year
464 drop HCUP_SURGERY_BROAD_CPT HCUP_SURGERY_NARROW_CPT SASD_SEDD
465 drop HCUP_ED HCUP_OS
```

```
462 drop HISPANIC_X
463 drop PointOfOrigin_X PointOfOriginUB04
464 drop STATE_AS
465 drop BYEAR
466 drop ZIP3
467 drop OS_TIME
468 drop PL_CBSA PL_RUCC PL_UIC PL_UR_CAT4 PSTC0
469 drop I10_DX_Visit_Reason1 I10_DX2 I10_PROCTYPE
470 drop DURATION
471 drop PSTC0 PSTC0_GEO
472 drop ZIPINC_QRTL
473
474 *wanted to check if BILLTYPE was important/ had varying numbers,
    deemed it unimportant*
475 destring BILLTYPE, replace
476 sum BILLTYPE
477 drop BILLTYPE
478
479 *look at PSTC0*
480 drop if PSTATE_GEO != "NC"
481 drop if PSTATE != "NC"
482 assert PSTATE == PSTATE_GEO
483 count if missing(PSTATE_GEO)
484 count if missing(PSTATE)
485 *if assertion is true then drop PSTATE_GEO because they say the
    same thing*
486 drop PSTATE_GEO
487
488 *making sure the hospital is in NC, if true then can drop the
    variable*
489 assert HOSPST == "NC"
490 drop HOSPST
491
492 sum RACE_PCT_MISS_HOSP
493 drop RACE_PCT_MISS_HOSP
494
495 *3.Drop observations where key variable are missing*
496 count if missing(I10_DX1)
497 drop if missing(I10_DX1)
498
499 count if missing(PAY1)
500 drop if missing(PAY1)
501
502 count if missing(ZIP)
503 drop if missing(ZIP)
504
505 count if missing(RACE)
506 drop if missing(RACE)
```

```
507
508 count if missing(PL_NCHS)
509 drop if missing(PL_NCHS)
510
511 save
512 "P:\read_write\NC\Analyses\Temporary\02.22updated\650mergedfile.dta"
513 , replace
514 merge m:1 ZIP using
515 "P:\read_write\NC\Analyses\Temporary\02.22updated\ZipCounty.dta"
516
517 drop if AGE == .
518 keep if _merge==3
519 drop _merge
520
521 replace COUNTY = trim(COUNTY)
522 replace COUNTY = proper(COUNTY)
523 merge m:1 COUNTY using
524 "P:\read_write\NC\Analyses\Temporary\02.22updated\CountyUrbanRural
525 .dta"
526 drop _merge
527 gen VISIT_ID = _n
528 save
529 "P:\read_write\NC\Analyses\Temporary\02.22updated\650mergedfile2.dta"
530 ", replace
531
532 gen RACE_X = ""
533 replace RACE_X = "2" if RACE == 2
534 replace RACE_X = "1" if RACE == 1
535 replace RACE_X = "0" if RACE > 2
536 drop RACE
537
538 merge m:1 I10_DX1 using "P:\read_write\NC\Analyses\RAW\CCIR MAP
539 (icd+0.1).dta"
540 keep if _merge ==3
541 drop _merge
542 drop I10_DX1
543 destring CCIR, replace
544 gen CCIR_0 = (CCIR ==0)
545 gen CCIR_1 = (CCIR ==1)
546 destring RACE_X, replace
547 gen RACE_0 = (RACE_X ==0)
548 gen RACE_1 = (RACE_X ==1)
549 gen RACE_2 = (RACE_X ==2)
550 save
551 "P:\read_write\NC\Analyses\Temporary\02.22updated\650mergedfile3.dta"
552 ", replace
553
554 use P:\read_write\NC\Analyses\Temporary\02.22updated\
```

```
650mergedfile3.dta, clear
545 preserve
546 collapse(count) VISIT_ID (first) CCIR UrbanRural (sum) CCIR_0
CCIR_1 RACE_0 RACE_1 RACE_2, by(AYEAR AMONTH COUNTY)
547 drop CCIR
548 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\650mergedfile4.dta
", replace
549 merge m:1 COUNTY using
"P:\read_write\NC\Analyses\Temporary\02.22updated\650P0Pbycounty.dta
"
550 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\650Edvisitsbymonth
yearcounty.dta"
551 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\650Edvisitsbymonth
yearcounty.dta", clear
552 collapse (sum) VISIT_ID CCIR_0 CCIR_1 RACE_0 RACE_1 RACE_2 AGE650,
by(AYEAR AMONTH UrbanRural)
553 gen EDperthousand = ""
554 destring EDper, replace
555 replace EDper = (VISIT_ID / AGE650) * 1000
556
557 gen CCEDperthousand = ""
558 destring CCEDper, replace
559 replace CCEDper = (CCIR_1/AGE650) * 1000
560 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EdVisitsbymonth
yearlocation.dta", replace
561
562 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EdVisitsbymonth
yearlocation.dta"
563 collapse (sum) VISIT_ID CCIR_0 CCIR_1 RACE_0 RACE_1 RACE_2 AGE650,
by(AYEAR AMONTH)
564 gen EDperthousand = ""
565 destring EDper, replace
566 replace EDper = (VISIT_ID / AGE650) * 1000
567
568 gen CCEDperthousand = ""
569 destring CCEDper, replace
570 replace CCEDper = (CCIR_1/AGE650) * 1000
571 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EDVisitsbymonth
year.dta"
572
573 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EDVisitsbymonth
```



```
year.dta", clear
574 rename VISIT_ID OLDvisits
575 rename CCIR_0 OLDCCIR_0
576 rename CCIR_1 OLDCCIR_1
577 rename RACE_0 OLDRACE_0
578 rename RACE_1 OLDRACE_1
579 rename RACE_2 OLDRACE_2
580 rename EDperthousand OLDperthousand
581 rename CCEDperthousand OLDCCperthousand
582 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EDVisitsbymonth
yearRENAMED.dta", replace
583 *merge old people file with everything else*
584 use "P:\read_write\NC\Study
Data\EDvisitsbymonthyear(MCvsnonMC).dta", clear
585 merge 1:1 AMONTH AYEAR using
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EDVisitsbymonth
yearRENAMED.dta"
586 drop _merge
587 save "P:\read_write\NC\Study
Data\EDvisitsbymonthyear(MCvsnonMCvsOLD).dta", replace
588
589 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EdVisitsbymonth
yearlocation.dta", clear
590 rename VISIT_ID OLDvisits
591 rename CCIR_0 OLDCCIR_0
592 rename CCIR_1 OLDCCIR_1
593 rename RACE_0 OLDRACE_0
594 rename RACE_1 OLDRACE_1
595 rename RACE_2 OLDRACE_2
596 rename EDperthousand OLDperthousand
597 rename CCEDperthousand OLDCCperthousand
598 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EdVisitsbymonth
yearlocationRENA MED.dta", replace
599
600 use "P:\read_write\NC\Study
Data\EDvisitsbymonthyearlocation(MCvsnonMC).dta", clear
601 merge 1:1 AMONTH AYEAR UrbanRural using
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EdVisitsbymonth
yearlocationRENAMED.dta"
602 drop _merge
603 save "P:\read_write\NC\Study
Data\EDvisitsbymonthyearlocation(MCvsnonMCvsOLD).dta", replace
604
605
606
```

```
607
608 use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\650EDVisitsbymonth
    yearcounty.dta", clear
609 gen POST = (AYEAR > 2021 | AYEAR == 2021 & AMONTH >= 7)
610 gen COVID = (AYEAR == 2021 & inlist (AMONTH, 2, 3, 4))
611 gen EDperthousand = ""
612 destring EDper, replace
613 replace EDper = (VISIT_ID / AGE650) * 1000
614 gen CCEDperthousand = ""
615 destring CCEDper, replace
616 replace CCEDper = (CCIR_1/AGE650) * 1000
617 encode COUNTY, gen(county_id)
618 xtset county_id
619 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\650Edvisitsbymonth
    yearcounty2.dta", replace
620
621
622 *creation of population data for old people*
623 import delimited "P:\read_write\NC\Analyses\RAW\NC county pop +
    race final.txt"
624 drop se_a01001_001 se_a01001_002 se_a01001_003 se_a01001_004
    se_a01001_005 se_a01001_006 se_a01001_007 se_a01001_008
    se_a01001_009 se_a01001_010 se_a01001_011 se_a01001_012
    se_a01001_013 se_c01001_001 se_c01001_002 se_c01001_003
    se_c01001_004 se_c01001_005 se_c01001_006 se_c01001_007
    se_c01001_008 se_c01001_009 se_c01001_010 se_c01001_011
    se_c01001_012 se_c01001_013 se_c01001_014 se_c01001_015
    se_c01001_016 se_c01001_017 se_c01001_018 se_c01001_019
    se_c01001_020 se_c01001_021 se_c01001_022 se_c01001_023
    se_c01001_024
625 rename geo_qname COUNTY
626 rename geo_name COUNTY1
627 rename geo_fips FIPS
628 rename geo_county countygeo
629 drop geo*
630 rename se_b01001_001 TOTALPOP
631 rename se_b01001_002 under18
632 rename se_b01001_003 AGE1834
633 rename se_b01001_004 AGE3564
634 rename se_b01001_005 AGE650
635 drop se_a03001_001
636 rename se_a03001_002 White
637 rename se_a03001_003 Black
638 rename se_a03001_004 AIAN
639 rename se_a03001_005 Asian
640 rename se_a03001_006 NativeHawaiian
```

```
641 rename se_a03001_007 OtherRace
642 rename se_a03001_008 TwoMore
643 drop se_a04001_001
644 rename se_a04001_002 TotalNonHispan
645 rename se_a04001_003 WhiteNonHispan
646 rename se_a04001_004 BlackNonHispan
647 rename se_a04001_005 AIANNonHispan
648 rename se_a04001_006 AsianNonHispan
649 rename se_a04001_007 NativeHawaiianNonHispan
650 rename se_a04001_008 OtherNonHispan
651 rename se_a04001_009 TwoMoreNonHispan
652 rename se_a04001_010 TotalHispan
653 rename se_a04001_011 WhiteHispan
654 rename se_a04001_012 BlackHispan
655 rename se_a04001_013 AIANHispan
656 rename se_a04001_014 AsianHispan
657 rename se_a04001_015 NativeHawaiianHispan
658 rename se_a04001_016 OtherHispan
659 rename se_a04001_017 TwoMoreHispan
660 label variable White "Total White population"
661 label variable Black "Total Black Population"
662 label variable AIAN "Total American Indian and Alaska Native"
663 label variable Asian "Total Asian"
664 label variable NativeHawaiian "Total Native Hawaiian and other
    pacific islander"
665 label variable OtherRace "Total Other Race"
666 label variable TwoMore "Two or More Races Population"
667 label variable WhiteNonHispan "White non- Hispanic"
668 label variable BlackNonHispan "Black non-Hispanic"
669 label variable AIANNonHispan "AmericanIndian and Alaska Native
    Non-hispanic"
670 label variable AsianNonHispan "Asian Non Hispanic"
671 label variable NativeHawaiianNonHispan "Native Hawaiian and Other
    Pacific Islander non Hispanic"
672 label variable OtherNonHispan "Other Race non hispanic"
673 label variable TwoMoreNonHispan "Two or more races non-hispanic"
674 label variable TotalHispan "Total Hispanic Population"
675 drop COUNTY
676 rename COUNTY1 COUNTY
677 replace COUNTY = substr(COUNTY, "County", "", .)
678 replace COUNTY = trim(COUNTY)
679 drop White Black AIAN Asian NativeHawaiian OtherRace TwoMore
680 drop WhiteHispan BlackHispan AIANHispan AsianHispan
    NativeHawaiianHispan OtherHispan TwoMoreHispan
681 gen A1864 = AGE1834 + AGE3564
682 gen OtherNonHispanx = ""
683 destring OtherNonHispanx, replace
684 replace OtherNonHispanx = AIANNonHispan + AsianNonHispan +
```

```
NativeHawaiianNonHispan + OtherNonHispan + TwoMoreNonHispan
685 drop AIANNonHispan AsianNonHispan NativeHawaiianNonHispan
    OtherNonHispan TwoMoreNonHispan
686 drop under18 AGE1834 AGE3564 FIPS countygeo
687 drop TotalNonHispan WhiteNonHispan BlackNonHispan TotalHispan A1864
    OtherNonHispanx TOTALPOP
688 replace COUNTY = trim(COUNTY)
689 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\650P0Pbycounty.dta"
    "
690
691
692
693 *making regression dataset*
694 use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\650Edvisitsbymonth
    yearcounty2.dta", clear
695
696 rename EDperthousand EDper
697 rename CCEDperthousand CCEDper
698
699 gen PAYER = "."
700 destring PAYER, replace
701 replace PAYER = 0
702 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\650withpay.dta",
    replace
703
704
705
706 use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbyCou
    ntyv5.dta", clear
707 gen PAYER = "."
708 destring PAYER, replace
709 replace PAYER = 1
710 save
    "P:\read_write\NC\Analyses\Temporary\02.22updated\NonMCwithpay.dta"
    , replace
711
712
713 use
    "P:\read_write\NC\Analyses\Temporary\02.22updated\MCTotalEDVisitsbyC
    ountyv3.dta", clear
714 gen EDper = "."
715 destring EDper, replace
716 replace EDper = EDpercapita * 1000
717 gen PAYER = "."
```

```
718   destring PAYER, replace
719   replace PAYER = 2
720
721   gen CCEDper = ""
722   destring CCEDper, replace
723   replace CCEDper = (CCIR_1 / MCENROLTOT) * 1000
724   save
       "P:\read_write\NC\Analyses\Temporary\02.22updated\MCwithpay.dta",
       replace
725
726   *Non-MC vs MC regression
727   use
       "P:\read_write\NC\Analyses\Temporary\02.22updated\MCwithpay.dta",
       clear
728   destring AMONTH AYEAR, replace
729   append using
       "P:\read_write\NC\Analyses\Temporary\02.22updated\NonMCwith pay.dta"
730   gen POST = (AYEAR >= 2021 & AMONTH >= 7 | AYEAR >= 2022)
731   encode COUNTY, gen(county_id)
732   xtset county_id
733   gen COVID = (AYEAR == 2021 & inlist (AMONTH, 2, 3, 4))
734   gen MC = (PAYER == 2)
735   gen POST_MC = (PAYER ==2 & AYEAR >= 2021 & AMONTH >= 7 | PAYER ==2
       & AYEAR >= 2022)
736   save "P:\read_write\NC\Study Data\mc+nonmcregression.dta", replace
737
738   save "P:\read_write\NC\Study Data\Regressiondataset.dta"
739
740   use "P:\read_write\NC\Study Data\Regressiondataset.dta", clear
741   drop if PAYER == 0
742   save "P:\read_write\NC\Study Data\mc+nonmcregression.dta", replace
743
744   use "P:\read_write\NC\Study Data\Regressiondataset.dta", clear
745   drop if PAYER == 1
746   save "P:\read_write\NC\Study Data\mc+oldregression.dta", replace
747
748
749   *running regression*
750   *1. medicaid vs. non-MC
751   *PART A -- all ED visits (ED per thousand)
752   use "P:\read_write\NC\Study Data\mc+nonmcregression.dta", clear
753   drop if (AYEAR < 2020) | (AYEAR == 2020 & AMONTH <=5)
754   xtreg EDper POST MC POST_MC COVID i.AMONTH i.AYEAR, fe vce(cluster
       county_id)
755   outreg2 using results.doc, replace se
756   *PART B -- all CCED visits (per thousand)
757   xtreg CCEDper POST MC POST_MC COVID i.AMONTH i.AYEAR, fe vce(
       cluster county_id)
```

```
758 outreg2 using results1.doc, replace se
759 *then combined the two results to one doc -- 'results.doc'
760
761 *2. medicaid vs old
762 use "P:\read_write\NC\Study Data\mc+oldregression.dta", clear
763 drop if (AYEAR < 2020) | (AYEAR == 2020 & AMONTH <=5)
764 xtreg EDper POST MC POST_MC COVID i.AMONTH i.AYEAR, fe vce(cluster
    county_id)
765 outreg2 using results2.doc, replace
766 xtreg CCEDper POST MC POST_MC COVID i.AMONTH i.AYEAR, fe vce(
    cluster county_id)
767 outreg2 using results3.doc, replace
768 *combine results2 and results3 into one table, then add to
    results.doc to get one doc with all regression output*
769
770 *3. creating urban/rural analysis
771 *part a -- medicaid vs. non-mc
772 *creating urban/rural dataset
773 use "P:\read_write\NC\Study Data\mc+nonmc regression.dta", clear
774 drop if (AYEAR < 2020) | (AYEAR == 2020 & AMONTH <=5)
775 gen LOC = (UrbanRural == "urban")
776 gen LOC_MC = LOC * MC
777 gen LOC_POST = LOC * POST
778 gen LOC_POST_MC = LOC * POST * MC
779 save "P:\read_write\NC\Study
    Data\mc+nonmc regression(URBANRURAL).dta", replace
780 xtreg EDper POST MC POST_MC COVID LOC_MC LOC_POST LOC_POST_MC i.
    AMONTH i.AYEAR, fe vce(cluster county_id)
781 outreg2 using locationresults.doc, replace se
782 xtreg CCEDper POST MC POST_MC COVID LOC_MC LOC_POST LOC_POST_MC i.
    AMONTH i.AYEAR, fe vce(cluster county_id)
783 outreg2 using locationresults2.doc, replace se
784
785 *part b -- medicaid vs. 650
786 use "P:\read_write\NC\Study Data\mc+oldregression.dta", clear
787 drop if (AYEAR < 2020) | (AYEAR == 2020 & AMONTH <=5)
788 gen LOC = (UrbanRural == "urban")
789 gen LOC_MC = LOC * MC
790 gen LOC_POST = LOC * POST
791 gen LOC_POST_MC = LOC * POST * MC
792 save "P:\read_write\NC\Study Data\mc+oldregression(URBANRURAL).dta"
    , replace
793 xtreg EDper POST MC POST_MC COVID LOC_MC LOC_POST LOC_POST_MC i.
    AMONTH i.AYEAR, fe vce(cluster county_id)
794 outreg2 using locationresults1.doc, replace se
795 xtreg CCEDper POST MC POST_MC COVID LOC_MC LOC_POST LOC_POST_MC i.
    AMONTH i.AYEAR, fe vce(cluster county_id)
796 outreg2 using locationresults3.doc, replace se
```

```
797 *combine locationresults1 and locationresults3 to one word doc
    table called locationresults*
798
799 *CHECKING PARALLEL TRENDS ASSUMPTION*
800 use "P:\read_write\NC\Study Data\mc+nonmcregression.dta", clear
801 xtreg EDper POST MC POST_MC COVID i.AMONTH i.AYEAR, fe vce(cluster
    county_id)
802 gen event_time = ((AYEAR - 2021) * 12) + (AMONTH -6)
803 tab event_time, gen(event_dummy)
804 gen pre_post = .
805 replace pre_post = -1 if event_time <0
806 replace pre_post = 0 if event_time == 0
807 replace pre_post = 1 if event_time > 0
808
809 gen JAN19 = (event_time == -29)
810 gen FEB19 = (event_time == -28)
811 gen MAR19 = (event_time == -27)
812 gen APR19 = (event_time == -26)
813 gen MAY19 = (event_time == -25)
814 gen JUN19 = (event_time == -24)
815 gen JUL19 = (event_time == -23)
816 gen AUG19 = (event_time == -22)
817 gen SEP19 = (event_time == -21)
818 gen OCT19 = (event_time == -20)
819 gen NOV19 = (event_time == -19)
820 gen DEC19 = (event_time == -18)
821 gen JAN20 = (event_time == -17)
822 gen FEB20 = (event_time == -16)
823 gen MAR20 = (event_time == -15)
824 gen APR20 = (event_time == -14)
825 gen MAY20 = (event_time == -13)
826 gen JUN20 = (event_time == -12)
827 gen JUL20 = (event_time == -11)
828 gen AUG20 = (event_time == -10)
829 gen SEP20 = (event_time == -9)
830 gen OCT20 = (event_time == -8)
831 gen NOV20 = (event_time == -7)
832 gen DEC20 = (event_time == -6)
833 gen JAN21 = (event_time == -5)
834 gen FEB21 = (event_time == -4)
835 gen MAR21 = (event_time == -3)
836 gen APR21 = (event_time == -2)
837 gen MAY21 = (event_time == -1)
838 gen JUL21 = (event_time == 1)
839 gen AUG21 = (event_time == 2)
840 gen SEP21 = (event_time == 3)
841 gen OCT21 = (event_time == 4)
842 gen NOV21 = (event_time == 5)
```

```
843 gen DEC21 = (event_time == 6)
844 gen JAN22 = (event_time == 7)
845 gen FEB22 = (event_time == 8)
846 gen MAR22 = (event_time == 9)
847 gen APR22 = (event_time == 10)
848 gen MAY22 = (event_time == 11)
849 gen JUN22 = (event_time == 12)
850 gen JUL22 = (event_time == 13)
851 gen AUG22 = (event_time == 14)
852 gen SEP22 = (event_time == 15)
853 gen OCT22 = (event_time == 16)
854 gen NOV22 = (event_time == 17)
855 gen DEC22 = (event_time == 18)
856
857 gen JAN19MC = (event_time == -29) *MC
858 gen FEB19MC = (event_time == -28) *MC
859 gen MAR19MC = (event_time == -27) *MC
860 gen APR19MC = (event_time == -26) *MC
861 gen MAY19MC = (event_time == -25) *MC
862 gen JUN19MC = (event_time == -24) *MC
863 gen JUL19MC = (event_time == -23) *MC
864 gen AUG19MC = (event_time == -22) *MC
865 gen SEP19MC = (event_time == -21) *MC
866 gen OCT19MC = (event_time == -20) *MC
867 gen NOV19MC = (event_time == -19) *MC
868 gen DEC19MC = (event_time == -18) *MC
869 gen JAN20MC = (event_time == -17) *MC
870 gen FEB20MC = (event_time == -16) *MC
871 gen MAR20MC = (event_time == -15) *MC
872 gen APR20MC = (event_time == -14) *MC
873 gen MAY20MC = (event_time == -13) *MC
874 gen JUN20MC = (event_time == -12) *MC
875 gen JUL20MC = (event_time == -11) *MC
876 gen AUG20MC = (event_time == -10) *MC
877 gen SEP20MC = (event_time == -9) *MC
878 gen OCT20MC = (event_time == -8) *MC
879 gen NOV20MC = (event_time == -7) *MC
880 gen DEC20MC = (event_time == -6) *MC
881 gen JAN21MC = (event_time == -5) *MC
882 gen FEB21MC = (event_time == -4) *MC
883 gen MAR21MC = (event_time == -3) *MC
884 gen APR21MC = (event_time == -2) *MC
885 gen MAY21MC = (event_time == -1) *MC
886 gen JUL21MC = (event_time == 1) *MC
887 gen AUG21MC = (event_time == 2) *MC
888 gen SEP21MC = (event_time == 3) *MC
889 gen OCT21MC = (event_time == 4) *MC
890 gen NOV21MC = (event_time == 5) *MC
```



```

891 gen DEC21MC = (event_time == 6) *MC
892 gen JAN22MC = (event_time == 7) *MC
893 gen FEB22MC = (event_time == 8) *MC
894 gen MAR22MC = (event_time == 9) *MC
895 gen APR22MC = (event_time == 10) *MC
896 gen MAY22MC = (event_time == 11) *MC
897 gen JUN22MC = (event_time == 12) *MC
898 gen JUL22MC = (event_time == 13) *MC
899 gen AUG22MC = (event_time == 14) *MC
900 gen SEP22MC = (event_time == 15) *MC
901 gen OCT22MC = (event_time == 16) *MC
902 gen NOV22MC = (event_time == 17) *MC
903 gen DEC22MC = (event_time == 18) *MC
904
905 xtreg EDper JAN19 FEB19 MAR19 APR19 MAY19 JUN19 JUL19 AUG19 SEP19
OCT19 NOV19 DEC19 JAN20 FEB20 MAR20 APR20 MAY20 JUN20 JUL20 AUG20
SEP20 OCT20 NOV20 DEC20 JAN21 FEB21 MAR21 APR21 MAY21 JUL21 AUG21
SEP21 OCT21 NOV21 DEC21 JAN22 FEB22 MAR22 APR22 MAY22 JUN22 JUL22
AUG22 SEP22 OCT22 NOV22 DEC22 JAN19MC FEB19MC MAR19MC APR19MC
MAY19MC JUN19MC JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC
JAN20MC FEB20MC MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC
SEP20MC OCT20MC NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC
MAY21MC JUL21MC AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC
FEB22MC MAR22MC APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC
OCT22MC NOV22MC DEC22MC MC, fe vce(cluster county_id)
906
907 coefplot, keep(JAN19MC FEB19MC MAR19MC APR19MC MAY19MC JUN19MC
JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC JAN20MC FEB20MC
MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC SEP20MC OCT20MC
NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC MAY21MC JUL21MC
AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC FEB22MC MAR22MC
APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC OCT22MC NOV22MC
DEC22MC) xline(29.5, lcolor(red)) vertical title("Event Study: Pre
& Post-event Coefficients") xtitle("Months Relative to Medicaid
Expansion (July 2021)") ytitle("Coefficient Estimate (Edper)")
ciopts(recast(rcap))
908 graph save "Graph" "P:\read_write\NC\Study
Data\Pre-Post-eventcoefficient-MCvsnonMC.gph"
909
910 drop if event_time < -12
911
912 xtreg EDper JAN19 FEB19 MAR19 APR19 MAY19 JUN19 JUL19 AUG19 SEP19
OCT19 NOV19 DEC19 JAN20 FEB20 MAR20 APR20 MAY20 JUN20 JUL20 AUG20
SEP20 OCT20 NOV20 DEC20 JAN21 FEB21 MAR21 APR21 MAY21 JUL21 AUG21
SEP21 OCT21 NOV21 DEC21 JAN22 FEB22 MAR22 APR22 MAY22 JUN22 JUL22
AUG22 SEP22 OCT22 NOV22 DEC22 JAN19MC FEB19MC MAR19MC APR19MC
MAY19MC JUN19MC JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC
JAN20MC FEB20MC MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC

```

```
SEP20MC OCT20MC NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC
MAY21MC JUL21MC AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC
FEB22MC MAR22MC APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC
OCT22MC NOV22MC DEC22MC MC, fe vce(cluster county_id)
```

913

```
914 coefplot, keep(JAN19MC FEB19MC MAR19MC APR19MC MAY19MC JUN19MC
JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC JAN20MC FEB20MC
MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC SEP20MC OCT20MC
NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC MAY21MC JUL21MC
AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC FEB22MC MAR22MC
APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC OCT22MC NOV22MC
DEC22MC) xline(29.5, lcolor(red)) vertical title("Event Study: Pre
& Post-event Coefficients") xtitle("Months Relative to Medicaid
Expansion (July 2021)") ytitle("Coefficient Estimate (Edper)")
ciopts(recast(rcap))
915 graph save "Graph" "P:\read_write\NC\Study
Data\Pre-Post-eventcoefficient-MCvsnonMC2020-2022.gph"
```

916

```
917 *CHRONIC CONDITIONS
```

```
918 xtreg CCEDper JAN19 FEB19 MAR19 APR19 MAY19 JUN19 JUL19 AUG19 SEP19
OCT19 NOV19 DEC19 JAN20 FEB20 MAR20 APR20 MAY20 JUN20 JUL20 AUG20
SEP20 OCT20 NOV20 DEC20 JAN21 FEB21 MAR21 APR21 MAY21 JUL21 AUG21
SEP21 OCT21 NOV21 DEC21 JAN22 FEB22 MAR22 APR22 MAY22 JUN22 JUL22
AUG22 SEP22 OCT22 NOV22 DEC22 JAN19MC FEB19MC MAR19MC APR19MC
MAY19MC JUN19MC JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC
JAN20MC FEB20MC MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC
SEP20MC OCT20MC NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC
MAY21MC JUL21MC AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC
FEB22MC MAR22MC APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC
OCT22MC NOV22MC DEC22MC MC, fe vce(cluster county_id)
```

919

```
920 coefplot, keep(JAN19MC FEB19MC MAR19MC APR19MC MAY19MC JUN19MC
JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC JAN20MC FEB20MC
MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC SEP20MC OCT20MC
NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC MAY21MC JUL21MC
AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC FEB22MC MAR22MC
APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC OCT22MC NOV22MC
DEC22MC) xline(29.5, lcolor(red)) vertical title("Event Study:
Pre-event & Post-event Coefficients") xtitle("Months Relative to
Medicaid Expansion (July 2021)") ytitle("Coefficient Estimate
(Edper)") ciopts(recast(rcap))
```

921

```
922 xtreg CCEDper JAN19 FEB19 MAR19 APR19 MAY19 JUN19 JUL19 AUG19 SEP19
OCT19 NOV19 DEC19 JAN20 FEB20 MAR20 APR20 MAY20 JUN20 JUL20 AUG20
SEP20 OCT20 NOV20 DEC20 JAN21 FEB21 MAR21 APR21 MAY21 JUL21 AUG21
SEP21 OCT21 NOV21 DEC21 JAN22 FEB22 MAR22 APR22 MAY22 JUN22 JUL22
AUG22 SEP22 OCT22 NOV22 DEC22 JAN19MC FEB19MC MAR19MC APR19MC
MAY19MC JUN19MC JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC
```

```

JAN20MC FEB20MC MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC
SEP20MC OCT20MC NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC
MAY21MC JUL21MC AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC
FEB22MC MAR22MC APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC
OCT22MC NOV22MC DEC22MC MC, fe vce(cluster county_id)

```

923

924

```

coefplot, keep(JAN19MC FEB19MC MAR19MC APR19MC MAY19MC JUN19MC
JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC JAN20MC FEB20MC
MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC SEP20MC OCT20MC
NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC MAY21MC JUL21MC
AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC FEB22MC MAR22MC
APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC OCT22MC NOV22MC
DEC22MC) xline(12.5, lcolor(red)) vertical title("Event Study: Pre
& Post-event Coefficients") xtitle("Months Relative to Medicaid
Expansion (July 2021)") ytitle("Coefficient Estimate (Edper)")
ciopts(recast(rcap))

```

925

```

graph save "Graph" "P:\read_write\NC\Study
Data\CCPre-Post-eventcoefficient-MCvsnonMC2020-2022.gph"

```

926

927

```

*for old people*

```

928

```

use "P:\read_write\NC\Study Data\mc+oldregression.dta", clear

```

929

```

xtreg EDper POST MC POST_MC COVID i.AMONTH i.AYEAR, fe vce(cluster
county_id)

```

930

```

gen event_time = ((AYEAR - 2021) * 12) + (AMONTH - 6)

```

931

```

tab event_time, gen(event_dummy)

```

932

```

gen pre_post = .

```

933

```

replace pre_post = -1 if event_time < 0

```

934

```

replace pre_post = 0 if event_time == 0

```

935

```

replace pre_post = 1 if event_time > 0

```

936

937

```

gen JAN19 = (event_time == -29)

```

938

```

gen FEB19 = (event_time == -28)

```

939

```

gen MAR19 = (event_time == -27)

```

940

```

gen APR19 = (event_time == -26)

```

941

```

gen MAY19 = (event_time == -25)

```

942

```

gen JUN19 = (event_time == -24)

```

943

```

gen JUL19 = (event_time == -23)

```

944

```

gen AUG19 = (event_time == -22)

```

945

```

gen SEP19 = (event_time == -21)

```

946

```

gen OCT19 = (event_time == -20)

```

947

```

gen NOV19 = (event_time == -19)

```

948

```

gen DEC19 = (event_time == -18)

```

949

```

gen JAN20 = (event_time == -17)

```

950

```

gen FEB20 = (event_time == -16)

```

951

```

gen MAR20 = (event_time == -15)

```

952

```

gen APR20 = (event_time == -14)

```

953

```

gen MAY20 = (event_time == -13)

```

954

```

gen JUN20 = (event_time == -12)

```

```
955 gen JUL20 = (event_time == -11)
956 gen AUG20 = (event_time == -10)
957 gen SEP20 = (event_time == -9)
958 gen OCT20 = (event_time == -8)
959 gen NOV20 = (event_time == -7)
960 gen DEC20 = (event_time == -6)
961 gen JAN21 = (event_time == -5)
962 gen FEB21 = (event_time == -4)
963 gen MAR21 = (event_time == -3)
964 gen APR21 = (event_time == -2)
965 gen MAY21 = (event_time == -1)
966 gen JUL21 = (event_time == 1)
967 gen AUG21 = (event_time == 2)
968 gen SEP21 = (event_time == 3)
969 gen OCT21 = (event_time == 4)
970 gen NOV21 = (event_time == 5)
971 gen DEC21 = (event_time == 6)
972 gen JAN22 = (event_time == 7)
973 gen FEB22 = (event_time == 8)
974 gen MAR22 = (event_time == 9)
975 gen APR22 = (event_time == 10)
976 gen MAY22 = (event_time == 11)
977 gen JUN22 = (event_time == 12)
978 gen JUL22 = (event_time == 13)
979 gen AUG22 = (event_time == 14)
980 gen SEP22 = (event_time == 15)
981 gen OCT22 = (event_time == 16)
982 gen NOV22 = (event_time == 17)
983 gen DEC22 = (event_time == 18)
984
985 gen JAN19MC = (event_time == -29) *MC
986 gen FEB19MC = (event_time == -28) *MC
987 gen MAR19MC = (event_time == -27) *MC
988 gen APR19MC = (event_time == -26) *MC
989 gen MAY19MC = (event_time == -25) *MC
990 gen JUN19MC = (event_time == -24) *MC
991 gen JUL19MC = (event_time == -23) *MC
992 gen AUG19MC = (event_time == -22) *MC
993 gen SEP19MC = (event_time == -21) *MC
994 gen OCT19MC = (event_time == -20) *MC
995 gen NOV19MC = (event_time == -19) *MC
996 gen DEC19MC = (event_time == -18) *MC
997 gen JAN20MC = (event_time == -17) *MC
998 gen FEB20MC = (event_time == -16) *MC
999 gen MAR20MC = (event_time == -15) *MC
1000 gen APR20MC = (event_time == -14) *MC
1001 gen MAY20MC = (event_time == -13) *MC
1002 gen JUN20MC = (event_time == -12) *MC
```

```

1003 gen JUL20MC = (event_time == -11) *MC
1004 gen AUG20MC = (event_time == -10) *MC
1005 gen SEP20MC = (event_time == -9) *MC
1006 gen OCT20MC = (event_time == -8) *MC
1007 gen NOV20MC = (event_time == -7) *MC
1008 gen DEC20MC = (event_time == -6) *MC
1009 gen JAN21MC = (event_time == -5) *MC
1010 gen FEB21MC = (event_time == -4) *MC
1011 gen MAR21MC = (event_time == -3) *MC
1012 gen APR21MC = (event_time == -2) *MC
1013 gen MAY21MC = (event_time == -1) *MC
1014 gen JUL21MC = (event_time == 1) *MC
1015 gen AUG21MC = (event_time == 2) *MC
1016 gen SEP21MC = (event_time == 3) *MC
1017 gen OCT21MC = (event_time == 4) *MC
1018 gen NOV21MC = (event_time == 5) *MC
1019 gen DEC21MC = (event_time == 6) *MC
1020 gen JAN22MC = (event_time == 7) *MC
1021 gen FEB22MC = (event_time == 8) *MC
1022 gen MAR22MC = (event_time == 9) *MC
1023 gen APR22MC = (event_time == 10) *MC
1024 gen MAY22MC = (event_time == 11) *MC
1025 gen JUN22MC = (event_time == 12) *MC
1026 gen JUL22MC = (event_time == 13) *MC
1027 gen AUG22MC = (event_time == 14) *MC
1028 gen SEP22MC = (event_time == 15) *MC
1029 gen OCT22MC = (event_time == 16) *MC
1030 gen NOV22MC = (event_time == 17) *MC
1031 gen DEC22MC = (event_time == 18) *MC
1032
1033 drop if event_time < -12
1034
1035 xtreg EDper JAN19 FEB19 MAR19 APR19 MAY19 JUN19 JUL19 AUG19 SEP19
OCT19 NOV19 DEC19 JAN20 FEB20 MAR20 APR20 MAY20 JUN20 JUL20 AUG20
SEP20 OCT20 NOV20 DEC20 JAN21 FEB21 MAR21 APR21 MAY21 JUL21 AUG21
SEP21 OCT21 NOV21 DEC21 JAN22 FEB22 MAR22 APR22 MAY22 JUN22 JUL22
AUG22 SEP22 OCT22 NOV22 DEC22 JAN19MC FEB19MC MAR19MC APR19MC
MAY19MC JUN19MC JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC
JAN20MC FEB20MC MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC
SEP20MC OCT20MC NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC
MAY21MC JUL21MC AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC
FEB22MC MAR22MC APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC
OCT22MC NOV22MC DEC22MC MC, fe vce(cluster county_id)
1036
1037 coefplot, keep(JAN19MC FEB19MC MAR19MC APR19MC MAY19MC JUN19MC
JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC JAN20MC FEB20MC
MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC SEP20MC OCT20MC
NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC MAY21MC JUL21MC

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AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC FEB22MC MAR22MC
APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC OCT22MC NOV22MC
DEC22MC) xline(12.5, lcolor(red)) vertical title("Event Study: Pre
& Post-event Coefficients") xtitle("Months Relative to Medicaid
Expansion (July 2021)") ytitle("Coefficient Estimate (Edper)")
ciopts(recast(rcap))
1038 graph save "Graph" "P:\read_write\NC\Study
Data\Pre-Post-eventcoefficient-MCvsold2020-2022.gph"
1039 *CHRONIC CONDITIONS
1040 xtreg CCEDper JAN19 FEB19 MAR19 APR19 MAY19 JUN19 JUL19 AUG19 SEP19
OCT19 NOV19 DEC19 JAN20 FEB20 MAR20 APR20 MAY20 JUN20 JUL20 AUG20
SEP20 OCT20 NOV20 DEC20 JAN21 FEB21 MAR21 APR21 MAY21 JUL21 AUG21
SEP21 OCT21 NOV21 DEC21 JAN22 FEB22 MAR22 APR22 MAY22 JUN22 JUL22
AUG22 SEP22 OCT22 NOV22 DEC22 JAN19MC FEB19MC MAR19MC APR19MC
MAY19MC JUN19MC JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC
JAN20MC FEB20MC MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC
SEP20MC OCT20MC NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC
MAY21MC JUL21MC AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC
FEB22MC MAR22MC APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC
OCT22MC NOV22MC DEC22MC MC, fe vce(cluster county_id)
1041
1042 coefplot, keep(JAN19MC FEB19MC MAR19MC APR19MC MAY19MC JUN19MC
JUL19MC AUG19MC SEP19MC OCT19MC NOV19MC DEC19MC JAN20MC FEB20MC
MAR20MC APR20MC MAY20MC JUN20MC JUL20MC AUG20MC SEP20MC OCT20MC
NOV20MC DEC20MC JAN21MC FEB21MC MAR21MC APR21MC MAY21MC JUL21MC
AUG21MC SEP21MC OCT21MC NOV21MC DEC21MC JAN22MC FEB22MC MAR22MC
APR22MC MAY22MC JUN22MC JUL22MC AUG22MC SEP22MC OCT22MC NOV22MC
DEC22MC) xline(12.5, lcolor(red)) vertical title("Event Study: Pre
& Post-event Coefficients") xtitle("Months Relative to Medicaid
Expansion (July 2021)") ytitle("Coefficient Estimate (Edper)")
ciopts(recast(rcap))
1043 graph save "Graph" "P:\read_write\NC\Study
Data\CCPre-Post-eventcoefficient-MCvsold2020-2022.gph"
1044
1045
1046 *GRAPH CREATION*
1047 *1. NONMC ED RATES ACROSS TIME*
1048 *by urban and rural*
1049 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbymon
thyearlocation.dta", clear
1050 gen time = ym(AYEAR,AMONTH)
1051 format time %tm
1052 twoway (line EDperthousand time if UrbanRural == "urban", sort
lcolor(blue) lpattern(solid)) (line EDperthousand time if
UrbanRural == "rural", sort lcolor(black) lpattern(solid)), title(
"Non-Medicaid Monthly ED Rate: Urban vs Rural Areas") xtitle(
"Time(Month-Year)") ytitle("ED Rate per thousand") xlabel(, format

```

```

(%tmMonYY)) legend(order(1 "Urban" 2 "Rural")) graphregion(color(
white))
1053
1054 graph save "Graph" "P:\read_write\NC\Study
Data\NonMCEDvisitsovertime(urban-rural).gph", replace
1055 save
"P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbymon
thyearlocation.dta", replace
1056
1057 *CC urban/rural*
1058 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\SINMCEDVisitsbymon
thyearlocation.dta", clear
1059 gen time = ym(AYEAR,AMONTH)
1060 format time %tm
1061 twoway (line CCEDperthousand time if UrbanRural == "urban", sort
lcolor(blue) lpattern(solid)) (line CCEDperthousand time if
UrbanRural == "rural", sort lcolor(black) lpattern(solid)), title(
"Non-Medicaid Chronic Condition ED Rate: Urban vs Rural Areas")
xtitle("Time(Month-Year)") ytitle("Chronic Condition ED Rate per
thousand") xlabel(, format(%tmMonYY)) legend(order(1 "Urban" 2
"Rural")) graphregion(color(white))
1062 graph export "P:\read_write\NC\Study Data\NonMCCC(urban-rural).jpg"
, as(jpg) name("Graph") quality(100)
1063
1064
1065
1066 *across all counties*
1067 use "P:\read_write\NC\Study Data\NonMCEDvisit1.dta", clear
1068 gen NonMCperthousand = ""
1069 destring NonMCperthousand, replace
1070 replace NonMCperthousand = (VISIT_ID / A1864) * 1000
1071
1072 gen NonMCCCIRperthousand = ""
1073 destring NonMCCCIRperthousand, replace
1074 replace NonMCCCIRperthousand = (CCIR_1 / A1864) * 1000
1075 gen time = ym(AYEAR,AMONTH)
1076 format time %tm
1077 save "P:\read_write\NC\Study Data\NonMCEDvisit2.dta", replace
1078 twoway (line NonMCperthousand time, sort lcolor(blue) lpattern(
solid)), title("Non-Medicaid Monthly ED Rate") xtitle(
"Time(Month-Year)") ytitle("ED Rate per thousand") xlabel(, format
(%tmMonYY)) graphregion(color(white))
1079 graph save "Graph" "P:\read_write\NC\Study
Data\NonMCEDvisitsovertime(allcounties).gph", replace
1080
1081 use "P:\read_write\NC\Study Data\NonMCEDvisit2.dta", clear
1082 twoway (line NonMCCCIRperthousand time, sort lcolor(blue) lpattern(

```

```

solid)), title("Non-Medicaid Chronic Condition ED Rate") xtitle(
"Time(Month-Year)") ytitle("Chronic Condition ED Rate per thousand"
) xlabel(, format(%tmMonYY)) graphregion(color(white))
1083 graph export "P:\read_write\NC\Study Data\NonMCCC(allcounties).jpg"
, as(jpg) name("Graph") quality(100)
1084
1085 *2. MC ED RATES ACROSS TIME
1086 *overall first*
1087 use "P:\read_write\NC\Study Data\MCTotalEDVisitsbyCountyv5.dta",
clear
1088 preserve
1089 collapse (sum) MCvisits MCCCIR_0 MCCCIR_1 MCRACE_0 MCRACE_1
MCRACE_2 MCENROLTOT, by (AYEAR AMONTH)
1090 gen MCEDperthousand = ""
1091 destring MCEDperthousand, replace
1092 replace MCEDperthousand = (MCvisits / MCENROLTOT) * 1000
1093 gen MCCCEDperthousand = ""
1094 destring MCCCEDperthousand, replace
1095 replace MCCCEDperthousand = (MCCCIR_1 / MCENROLTOT) * 1000
1096 save "P:\read_write\NC\Study Data\MCvisitsbymonthyear.dta", replace
1097 destring AYEAR AMONTH, replace
1098 gen time = ym(AYEAR,AMONTH)
1099 format time %tm
1100 twoway (line MCEDperthousand time, sort lcolor(blue) lpattern(solid
)), title("Medicaid Monthly ED Rate") xtitle("Time(Month-Year)")
ytitle("ED Rate per thousand") xlabel(, format(%tmMonYY))
graphregion(color(white))
1101
1102 *for chronic conditons*
1103 use "P:\read_write\NC\Study Data\MCvisitsbymonthyear.dta", clear
1104 gen time = ym(AYEAR,AMONTH)
1105 format time %tm
1106 twoway (line MCCCEDperthousand time, sort lcolor(blue) lpattern(
solid)), title("Medicaid Chronic Condition ED Rate") xtitle(
"Time(Month-Year)") ytitle("Chronic Condition ED Rate per thousand"
) xlabel(, format(%tmMonYY)) graphregion(color(white))
1107 graph export "P:\read_write\NC\Study Data\MCCCED(allcounties).jpg",
as(jpg) name("Graph") quality(100)
1108
1109 use "P:\read_write\NC\Study Data\MCvisitsbymonthyearlocation.dta"
1110 gen time = ym(AYEAR,AMONTH)
1111 format time %tm
1112 twoway (line MCCCEDperthousand time if UrbanRural == "urban", sort
lcolor(blue) lpattern(solid)) (line MCCCEDperthousand time if
UrbanRural == "rural", sort lcolor(black) lpattern(solid)), title(
"Medicaid Chronic Condition ED Rate: Urban vs Rural Areas") xtitle(
"Time(Month-Year)") ytitle("Chronic Condition ED Rate per thousand"
) xlabel(, format(%tmMonYY)) legend(order(1 "Urban" 2 "Rural"))

```



```
graphregion(color(white))
1113 graph export "P:\read_write\NC\Study Data\MCCC(urban-rural).jpg",
as(jpg) name("Graph") quality(90)
1114
1115 *by urban/rural*
1116 use "P:\read_write\NC\Study Data\MCvisitsbymonthyearlocation.dta"
1117 gen time = ym(AYEAR,AMONTH)
1118 format time %tm
1119 twoway (line MCEDperthousand time if UrbanRural == "urban", sort
lcolor(blue) lpattern(solid)) (line MCEDperthousand time if
UrbanRural == "rural", sort lcolor(black) lpattern(solid)), title(
"Medicaid Monthly ED Rate: Urban vs Rural Areas") xtitle(
"Time(Month-Year)") ytitle("ED Rate per thousand") xlabel(, format
(%tmMonYY)) legend(order(1 "Urban" 2 "Rural")) graphregion(color(
white))
1120
1121
1122 encode county_id, gen(county_num)
1123 replace county_id = county_num
1124 drop county_num
1125 save "P:\read_write\NC\Study Data\MasterEDv3.dta", replace
1126
1127 *3. OLD PEOPLE
1128 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EDVisitsbymonth
year.dta"
1129 gen time = ym(AYEAR,AMONTH)
1130 format time %tm
1131 twoway (line EDperthousand time, sort lcolor(blue) lpattern(solid
)), title("Older Population Monthly ED Rate") xtitle(
"Time(Month-Year)") ytitle("ED Rate per thousand") xlabel(, format
(%tmMonYY)) graphregion(color(white))
1132 *save graph as OldEDvisitsovertime(allcounties)
1133 *chronic condition graph*
1134 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\650EDVisitsbymonth
year.dta"
1135 gen time = ym(AYEAR,AMONTH)
1136 format time %tm
1137 twoway (line CCEDperthousand time, sort lcolor(blue) lpattern(solid
)), title("Older Chronic Condition ED Rate") xtitle(
"Time(Month-Year)") ytitle("Chronic Condition ED Rate per thousand"
) xlabel(, format(%tmMonYY)) graphregion(color(white))
1138 graph export "P:\read_write\NC\Study Data\OldCC(allcounties).jpg",
as(jpg) name("Graph") quality(100) replace
1139 *save as OldCC(allcounties)*
1140
1141
```

```

1142 *now by urban/rural*
1143 use
      "P:\read_write\NC\Analyses\Temporary\02.22updated\650EdVisitsbymonth
      yearlocation.dta", clear
1144 gen time = ym(AYEAR,AMONTH)
1145 format time %tm
1146 *chronic condition graph)
1147 twoway (line CCEDperthousand time if UrbanRural == "urban", sort
      lcolor(blue) lpattern(solid)) (line CCEDperthousand time if
      UrbanRural == "rural", sort lcolor(black) lpattern(solid)), title(
      "Older Chronic Condition ED Rate: Urban vs Rural Areas") xtitle(
      "Time(Month-Year)") ytitle("Chronic Condition ED Rate per thousand"
      ) xlabel(, format(%tmMonYY)) legend(order(1 "Urban" 2 "Rural"))
      graphregion(color(white))
1148 *save graph*
1149 twoway (line EDperthousand time if UrbanRural == "urban", sort
      lcolor(blue) lpattern(solid)) (line EDperthousand time if
      UrbanRural == "rural", sort lcolor(black) lpattern(solid)), title(
      "Older Population Monthly ED Rate: Urban vs Rural Areas") xtitle(
      "Time(Month-Year)") ytitle("ED Rate per thousand") xlabel(, format
      (%tmMonYY)) legend(order(1 "Urban" 2 "Rural")) graphregion(color(
      white))

1150
1151 *ED visits master with MC and nonMC numbers*
1152 use "P:\read_write\NC\Study Data\NonMCEDvisit2.dta", clear
1153 merge 1:1 AMONTH AYEAR using "P:\read_write\NC\Study
      Data\MCvisitsbymonthyear.dta"
1154 drop _merge
1155 save "P:\read_write\NC\Study
      Data\EDvisitsbymonthyear(MCvsnonMC).dta", replace

1156
1157 *ED visits master with MC and nonMC numbers by urban/rural*
1158 use "P:\read_write\NC\Study
      Data\SINMCEDVisitsbymonthyearlocation.dta"
1159 merge 1:1 AYEAR AMONTH UrbanRural using "P:\read_write\NC\Study
      Data\MCvisitsbymonthyearlocation.dta"
1160 drop _merge
1161 save "P:\read_write\NC\Study
      Data\EDvisitsbymonthyearlocation(MCvsnonMC).dta", replace

1162
1163 *running sum statistics*
1164 use "P:\read_write\NC\Study
      Data\EDvisitsbymonthyear(MCvsnonMCvsOLD).dta", clear
1165 preserve
1166 collapse (sum) VISIT_ID MCvisits MCCCIR_0 MCCCIR_1 MCRACE_0
      MCRACE_1 MCRACE_2 CCIR_0 CCIR_1 RACE_0 RACE_1 RACE_2 OLDvisits
      OLDCCIR_0 OLDCCIR_1 OLDRACE_0 OLDRACE_1 OLDRACE_2, by(AYEAR)
1167 gen Totalvisits == ""

```

```
1168 destring Totalvisits, replace
1169 replace Totalvisits = VISIT_ID + MCvisits + OLDvisits
1170 save "P:\read_write\NC\Study Data\SummaryStats.dta", replace
1171 export excel using sumstats.xlsx, replace
1172
1173 use "P:\read_write\NC\Study
Data\EDvisitsbymonthyearlocation(MCvsnonMC).dta"
1174 preserve
1175 collapse (sum) VISIT_ID MCvisits MCCCIR_0 MCCCIR_1 MCRACE_0
MCRACE_1 MCRACE_2 CCIR_0 CCIR_1 RACE_0 RACE_1 RACE_2 , by(AYEAR
UrbanRural)
1176 save "P:\read_write\NC\Study Data\SumStatslocation(mcvsnonmc).dta"
1177 export excel using sumstatsurbanrural1.xlsx, replace
1178
1179 use "P:\read_write\NC\Study
Data\EDvisitsbymonthyearlocation(MCvsnonMCvsOLD).dta", clear
1180 preserve
1181 collapse (sum) OLDvisits OLDCCIR_0 OLDCCIR_1 OLDRACE_0 OLDRACE_1
OLDRACE_2 , by(AYEAR UrbanRural)
1182 merge 1:1 AYEAR UrbanRural using "P:\read_write\NC\Study
Data\SumStatslocation(mcvsnonmc).dta"
1183 drop _merge
1184 save "P:\read_write\NC\Study
Data\SumStatslocation(mcvsnonmcvsold).dta"
1185
1186 *finding avg age of Medicaid, Other, and Older demographic*
1187 *OLD*
1188 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\650mergedfile.dta"
, clear
1189 sum AGE
1190 *NONMC*
1191 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev5B.
dta", clear
1192 sum AGE
1193 *MC*
1194 use
"P:\read_write\NC\Analyses\Temporary\02.22updated\MergedSeddFilev5.d
ta", clear
1195 sum AGE
1196
1197
1198
1199
1200
1201
1202
```