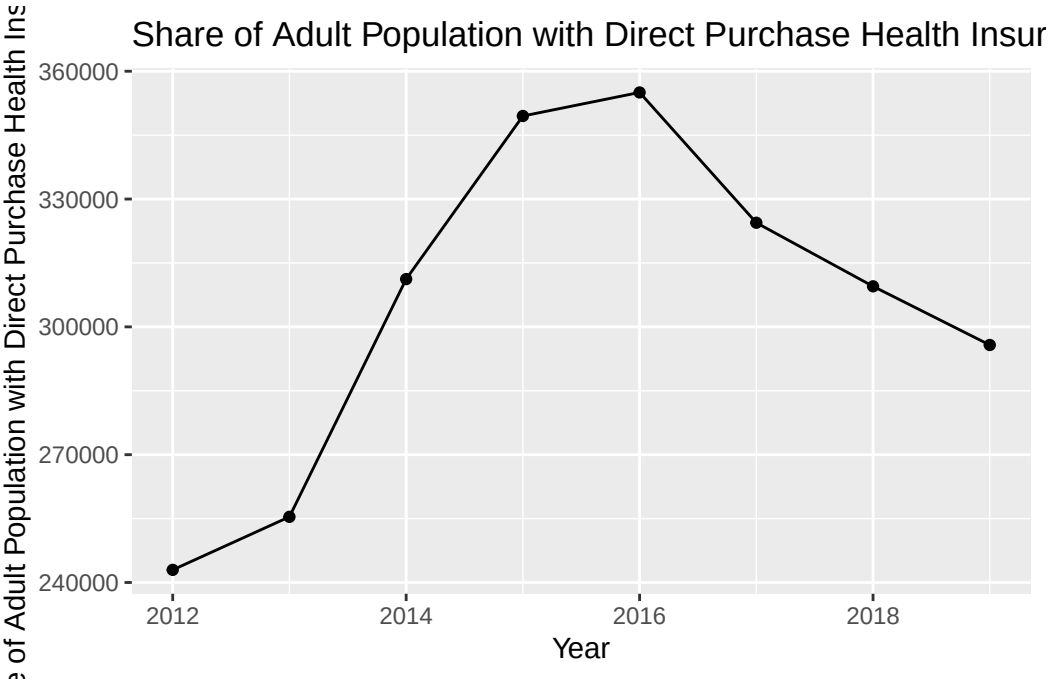
Git Repository: https://github.com/AlekhyaPidugu/Homework5

Question 1


Share of Adult Population with Direct Purchase Health Insur
e of Adult Population with Direct Purchase Health Ins
360000
330000
300000
270000
240000
2012
2014
2016
2018
Year

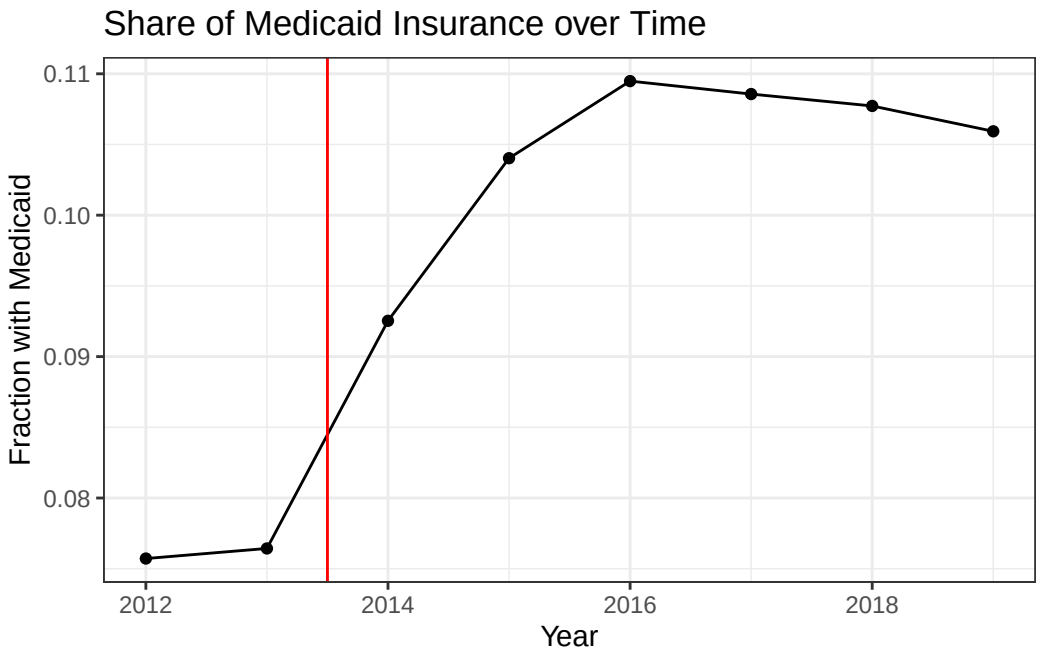
Question 2

The expansion of Medicaid eligibility under the ACA provided coverage to millions of low-income individuals who might have otherwise purchased insurance directly from the market. This could have reduced the pool of potential customers for direct purchase insurance plans.

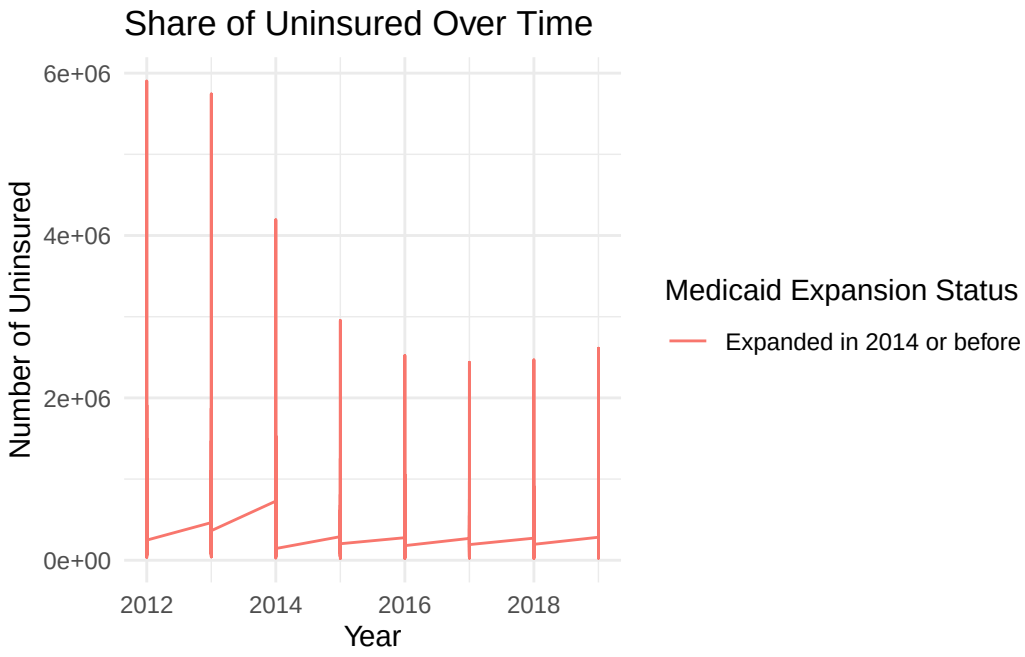
The ACA prohibits insurance companies from denying coverage or charging higher premiums based on pre-existing conditions. This provision made it easier for individuals with pre-existing conditions to obtain coverage through ACA-compliant plans offered in the marketplaces, potentially reducing the demand for direct purchase plans.

State-level regulations regarding insurance market practices, such as rate review requirements, benefit mandates, and network adequacy standards, can influence the availability and affordability of direct purchase insurance plans. Regulatory changes that increase the cost of offering or purchasing direct purchase plans could impact their viability in the market.

Question 3


Share of Medicaid Insurance over Time
Fraction with Medicaid
0.11
0.10
0.09
0.08
2012
2014
2016
2018
Year

Question 4


Share of Uninsured Over Time
Number of Uninsured
6e+06
4e+06
2e+06
0e+00
2012
2014
2016
2018
Year
Medicaid Expansion Status
Expanded in 2014 or before

Question 5

```
# A tibble: 2 x 3
  Group           Pre   Post
  <chr>         <dbl>  <dbl>
1 Non-expansion 0.216 0.158
2 Expansion     0.172 0.0959
```

Question 6

```
Call:
lm(formula = perc_unins ~ post + expand_ever + treat, data = reg.data)

Coefficients:
    (Intercept)         postTRUE  expand_everTRUE            treat
        0.21397         -0.05406         -0.04305         -0.02038
```

Question 7

```
OLS estimation, Dep. Var.: perc_unins
Observations: 344
Fixed-effects: State: 43,  year: 8
Standard-errors: Clustered (State)
       Estimate Std. Error  t value  Pr(>|t|)
treat -0.020378   0.007113 -2.86472 0.0064911 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
RMSE: 0.012536     Adj. R2: 0.943601
                 Within R2: 0.105898
```

Question 8

```
OLS estimation, Dep. Var.: perc_unins
Observations: 400
Fixed-effects: State: 50,  year: 8
Standard-errors: Clustered (State)
       Estimate Std. Error  t value   Pr(>|t|)
treat -0.022609   0.005192 -4.35503 6.7699e-05 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
RMSE: 0.012514     Adj. R2: 0.941658
                 Within R2: 0.15512
```

Question 9

```
OLS estimation, Dep. Var.: perc_unins
Observations: 344
Fixed-effects: State: 43,  year: 8
Standard-errors: Clustered (State)
                         Estimate Std. Error  t value  Pr(>|t|)
year::2012:expand_ever -0.002178   0.001806 -1.20580 0.2346428
year::2014:expand_ever -0.015172   0.004505 -3.36786 0.0016312 **
year::2015:expand_ever -0.020387   0.007256 -2.80968 0.0074982 **
year::2016:expand_ever -0.021412   0.008064 -2.65516 0.0111518 *
year::2017:expand_ever -0.023683   0.008029 -2.94986 0.0051785 **
year::2018:expand_ever -0.024605   0.007816 -3.14806 0.0030220 **
year::2019:expand_ever -0.023544   0.007728 -3.04678 0.0039880 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
RMSE: 0.012462     Adj. R2: 0.943103
                 Within R2: 0.11648
```

Question 10

```
OLS estimation, Dep. Var.: perc_unins
Observations: 400
Fixed-effects: State: 50,  year: 8
Standard-errors: Clustered (State)
                               Estimate Std. Error   t value   Pr(>|t|)
time_to_treat::-4:expand_ever  0.003293   0.010183  0.323384 7.4778e-01
time_to_treat::-3:expand_ever  0.005878   0.006259  0.939208 3.5223e-01
time_to_treat::-2:expand_ever -0.000758   0.001769 -0.428334 6.7028e-01
time_to_treat::0:expand_ever  -0.016530   0.003229 -5.119223 5.1332e-06 ***
time_to_treat::1:expand_ever  -0.024289   0.005549 -4.377269 6.2924e-05 ***
time_to_treat::2:expand_ever  -0.026386   0.006536 -4.037191 1.8963e-04 ***
time_to_treat::3:expand_ever  -0.027498   0.006530 -4.211057 1.0835e-04 ***
time_to_treat::4:expand_ever  -0.025648   0.006700 -3.828227 3.6680e-04 ***
time_to_treat::5:expand_ever  -0.024597   0.007270 -3.383495 1.4154e-03 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
RMSE: 0.012363     Adj. R2: 0.941692
                 Within R2: 0.17537
```