Research in Health Economics- Homework 2

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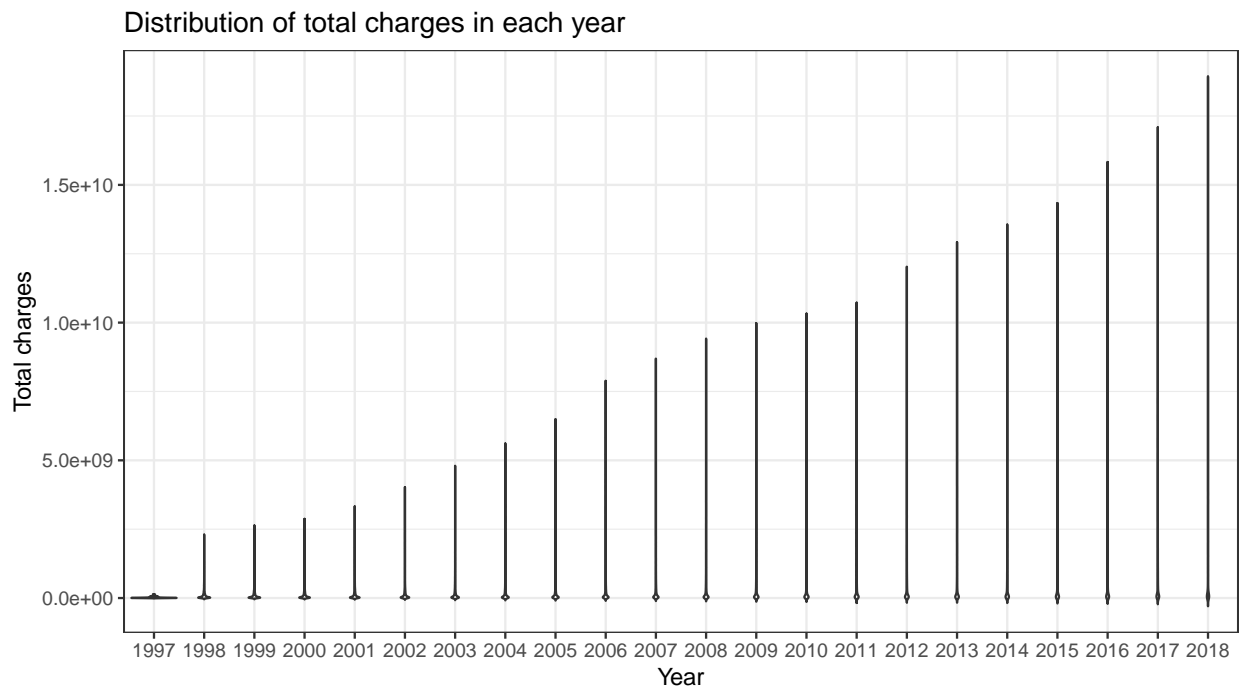
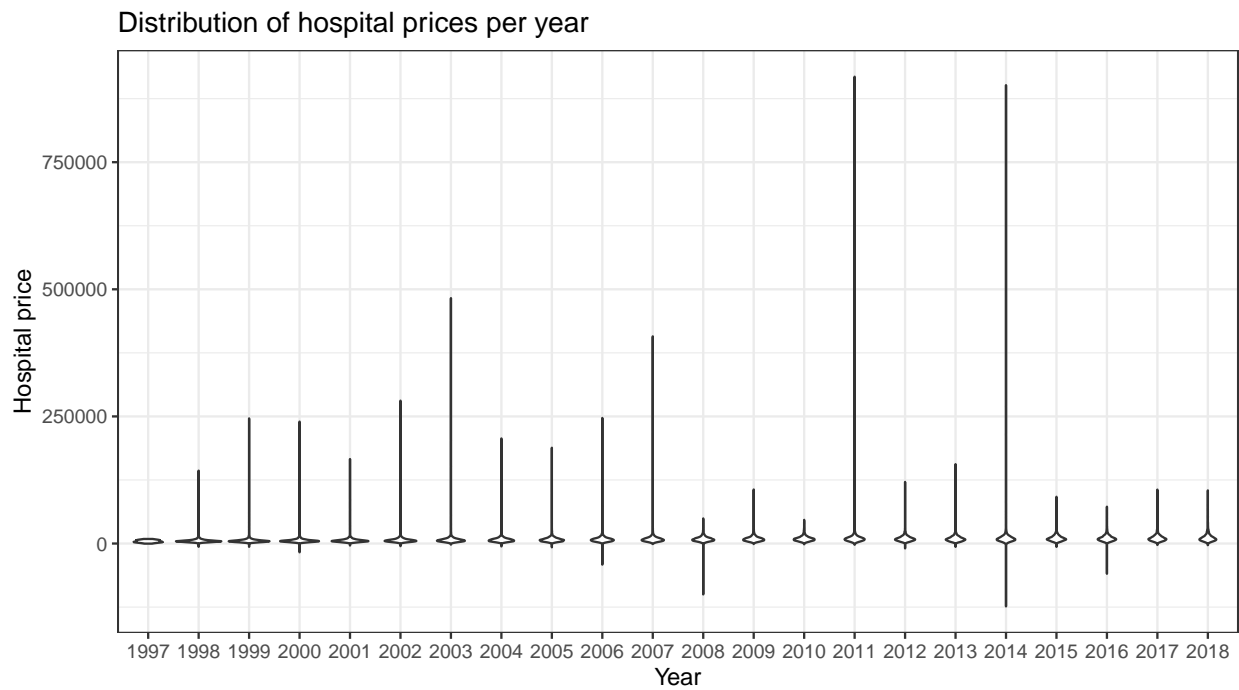## Question 1

Number of hospitals that filed more than one report in the same year
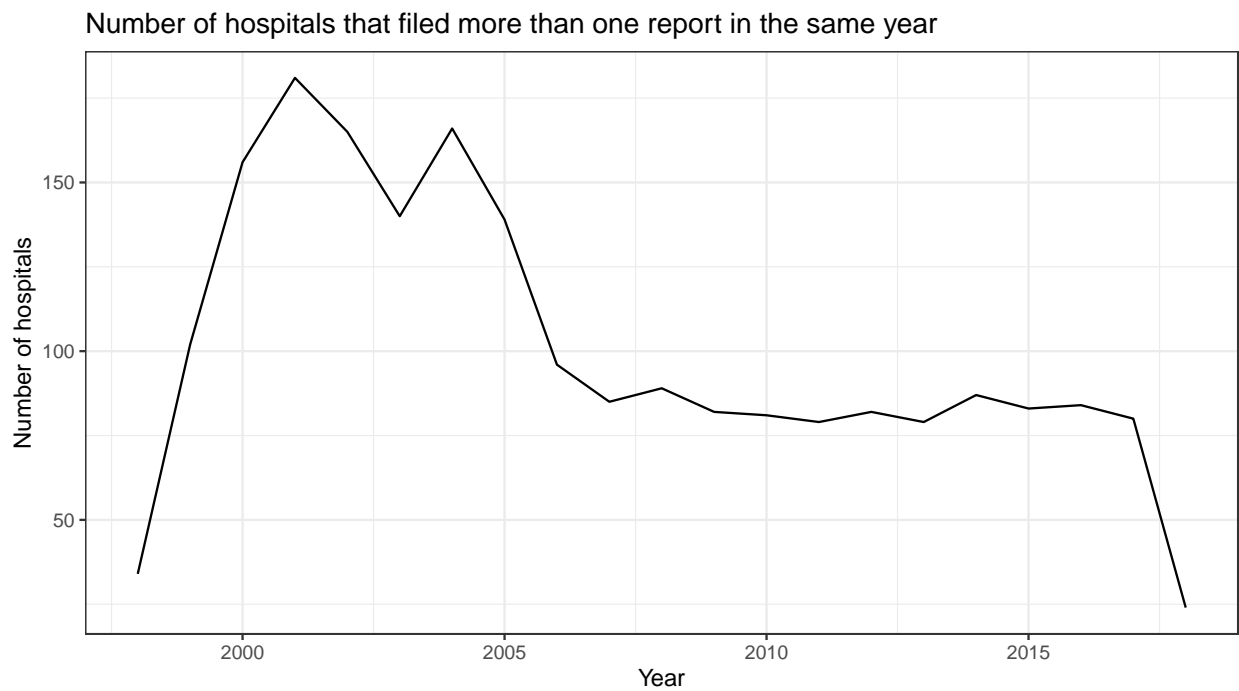
Question 2

There are 9323 unique hospitals in the data set.

Question 3

Distribution of total charges in each year

Question 4

Distribution of hospital prices per year

Question 5

```
## # A tibble: 2 x 2
##   penalty  price
##     <dbl>  <dbl>
## 1       0  9752.
## 2       1 10235.
```

Question 6

```
## # A tibble: 8 x 3
## # Groups:   quartile [4]
##   quartile penalty avg_price
##      <int>   <dbl>     <dbl>
## 1        1       0       NaN
## 2        1       1       NaN
## 3        2       0    10032.
## 4        2       1     6680.
## 5        3       0     8004.
## 6        3       1    10079.
## 7        4       0    11076.
## 8        4       1    11264.
```

Question 7

For KNN regression with inverse variance based on quartiles of bed size

```
##           [,1]
## [1,] 643.4647
```

For KNN regression with Mahalanobis distance based on quartiles of bed size

```
##           [,1]
## [1,] 643.4647
```

For inverse propensity weighting

```
## [1] 105.6059
```

For regression

```
## [1] 85
```