## Template

#### Name

March 3, 2019

#### 1 Preliminaries

#### 2 Numerical Summaries

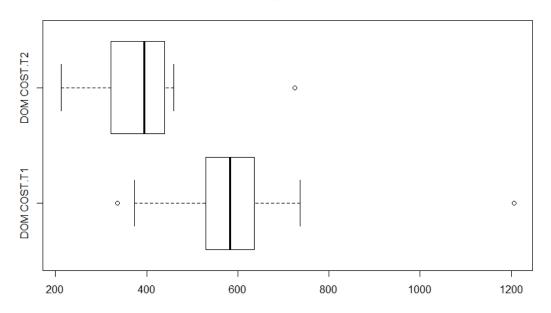
#### 2.1 Summaries

```
> summary(domdis$COSTS.T1)
   Min. 1st Qu.
                 Median
                             Mean 3rd Qu.
                                              Max.
  335.2
          529.9
                                    635.9
                   583.1
                            605.6
                                           1207.0
> summary(domdis$COSTS.T2)
   Min. 1st Qu.
                  Median
                            Mean 3rd Qu.
                                              Max.
  212.2
          322.2
                   394.8
                            390.4
                                    439.1
                                             725.3
> summary(domdis$COSTS.T1)
   Min. 1st Qu.
                  Median
                             Mean 3rd Qu.
                                              Max.
  335.2
          529.9
                   583.1
                            605.6
                                    635.9
                                           1207.0
> summary(domdis$COSTS.T2)
   Min. 1st Qu.
                  Median
                             Mean 3rd Qu.
                                              Max.
  212.2
          322.2
                   394.8
                            390.4
                                    439.1
                                             725.3
> summary(hosdis$COSTS.T1)
   Min. 1st Qu.
                  Median
                             Mean 3rd Qu.
                                              Max.
  407.1
          458.3
                   799.9
                            725.2
                                    913.7
                                           1312.7
> summary(hosdis$COSTS.T2)
   Min. 1st Qu.
                  Median
                             Mean 3rd Qu.
                                              Max.
  260.0
          452.2
                   656.0
                            612.5
                                    712.3
                                           1177.8
> summary(rnhdis$COSTS.T1)
   Min. 1st Qu.
                  Median
                             Mean 3rd Qu.
                                              Max.
  275.2
          530.7
                            747.5
                   798.4
                                    856.9
                                           1539.1
> summary(rnhdis$COSTS.T2)
   Min. 1st Qu.
                  Median
                             Mean 3rd Qu.
                                              Max.
  221.5
          440.6
                   571.8
                            590.3
                                    771.2
                                             961.6
> summary(sghdis$COSTS.T1)
   Min. 1st Qu.
                  Median
                             Mean 3rd Qu.
                                              Max.
```

```
383.1
          677.8
                          853.4
                 860.2
                                 952.7 1655.8
> summary(sghdis$COSTS.T2)
  Min. 1st Qu. Median
                          Mean 3rd Qu.
                                          Max.
  304.4
         707.2
                 846.4
                         825.3
                                 980.5 1313.4
>
> summary(learndis)
   PATIENT
                     COSTS.T1
                                      COSTS.T2
                                                   ACCOM
 Min.
        : 1.00
                 Min.
                                         : 212.2
                        : 275.2
                                  Min.
                                                   DOM:15
 1st Qu.: 27.00
                1st Qu.: 555.5
                                 1st Qu.: 445.2
                                                   HOS:21
Median : 53.00
                Median : 783.9
                                Median : 659.3
                                                   RNH:24
 Mean
      : 52.59
                 Mean
                        : 764.8
                                  Mean
                                         : 660.6
                                                   SGH:41
 3rd Qu.: 78.00
                  3rd Qu.: 922.9
                                  3rd Qu.: 854.4
        :103.00
                        :1655.8
 Max.
                 Max.
                                  Max.
                                          :1313.4
> summary(learndis$COSTS.T1)
  Min. 1st Qu.
                          Mean 3rd Qu.
                Median
                                           Max.
  275.2
          555.5
                  783.9
                          764.8
                                 922.9 1655.8
> summary(learndis$COSTS.T2)
  Min. 1st Qu. Median
                          Mean 3rd Qu.
                                          Max.
  212.2
          445.2
                  659.3
                          660.6
                                 854.4 1313.4
```

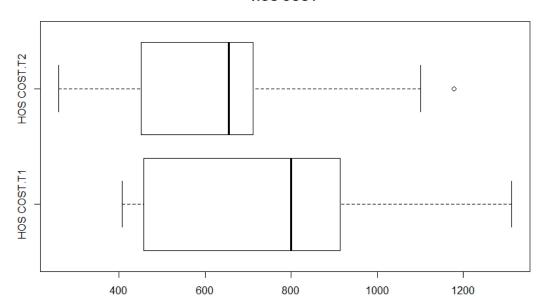
## 2.2 Boxplots

### DOM COST



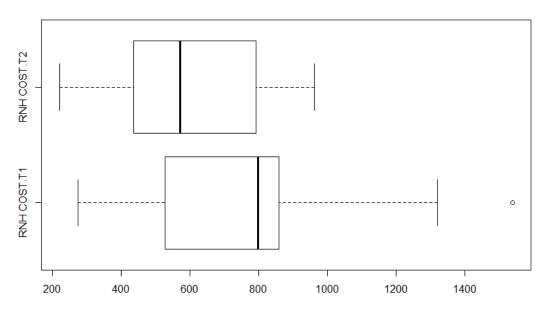
DOM.jpeg

## HOS COST



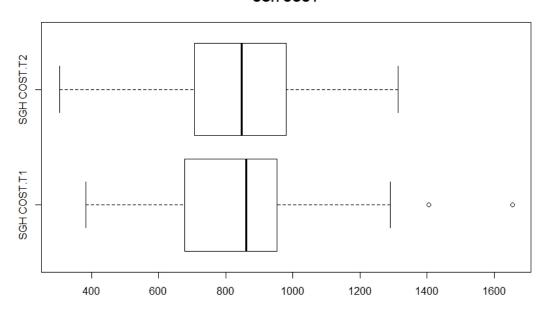
HOS.jpeg

### RNH COST



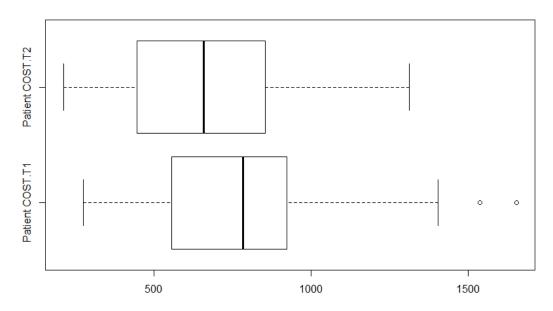
RNH.jpeg

## SGH COST



SGH.jpeg

#### Patient COST



COST.jpeg

## 3 Assesment of Normality

### 3.1 Stem and Leaf plots

> stem(domdis\$COSTS.T1)

The decimal point is 2 digit(s) to the right of the |

- 2 | 47
- 4 | 8155689
- 6 | 13434
- 8 |
- 10 |
- 12 | 1

> stem(domdis\$COSTS.T2)

The decimal point is 2 digit(s) to the right of the  $\mid$ 

- 2 | 16922479
- 4 | 022566
- 6 | 3

>

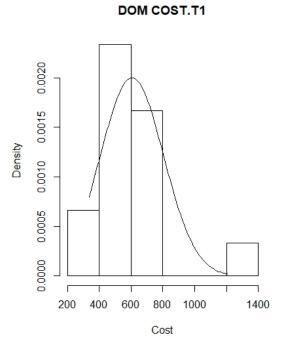
```
> stem(hosdis$COSTS.T1)
  The decimal point is 2 digit(s) to the right of the |
   4 | 11246646
   6 | 03
  8 | 0570113444
  10 l
  12 | 1
> stem(hosdis$COSTS.T2)
  The decimal point is 2 digit(s) to the right of the |
   2 | 646
   4 | 3456678
   6 | 66011145
  8 | 1
  10 | 08
> stem(rnhdis$COSTS.T1)
  The decimal point is 3 digit(s) to the right of the |
  0 | 334
  0 | 555567778888889999
  1 | 03
  1 | 5
> stem(rnhdis$COSTS.T2)
  The decimal point is 2 digit(s) to the right of the |
  2 | 28899
  4 | 359167788
  6 | 0335
  8 | 456236
> stem(sghdis$COSTS.T1)
  The decimal point is 2 digit(s) to the right of the |
   2 | 8
```

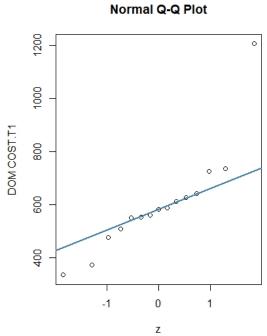
```
4 | 22456
   6 | 1334823788
  8 | 02236890123334588
  10 | 36672
  12 | 9
  14 | 0
  16 | 6
> stem(sghdis$COSTS.T2)
  The decimal point is 2 digit(s) to the right of the |
   2 | 044
   4 | 556
  6 | 337011123579
  8 | 2455993344448
  10 | 055691348
  12 | 1
> stem(learndis$COSTS.T1)
  The decimal point is 2 digit(s) to the right of the |
   2 | 88
   3 | 4789
   4 | 11246689
   5 | 01223344555666889
   6 | 011333344678
   7 | 12334788
   8 | 0000222334456667889
  9 | 001112333344444588
  10 | 23667
  11 | 2
  12 | 19
  13 | 12
  14 | 0
  15 | 4
  16 | 6
> stem(learndis$COSTS.T2)
  The decimal point is 2 digit(s) to the right of the |
```

2 | 12668899

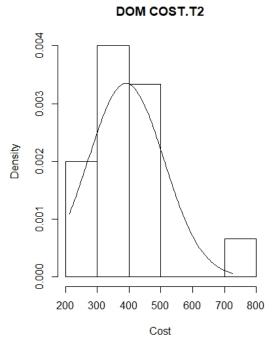
- 3 | 02244446799
- 4 | 022334555556666789
- 5 | 1667788
- 6 | 03333667
- 7 | 00111111233455579
- 8 | 1244555699
- 9 | 2333444468
- 10 | 05569
- 11 | 013488
- 12 |
- 13 | 1

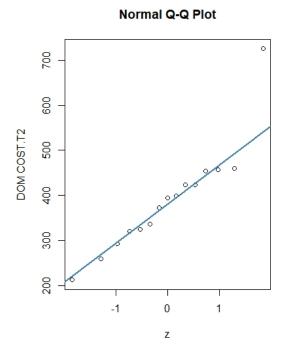
## 3.2 Normal Fit



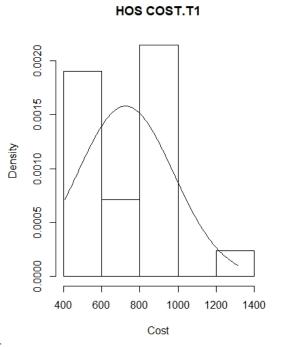


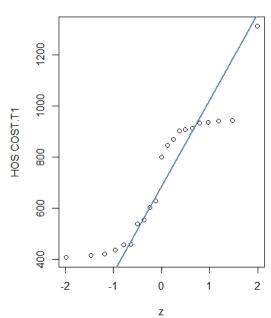
DOM T1.jpeg





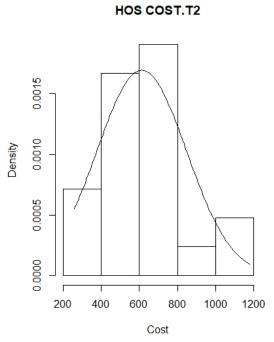
 ${\rm DOM}\,{\rm T2.jpeg}$ 

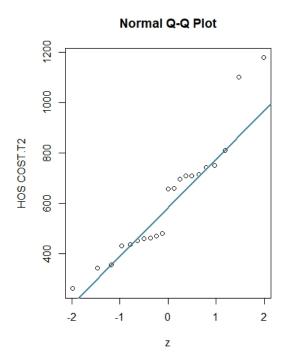




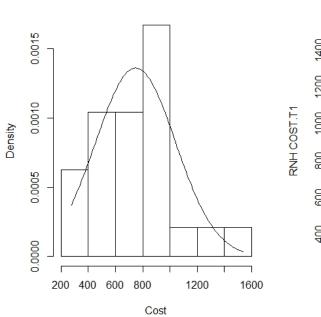
Normal Q-Q Plot

 ${
m HOS}\ {
m T1.jpeg}$ 

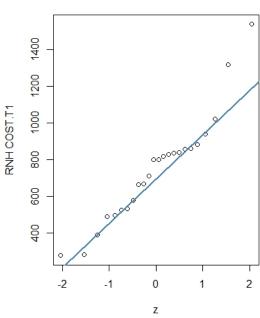




 ${
m HOS~T2.jpeg}$ 

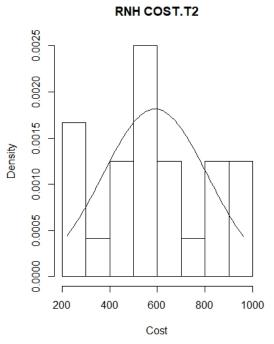


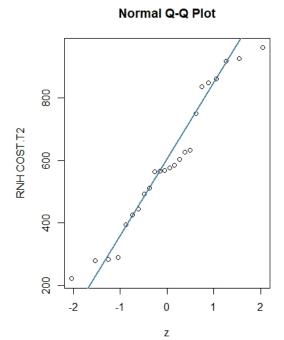
RNH COST.T1



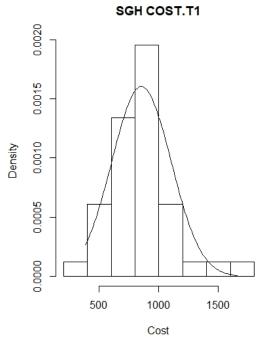
Normal Q-Q Plot

RNH T1.jpeg

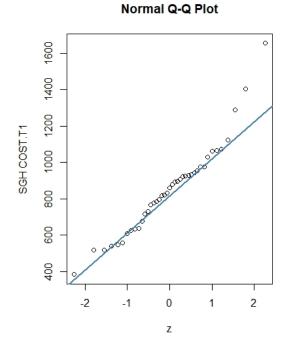




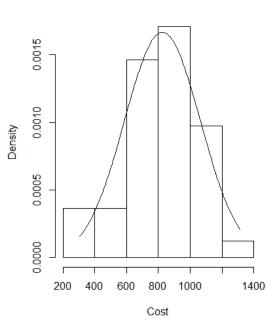
 ${\rm RNH}~{\rm T2.jpeg}$ 

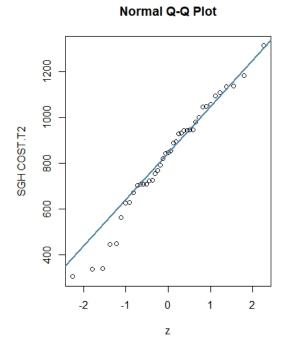


SGH COST.T2

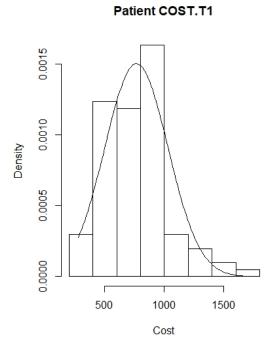


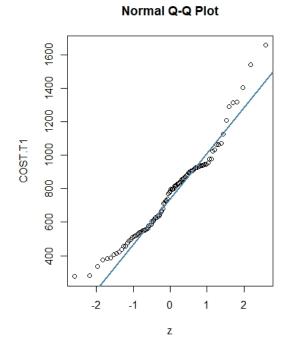
SGH T1.jpeg



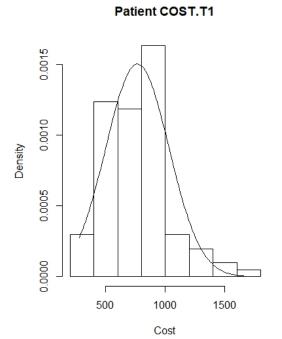


SGH T2.jpeg

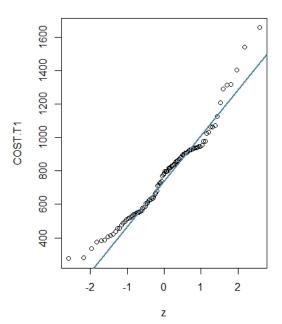




T1.jpeg



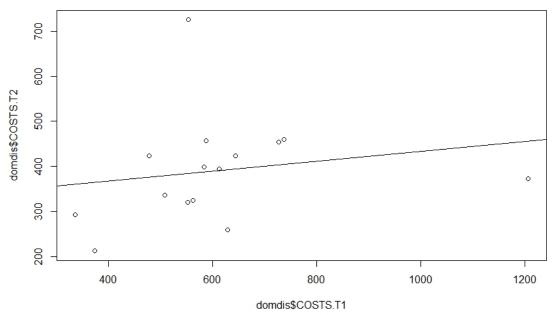
Normal Q-Q Plot



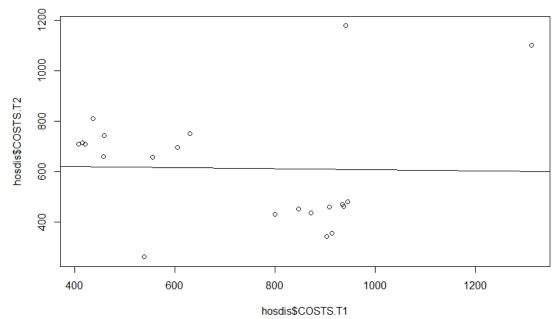
T1.jpeg

## 4 Associations

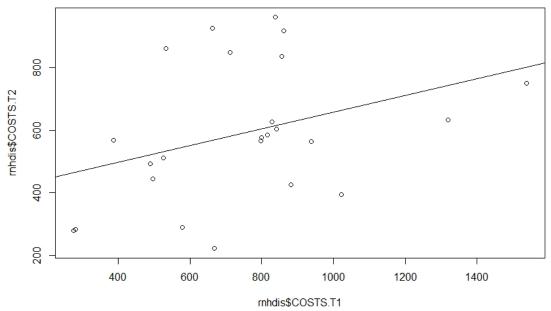
## 4.1 Linear Models



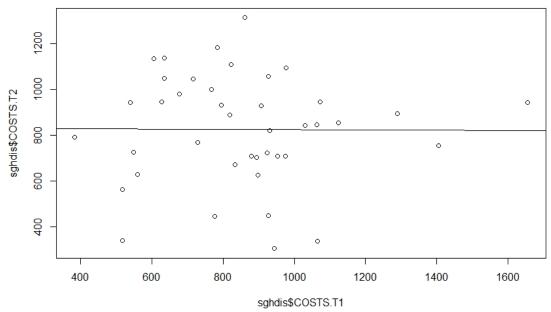
DOM.jpeg



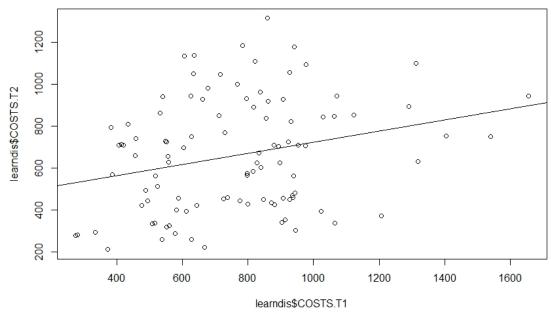
HOS.jpeg



RNH.jpeg



SGH.jpeg



COST.jpeg

# 5 Stability of Associations

## 5.1 Residuals

## 6 Interpretations