Reinterventions exploration

Proportion of reinterventions

Patients with 5y FU, reinterventions

Notes: - reintervention means that at least has that number of reinterventions

all reinterventions

```
##    reintervention   N prop
## 1:              0 258 64.7
## 2:              1  83 20.8
## 3:              2  28  7.0
## 4:              3  13  3.3
## 5:              4  10  2.5
## 6:              5   5  1.3
## 7:              6   2  0.5
```
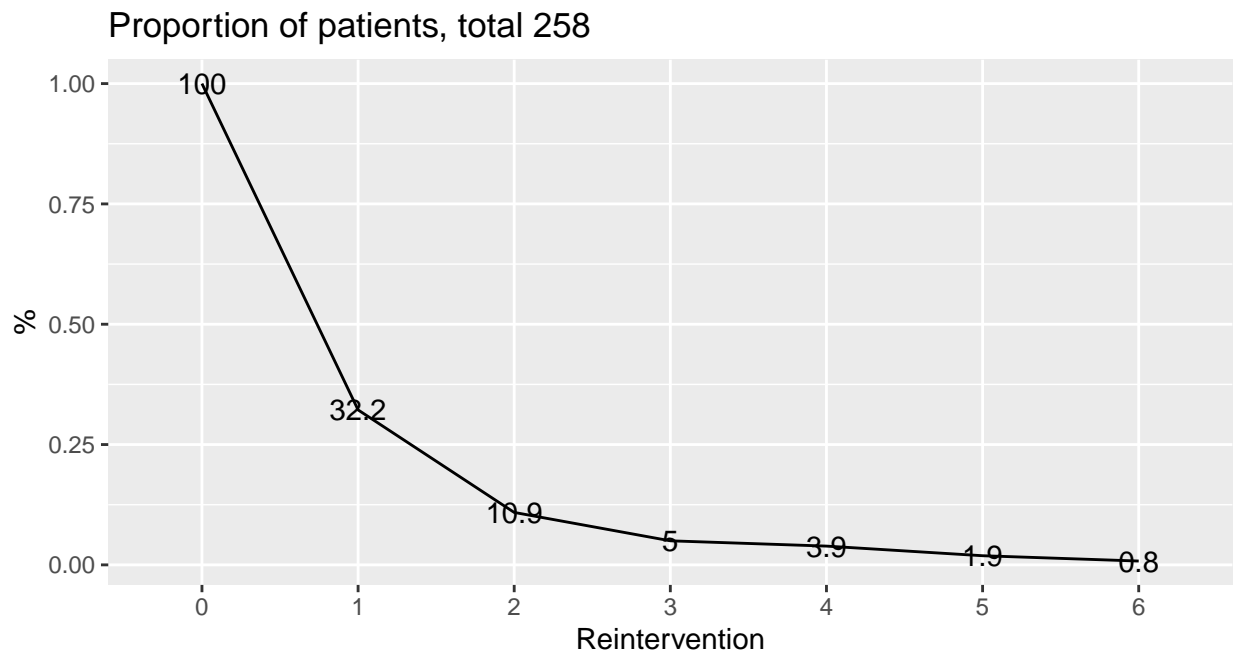
reinterventions before 5y

```
##    reintervention   N prop
## 1:              0 258 68.8
## 2:              1  73 19.5
## 3:              2  26  6.9
## 4:              3  10  2.7
## 5:              4   5  1.3
## 6:              5   2  0.5
## 7:              6   1  0.3
```

The analysis follows with 5Y FU. Number of patients 258

```
##    reintervention   N proportion
## 1:              0 258      1.000
## 2:              1  83      0.322
## 3:              2  28      0.109
## 4:              3  13      0.050
## 5:              4  10      0.039
## 6:              5   5      0.019
## 7:              6   2      0.008
```
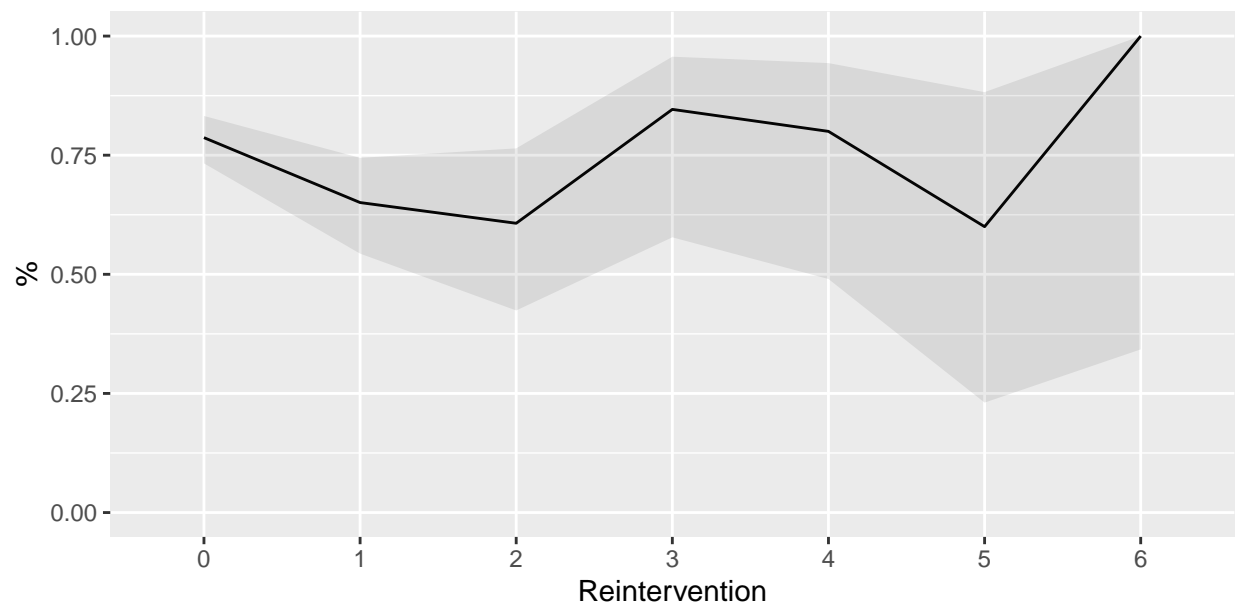
Proportion of patients, total 258

Proportion of SICU transfers

```
##    reintervention  prop    N    sd
## 1:             0 0.787  258 0.025
## 2:             1 0.651   83 0.052
## 3:             2 0.607   28 0.092
## 4:             3 0.846   13 0.100
## 5:             4 0.800   10 0.126
## 6:             5 0.600    5 0.219
## 7:             6 1.000    2 0.000
```
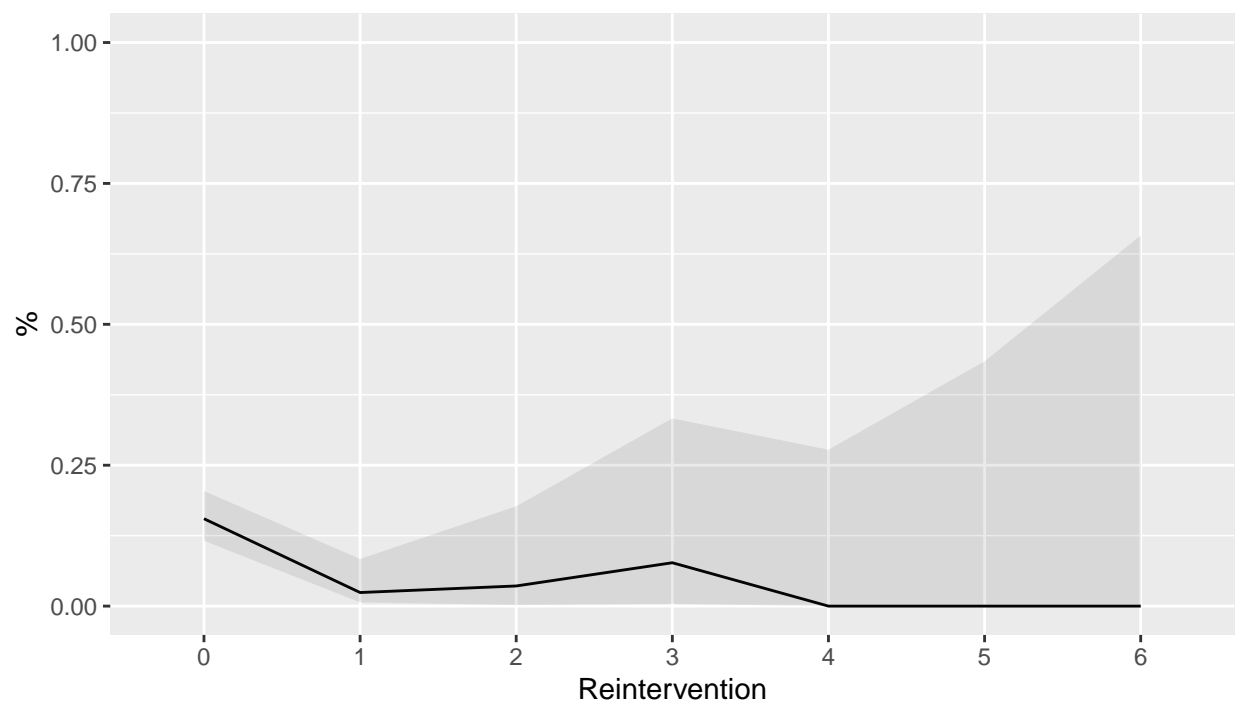
Proportion of transferred to SICU
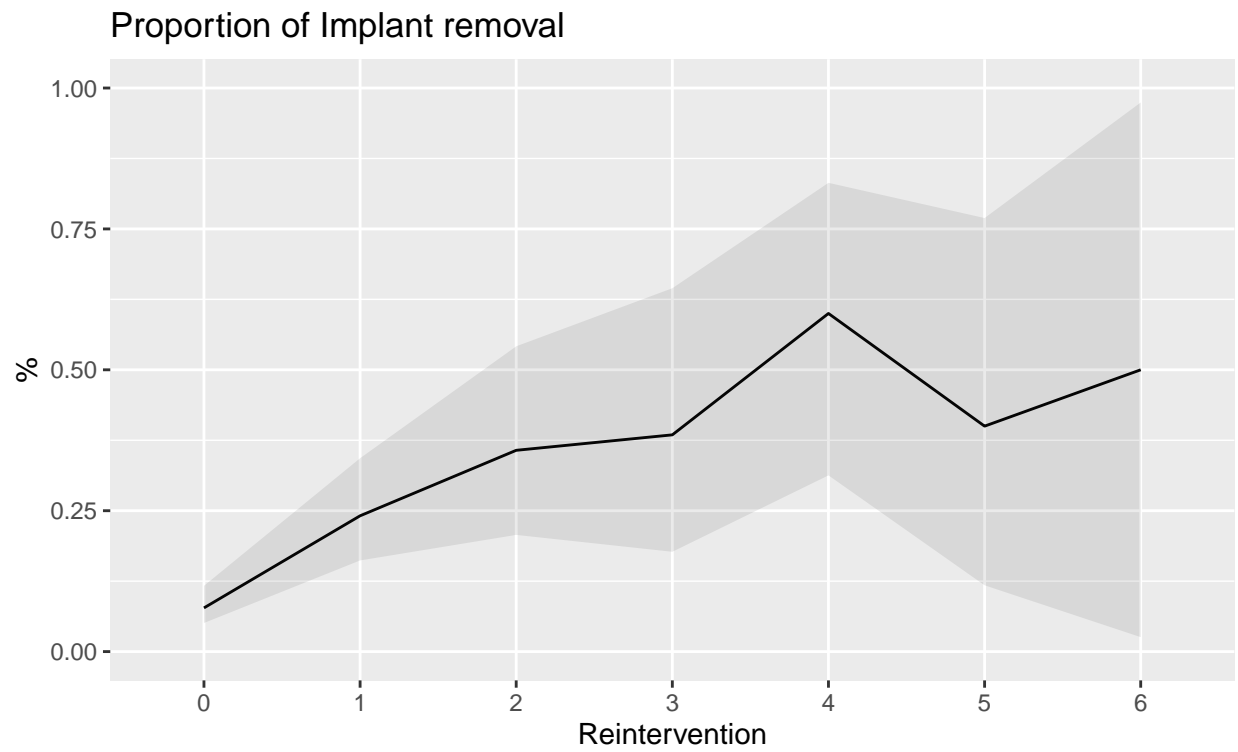


```
##              Estimate Std. Error    t value      Pr(>|t|)
## (Intercept)    0.77008 0.02594933 29.676301 5.406793e-101
## reintervention -0.05152 0.02871312 -1.794301  7.355984e-02
```
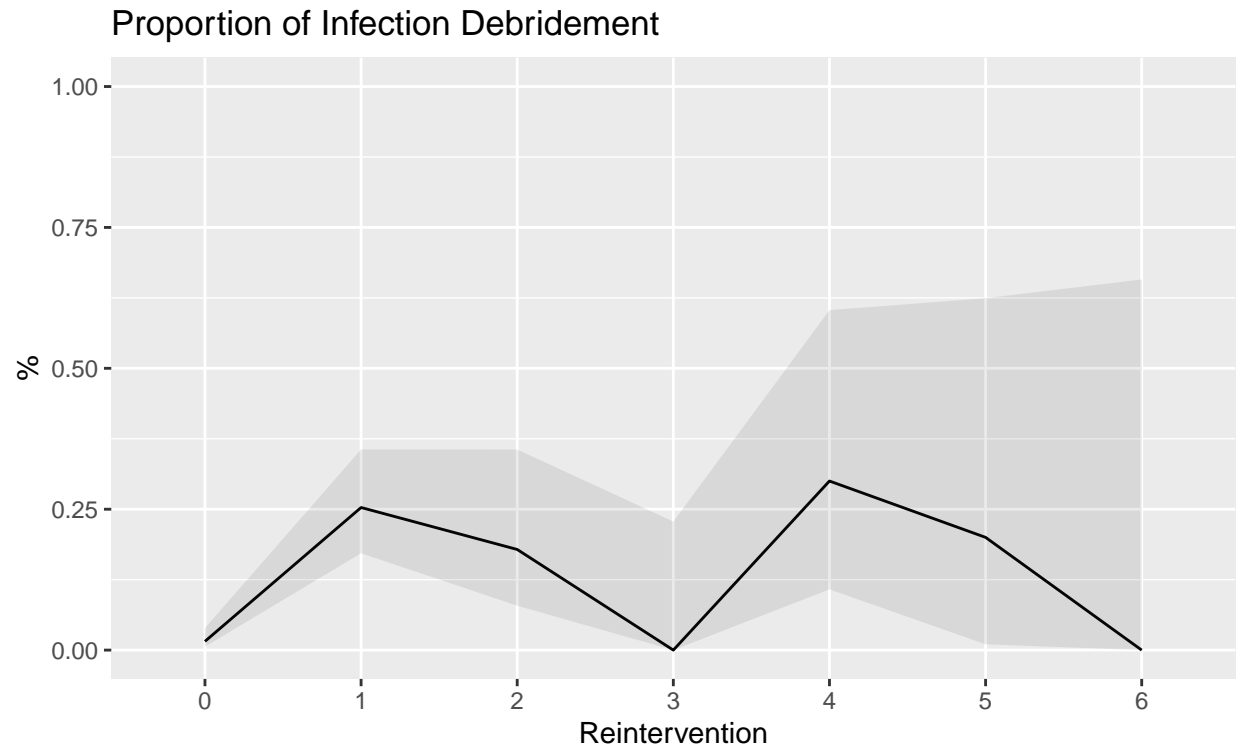
Evolution of surgeries

Proportion of 3CO
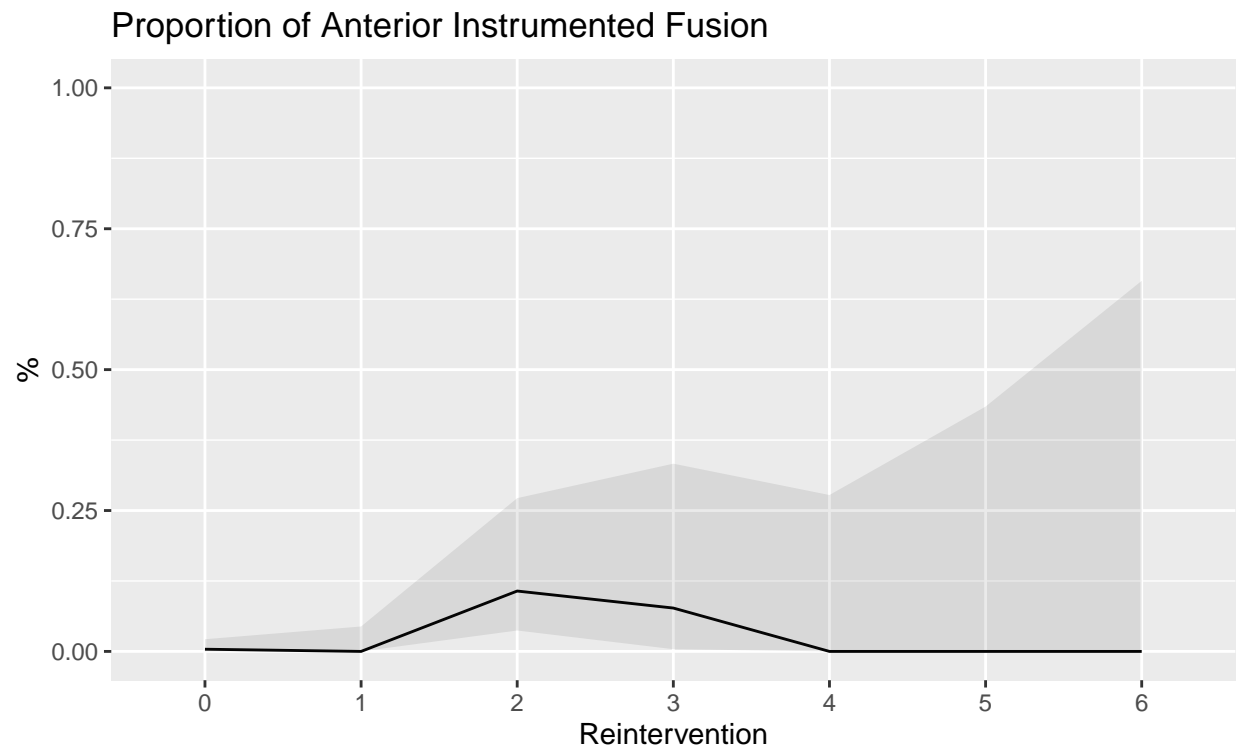
```
              Estimate Std. Error    t value       Pr(>|t|)
(Intercept)    0.14265143 0.01891685  7.540970 3.466497e-13
reintervention -0.05894857 0.02093164 -2.816242 5.112294e-03
```

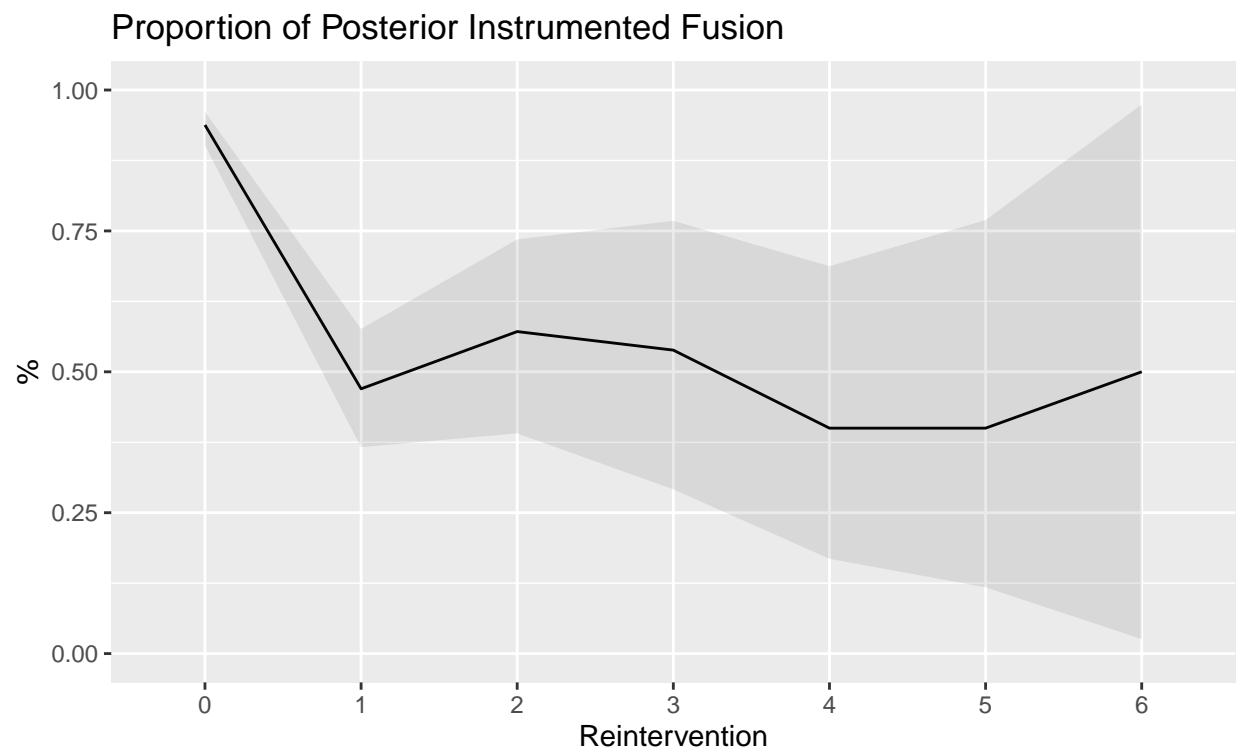## Proportion of Implant removal


```
              Estimate Std. Error    t value       Pr(>|t|)
(Intercept)    0.08422857 0.02016044  4.177914 3.653148e-05
reintervention 0.12822857 0.02230767  5.748182 1.853855e-08
```

Proportion of Infection Debridement
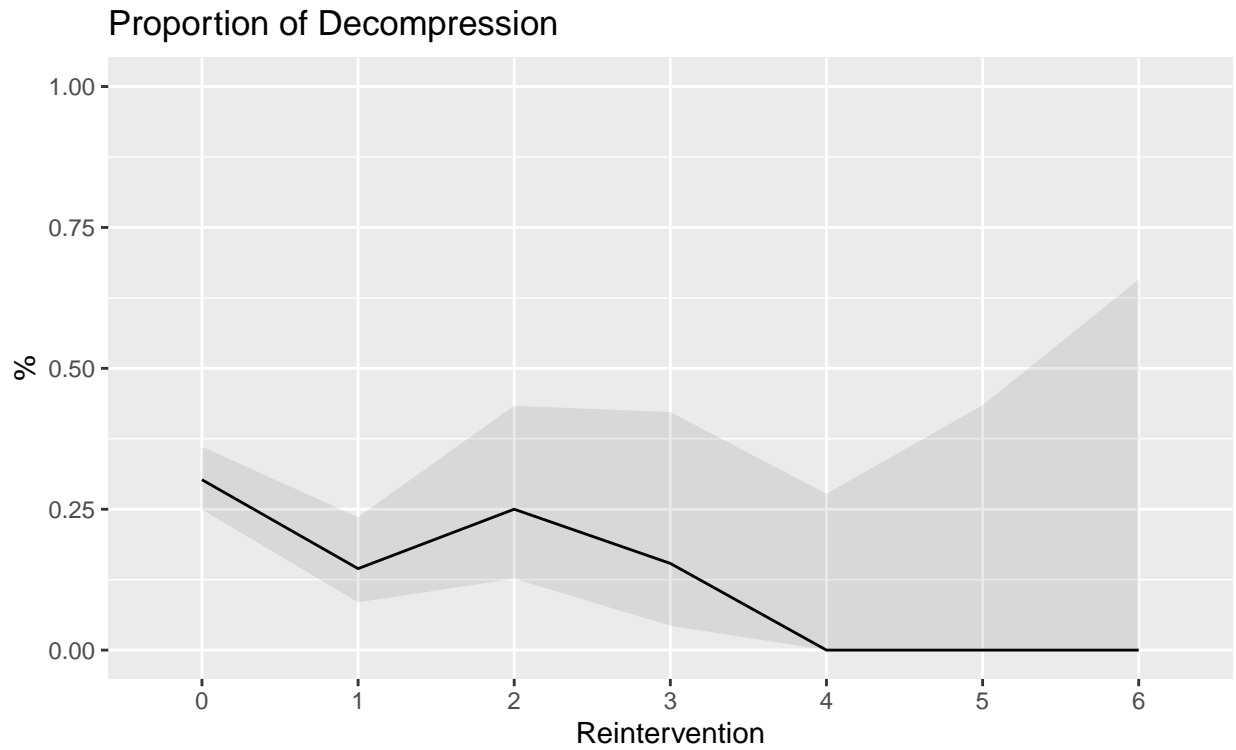


```
                Estimate Std. Error  t value      Pr(>|t|)
(Intercept)    0.04390857 0.01573302 2.790855 5.522088e-03
reintervention 0.07430857 0.01740871 4.268472 2.488605e-05
```

Proportion of Anterior Instrumented Fusion
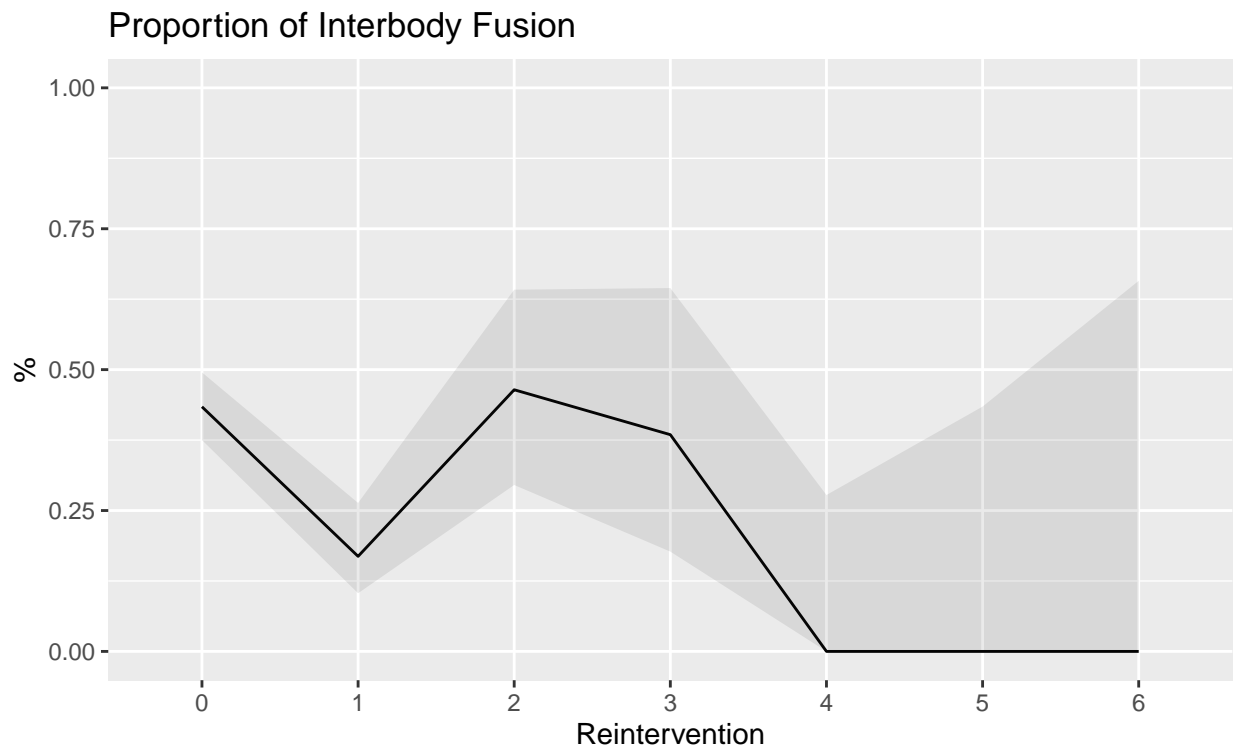
```
                Estimate  Std. Error    t value     Pr(>|t|)
(Intercept)    -0.00048 0.006669378 -0.07197073 9.426631e-01
reintervention  0.02912 0.007379717  3.94595096 9.467755e-05
```

Proportion of Posterior Instrumented Fusion


```
                Estimate Std. Error    t value      Pr(>|t|)
(Intercept)    0.8968229 0.02194218  40.872099 3.634037e-141
reintervention -0.2167771 0.02427919  -8.928518  1.872350e-17
```

Proportion of Decompression


```
                Estimate Std. Error     t value      Pr(>|t|)
(Intercept)    0.28790857 0.02607739  11.040544  9.083852e-25
reintervention -0.06169143 0.02885483  -2.137993  3.315471e-02
```

Proportion of Interbody Fusion

```
                 Estimate Std. Error    t value      Pr(>|t|)
(Intercept)     0.40157714 0.02891126 13.889990 9.230518e-36
reintervention -0.05282286 0.03199053 -1.651203 9.952328e-02
```

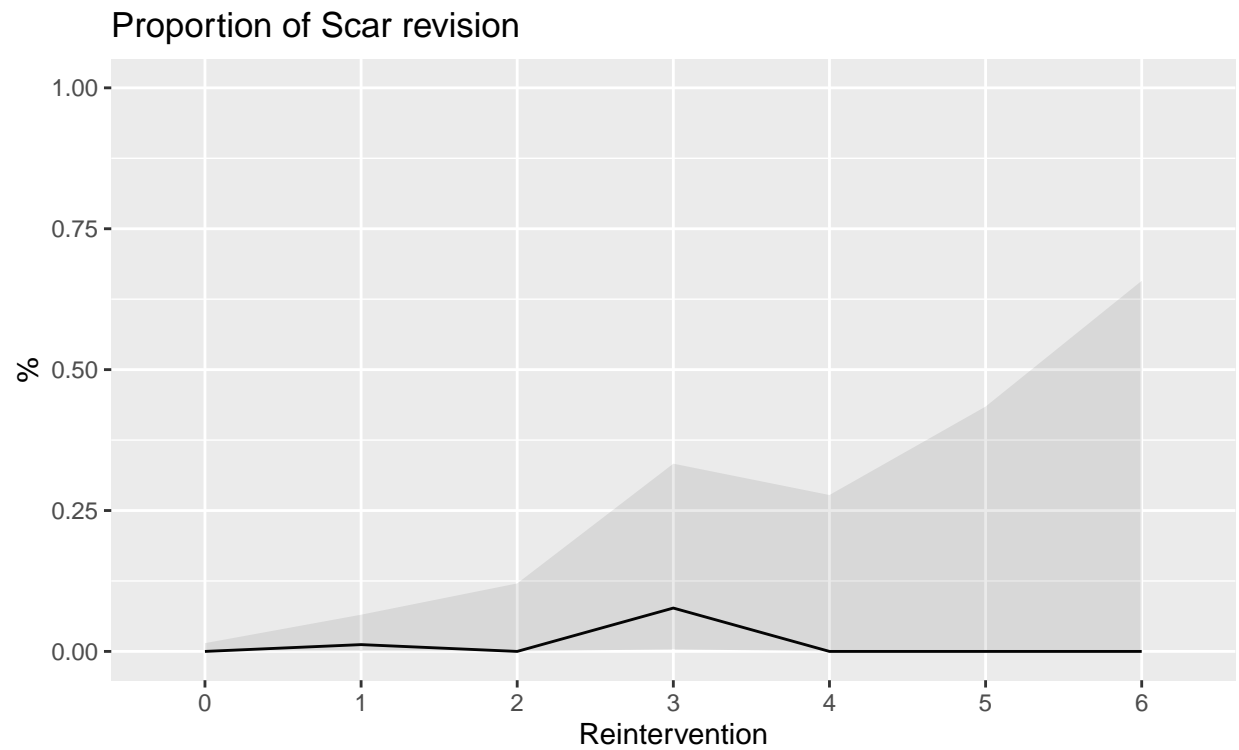## Proportion of Osteotomy


```
                Estimate Std. Error    t value      Pr(>|t|)
(Intercept)    0.4305143 0.02757220 15.614069 8.210859e-43
reintervention -0.1654857 0.03050885 -5.424187 1.038237e-07
```

Proportion of Rod change

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	0.01033143	0.01429092	0.7229366	4.701636e-01
reintervention	0.13513143	0.01581301	8.5455851	3.145266e-16

Proportion of Scar revision

```
                   Estimate  Std. Error    t value     Pr(>|t|)
(Intercept)     -0.001005714 0.004275869 -0.235207 0.814174762
reintervention   0.013394286 0.004731281  2.831006 0.004886866
```
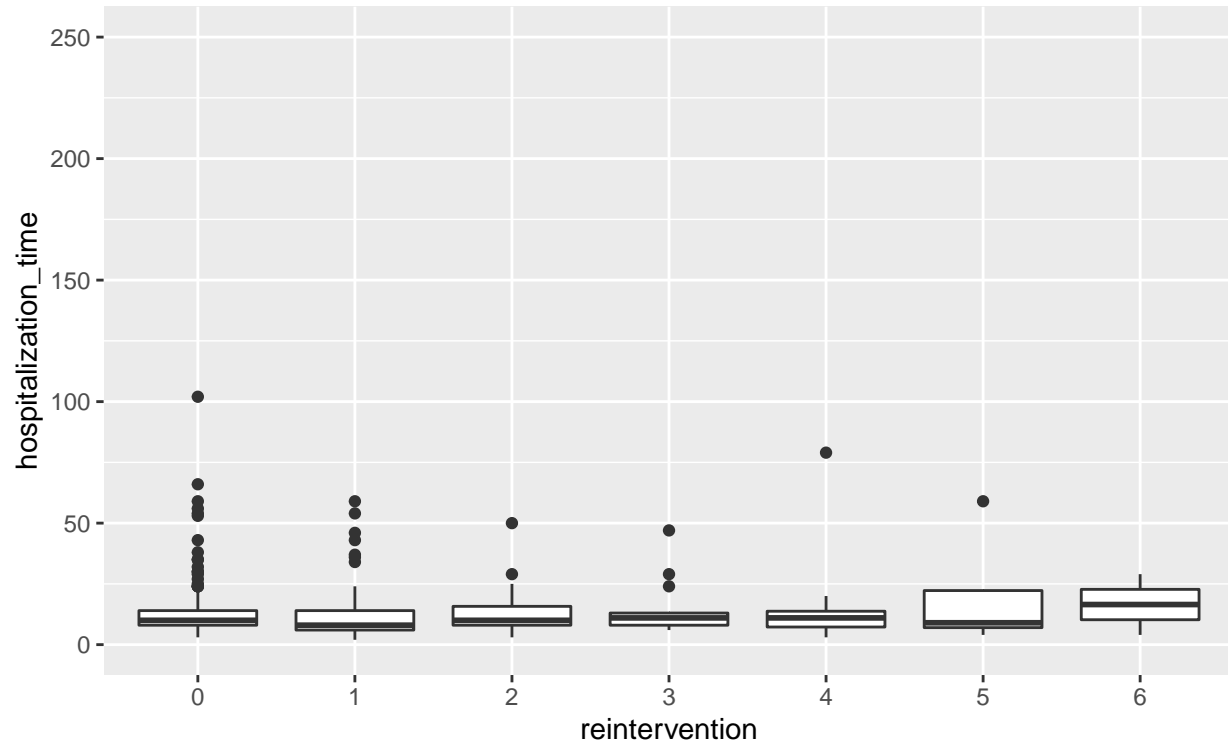
Hospitalization Time

Basic stats hospitalization time

```
     type    index       ur
1: Mean 12.87984 13.35714
2:   Sd 10.24738 12.48428
```

t-test mean comparison p-values index vs ur

```
[1] 0.6990194
```



```
##    reintervention 0%    25%  50%    75% 100%
## 1:              0  3  8.00 10.0 14.00  102
## 2:              1  2  6.00  8.0 14.00   59
## 3:              2  3  8.00 10.0 15.75   50
## 4:              3  6  8.00 11.0 13.00   47
## 5:              4  3  7.25 11.0 13.75   79
## 6:              5  4  7.00  9.0 22.25   59
## 7:              6  4 10.25 16.5 22.75   29
```

```
##              Estimate Std. Error   t value    Pr(>|t|)
```

```
## (Intercept)     12.7057143  0.6235471 20.3765110 6.606653e-63
## reintervention   0.3057143  0.6899596  0.4430901 6.579527e-01
```

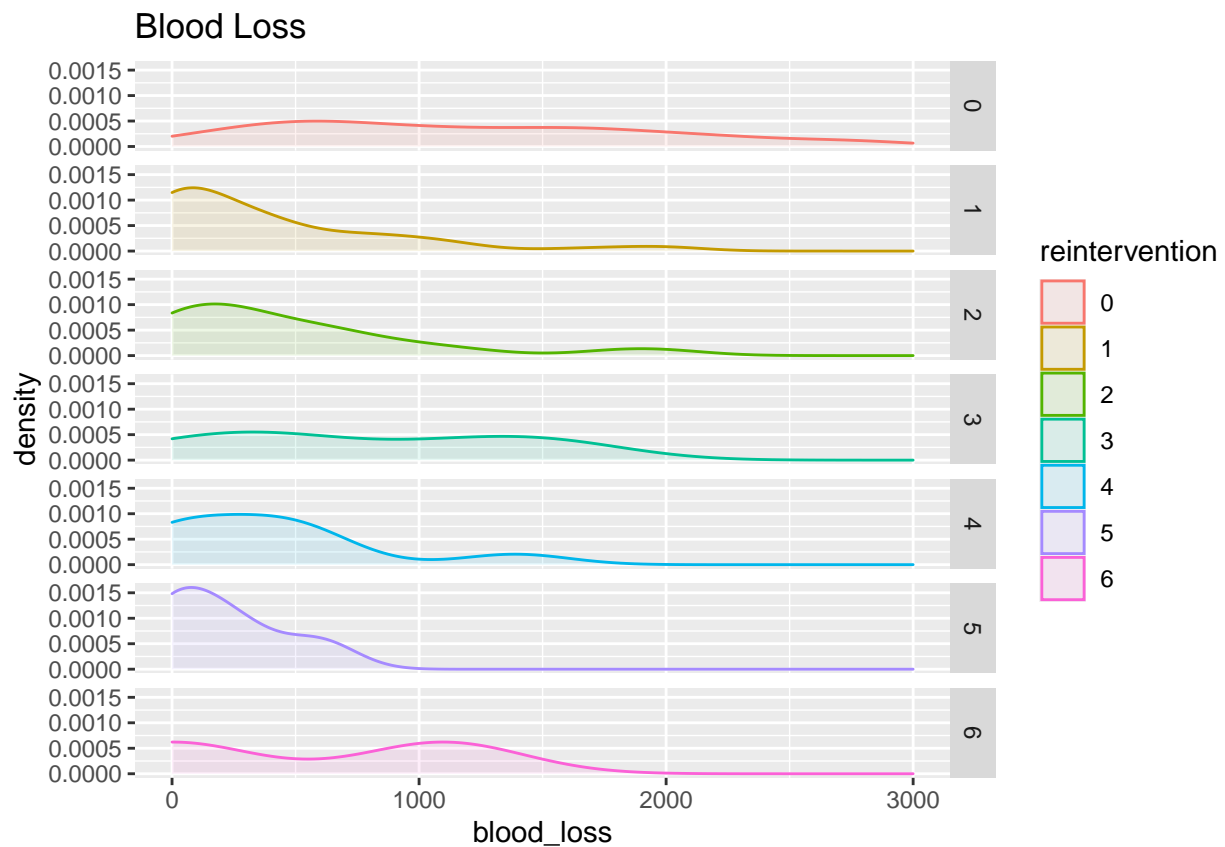Note: linear model only up to 3 reinterventions (included)

Blood Loss

Basic stats blood loss

```
    type    index       ur
1: Mean 1579.701 512.4496
2:   Sd 1373.563 720.7775
```
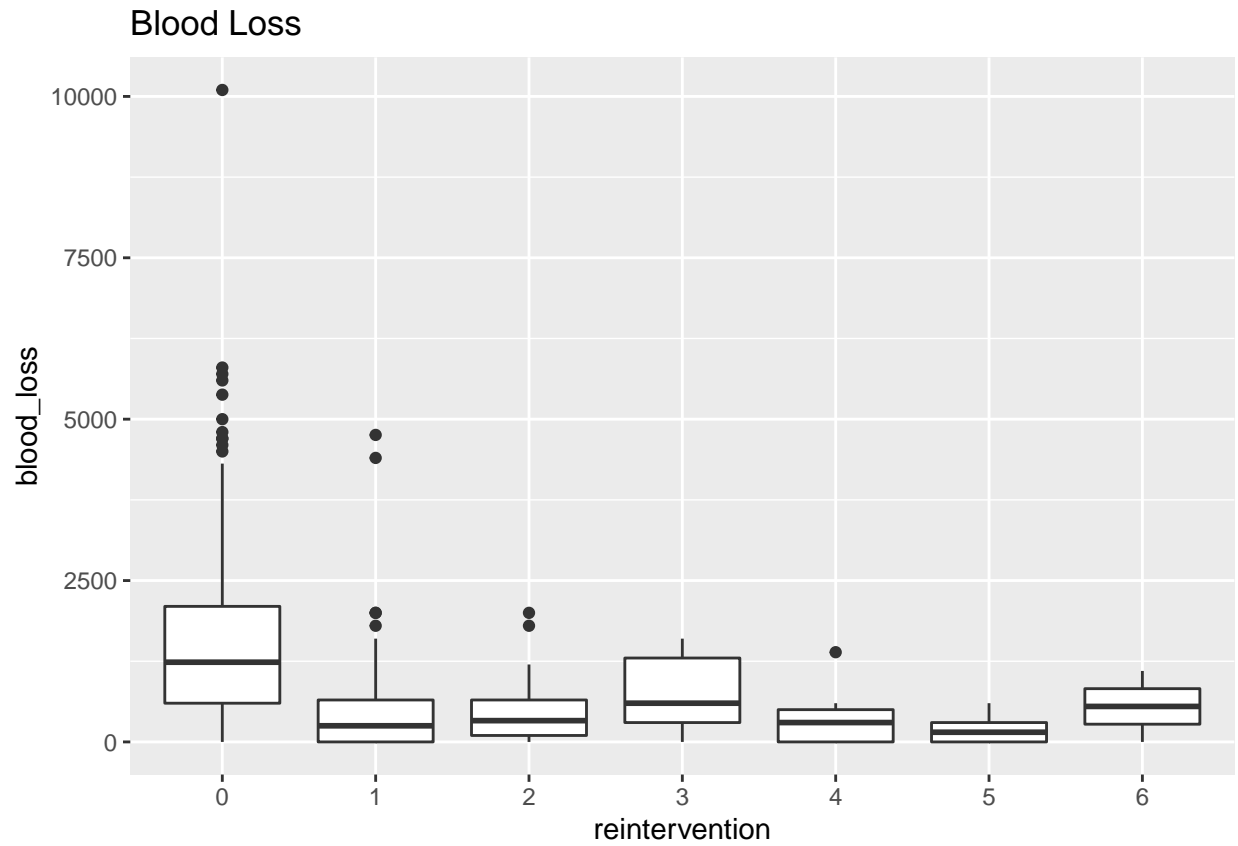
t-test mean comparison p-values index vs ur

```
[1] 7.690981e-18
```

Warning: Removed 98 rows containing non-finite values (stat_density).

Blood Loss

```
            Estimate Std. Error    t value      Pr(>|t|)
(Intercept)   1468.3478    82.73903 17.746738 4.959417e-49
reintervention -503.4387    84.38847 -5.965729 6.681517e-09
```

```
Warning: Removed 73 rows containing non-finite values (stat_boxplot).
```
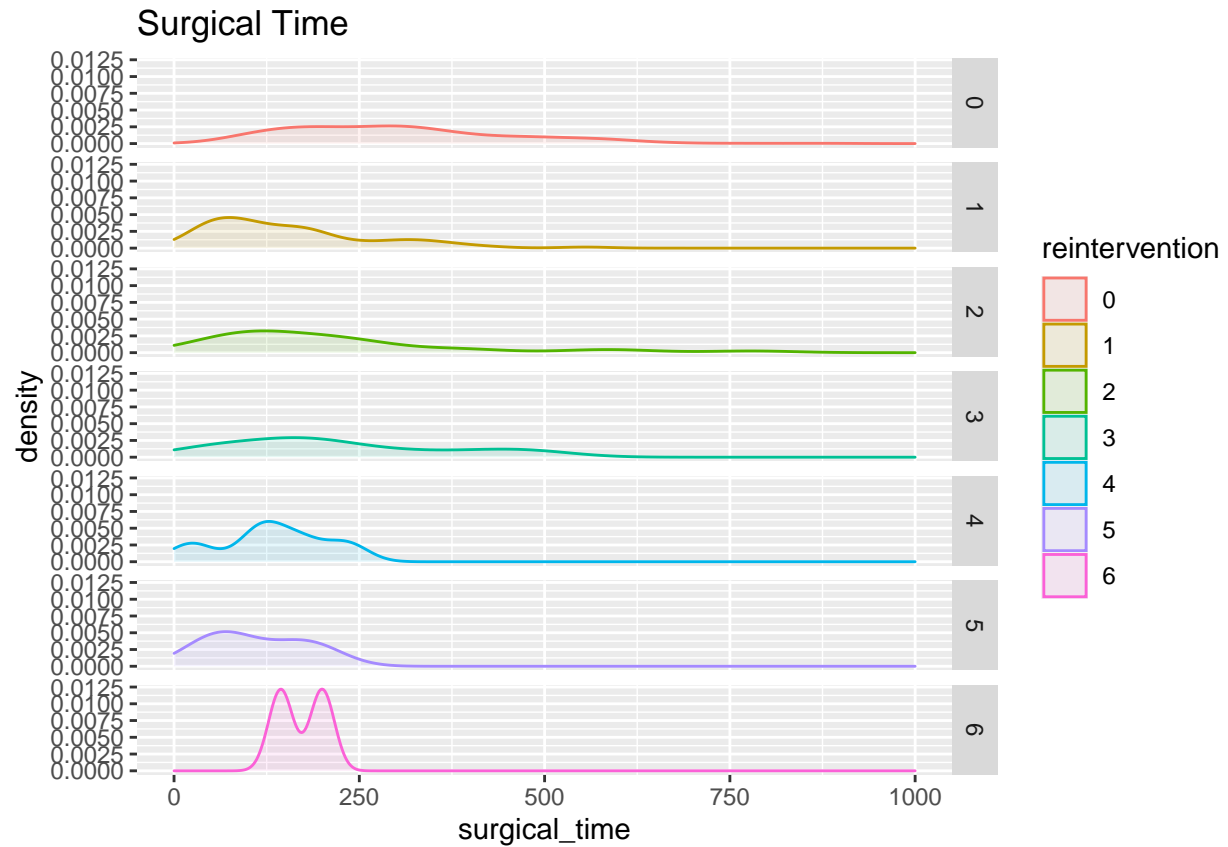
Blood Loss

Surgical Time

Basic stats surgical time

```
    type    index       ur
1: Mean 307.2132 172.2889
2:   Sd 164.3626 130.8314
```
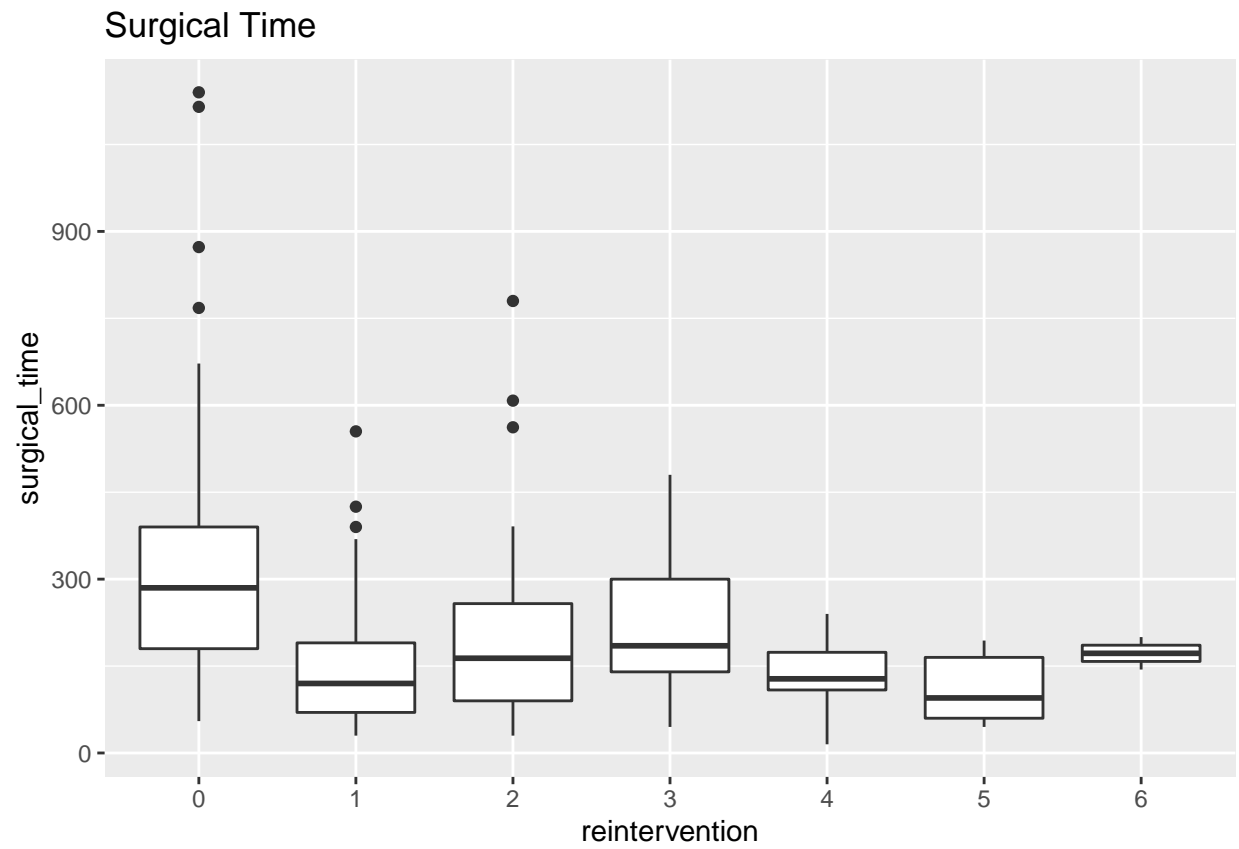
t-test mean comparison p-values index vs ur

```
[1] 4.799287e-17
```

```
Warning: Removed 8 rows containing non-finite values (stat_density).
```

```
                 Estimate  Std. Error    t value       Pr(>|t|)
(Intercept)     292.74242    9.658606  30.308972  9.332159e-103
reintervention  -56.93692   10.706503  -5.317975   1.809694e-07
```

Warning: Removed 6 rows containing non-finite values (stat_boxplot).

Surgical Time

Note: linear model only up to 3 reinterventions (included)