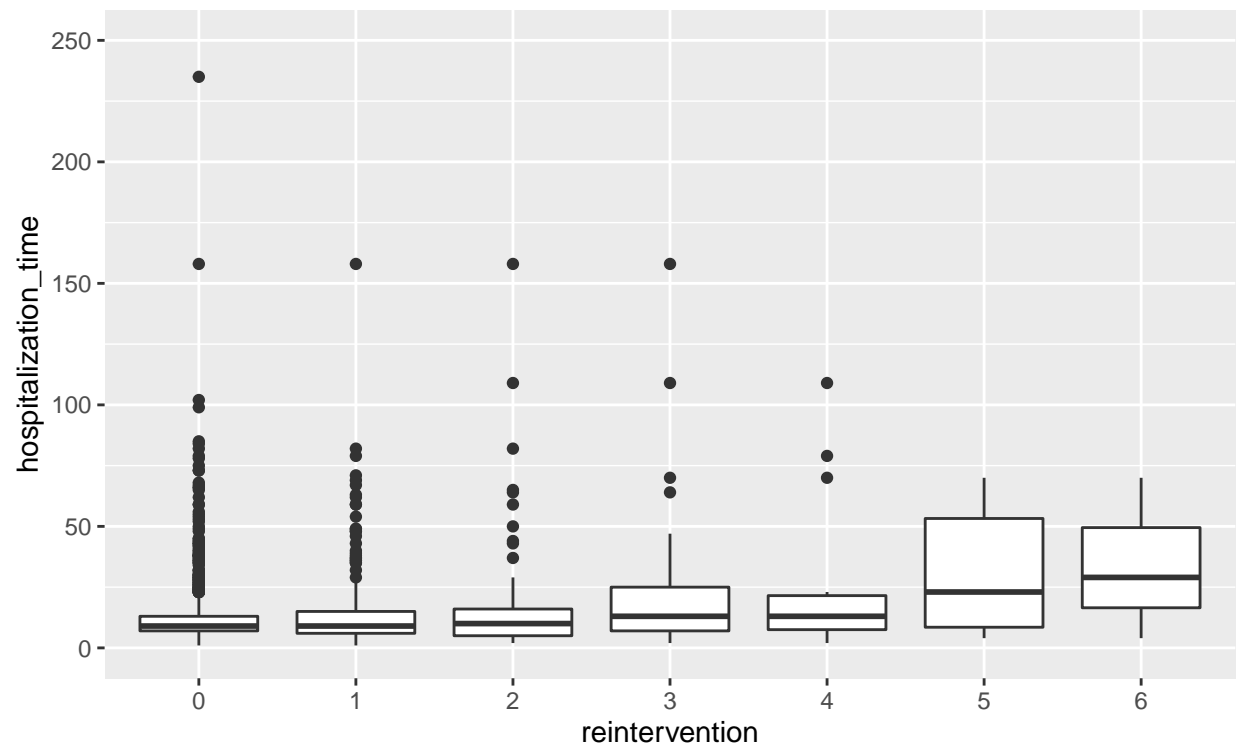


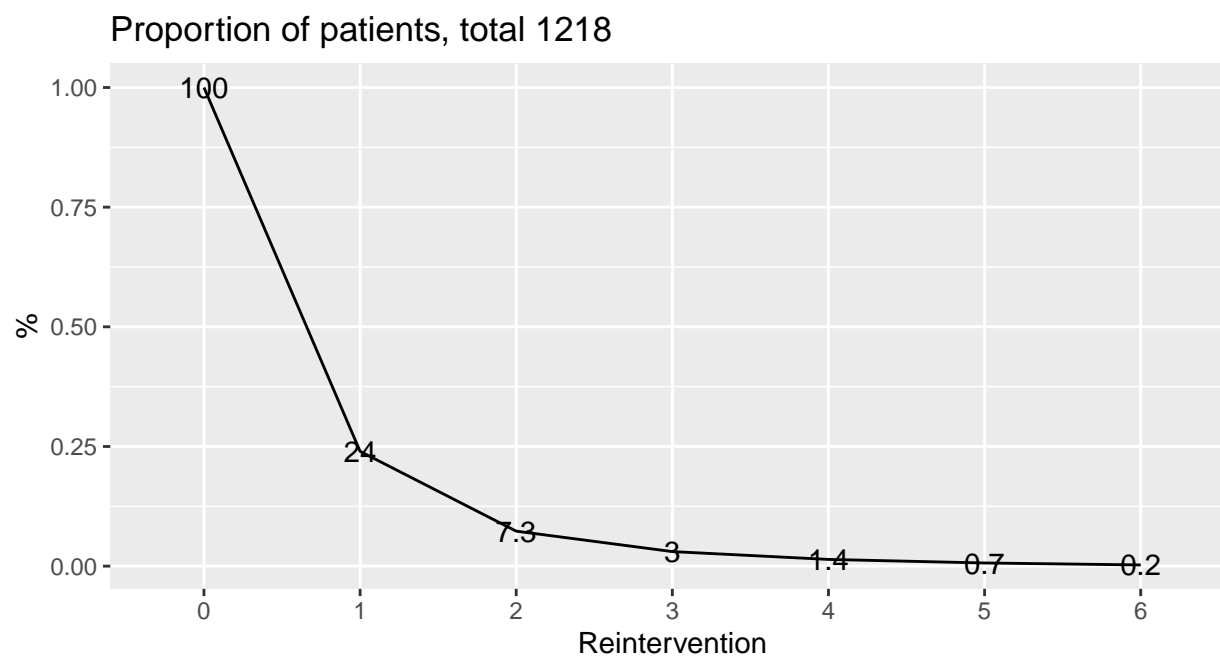
# Reinterventions exploration

## Hospitalization Time

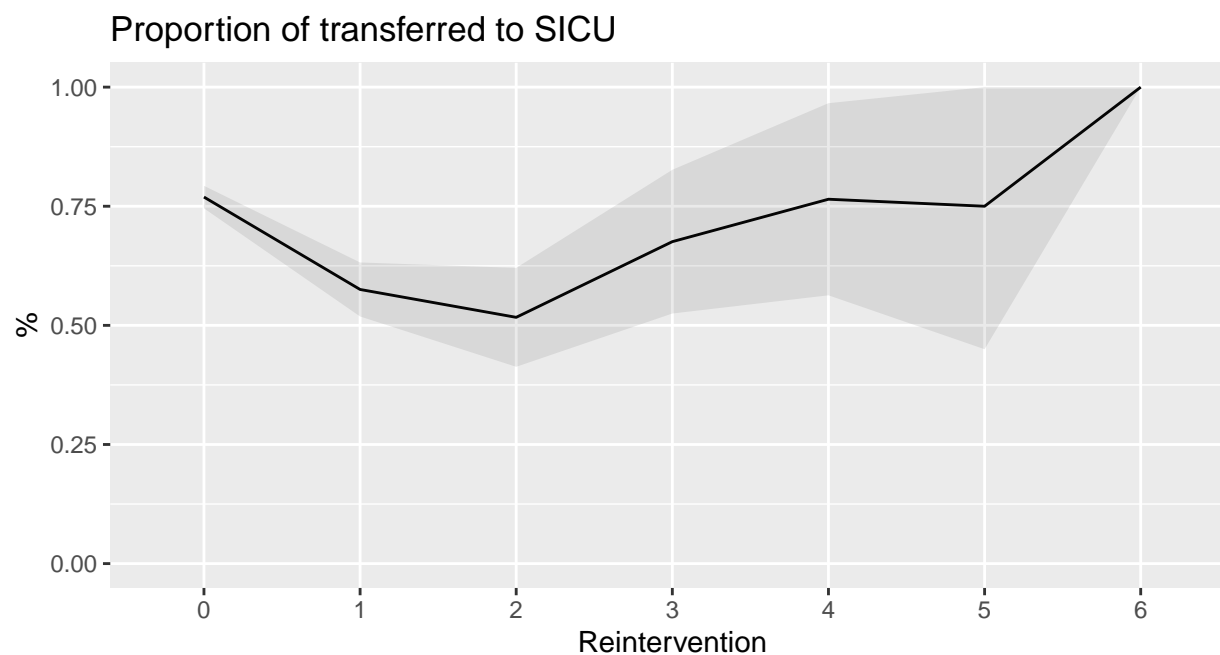


##	reintervention	0%	25%	50%	75%	100%
## 1:	0	1	7.0	9	13.00	235
## 2:	1	1	6.0	9	15.00	158
## 3:	2	2	5.0	10	16.00	158
## 4:	3	2	7.0	13	25.00	158
## 5:	4	2	7.5	13	21.50	109
## 6:	5	4	8.5	23	53.25	70
## 7:	6	4	16.5	29	49.50	70

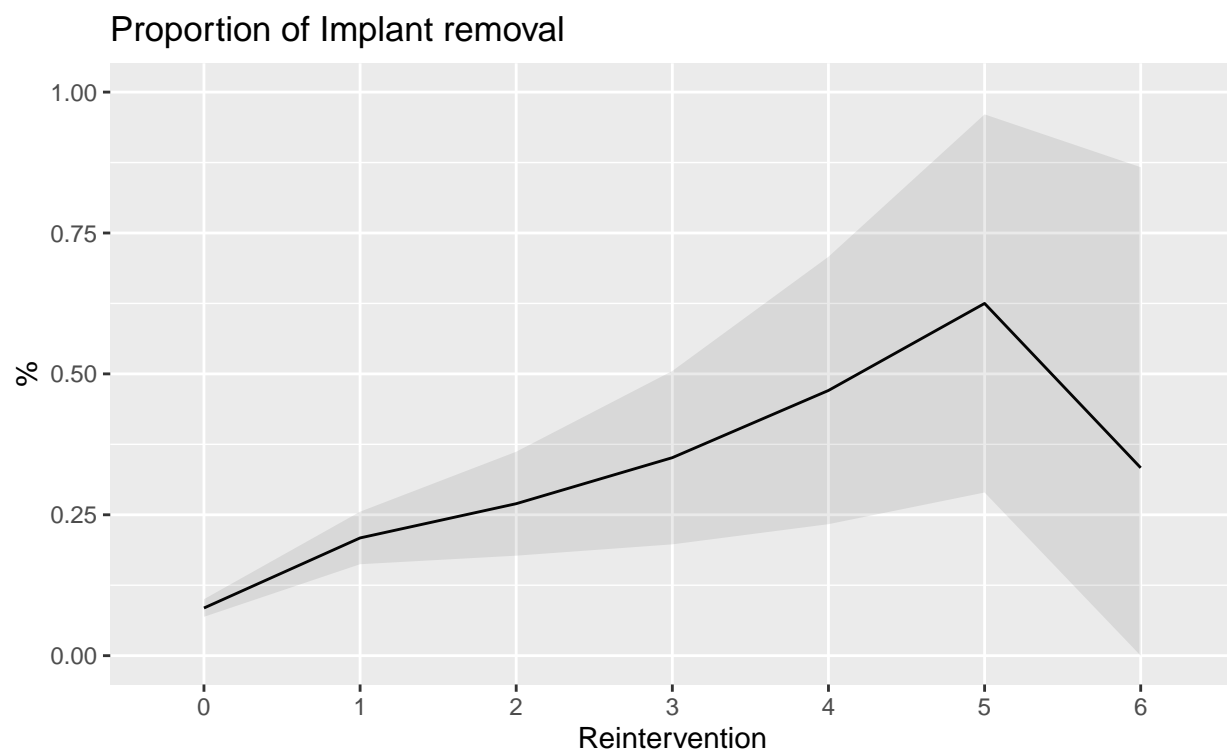
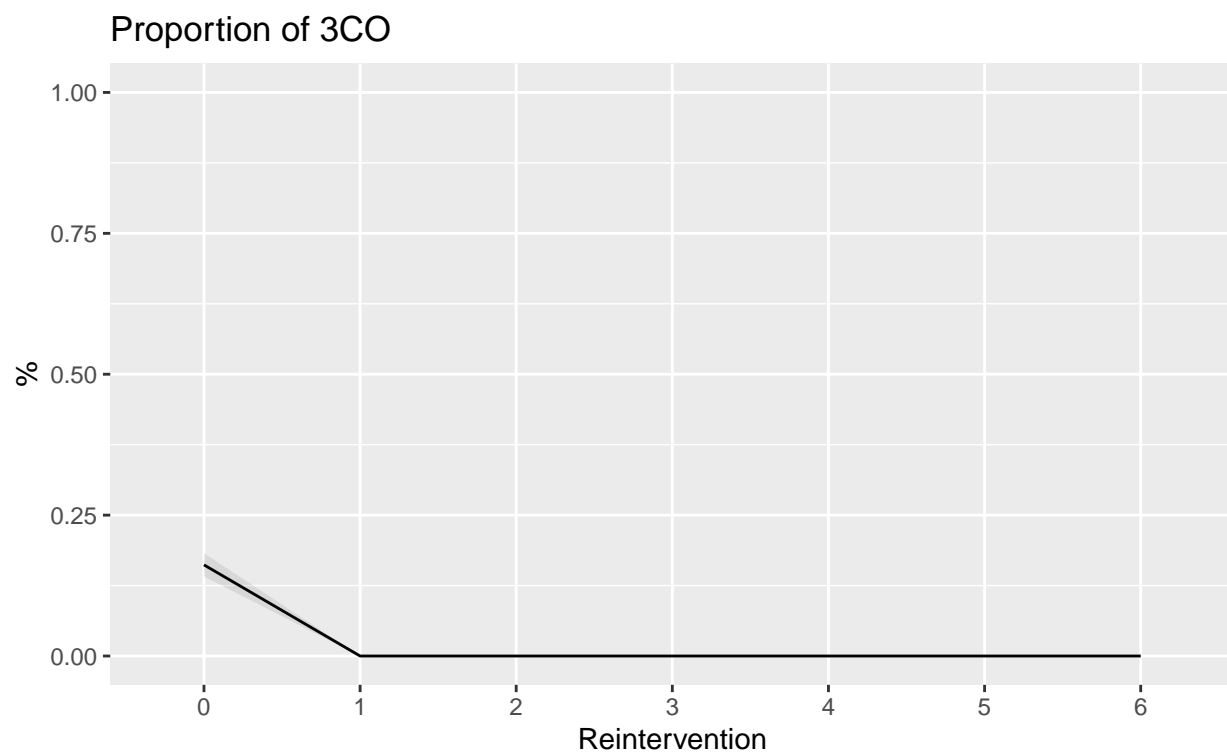
## Proportion of reinterventions

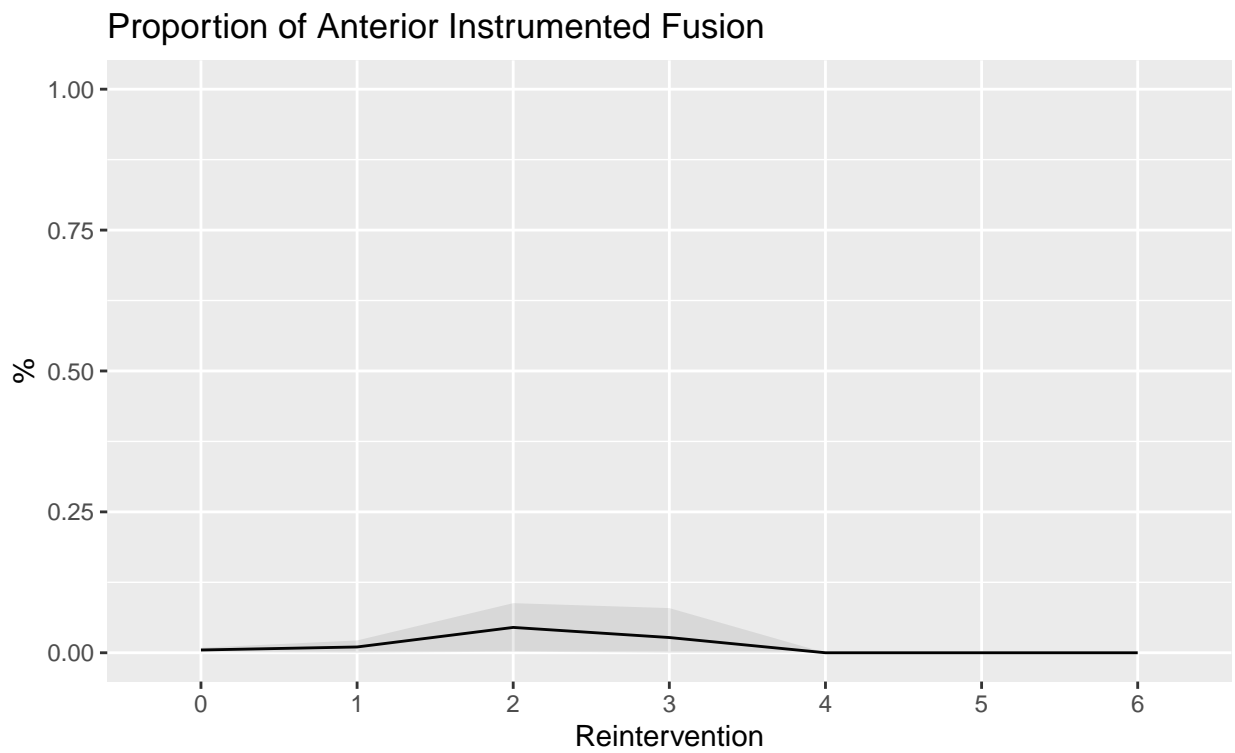
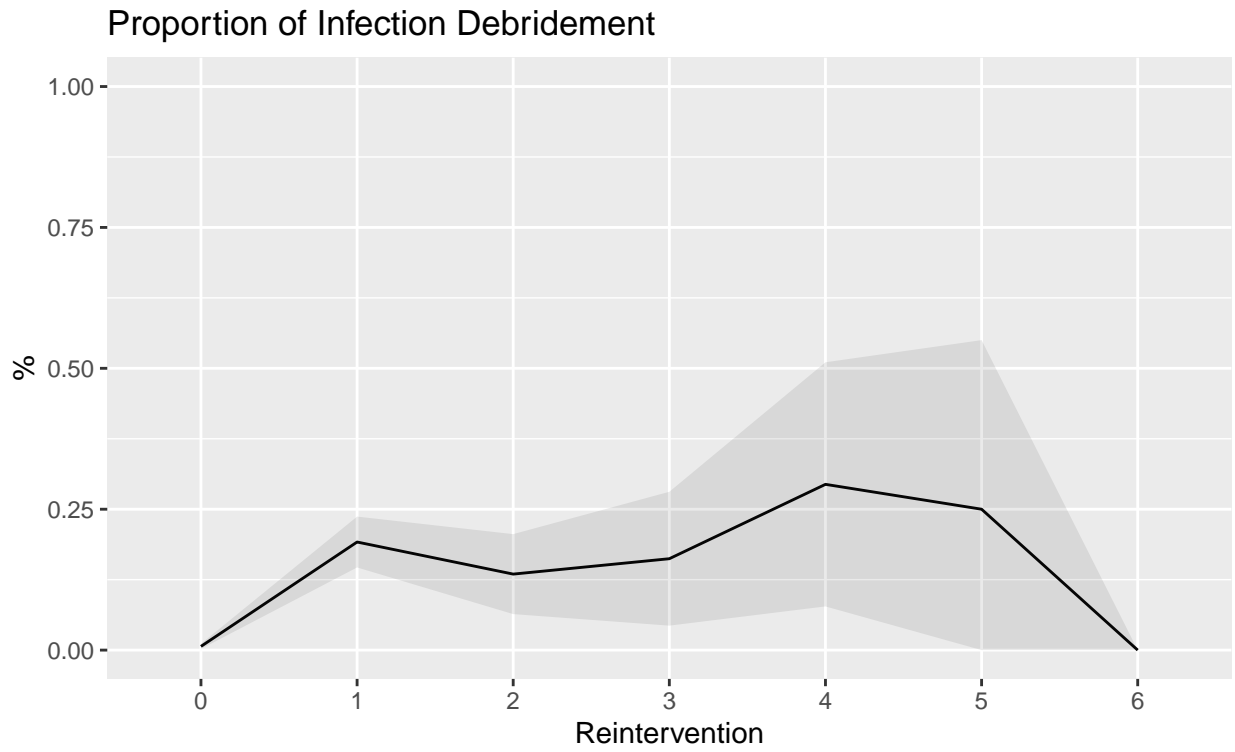


## Proportion of SICU transfers

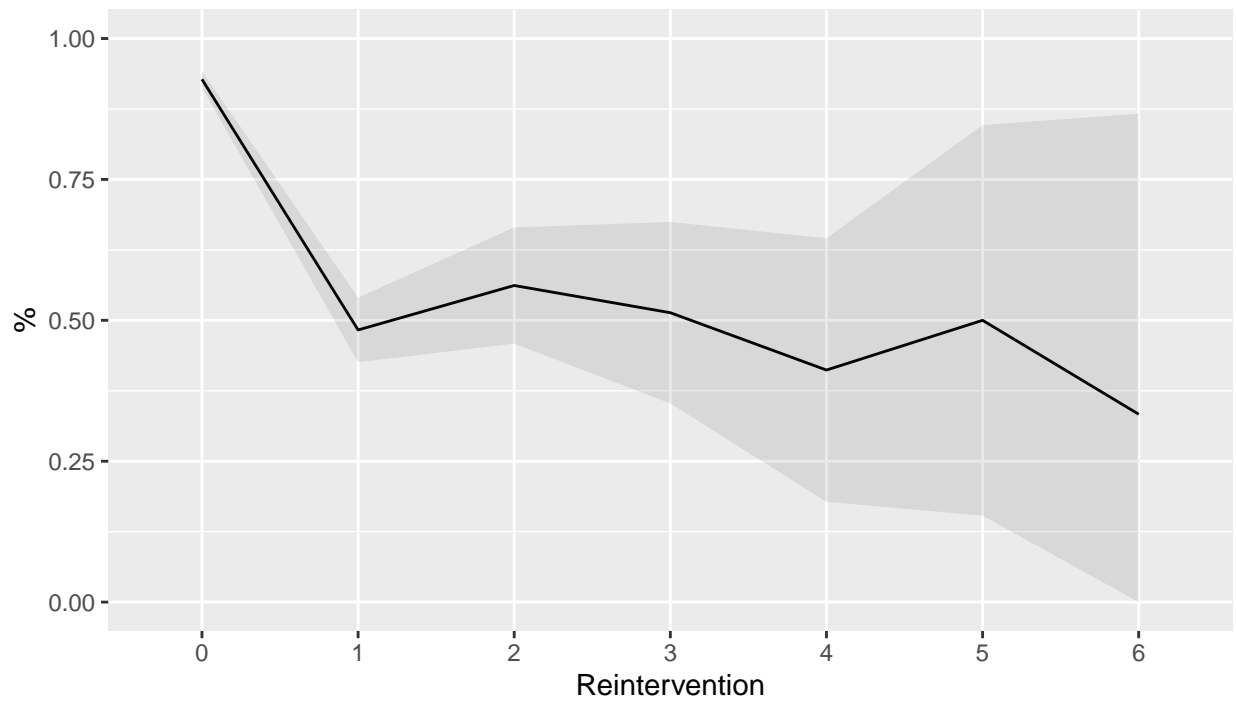


## Evolution of surgeries

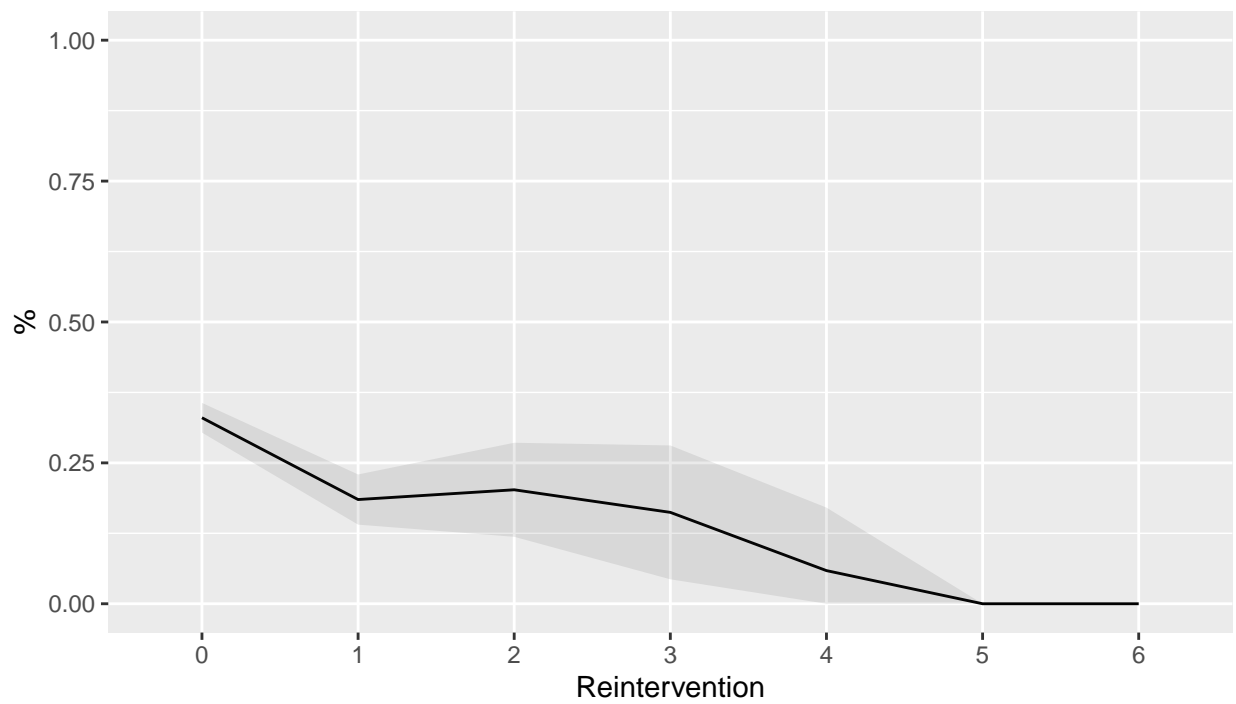




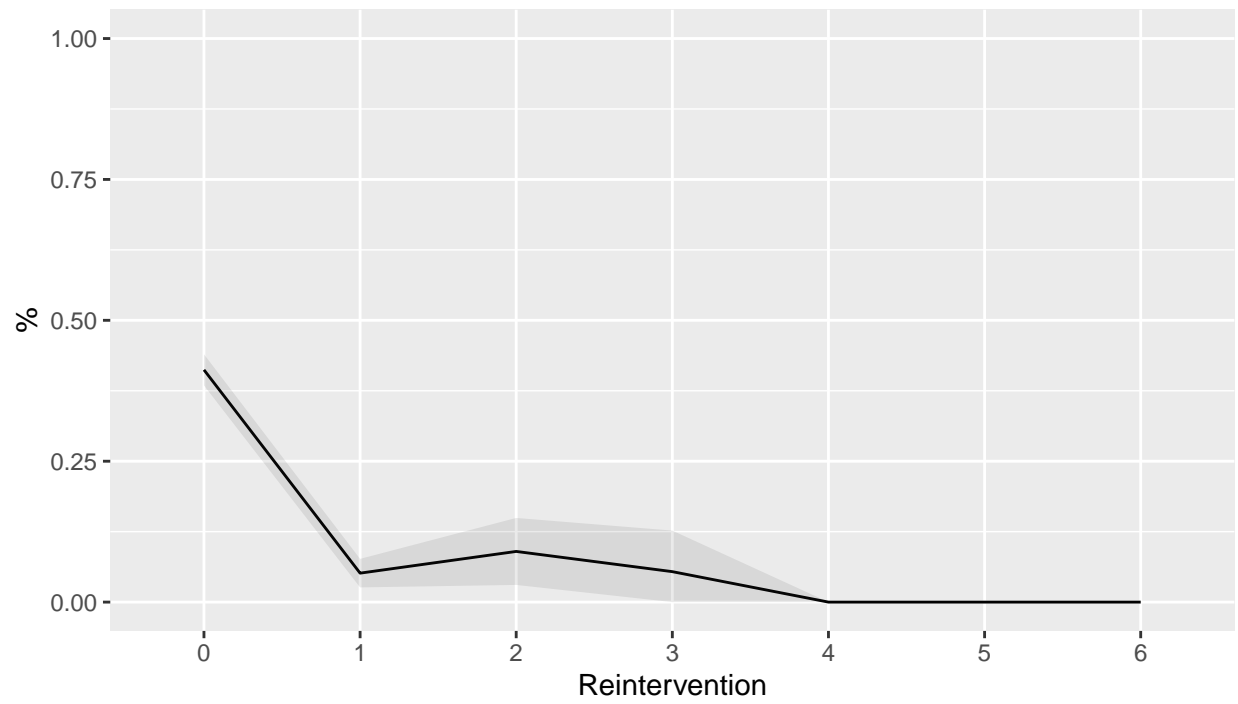
Proportion of Posterior Instrumented Fusion



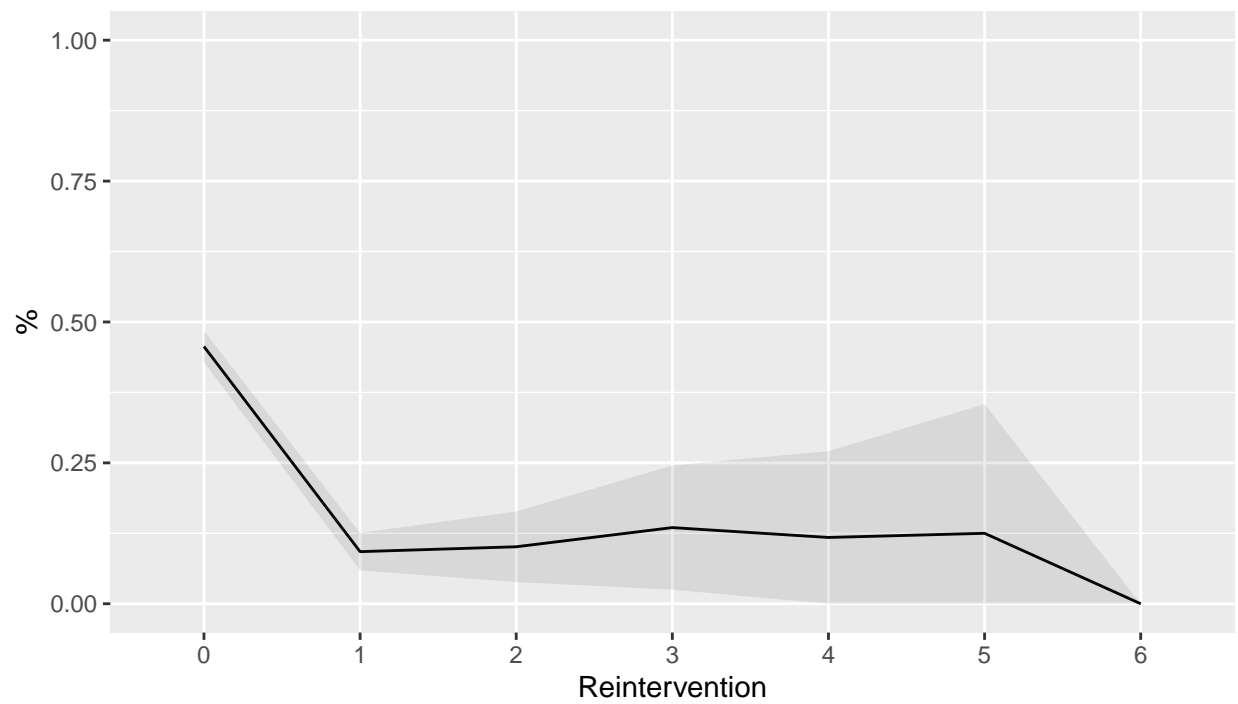
Proportion of Decompression

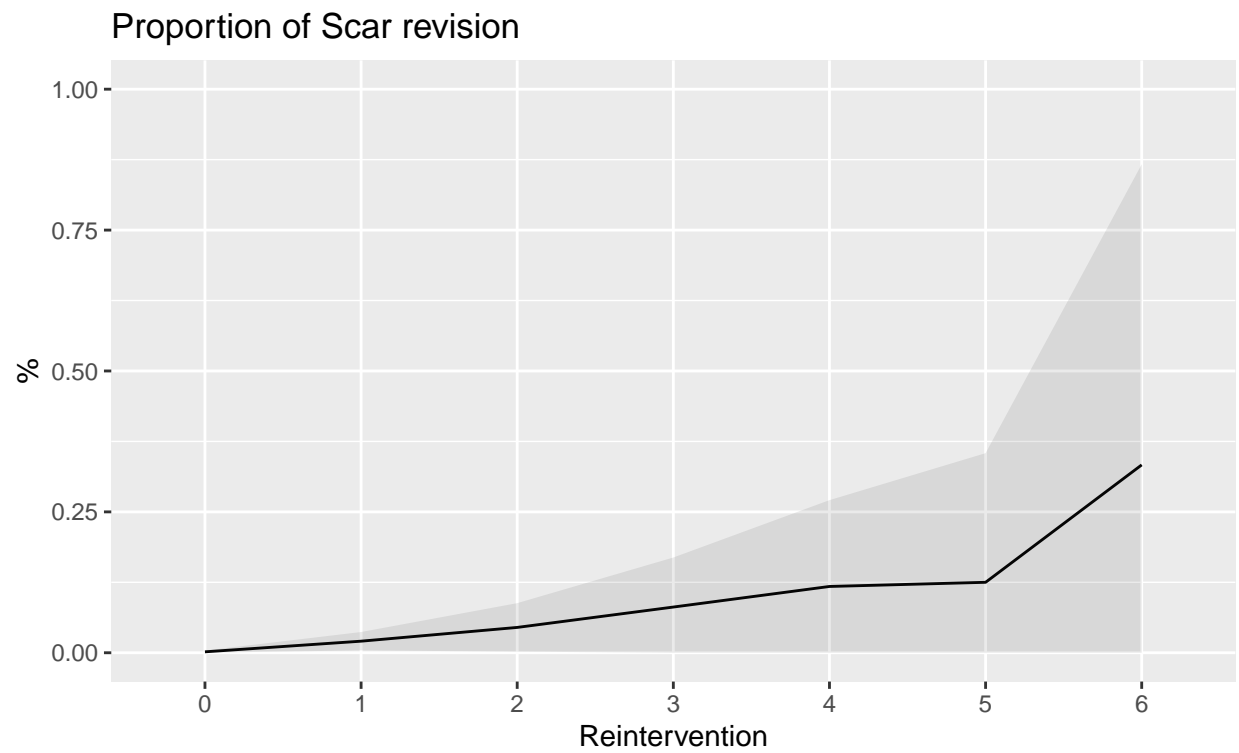
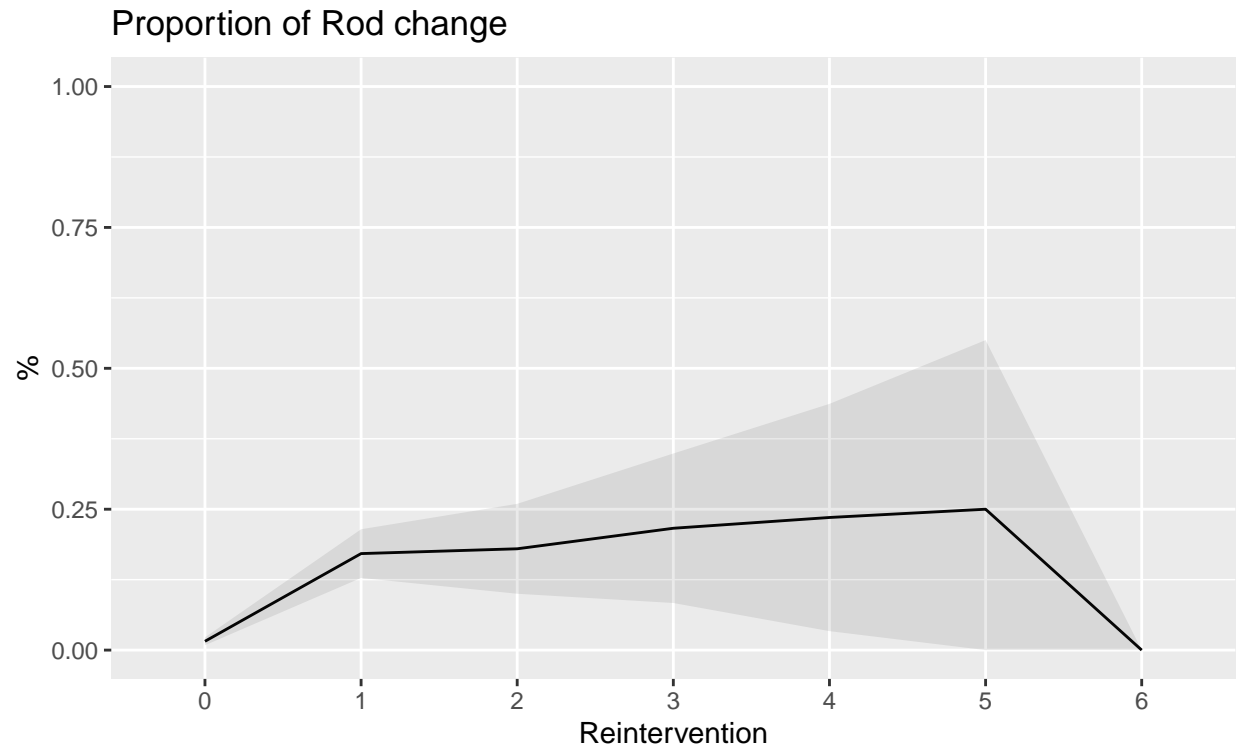


Proportion of Interbody Fusion

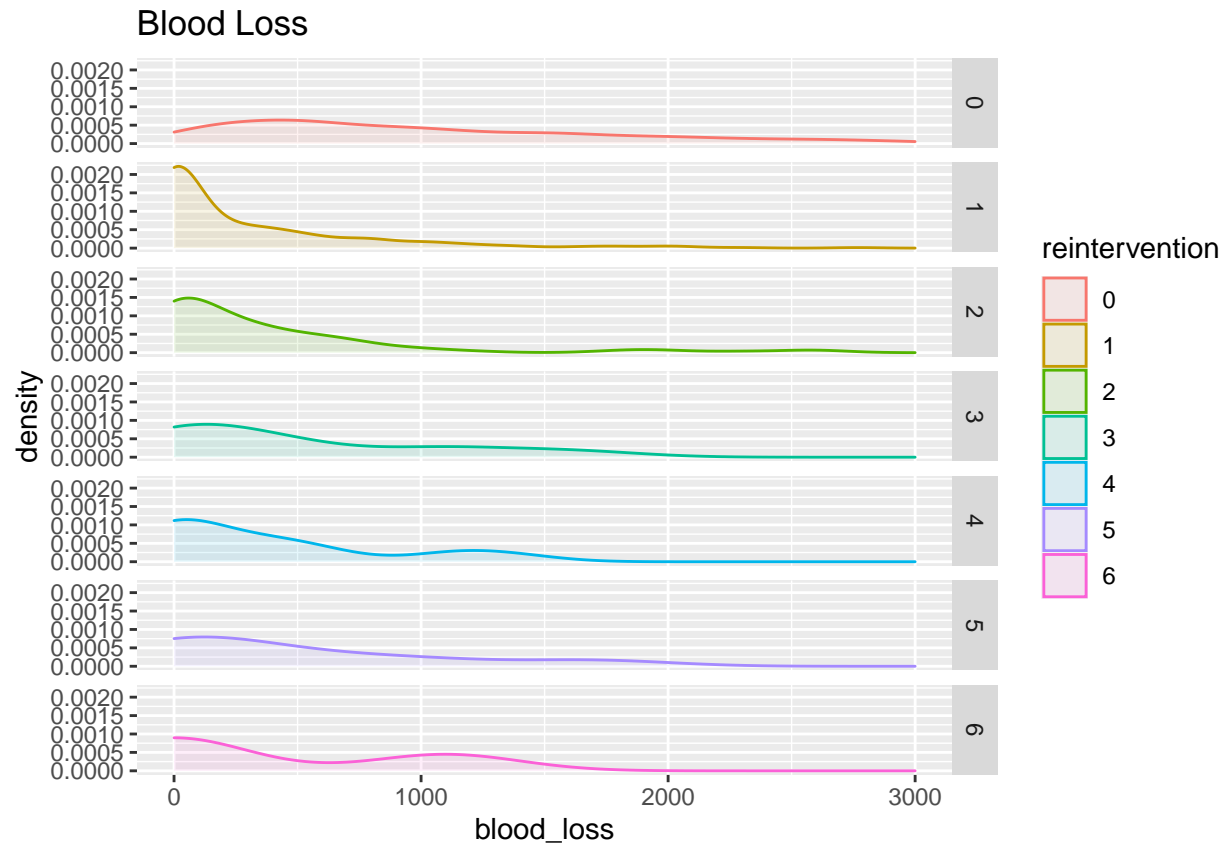


Proportion of Osteotomy



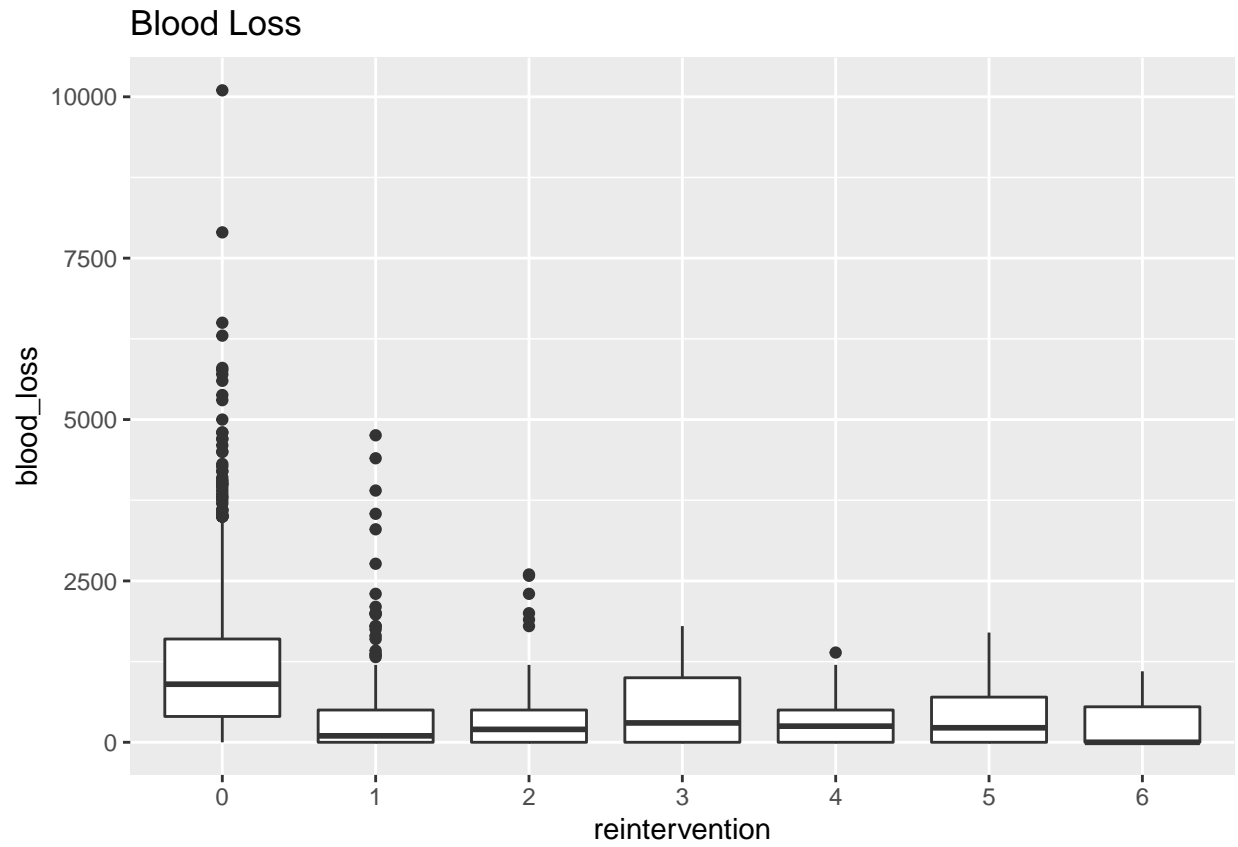


## Warning: Removed 107 rows containing non-finite values (stat\_density).

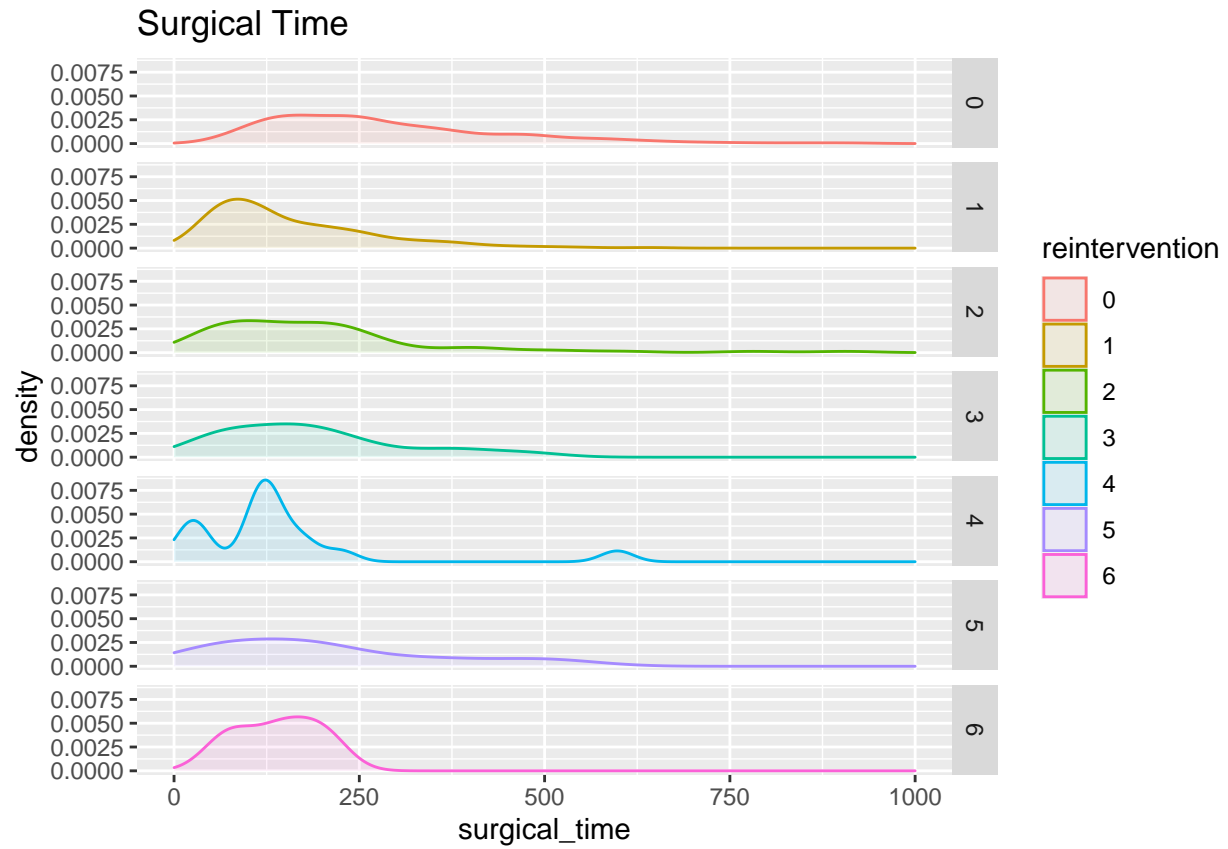


## Warning: Removed 38 rows containing non-finite values (stat\_boxplot).



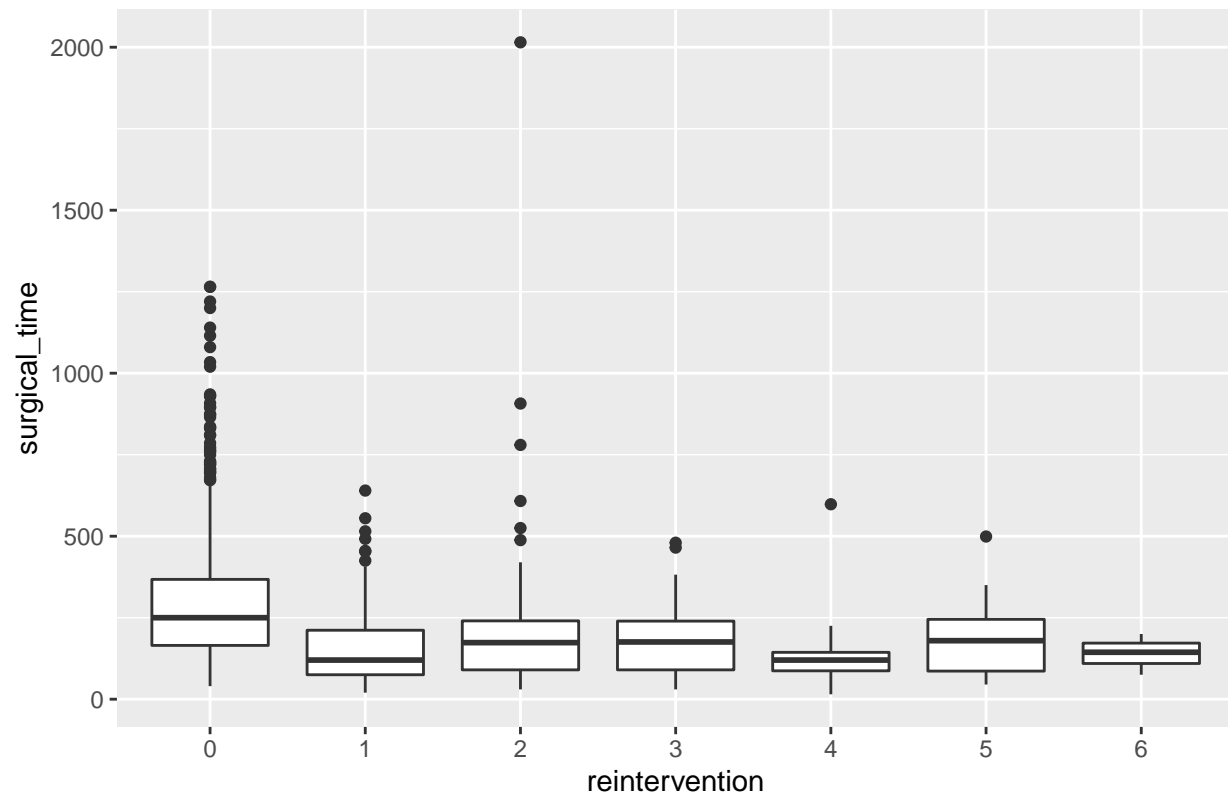


## Warning: Removed 111 rows containing non-finite values (stat\_density).



## Warning: Removed 101 rows containing non-finite values (stat\_boxplot).

## Surgical Time



## Complications

```

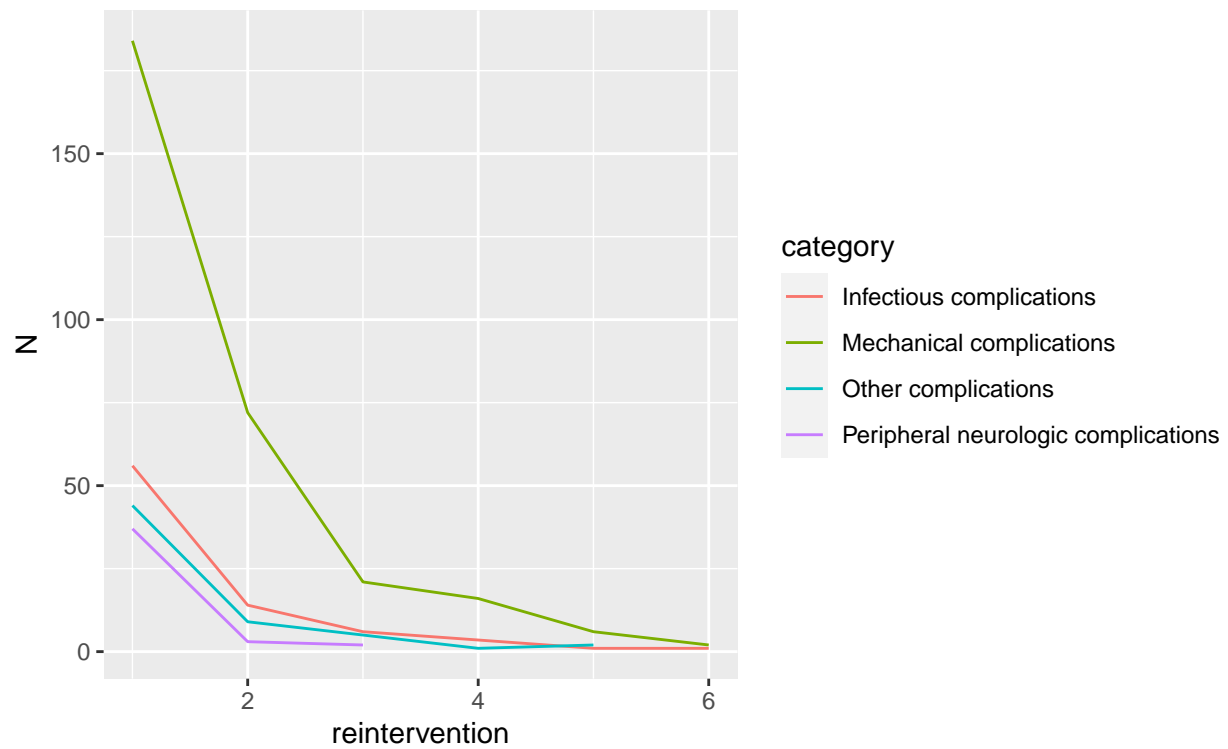
complications %>%
  .['Complication Type'=='Primary'] %>%
  .['Reoperation Due to Complication'=='Yes'] ->
  complications_

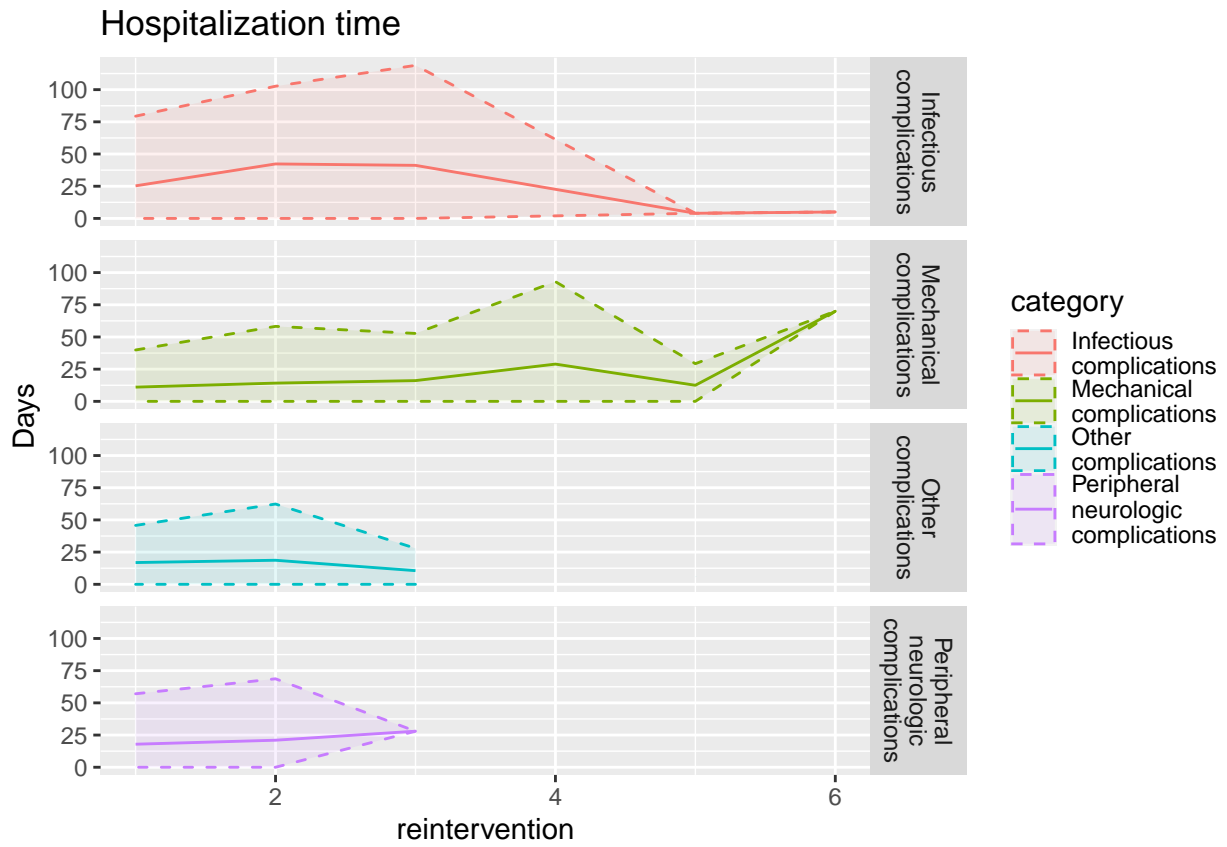
calc_reintervention <- function(days_since_surgery){
  days_since_surgery %>%
    unique %>%
    sort %>%
    data.table(days=., position=1:length(.)) %>%
    merge(data.table(days=days_since_surgery)) %>%
    .[, position]
}

complications_ %>%
  .[, .(
    category='Category of the complication',
    days_since_surgery='Days since surgery',
    patient_id='Code of the patient',
    date='Date of Reoperation'
  )] %>%

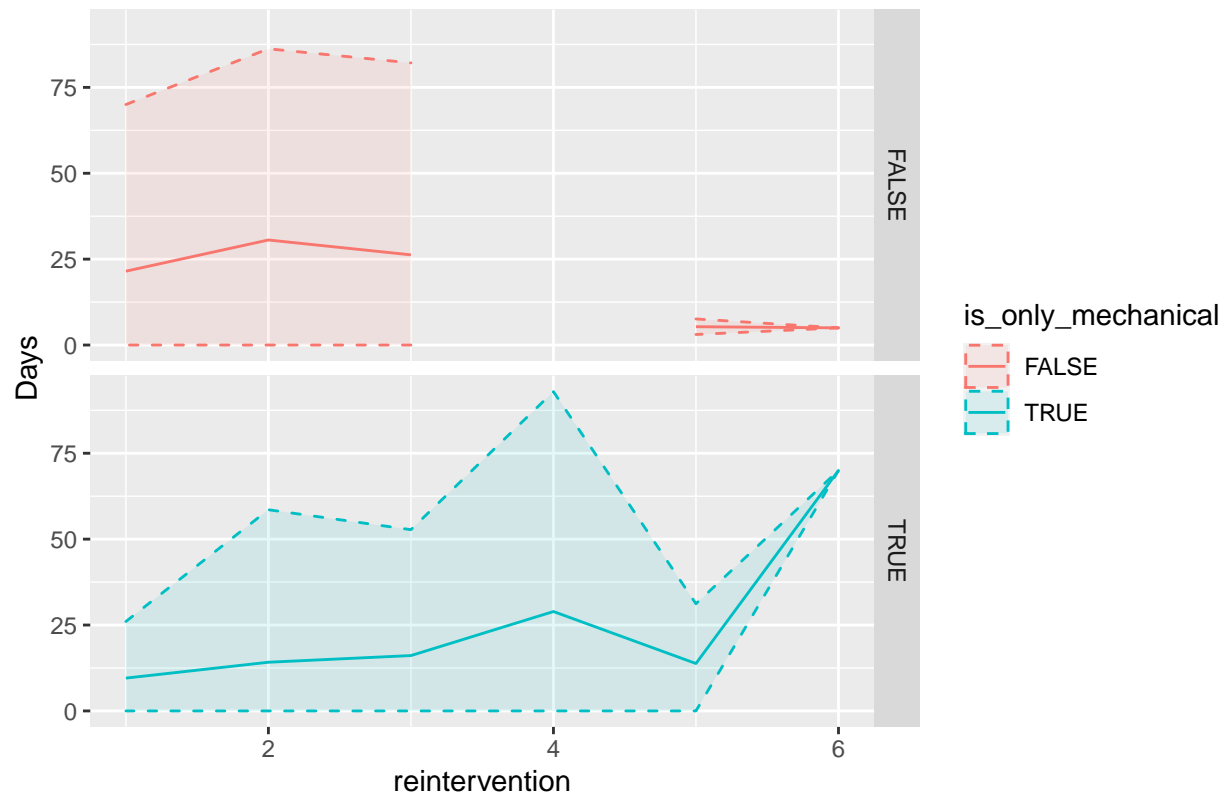
```

```
na.omit %>%
setorder(patient_id, days_since_surgery) %>%
.[, .(
  category, date, days_since_surgery,
  reintervention=calc_reintervention(days_since_surgery)),
patient_id] ->
complications_
```



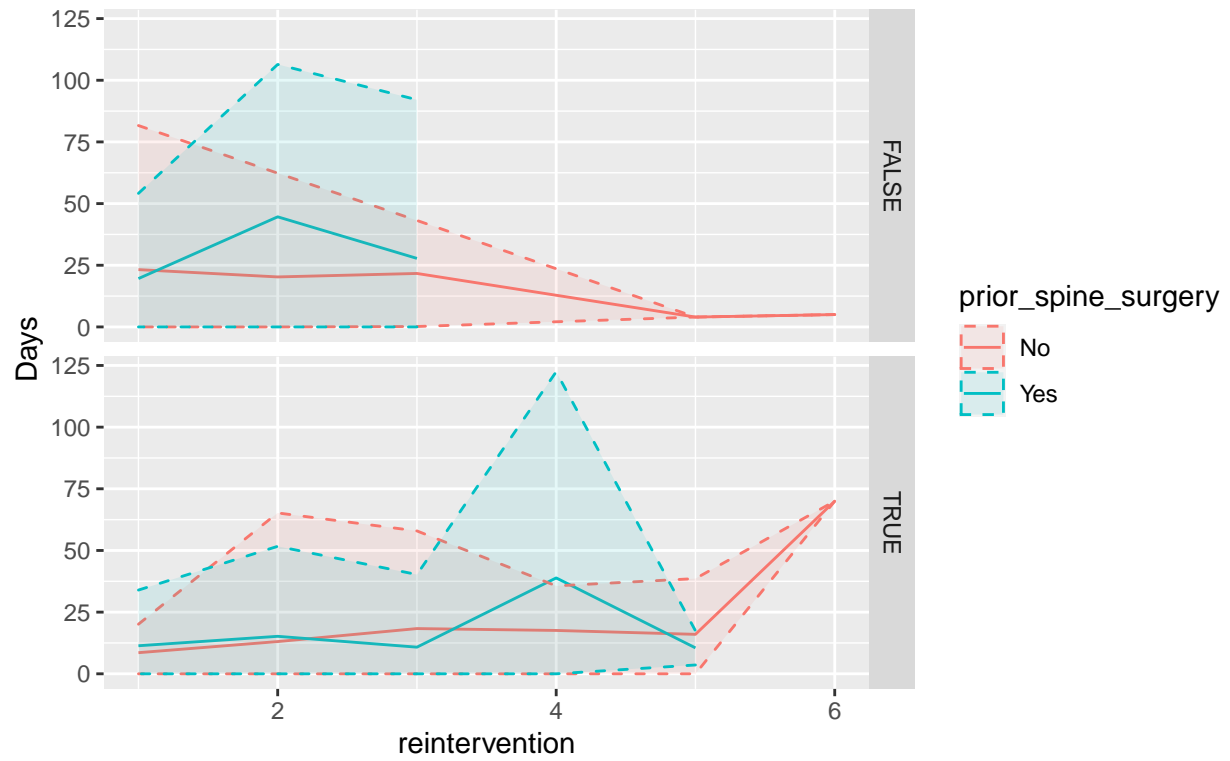


## Hospitalization time for ONLY mechanical interventions

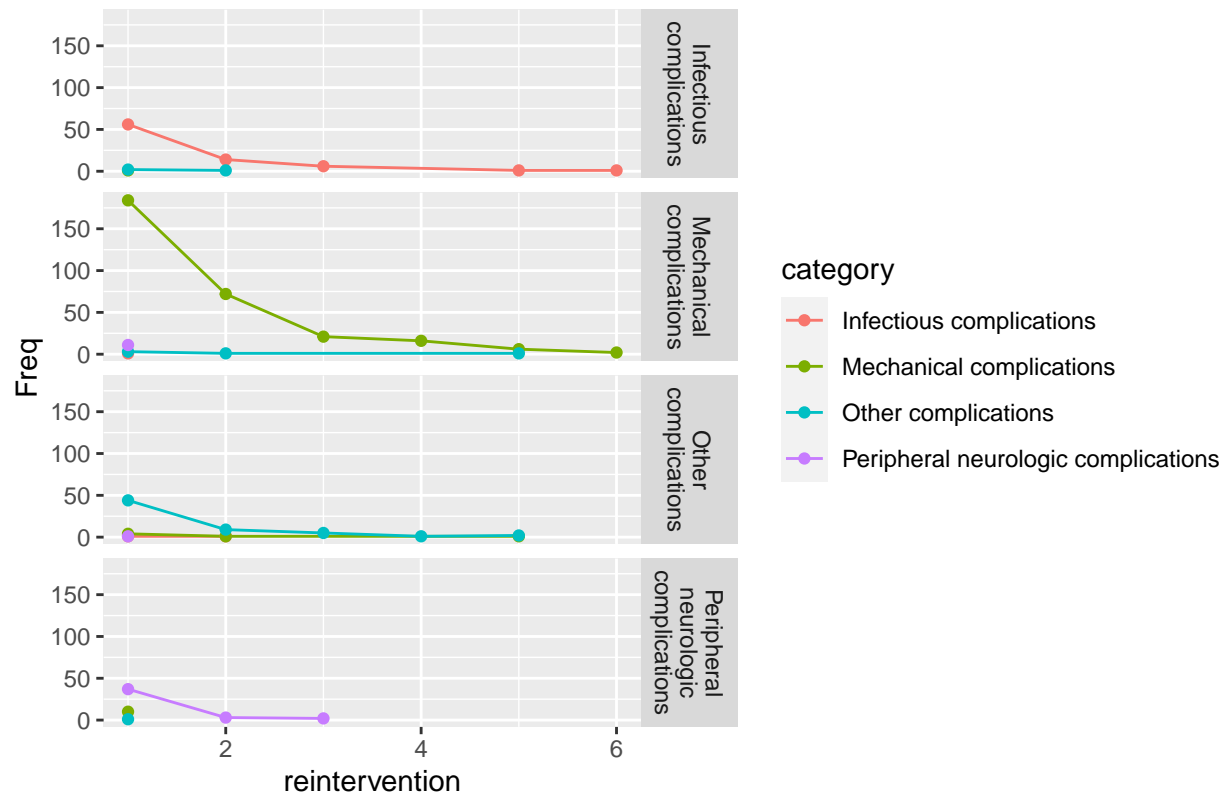


## Warning: Removed 1 row(s) containing missing values (geom\_path).

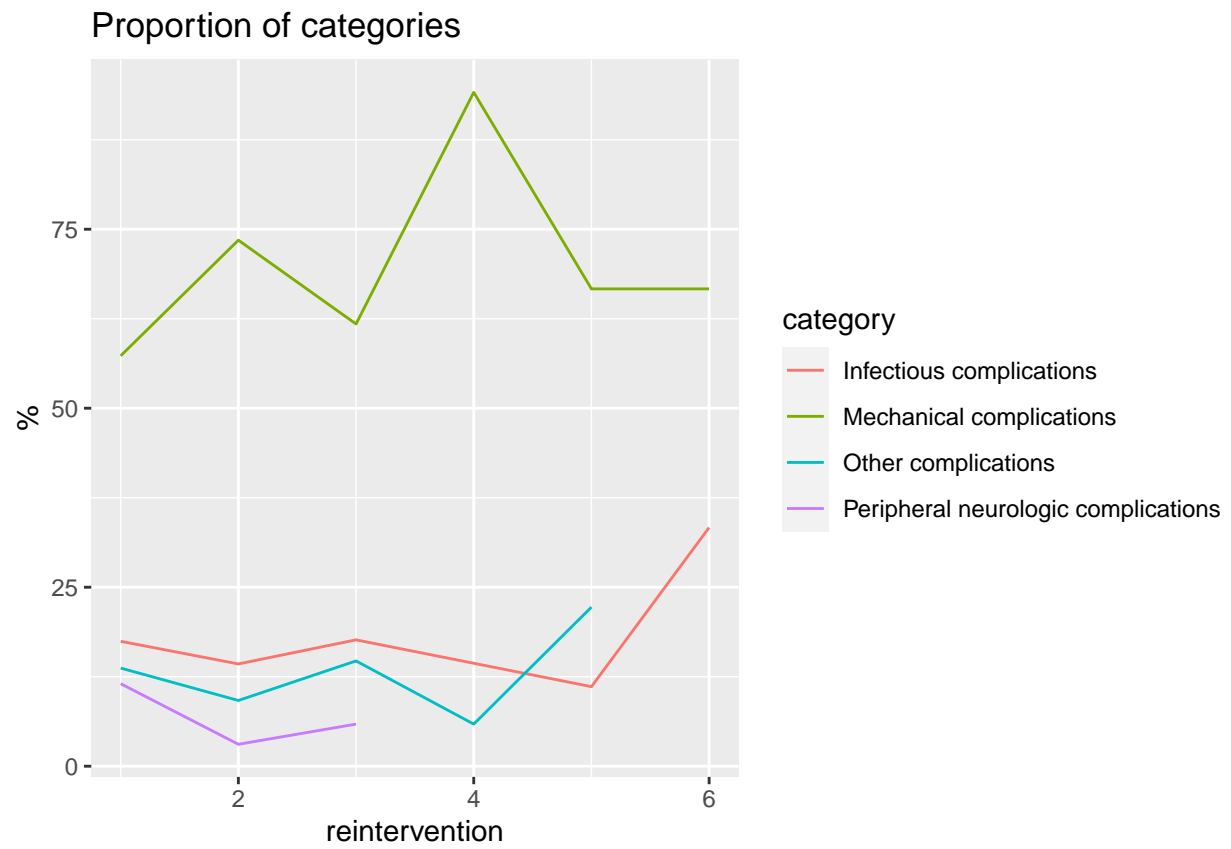
Hospitalization time for ONLY mechanical interventions  
with prior spine surgery – differences in means

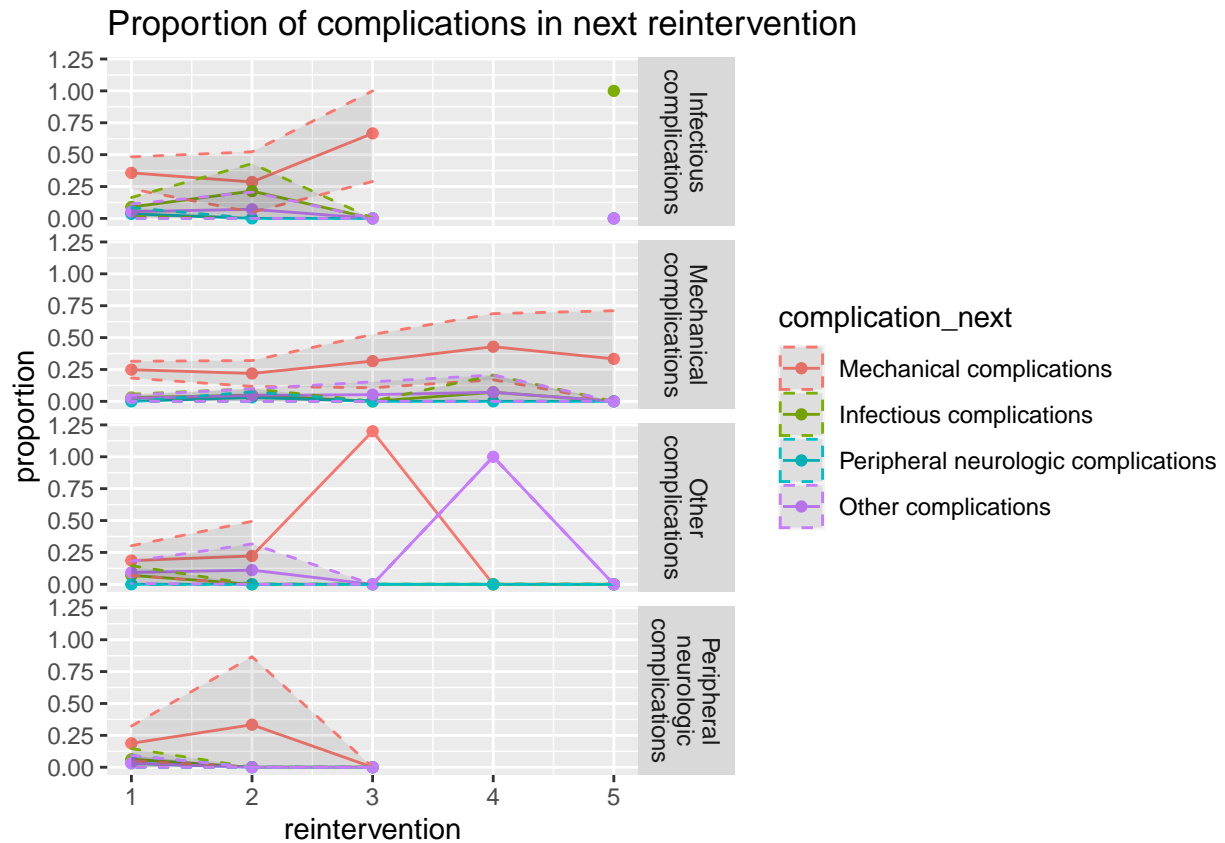


## Complication Category Overlap







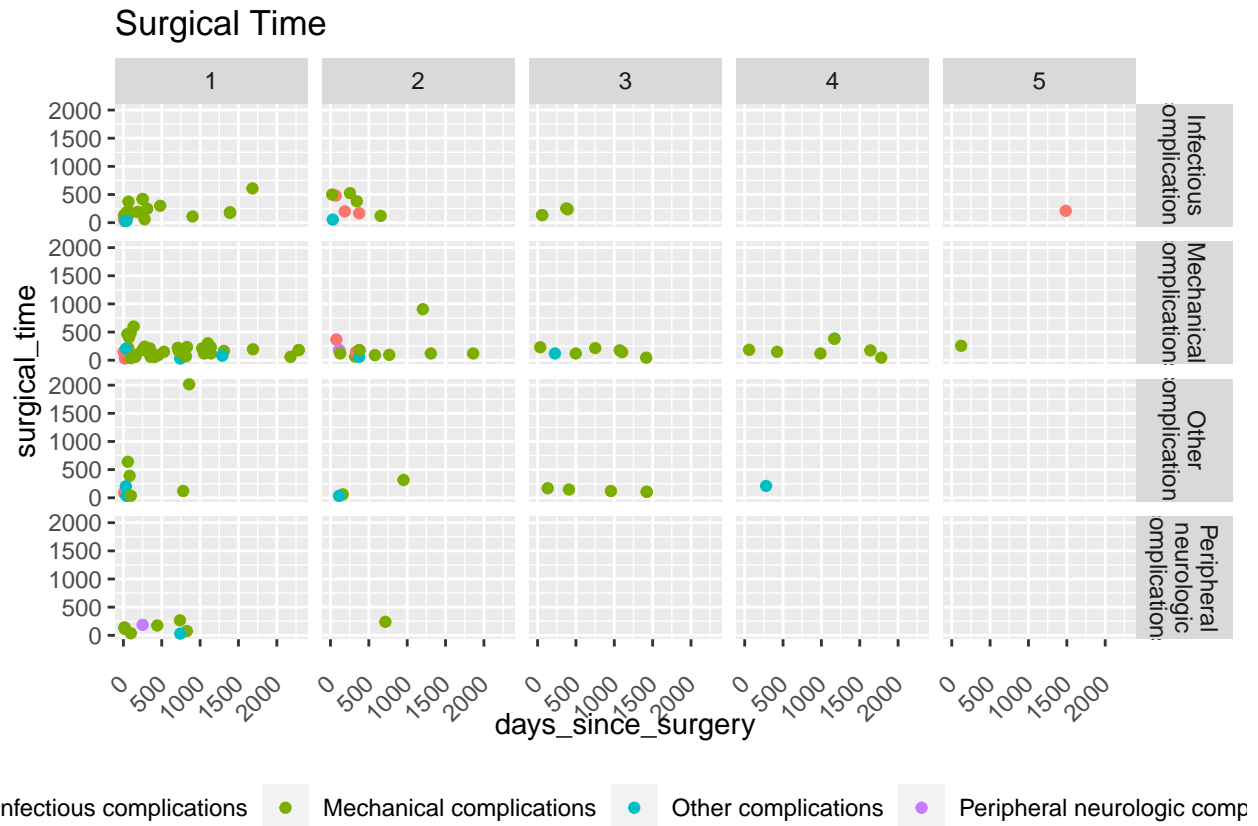


### Comparison with next reintervention

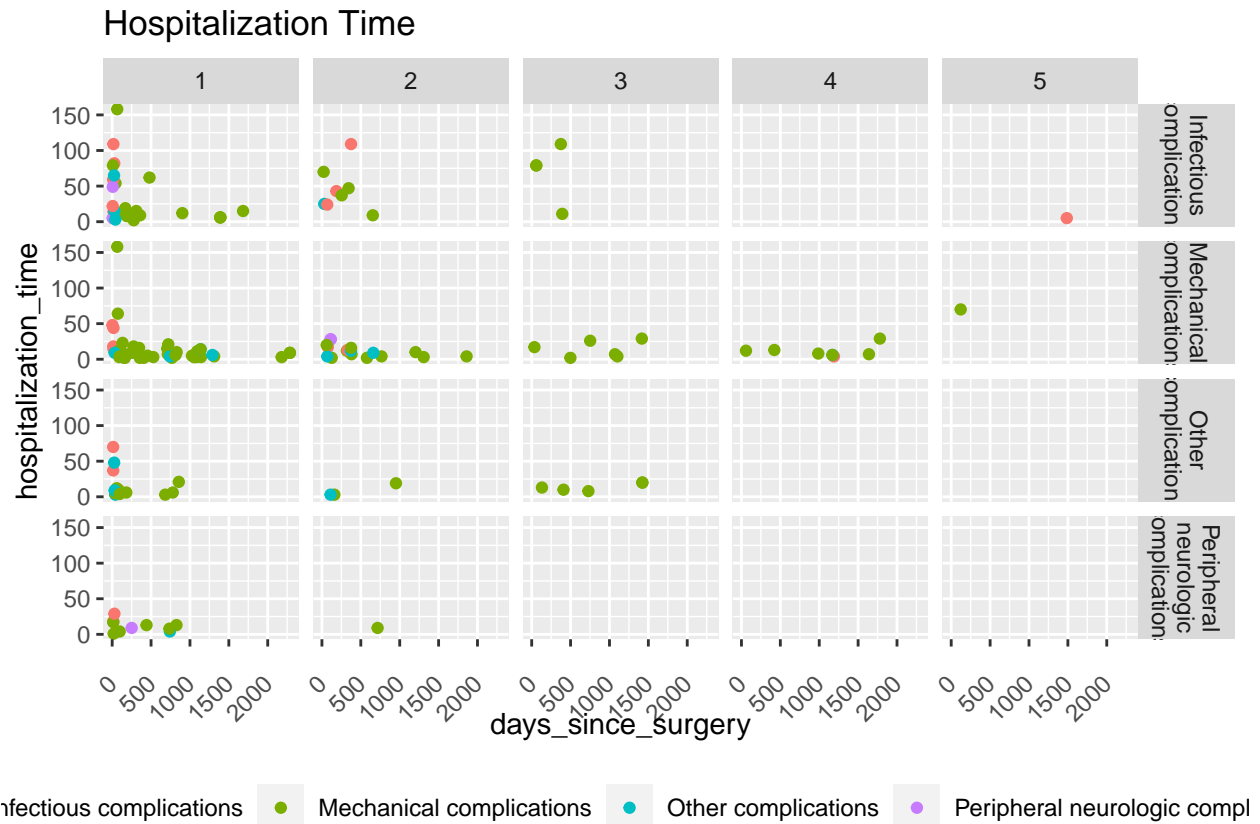
## Warning: Removed 5 rows containing missing values (geom\_point).



## Warning: Removed 34 rows containing missing values (geom\_point).



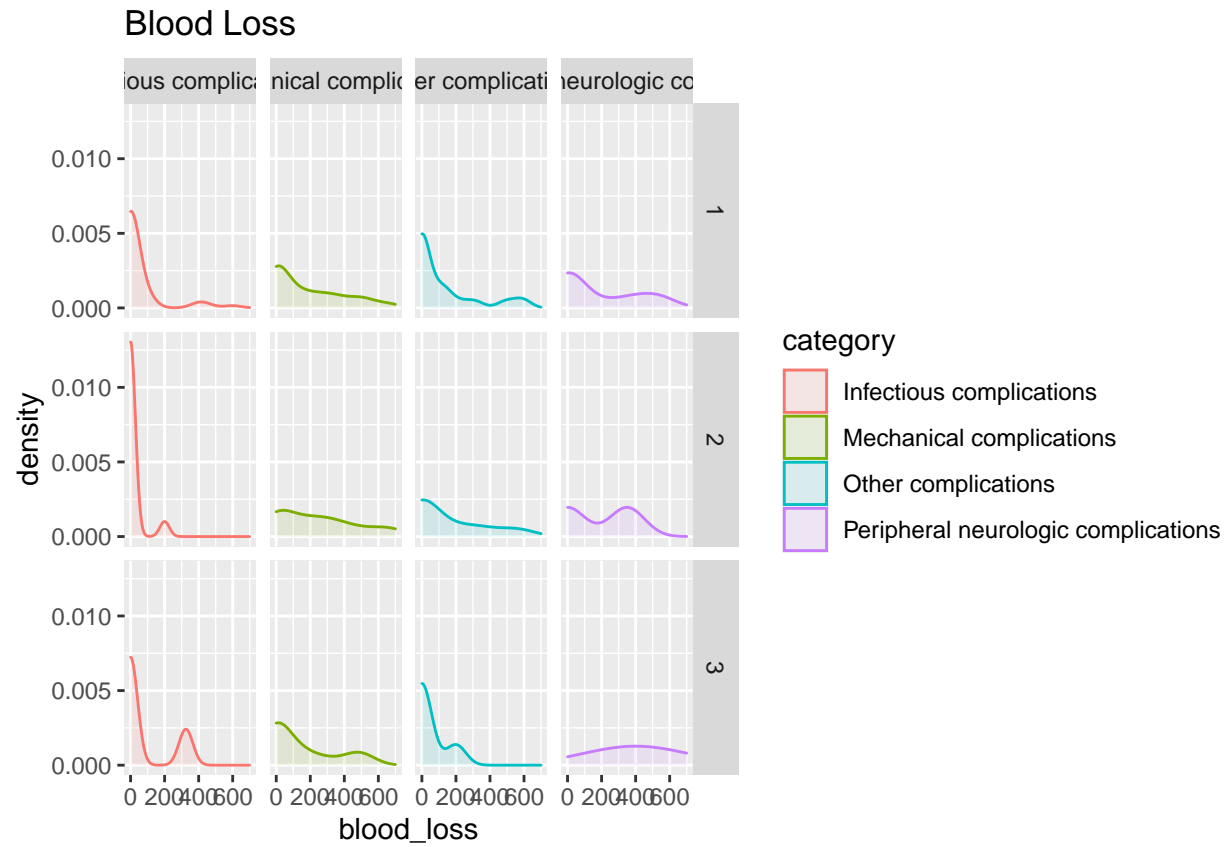
## Warning: Removed 17 rows containing missing values (geom\_point).



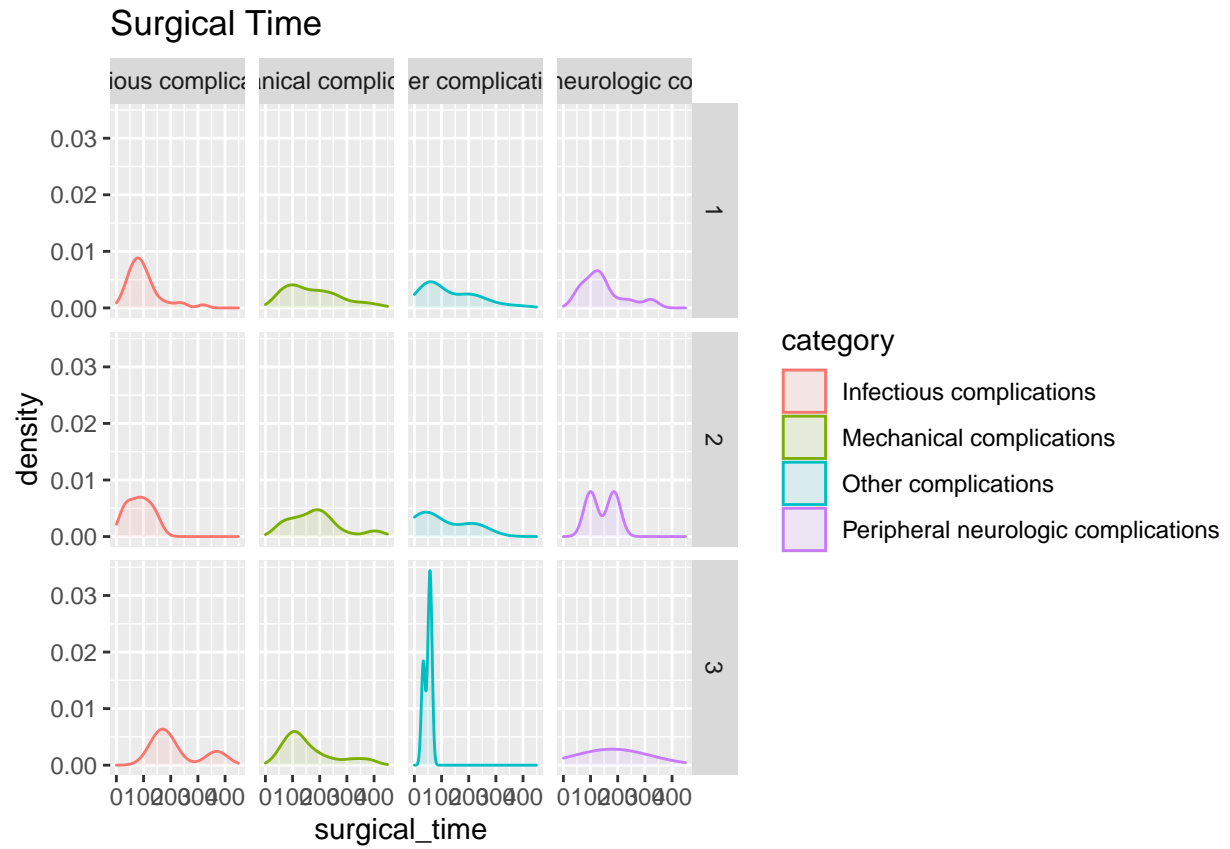
## By Complication type & Reintervention

### Blood Loss

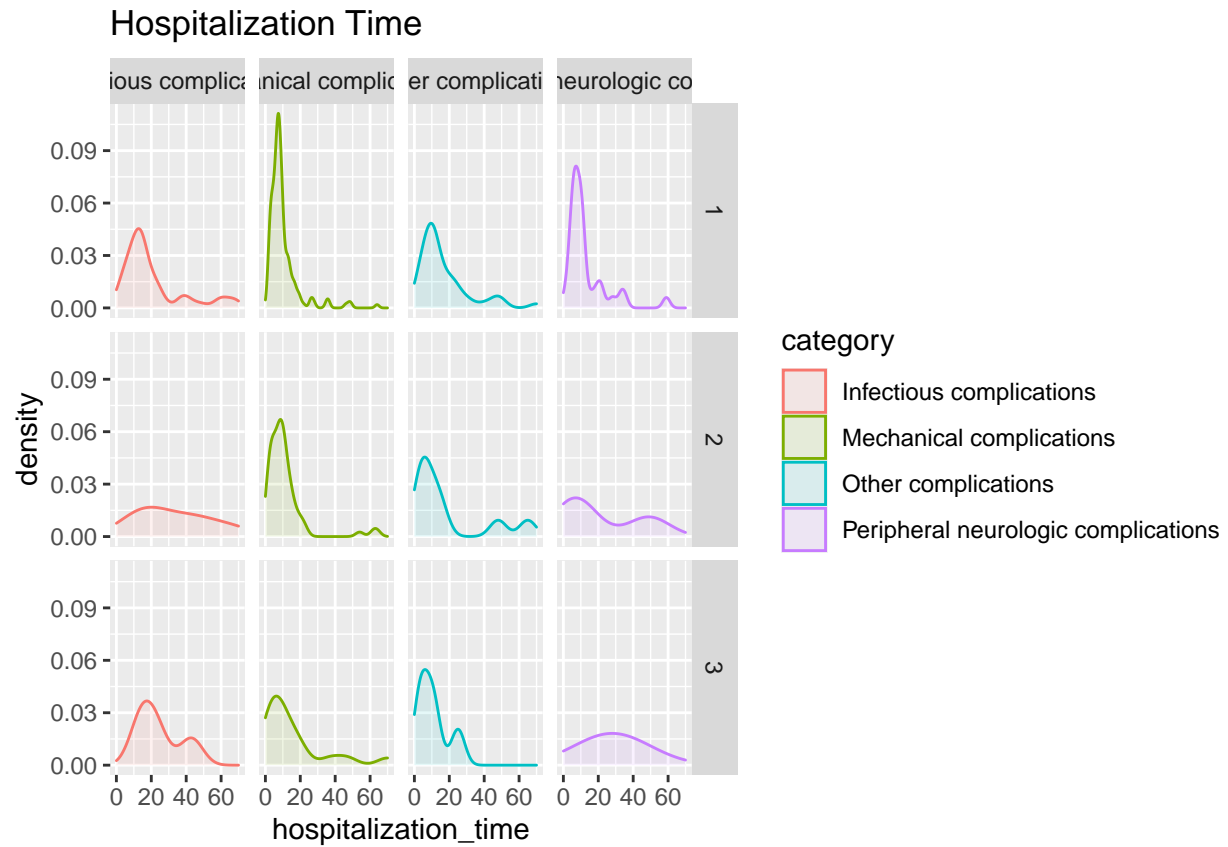
## Warning: Removed 83 rows containing non-finite values (stat\_density).



## Warning: Removed 114 rows containing non-finite values (stat\_density).



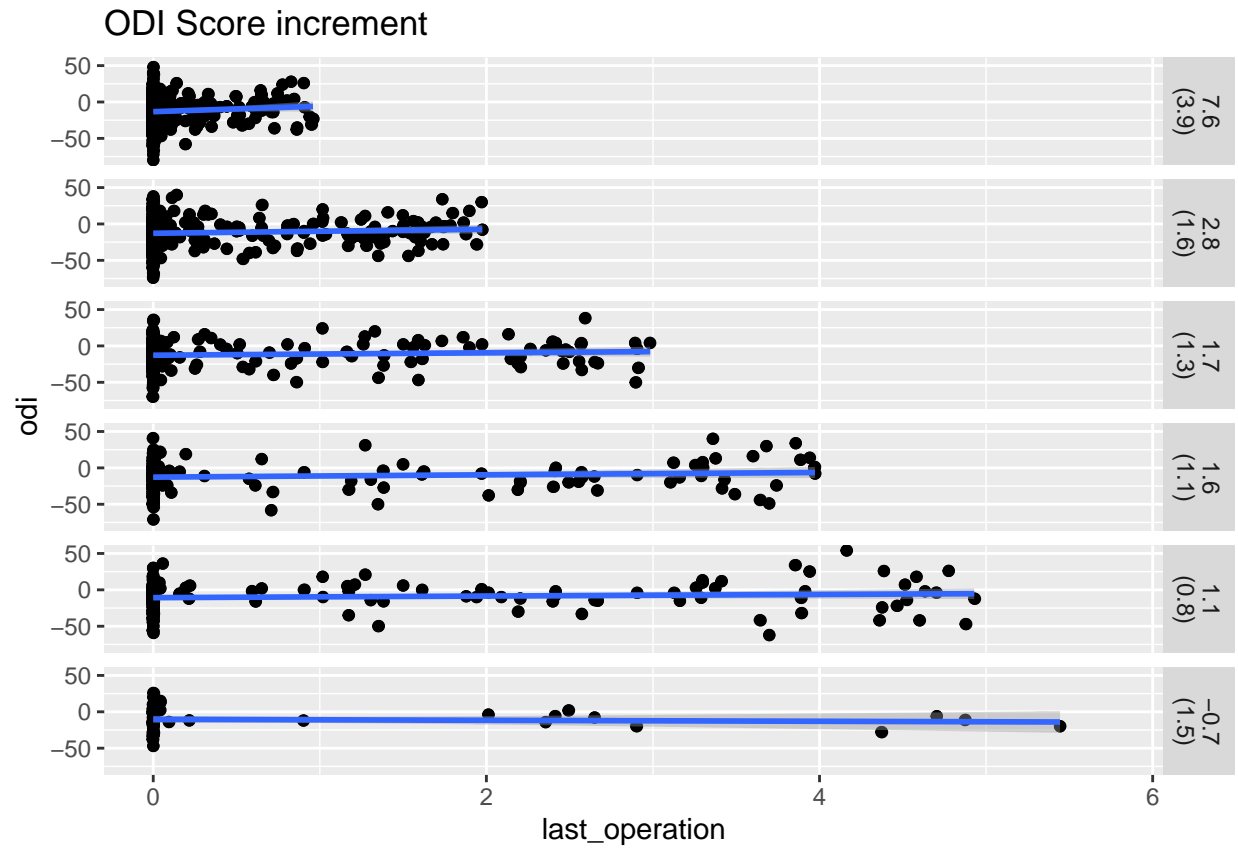
## Warning: Removed 26 rows containing non-finite values (stat\_density).



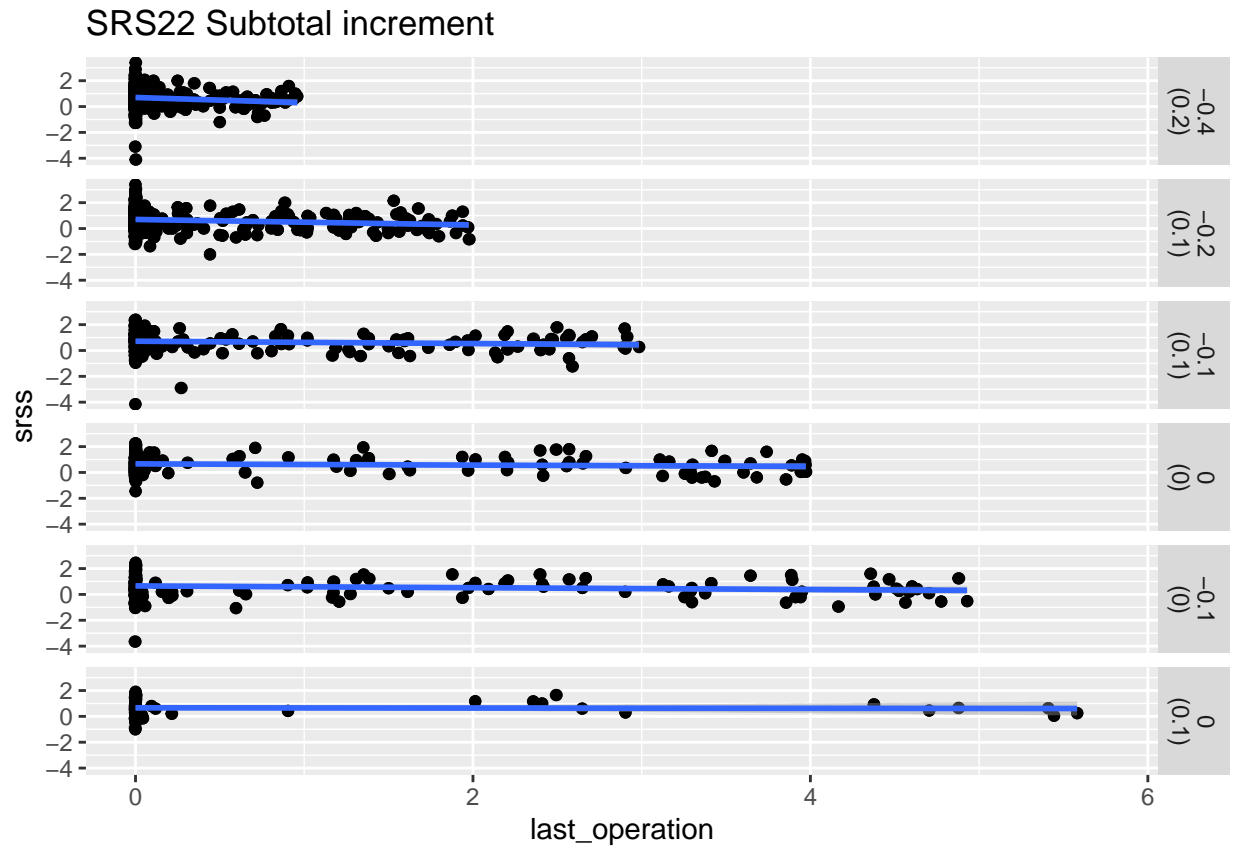
## Quality life increment for reinterventions

```
## 'geom_smooth()' using formula 'y ~ x'
```

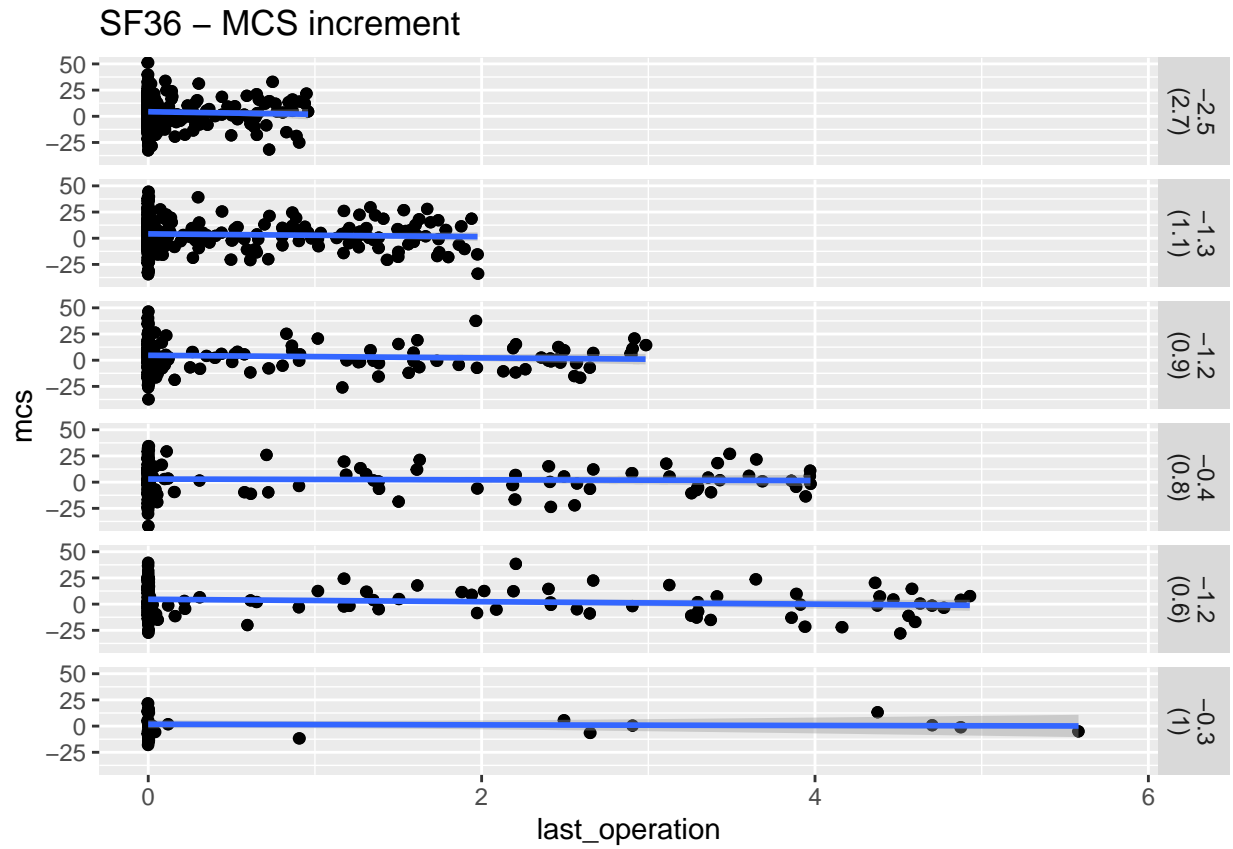




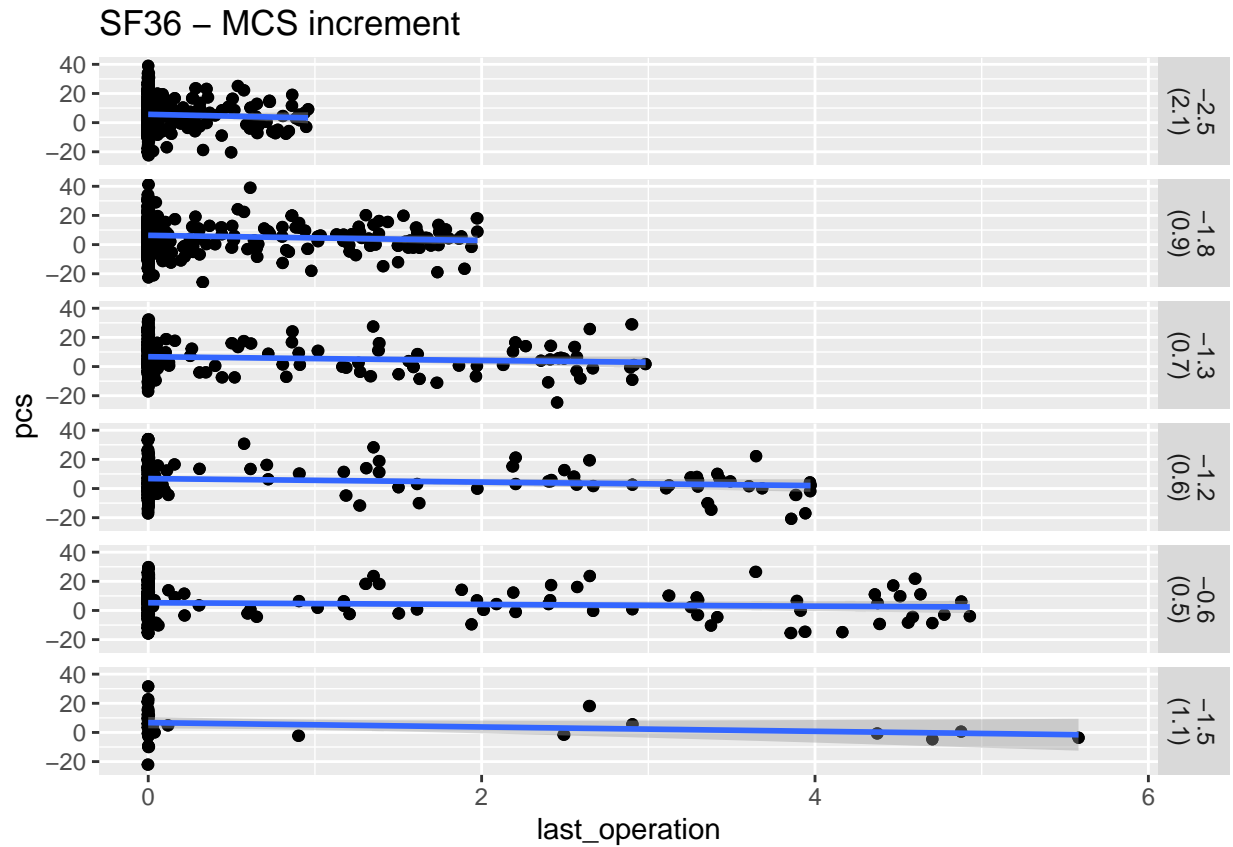
```
## 'geom_smooth()' using formula 'y ~ x'
```



```
## 'geom_smooth()' using formula 'y ~ x'
```



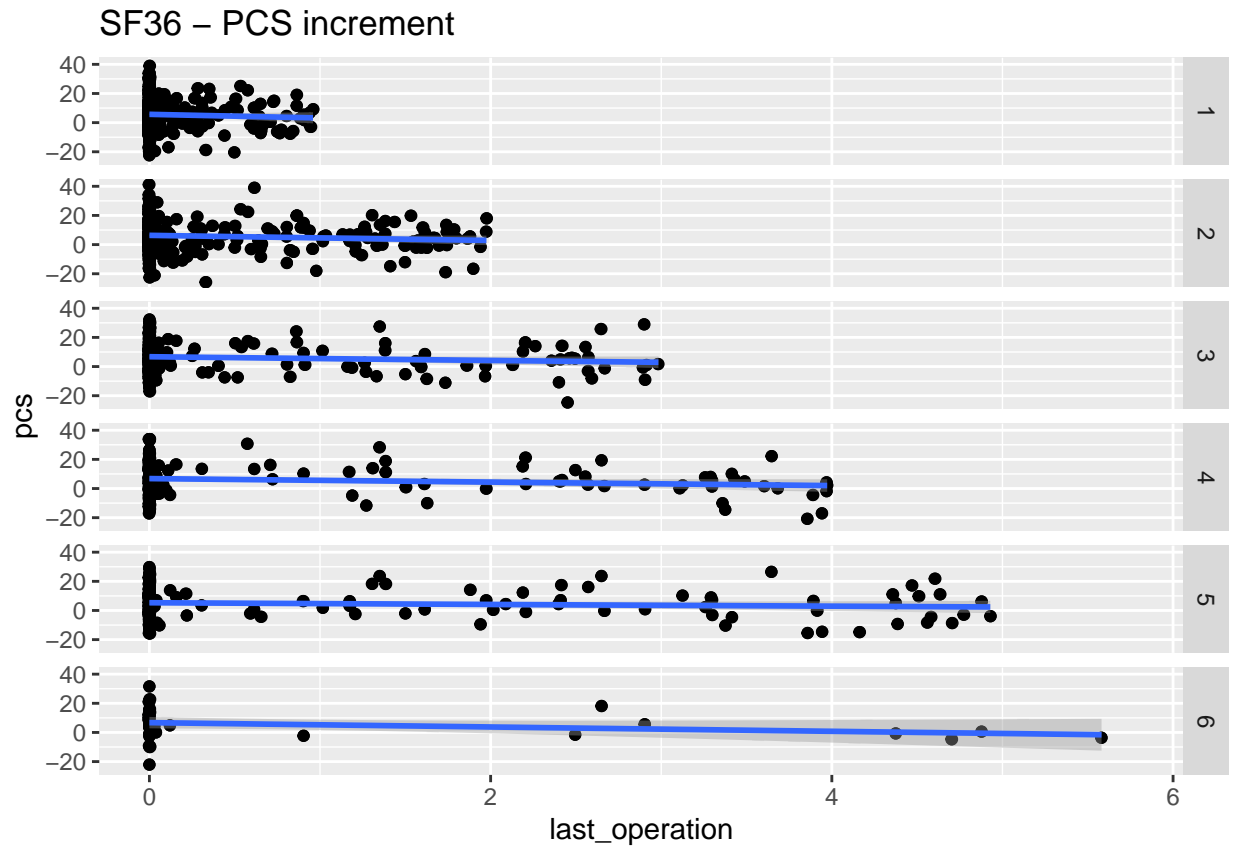
```
## 'geom_smooth()' using formula 'y ~ x'
```



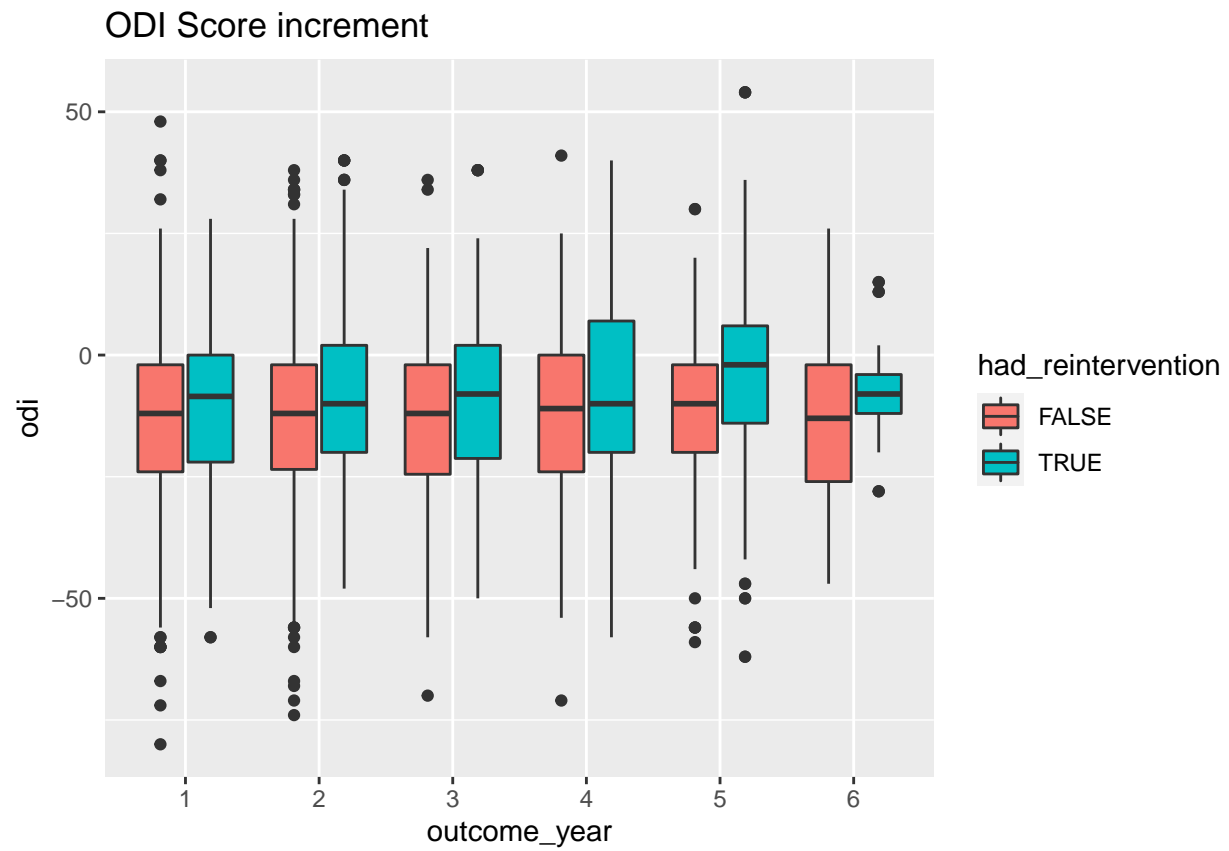
## Had Intervention

For each outcome year, whether the patient had an intervention before the questionnaire

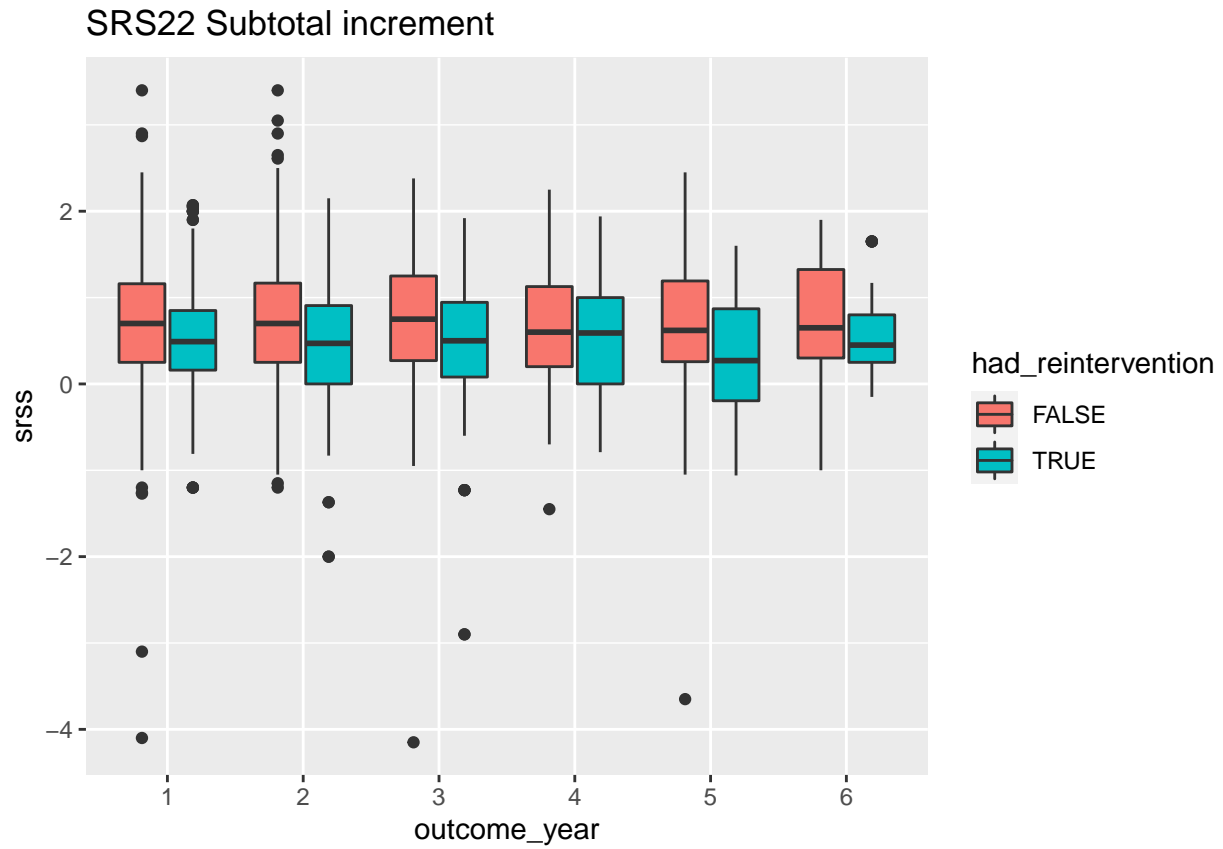
```
## 'geom_smooth()' using formula 'y ~ x'
```



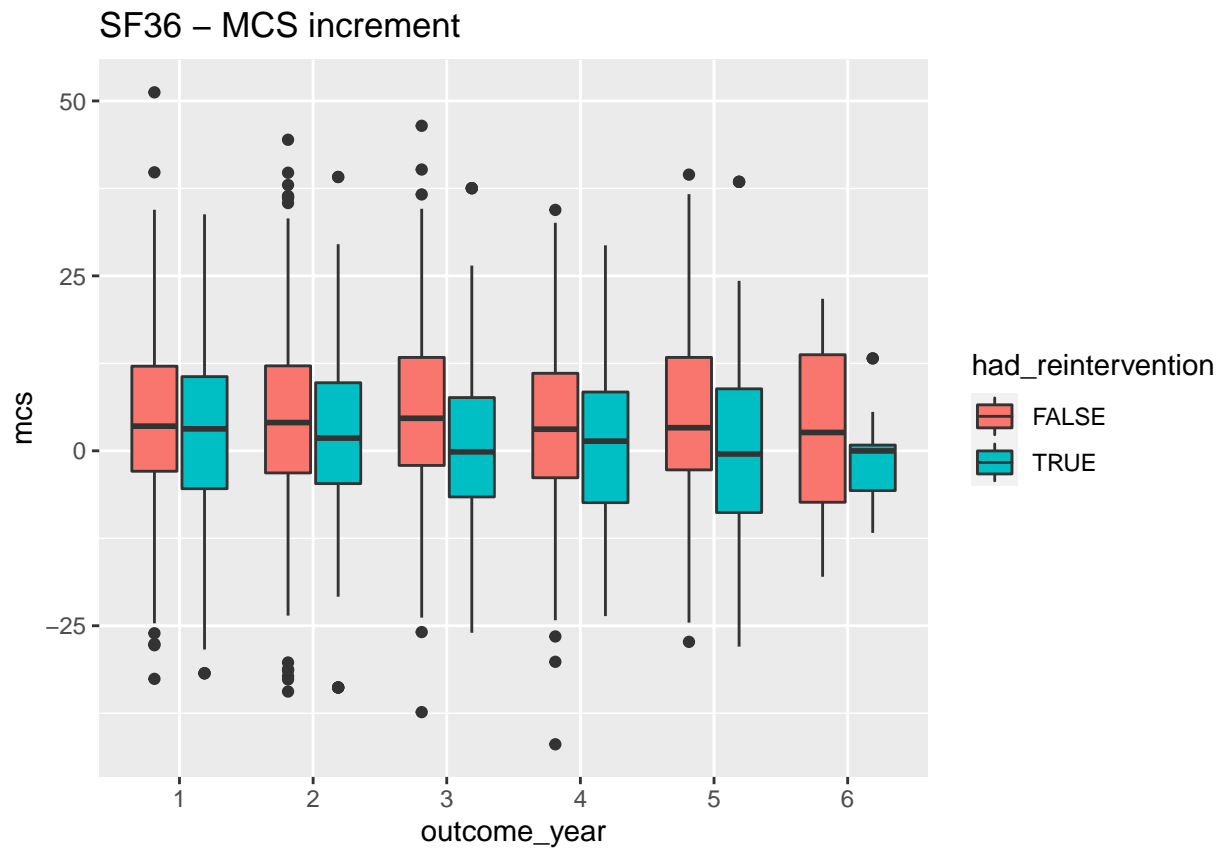
```
## Warning: Removed 6305 rows containing non-finite values (stat_boxplot).
```



## Warning: Removed 6214 rows containing non-finite values (stat\_boxplot).

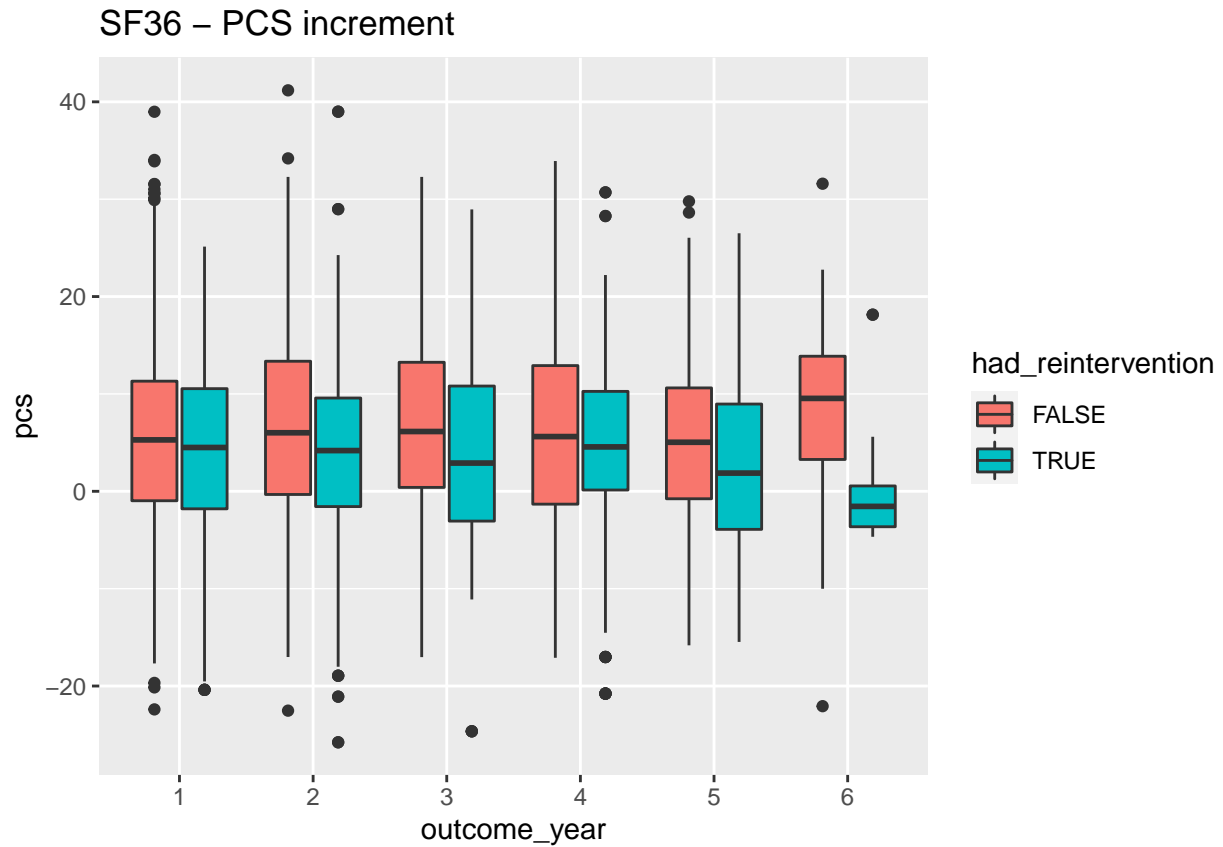


## Warning: Removed 6519 rows containing non-finite values (stat\_boxplot).



## Warning: Removed 6521 rows containing non-finite values (stat\_boxplot).





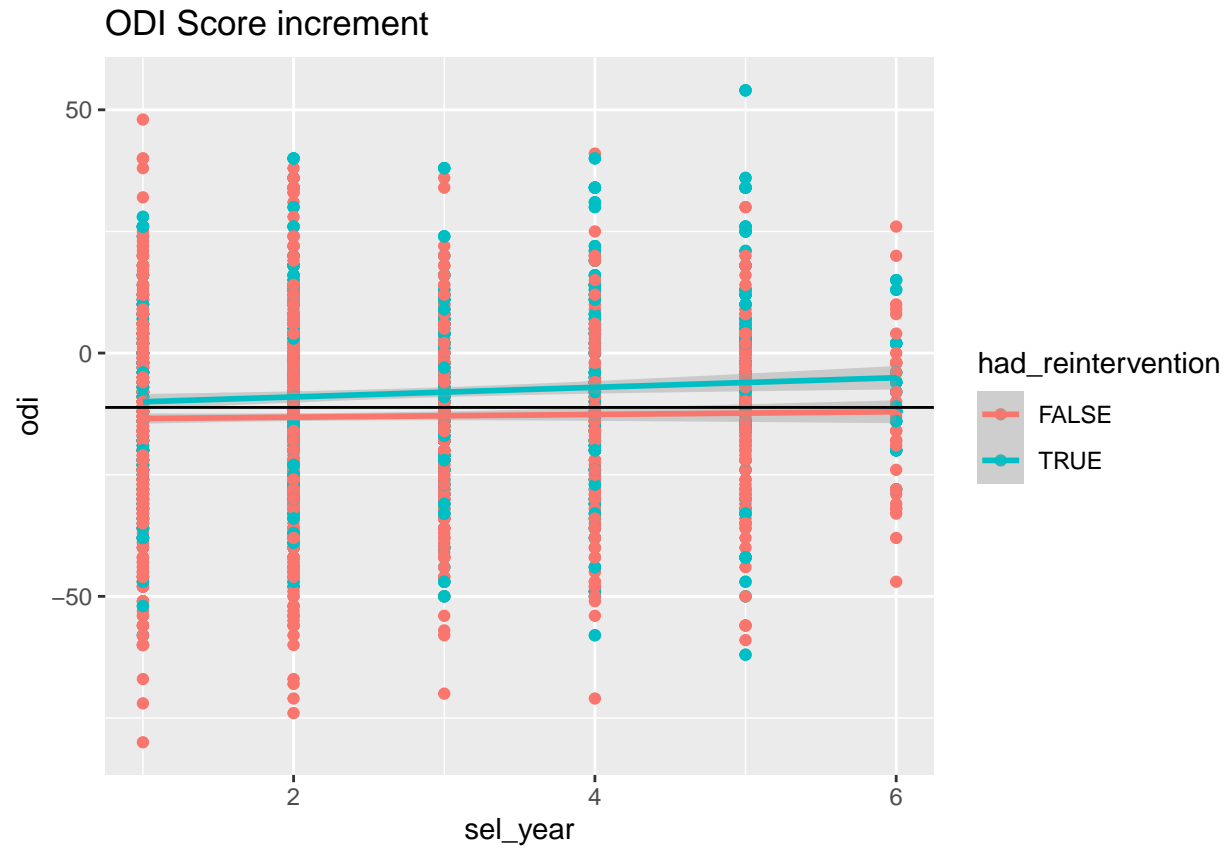
## Had intervention evolution

Black lines are the mean value of the score

```
## 'geom_smooth()' using formula 'y ~ x'
```

```
## Warning: Removed 6305 rows containing non-finite values (stat_smooth).
```

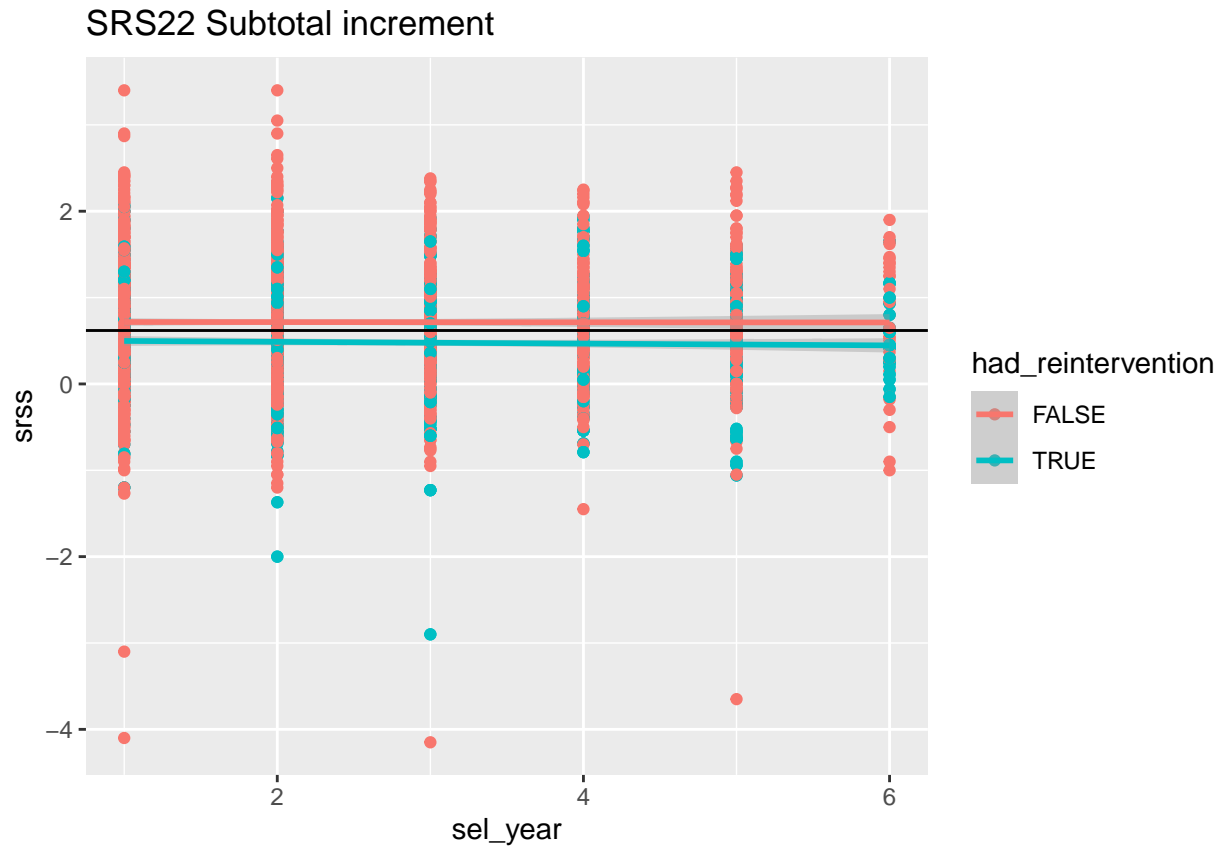
```
## Warning: Removed 6305 rows containing missing values (geom_point).
```



```
## 'geom_smooth()' using formula 'y ~ x'
```

```
## Warning: Removed 6214 rows containing non-finite values (stat_smooth).
```

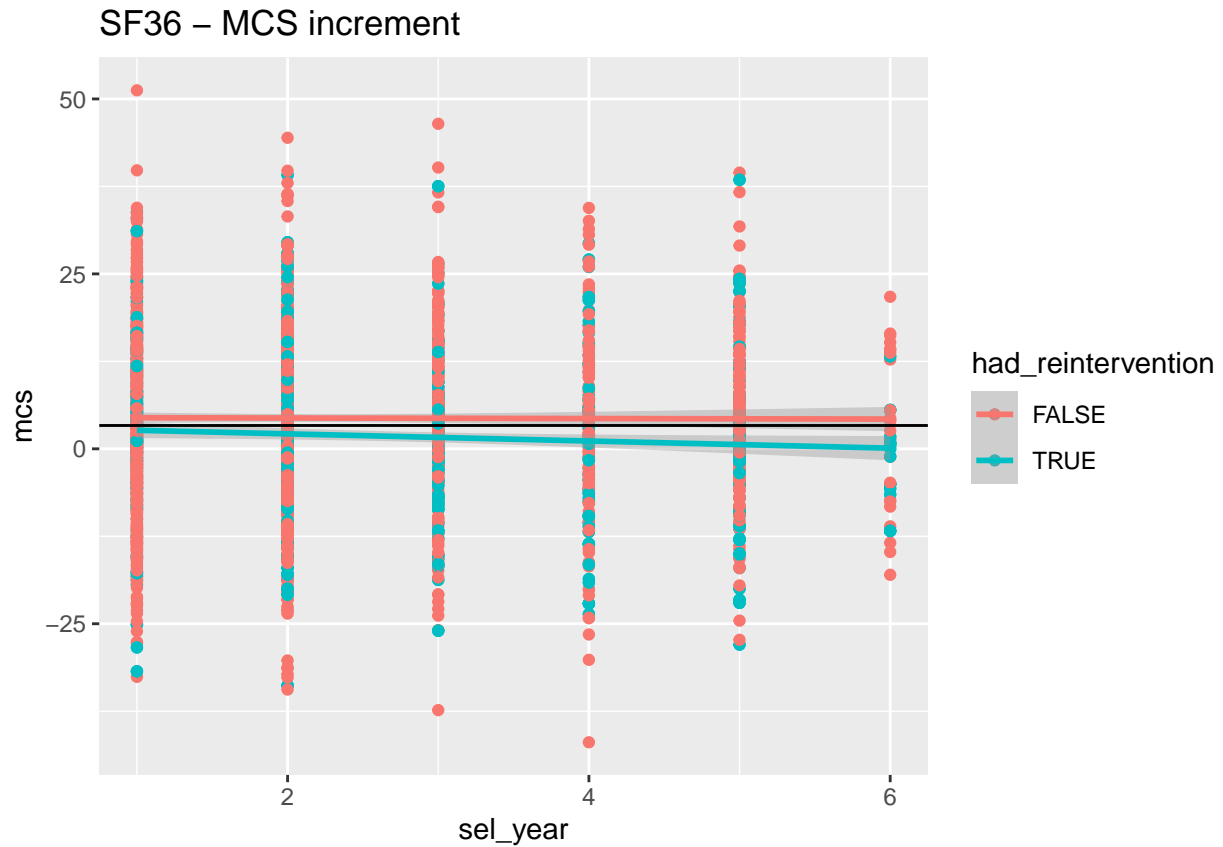
```
## Warning: Removed 6214 rows containing missing values (geom_point).
```



```
## 'geom_smooth()' using formula 'y ~ x'
```

```
## Warning: Removed 6519 rows containing non-finite values (stat_smooth).
```

```
## Warning: Removed 6519 rows containing missing values (geom_point).
```



```
## 'geom_smooth()' using formula 'y ~ x'
```

```
## Warning: Removed 6521 rows containing non-finite values (stat_smooth).
```

```
## Warning: Removed 6521 rows containing missing values (geom_point).
```

