

Rheum Backlog

Rheumatology Backlog

I have now done a first and second audit cycle of the Rheumatology outpatients backlog - based on the status date of the patients on the 17th September (*cyc1*) and 17th October 2021 (*cyc2*).

This is the raw data for this - abbreviated to just include the May 2020 - May 2021 period.

```
oct <- read.csv("october.csv") %>% filter(!is.na(month))
oct <- oct %>% mutate(date = make_date(year,month))

audit <- oct %>% pivot_wider(names_from = "cycle", values_from = patients ) %>% rename(cyc1 = `1`, cyc2
audit <- audit %>% mutate(delta = cyc2 - cyc1)

audit20 <- audit %>% filter(between(date,as_date("2020-05-01"), as_date("2021-05-01")))
audit20 <- audit20 %>% mutate(deltaperc = delta/cyc1*100)

audit20
```

```
## # A tibble: 13 x 8
##   month mon   year date      cyc1 cyc2 delta deltaperc
##   <int> <chr> <int> <date>   <int> <int> <int>   <dbl>
## 1     5 may   2020 2020-05-01    37   28    -9    -24.3
## 2     6 jun   2020 2020-06-01    53   46    -7    -13.2
## 3     7 jul   2020 2020-07-01    77   47   -30   -39.0
## 4     8 aug   2020 2020-08-01    33   22   -11   -33.3
## 5     9 sep   2020 2020-09-01   140   88   -52   -37.1
## 6    10 oct   2020 2020-10-01   144   95   -49   -34.0
## 7    11 nov   2020 2020-11-01   222  139   -83   -37.4
## 8    12 dec   2020 2020-12-01   287  212   -75   -26.1
## 9     1 jan   2021 2021-01-01   268  229   -39   -14.6
## 10    2 feb   2021 2021-02-01   437  382   -55   -12.6
## 11    3 mar   2021 2021-03-01   432  383   -49   -11.3
## 12    4 apr   2021 2021-04-01   561  496   -65   -11.6
## 13    5 may   2021 2021-05-01   568  466  -102   -18.0
```

The value *delta* represents the change in patients in the backlog in 1 month, *deltaperc* represents this number as a percentage of patients in the first cycle (*cyc1*)

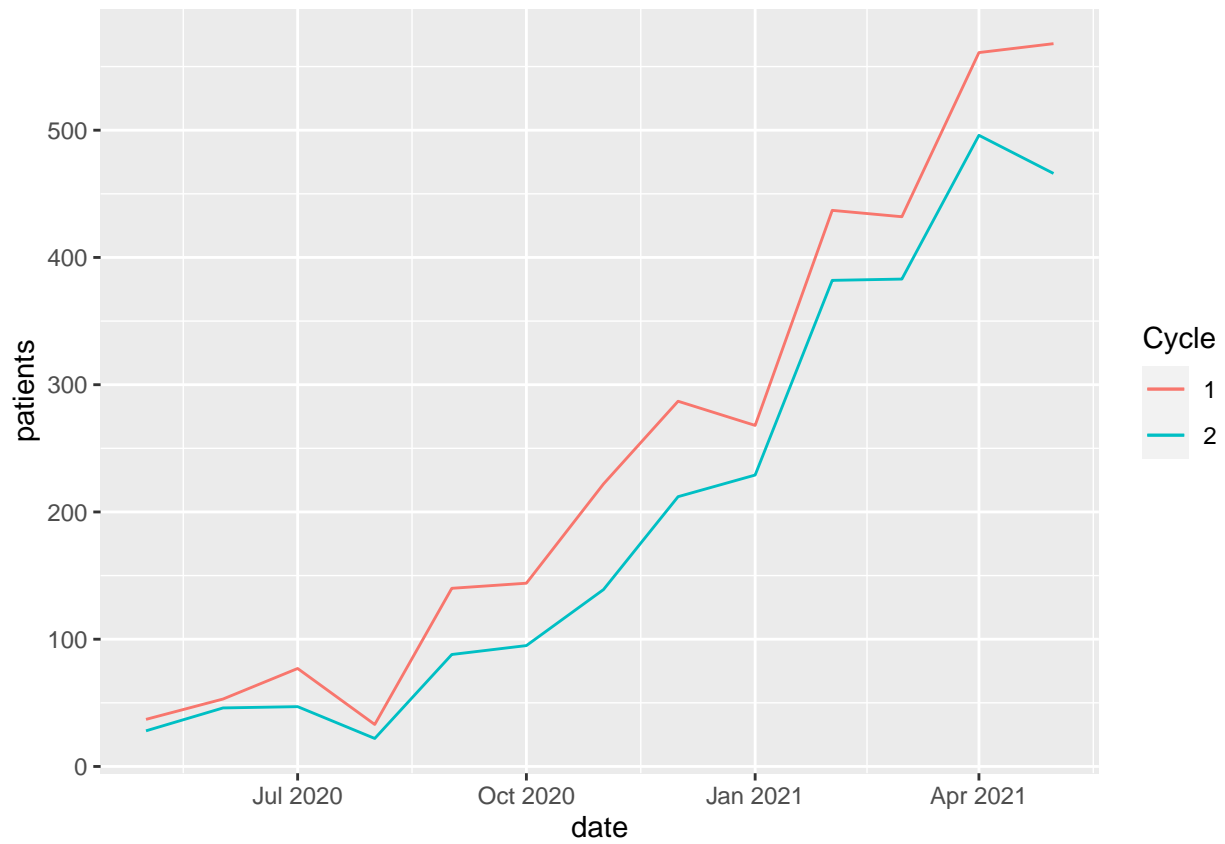
The median percentage of patients removed from the backlog per month is:

```
median(audit20$deltaperc)
```

```
## [1] -24.32432
```

Graphs

You can also embed plots, for example:



```
audit20ridge <- ggplot(audit20, aes(x = date)) + geom_area(aes(y = cyc1, fill = "1")) + geom_area(aes(y = cyc2, fill = "2"))  
audit20ridge
```

