

#CHALLENGE

```
library(tidyverse)
```

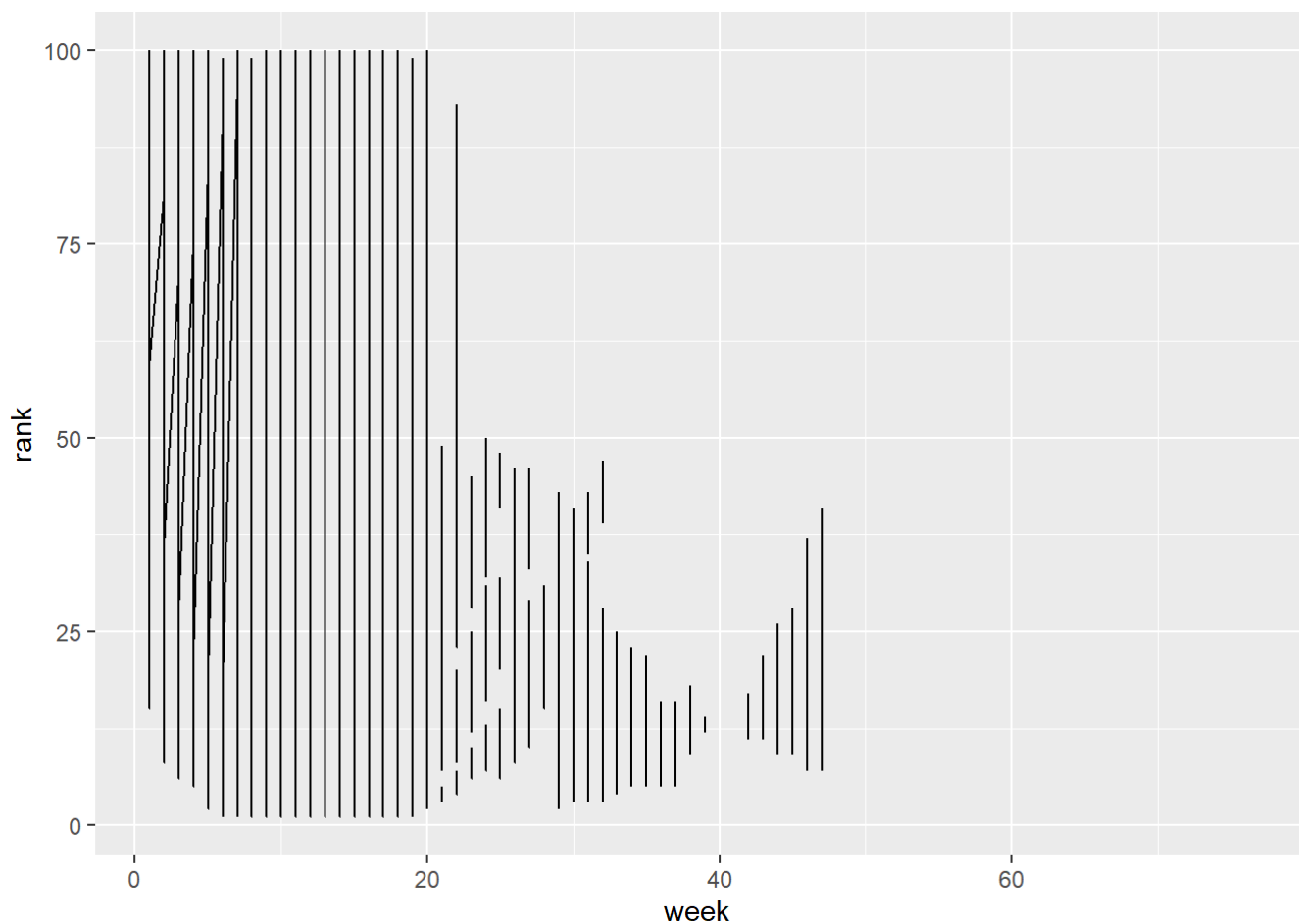
```
## —— Attaching core tidyverse packages ————— tidyverse 2.0.0 ——
## ✓ dplyr      1.1.2      ✓ readr      2.1.4
## ✓ forcats    1.0.0      ✓ stringr    1.5.0
## ✓ ggplot2     3.4.3      ✓ tibble     3.2.1
## ✓ lubridate  1.9.2      ✓ tidyr      1.3.0
## ✓ purrr      1.0.2
## —— Conflicts —————
——— tidyverse_conflicts() ——
## ✗ dplyr::filter() masks stats::filter()
## ✗ dplyr::lag()     masks stats::lag()
## ⓘ Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
billboard
```

```
## # A tibble: 317 × 79
##   artist      track date.entered  wk1  wk2  wk3  wk4  wk5  wk6  wk7  wk8
##   <chr>      <chr> <date>      <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl>
## 1 2 Pac      Baby... 2000-02-26    87   82   72   77   87   94   99   NA
## 2 2Ge+her    The ... 2000-09-02    91   87   92   NA   NA   NA   NA   NA
## 3 3 Doors D... Kryp... 2000-04-08    81   70   68   67   66   57   54   53
## 4 3 Doors D... Loser 2000-10-21    76   76   72   69   67   65   55   59
## 5 504 Boyz    Wobb... 2000-04-15    57   34   25   17   17   31   36   49
## 6 98^0        Give... 2000-08-19    51   39   34   26   26   19    2    2
## 7 A*Teens    Danc... 2000-07-08    97   97   96   95  100   NA   NA   NA
## 8 Aaliyah    I Do... 2000-01-29    84   62   51   41   38   35   35   38
## 9 Aaliyah    Try ... 2000-03-18    59   53   38   28   21   18   16   14
## 10 Adams, Yo... Open... 2000-08-26    76   76   74   69   68   67   61   58
## # ⓘ 307 more rows
## # ⓘ 68 more variables: wk9 <dbl>, wk10 <dbl>, wk11 <dbl>, wk12 <dbl>,
## # wk13 <dbl>, wk14 <dbl>, wk15 <dbl>, wk16 <dbl>, wk17 <dbl>, wk18 <dbl>,
## # wk19 <dbl>, wk20 <dbl>, wk21 <dbl>, wk22 <dbl>, wk23 <dbl>, wk24 <dbl>,
## # wk25 <dbl>, wk26 <dbl>, wk27 <dbl>, wk28 <dbl>, wk29 <dbl>, wk30 <dbl>,
## # wk31 <dbl>, wk32 <dbl>, wk33 <dbl>, wk34 <dbl>, wk35 <dbl>, wk36 <dbl>,
## # wk37 <dbl>, wk38 <dbl>, wk39 <dbl>, wk40 <dbl>, wk41 <dbl>, wk42 <dbl>, ...
```

```
billboard %>%
  pivot_longer(cols = starts_with("wk"),
    names_to = "week",
    values_to = "rank",
    values_drop_na = FALSE) %>%
  mutate(week = parse_number(week)) %>%
  ggplot(aes(x = week, y = rank, group = 1)) +
  geom_line()
```

```
## Warning: Removed 3741 rows containing missing values (`geom_line()`).
```



```
cms_patient_experience
```

```
## # A tibble: 500 × 5
##   org_pac_id org_nm          measure_cd measure_title prf_rate
##   <chr>      <chr>          <chr>      <chr>          <dbl>
## 1 0446157747 USC CARE MEDICAL GROUP INC CAHPS_GRP... CAHPS for MI...      63
## 2 0446157747 USC CARE MEDICAL GROUP INC CAHPS_GRP... CAHPS for MI...      87
## 3 0446157747 USC CARE MEDICAL GROUP INC CAHPS_GRP... CAHPS for MI...      86
## 4 0446157747 USC CARE MEDICAL GROUP INC CAHPS_GRP... CAHPS for MI...      57
## 5 0446157747 USC CARE MEDICAL GROUP INC CAHPS_GRP... CAHPS for MI...      85
## 6 0446157747 USC CARE MEDICAL GROUP INC CAHPS_GRP... CAHPS for MI...      24
## 7 0446162697 ASSOCIATION OF UNIVERSITY PHYSI... CAHPS_GRP... CAHPS for MI...      59
## 8 0446162697 ASSOCIATION OF UNIVERSITY PHYSI... CAHPS_GRP... CAHPS for MI...      85
## 9 0446162697 ASSOCIATION OF UNIVERSITY PHYSI... CAHPS_GRP... CAHPS for MI...      83
## 10 0446162697 ASSOCIATION OF UNIVERSITY PHYSI... CAHPS_GRP... CAHPS for MI...      63
## # i 490 more rows
```

```
result <- cms_patient_experience %>%
  pivot_wider(
    id_cols = starts_with("org"),
    names_from = measure_cd,
    values_from = prf_rate
  )

result
```

```
## # A tibble: 95 × 8
##   org_pac_id org_nm CAHPS_GRP_1 CAHPS_GRP_2 CAHPS_GRP_3 CAHPS_GRP_5 CAHPS_GRP_8
##   <chr>      <chr>      <dbl>      <dbl>      <dbl>      <dbl>      <dbl>
## 1 0446157747 USC C...      63        87        86        57        85
## 2 0446162697 ASSOC...      59        85        83        63        88
## 3 0547164295 BEAVE...      49        NA        75        44        73
## 4 0749333730 CAPE ...      67        84        85        65        82
## 5 0840104360 ALLIA...      66        87        87        64        87
## 6 0840109864 REX H...      73        87        84        67        91
## 7 0840513552 SCL H...      58        83        76        58        78
## 8 0941545784 GRITM...      46        86        81        54        NA
## 9 1052612785 COMMU...      65        84        80        58        87
## 10 1254237779 OUR L...      61        NA        NA        65        NA
## # 85 more rows
## # 1 more variable: CAHPS_GRP_12 <dbl>
```