



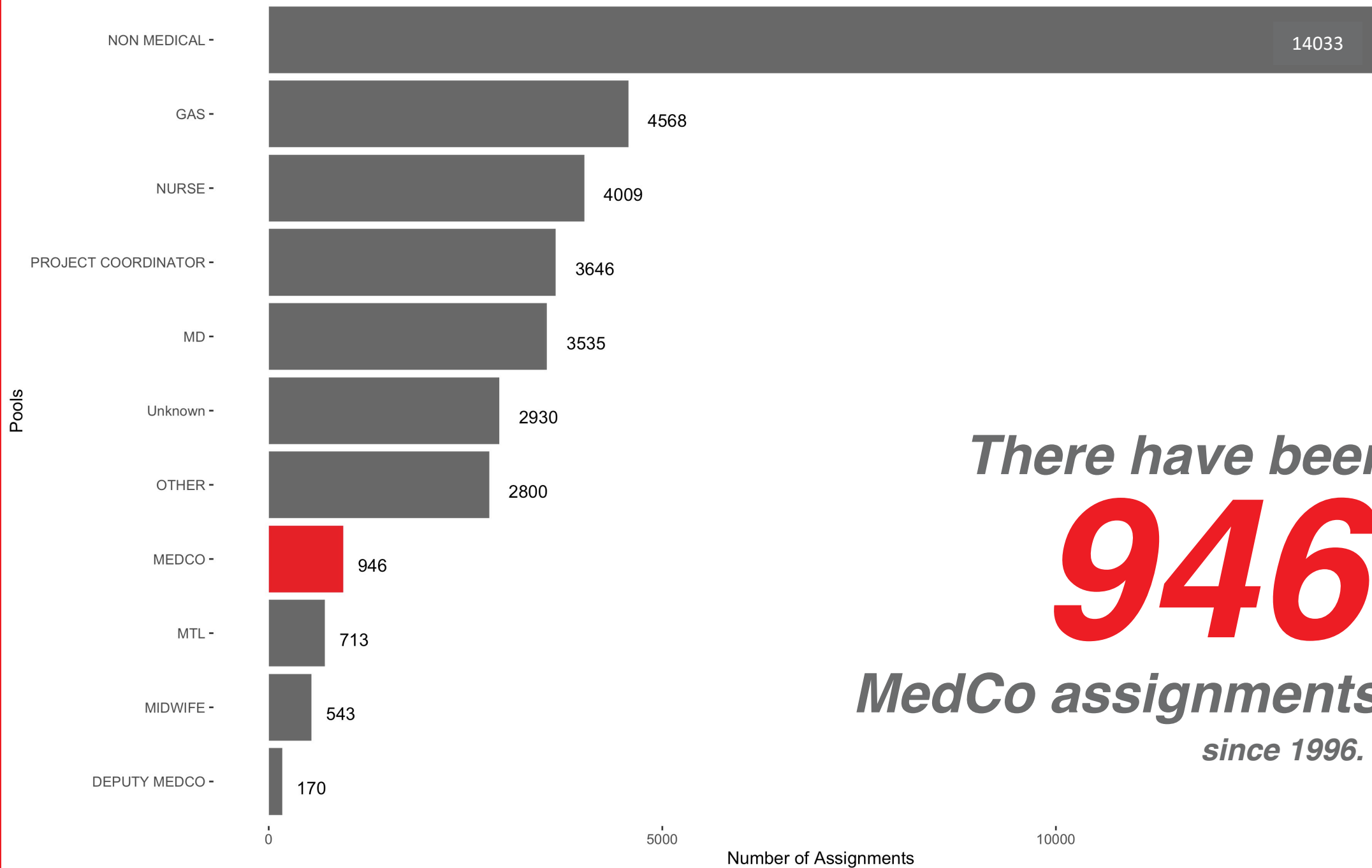
# Data Visualization Competition

Wharton People Analytics Conference 2020

Author: Paul Apivat Hanvongse

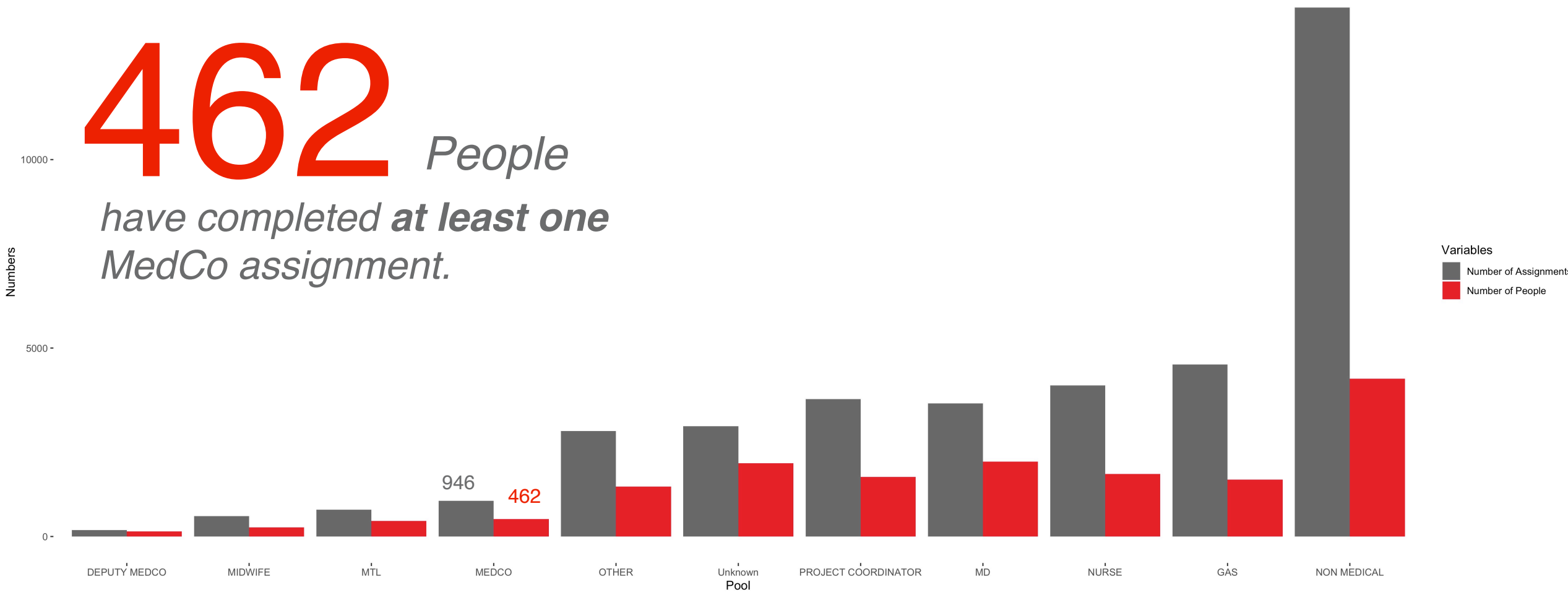


Total Assignments in each Pool



*There have been*  
**946**  
*MedCo assignments*  
*since 1996.*

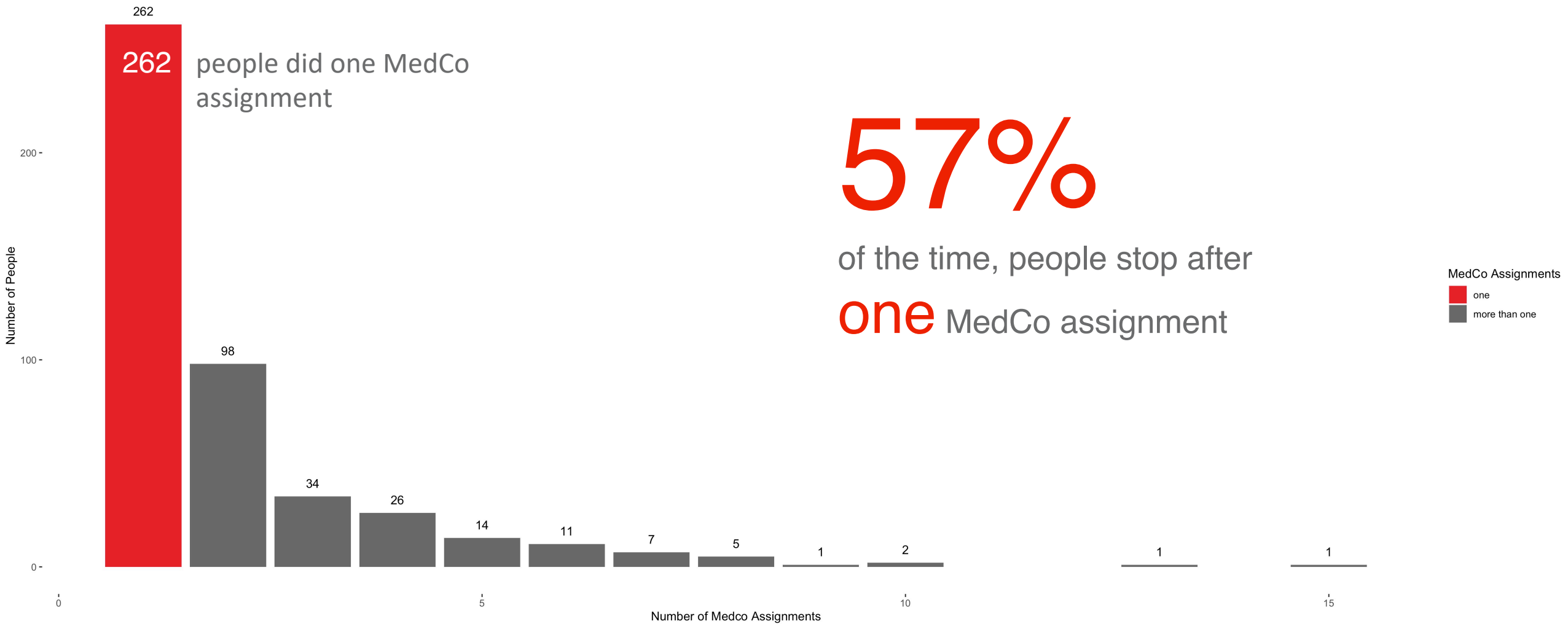
462 *People*  
*have completed at least one*  
*MedCo assignment.*

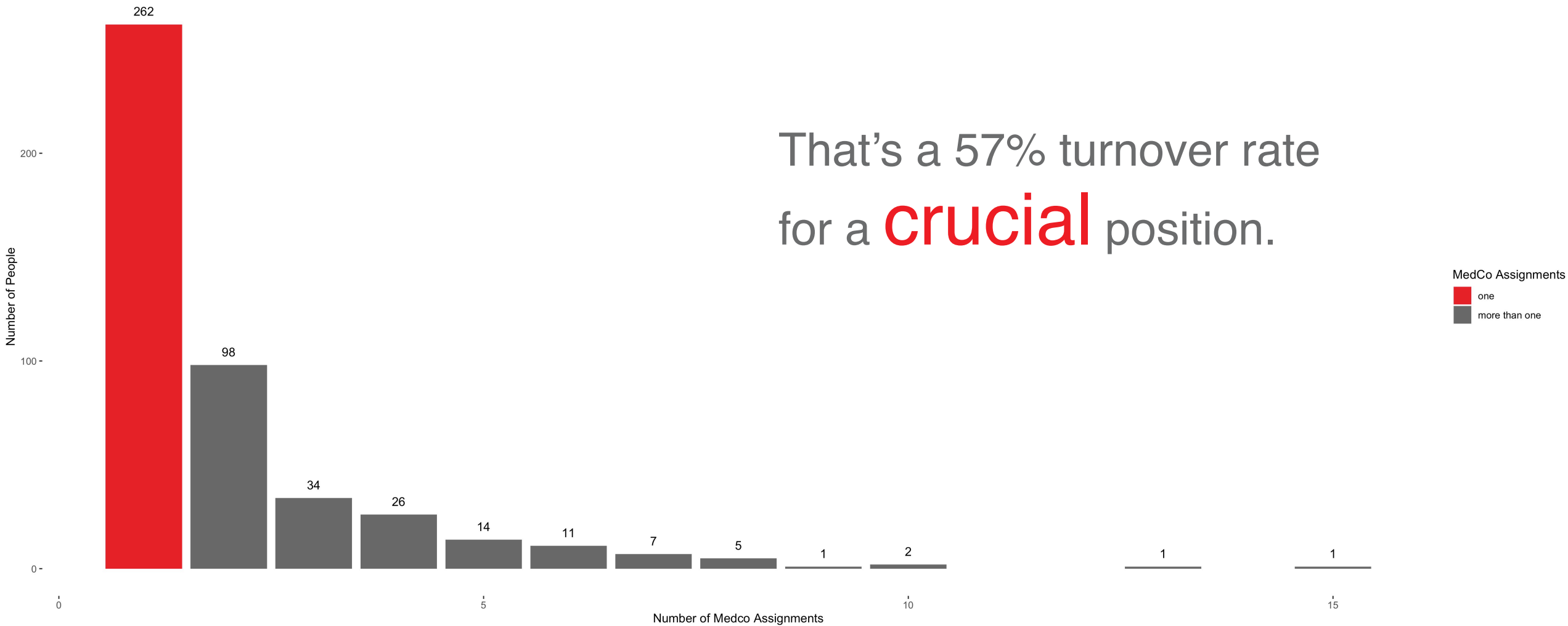


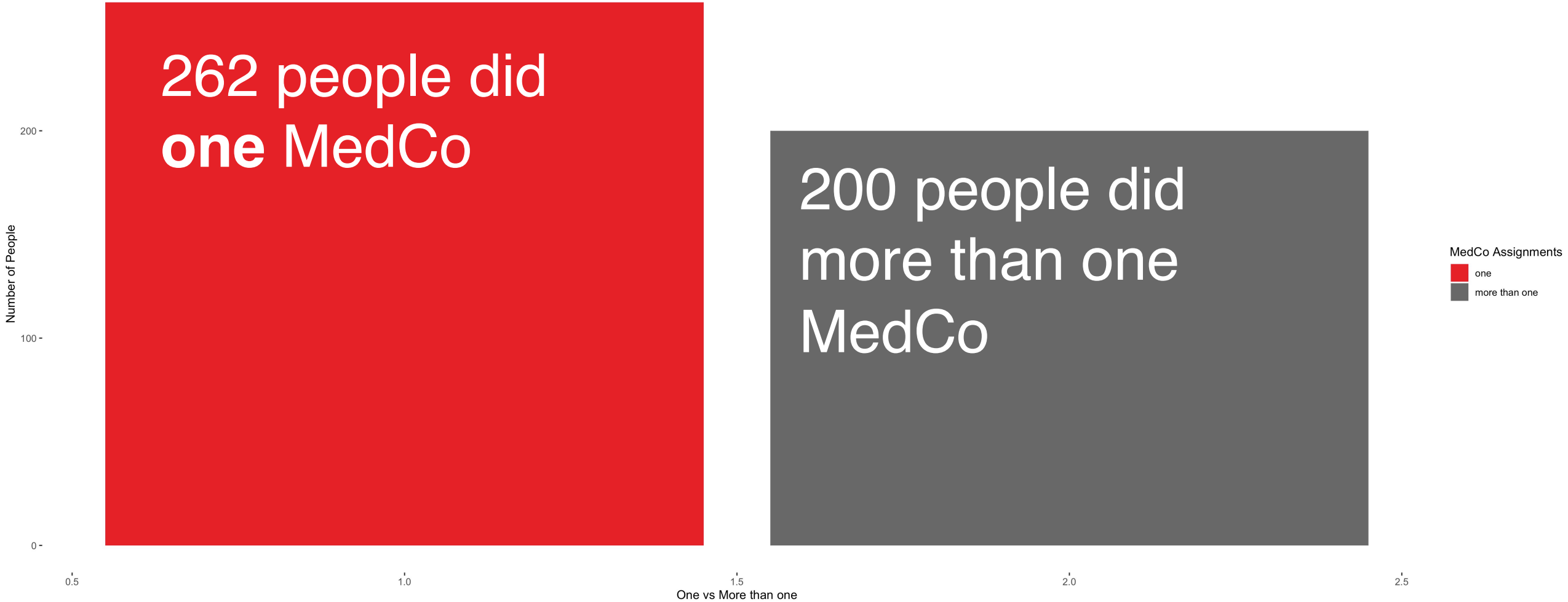


How should we define  
*shortage*?

**Shortage** is people stopping  
after *just* one MedCo  
assignment.







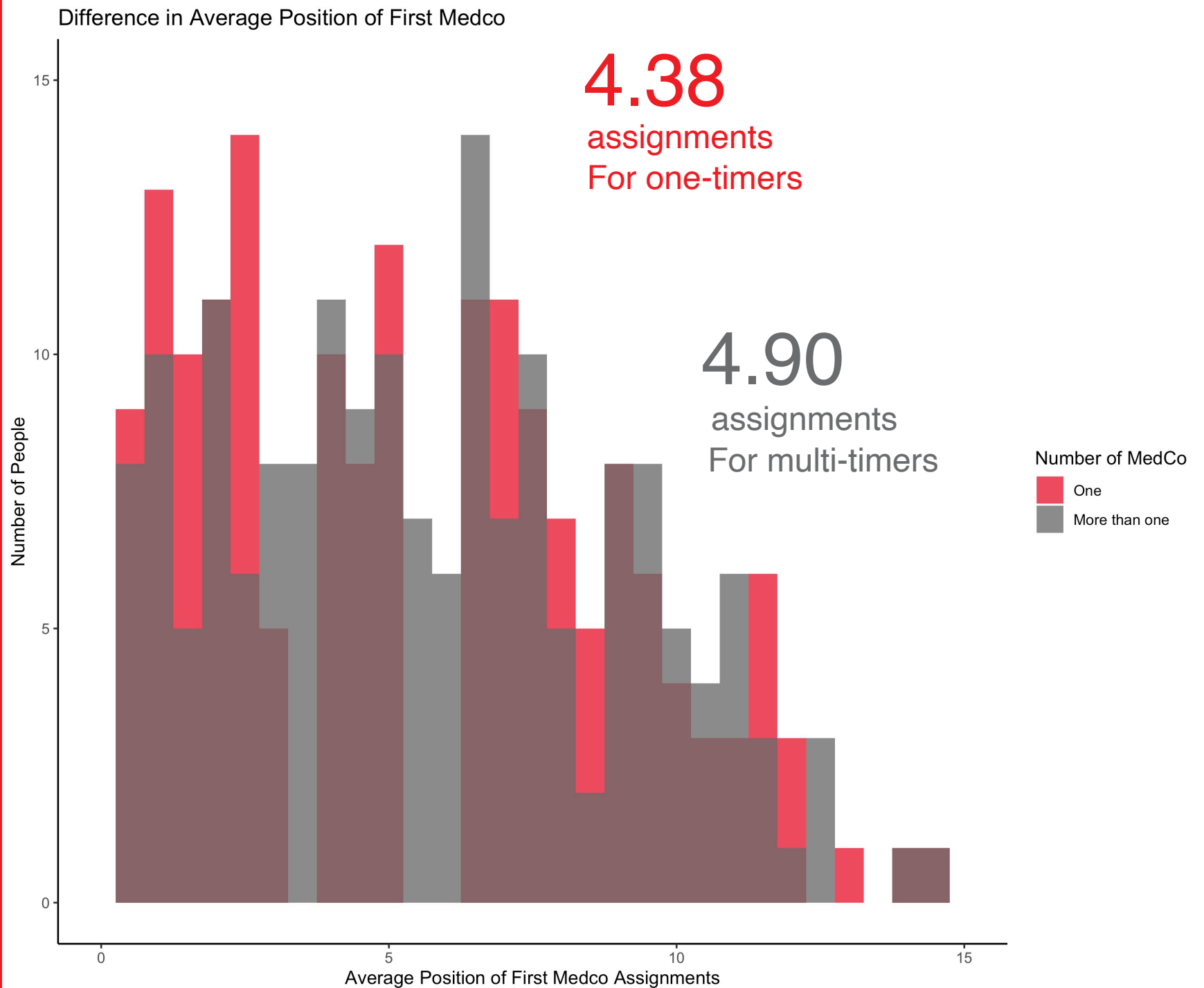


How might we explain why some people **stop** after **one** Medco, while others continued?

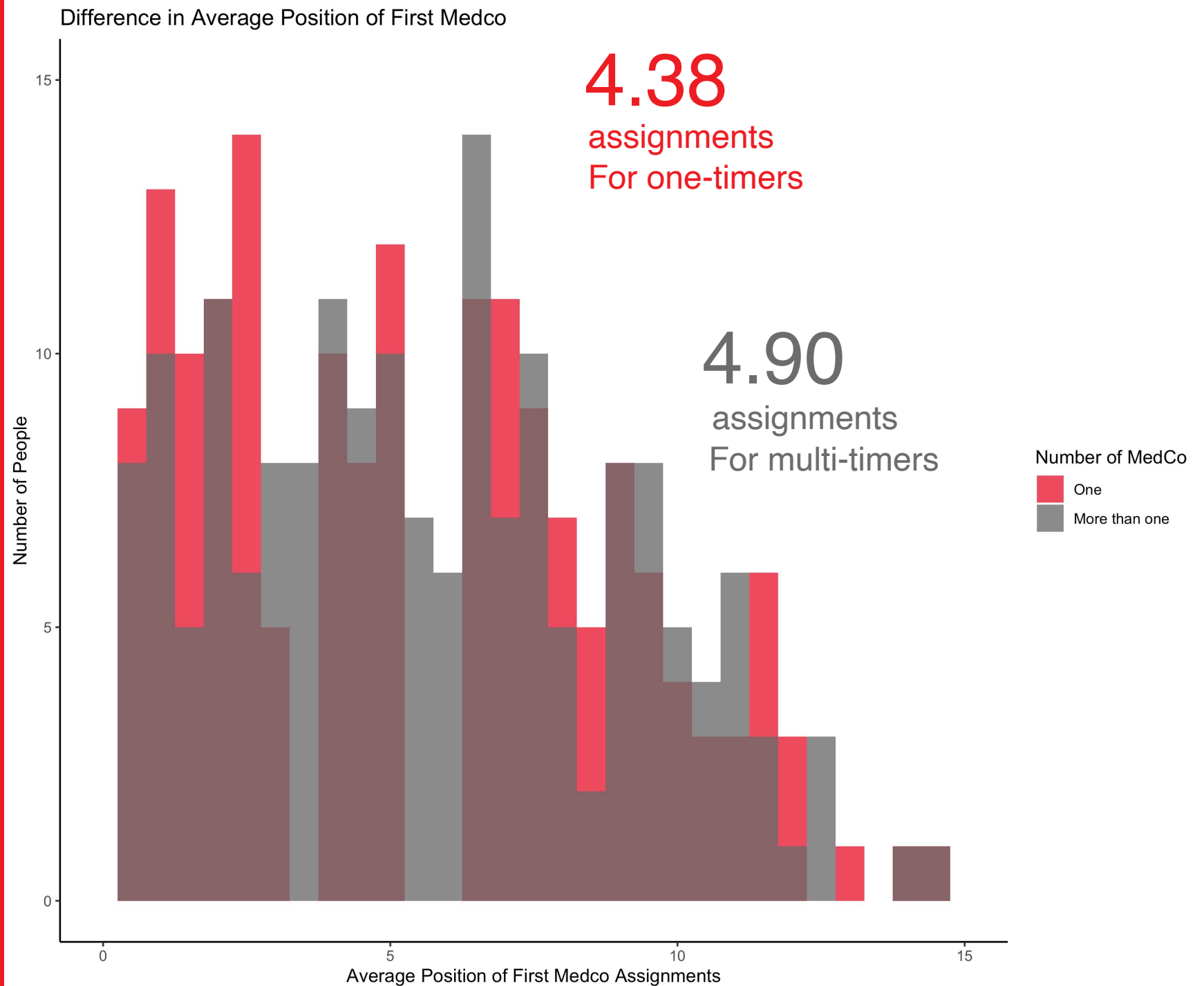
We can try to understand how one-timers are different from multi-timers.



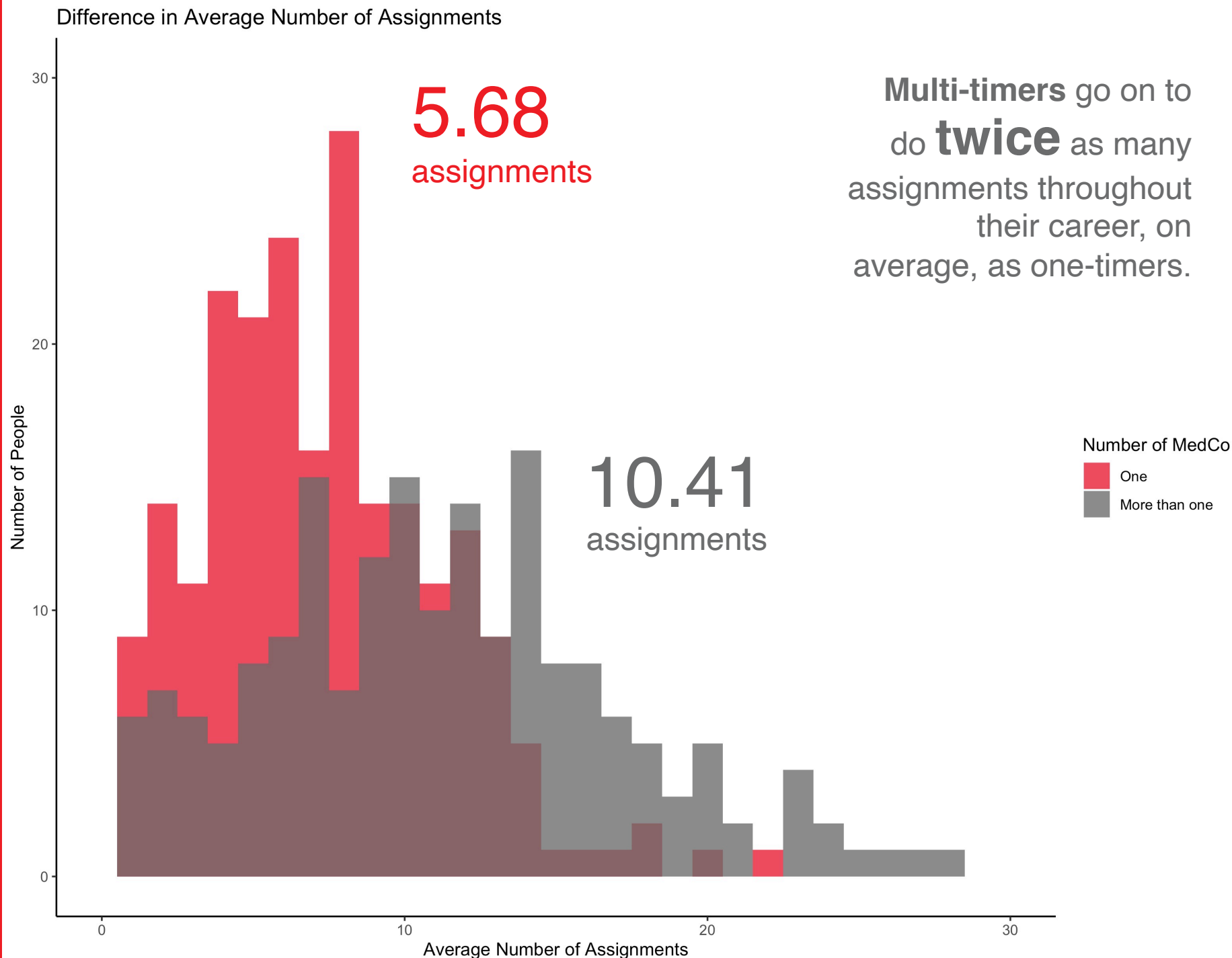
Considering  
the *average  
number of  
assignments*  
before  
someone is  
“ready” for  
MedCo.



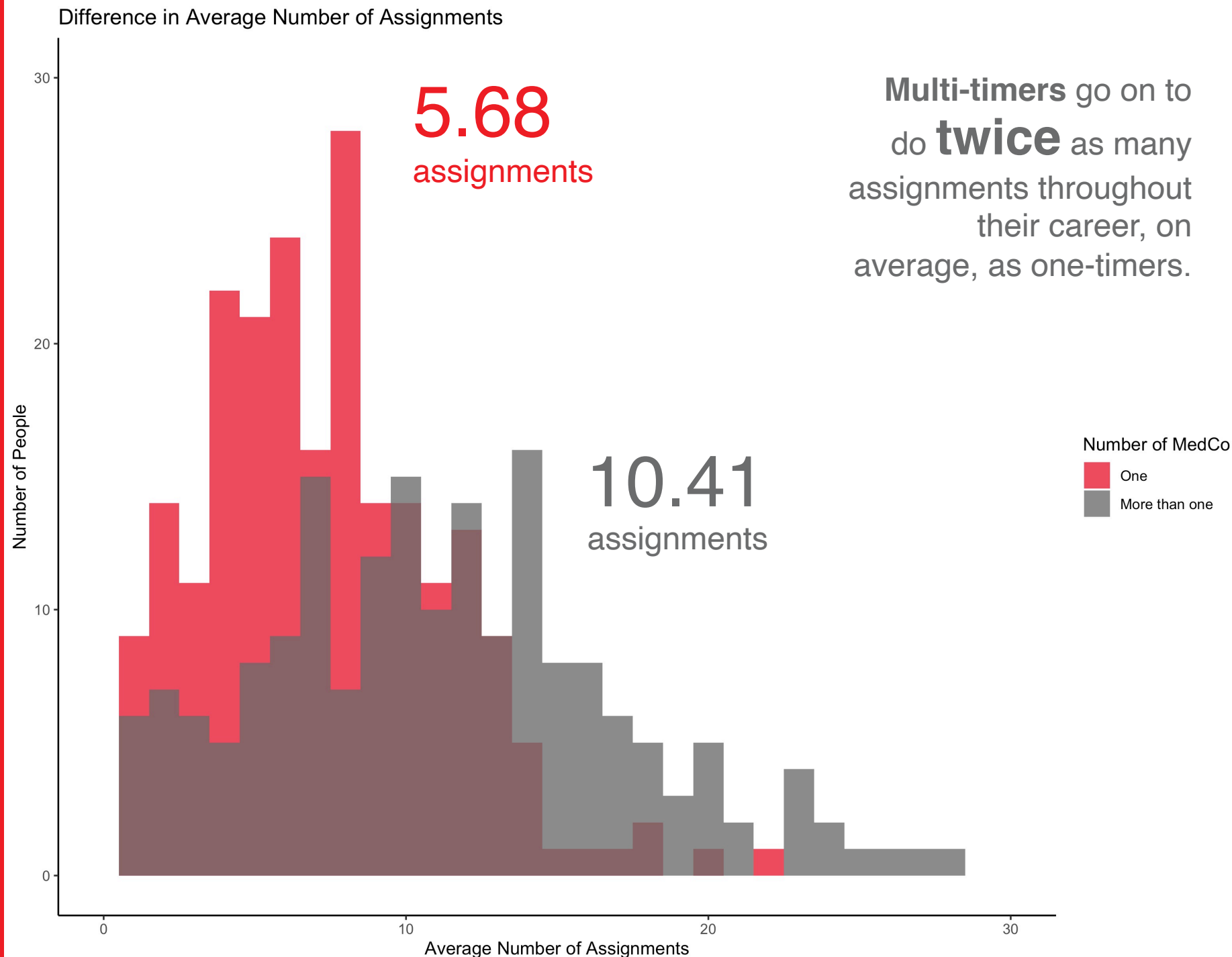
Multi-timers took *slightly* longer to get ready for their first MedCo



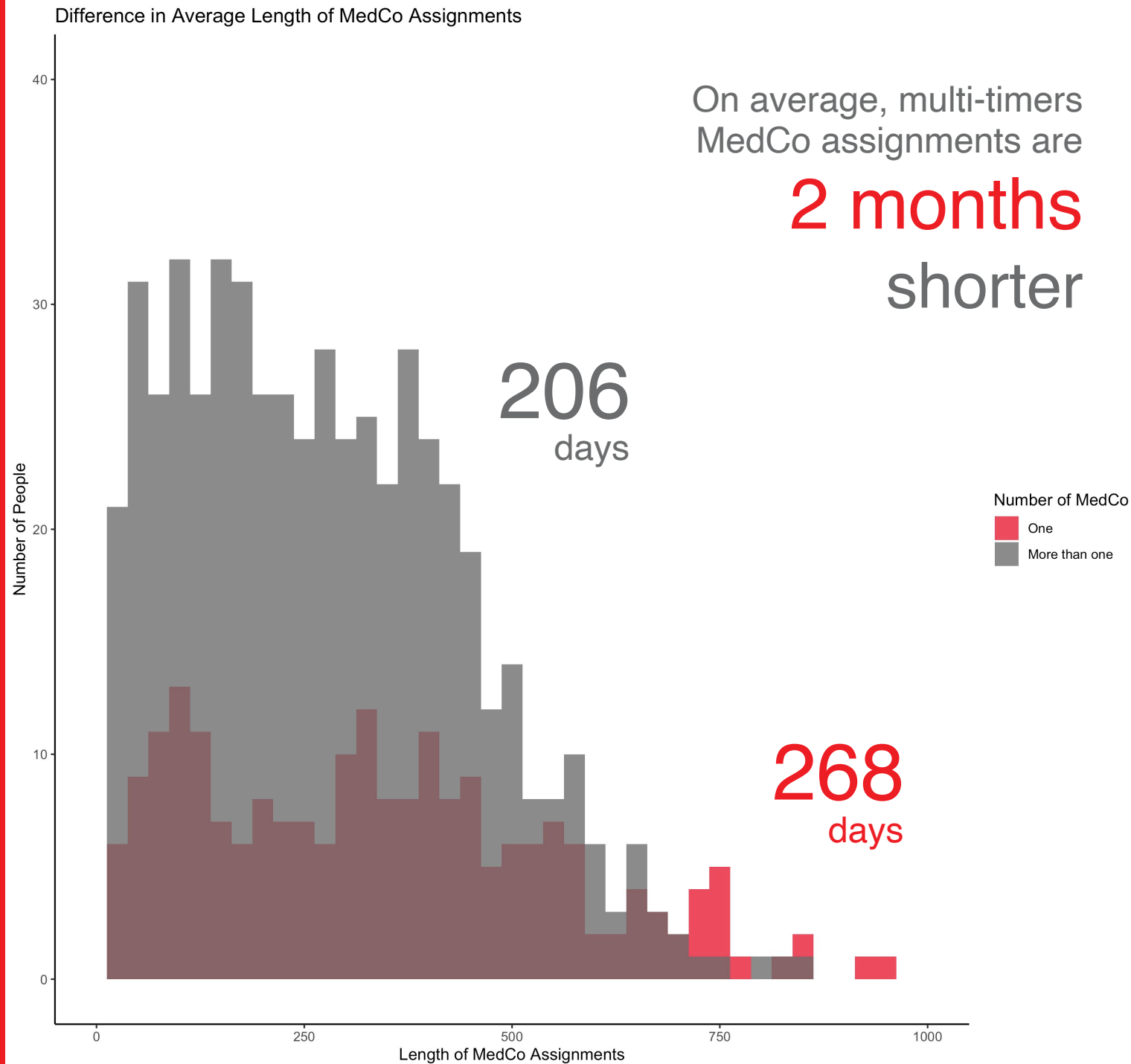
Consider the  
total  
number of  
assignments.



This makes sense as a MedCo assignments count towards the total.



Consider MedCo assignment length.



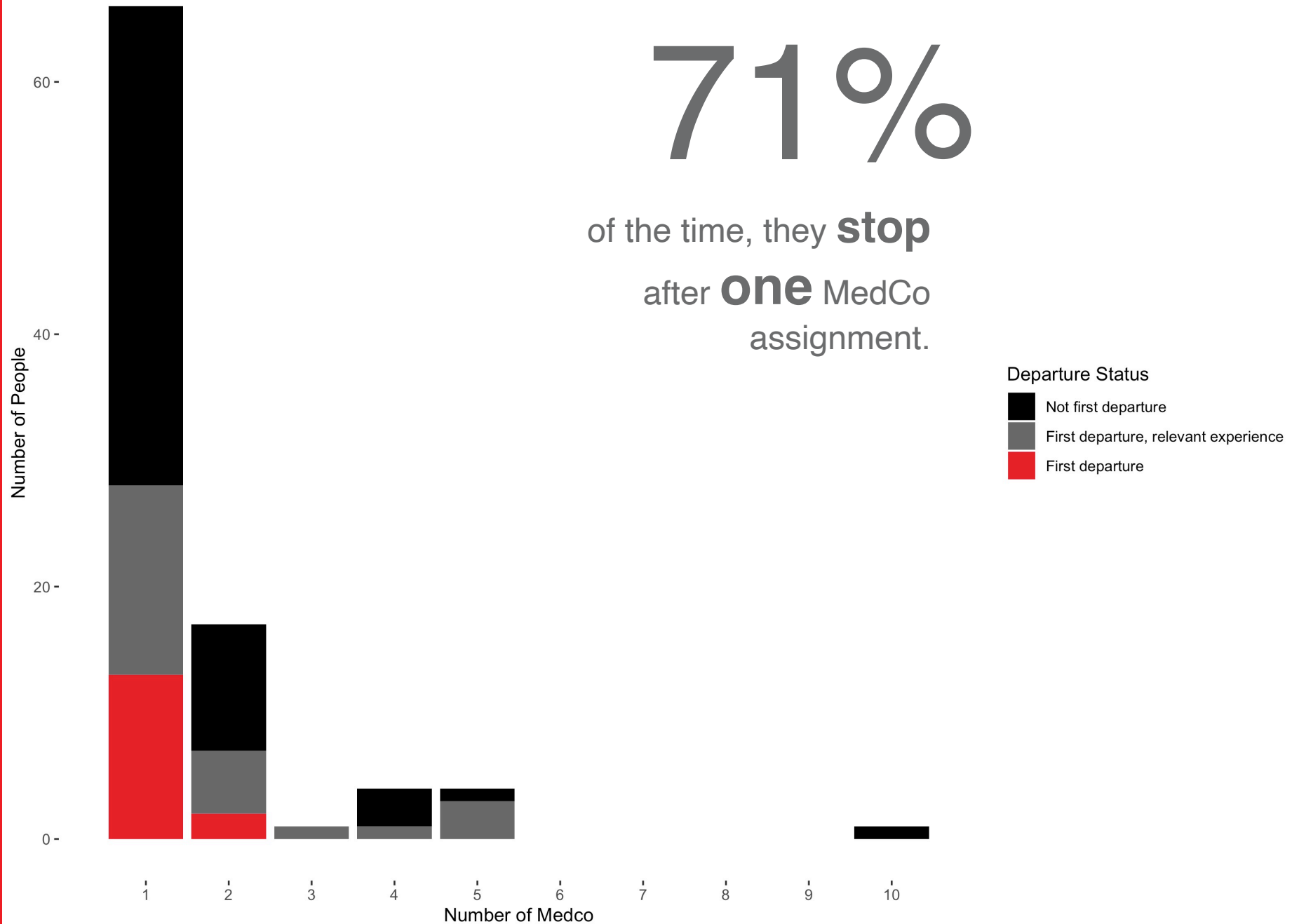
# Recap

- People who do more than one MedCo assignments (multi-timers)
  - Do nearly **twice** as many assignments, *in total*.
  - Have gone on **shorter** MedCo assignments
  - Take **slightly longer** to work their way up to their first MedCo assignment

What happens when people  
go on a MedCo assignment,  
as their *first* assignment?

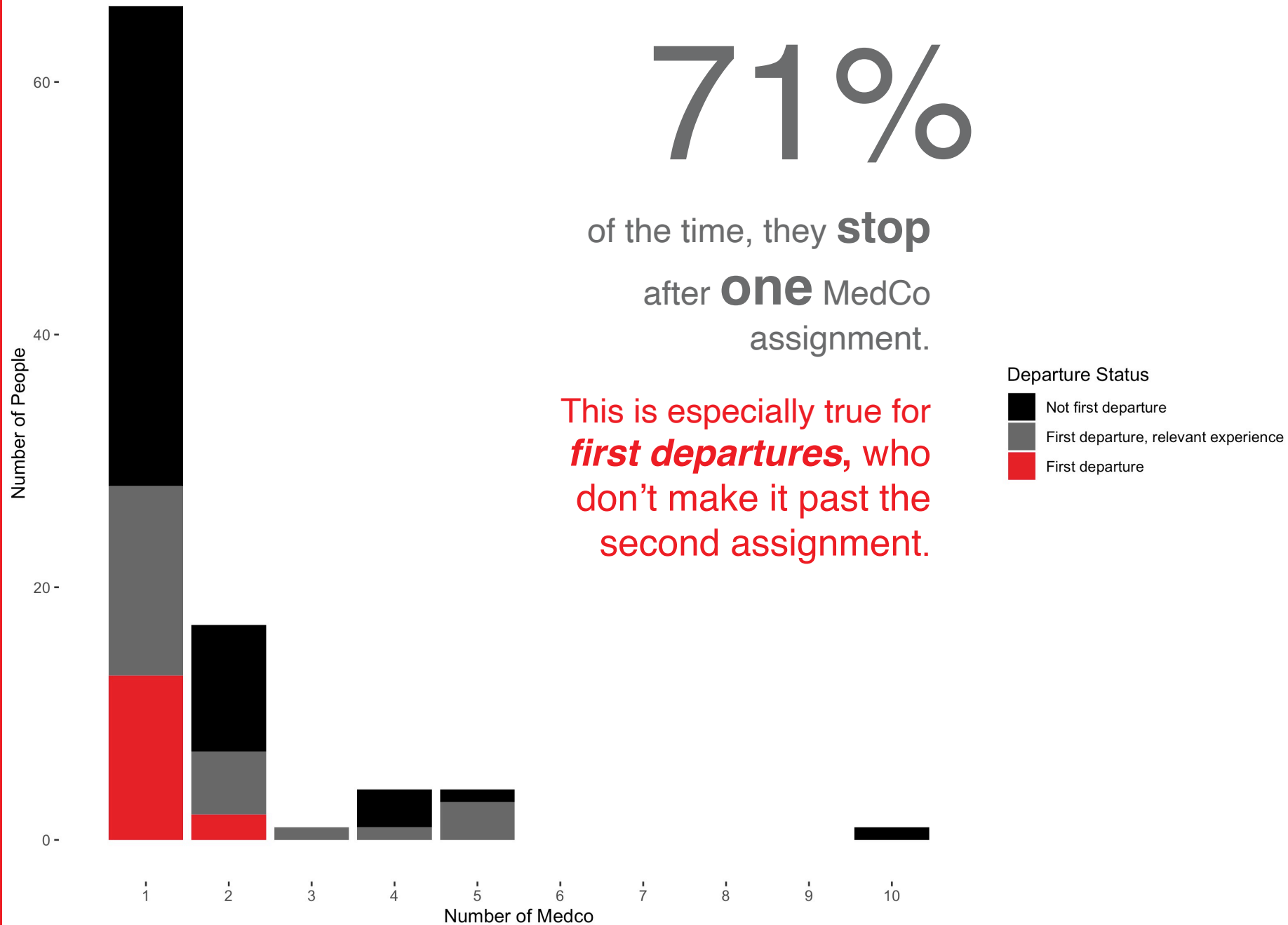
**93 people** have done this.

93 people whose first assignment was Medco



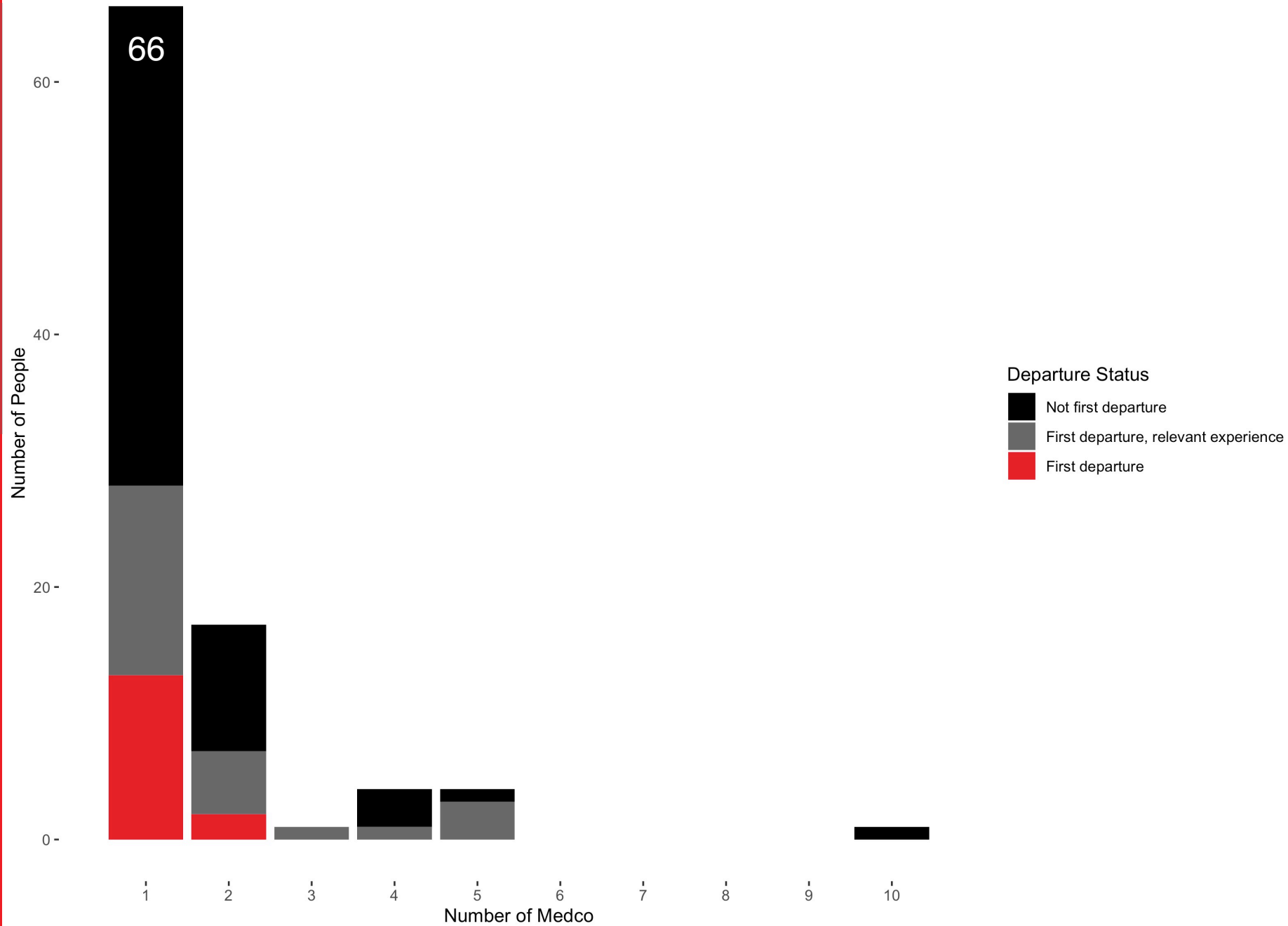


93 people whose first assignment was Medco

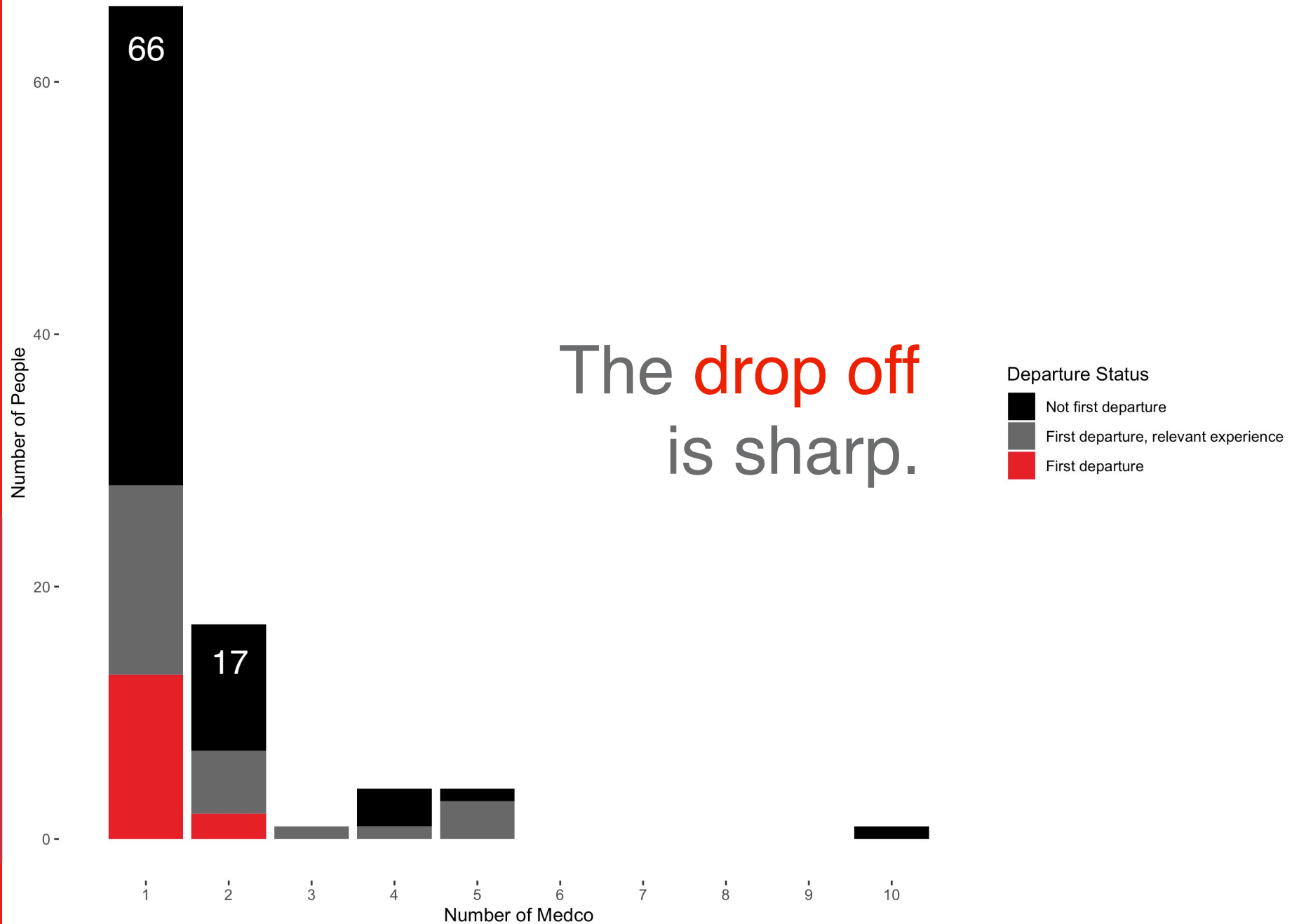


93 people whose first assignment was Medco

When it was  
their first  
assignment,  
66 people  
stopped after  
one MedCo



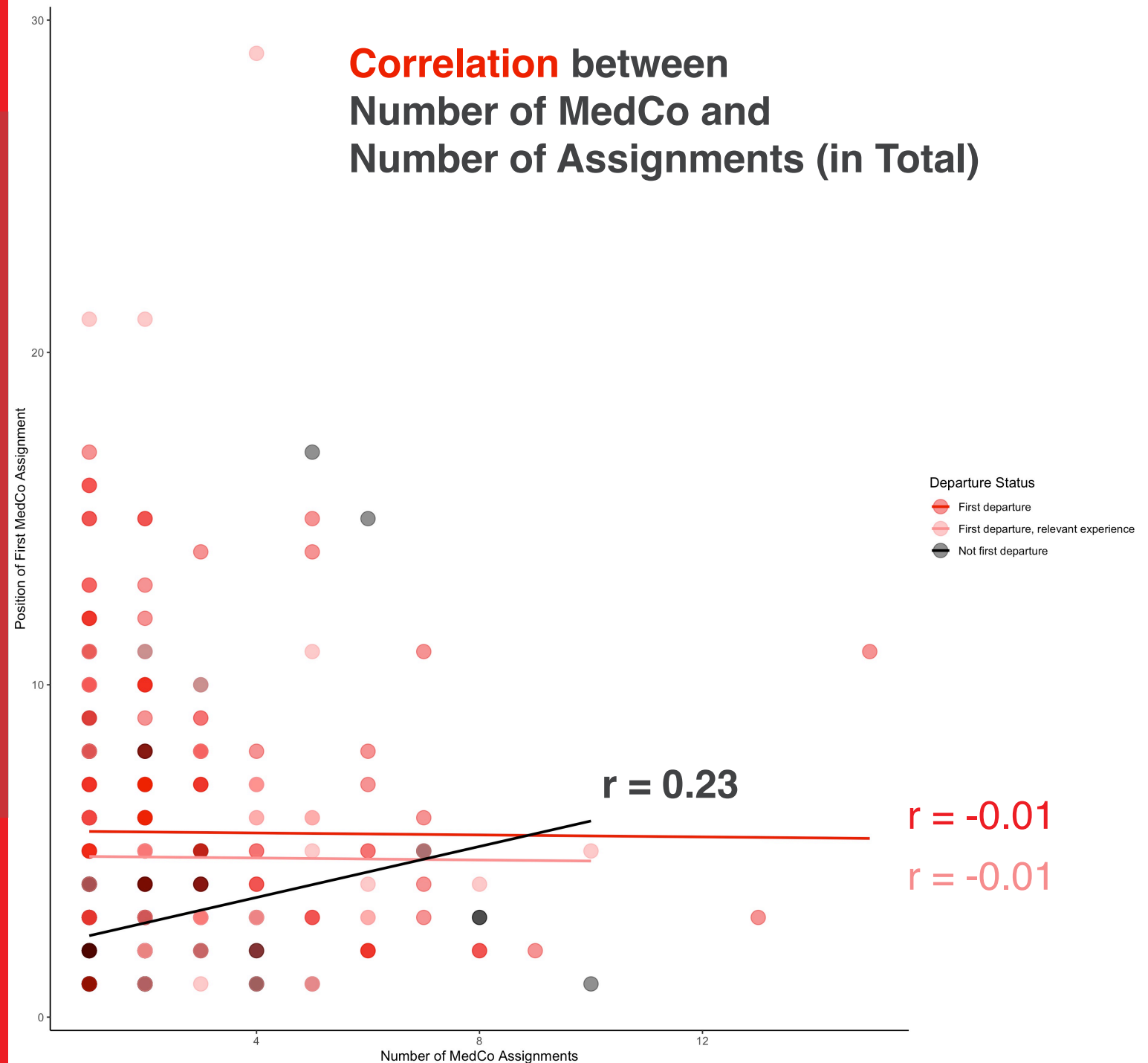
93 people whose first assignment was Medco



The drop off  
is sharp.

Only 17  
people went  
onto a  
second  
MedCo

Although multi-timers tend to do *more* assignments, this relationship holds **only** for those ***not*** on their first departure.



# Timing matters.

MedCo assignments should be reserved for those who are not on their **first assignments**.

Particularly if it's their **first departure**.

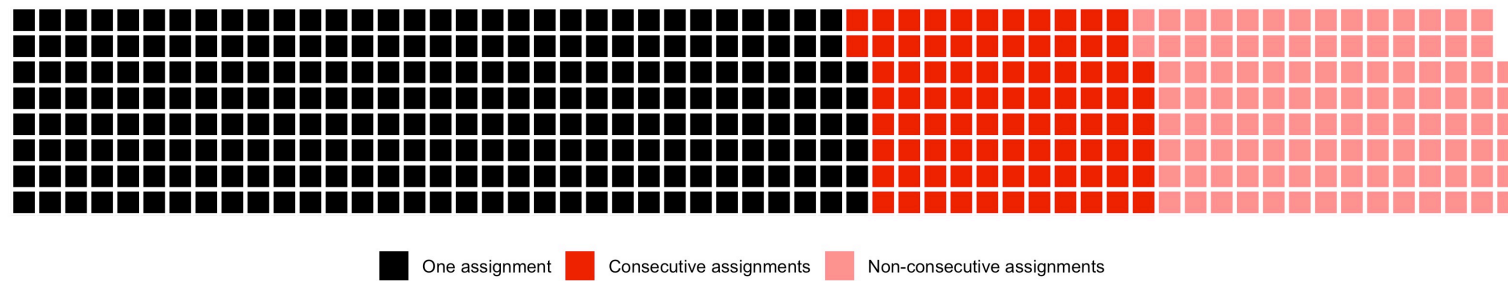
# How success is defined matters.

Conventional thinking has it that if someone ascended to MedCo after just a few assignments, they were “successful”.

The data suggest taking a *bit longer* to get ready for the first MedCo is fine.

How do we define *gaps*?

462 People  
*have completed **at least one** MedCo assignments.*



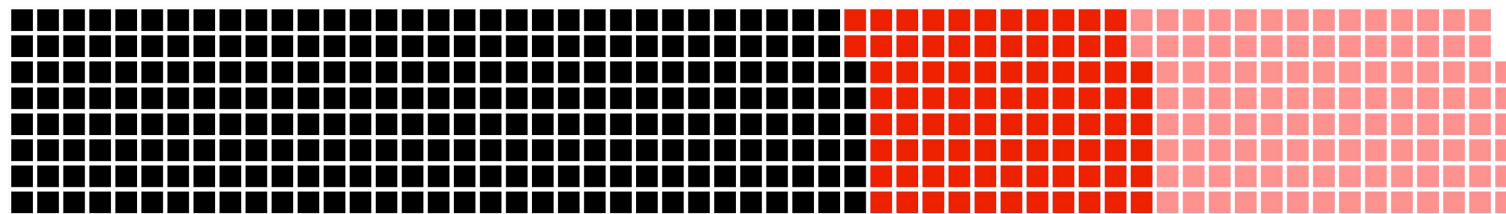


# 262

People did **one** MedCo assignment

# 200

People did **more than one**



■ One assignment ■ Consecutive assignments ■ Non-consecutive assignments

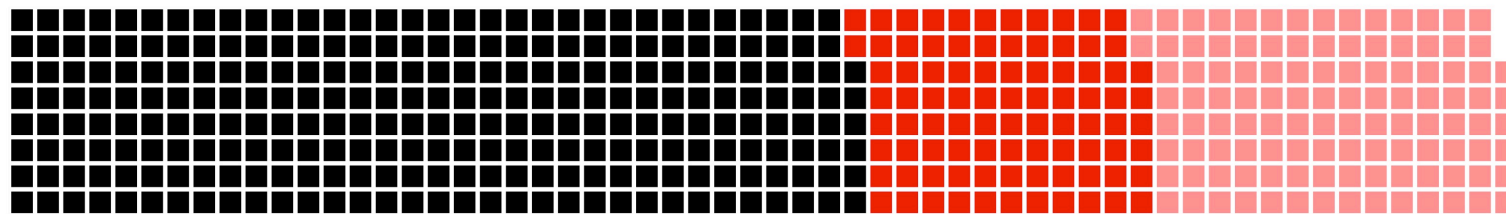
A **gap** is when someone takes a break from MedCo – performing in another role – before resuming with another MedCo assignment.

88

People did **consecutive** assignments

112

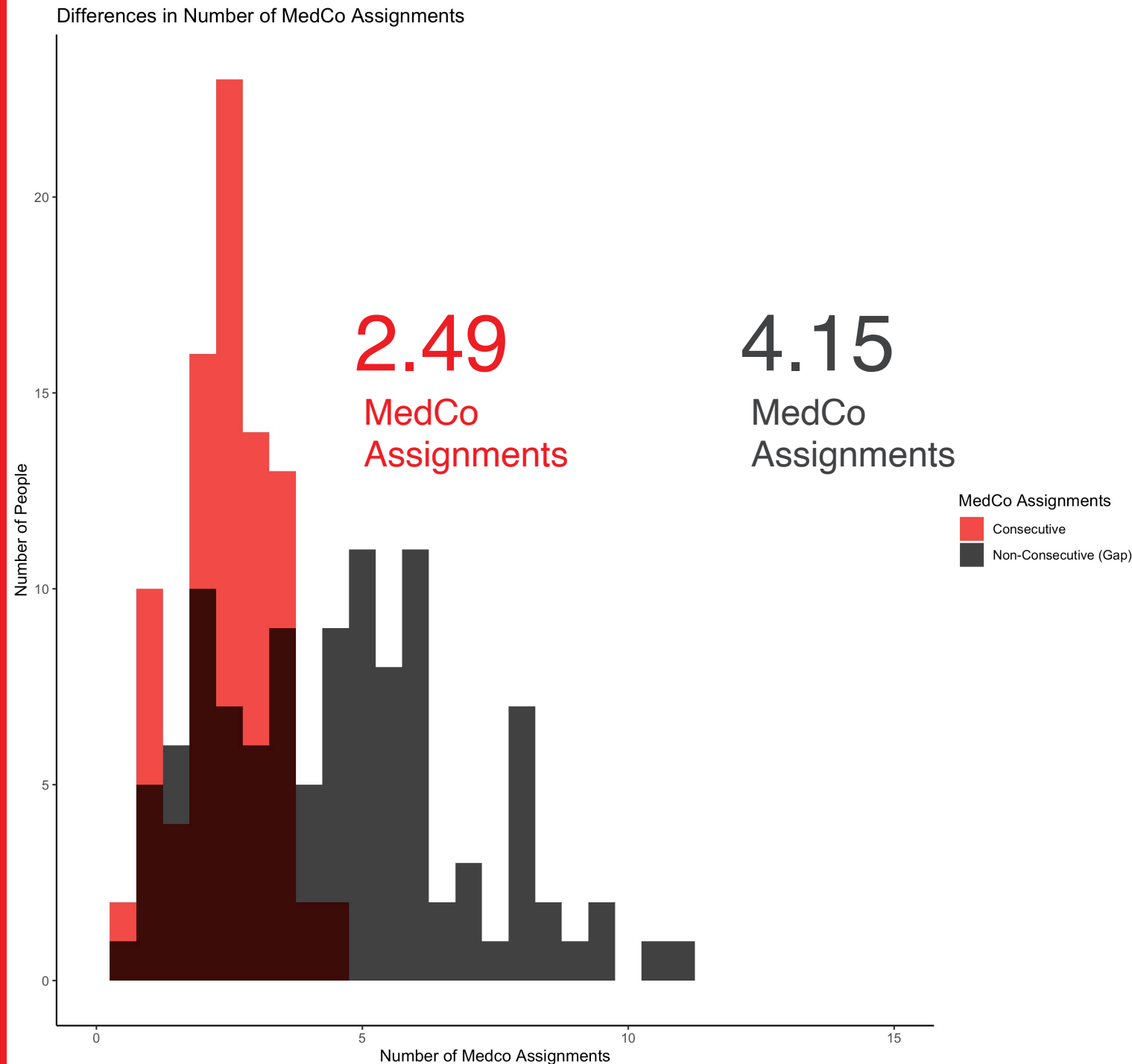
People took a break between MedCo assignments



■ One assignment ■ Consecutive assignments ■ Non-consecutive assignments

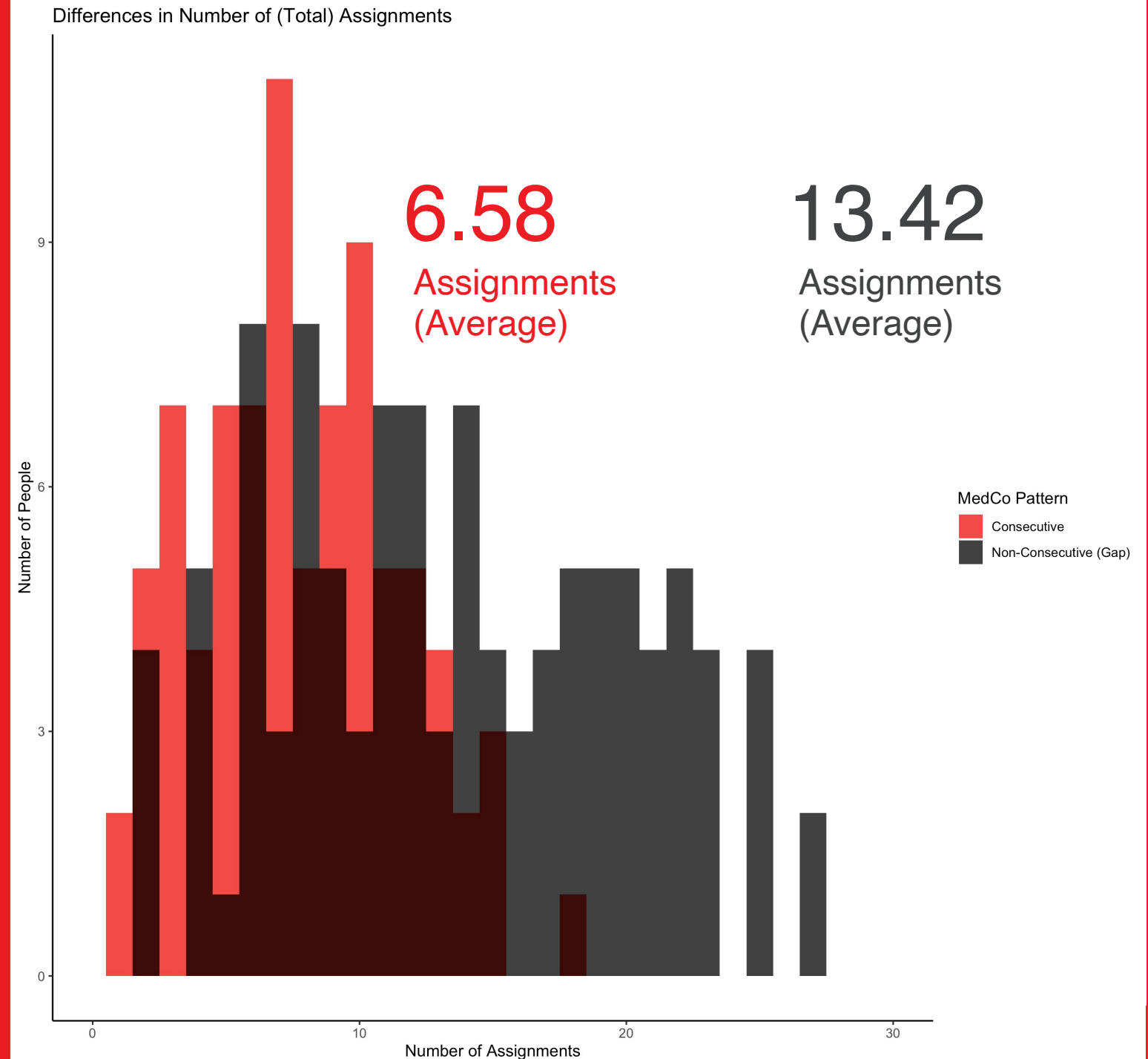
Are there differences between those who did *consecutive* MedCo assignments and those who took a break to do other jobs?

People who took a break between MedCo assignments had done **almost twice** as many MedCo assignments.

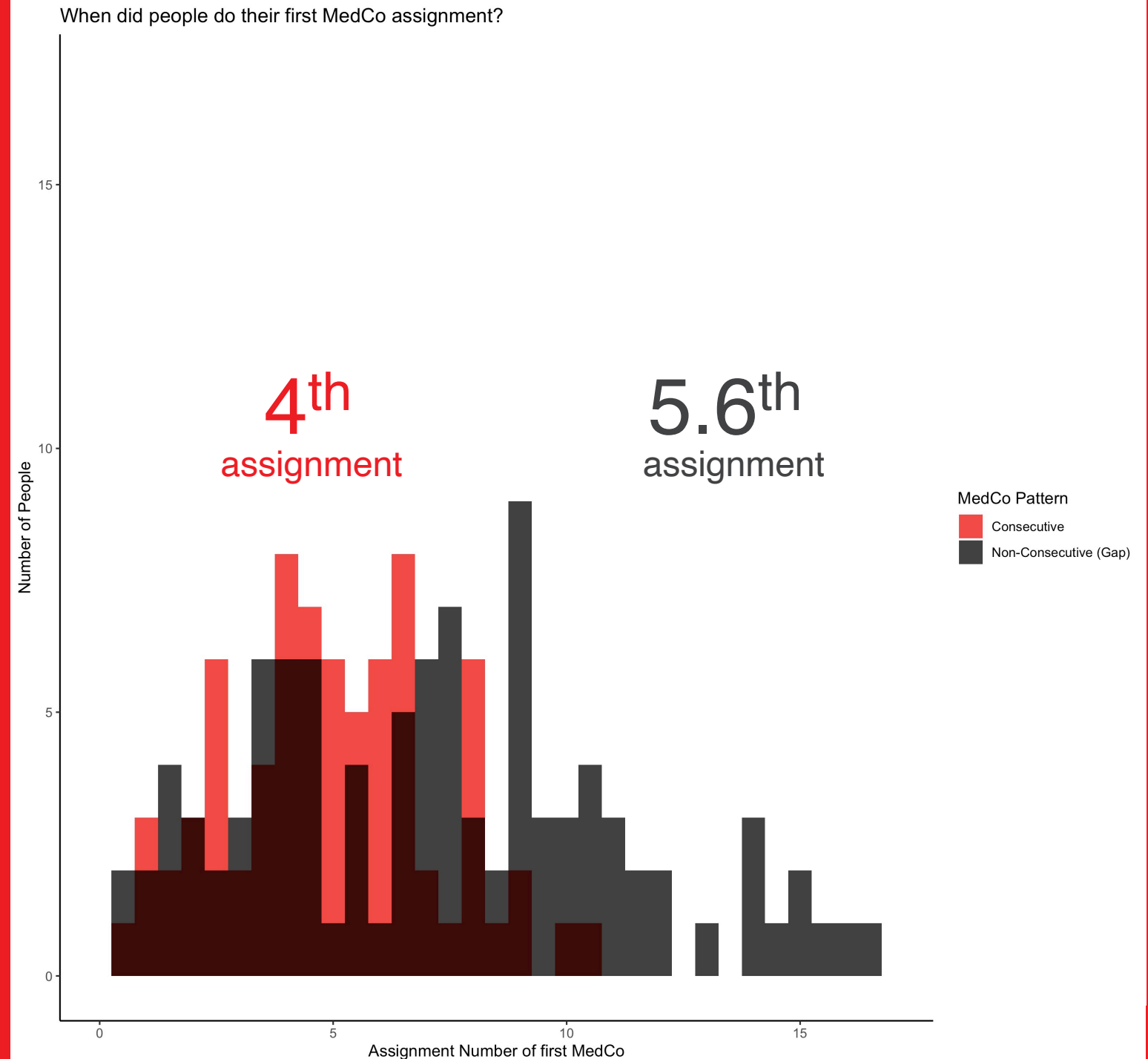


This patterns  
continues for the  
span of their  
careers.

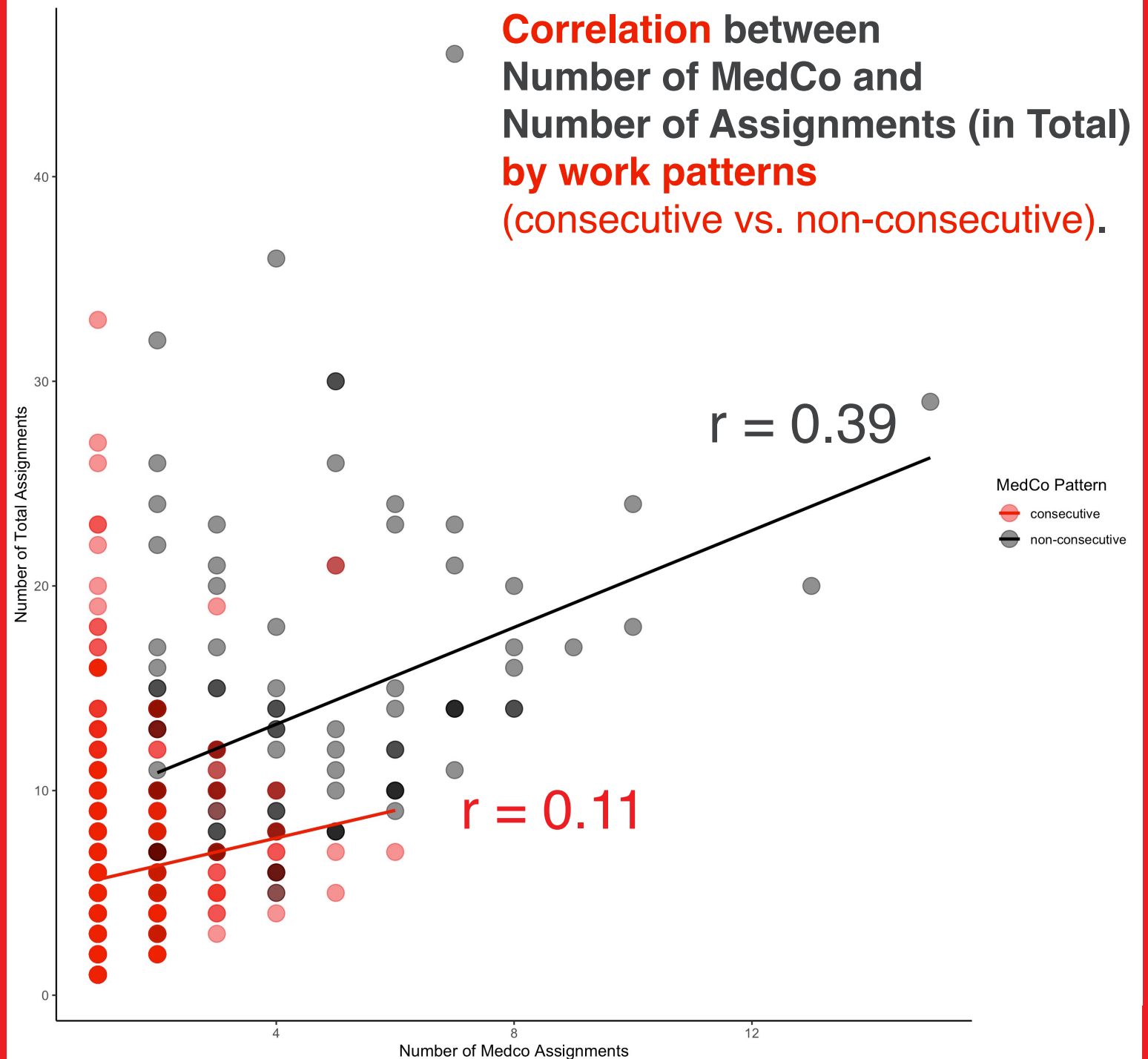
People who took  
breaks, did *more*.



People who took a break between MedCo assignments took a bit longer to work up to their first MedCo assignment.

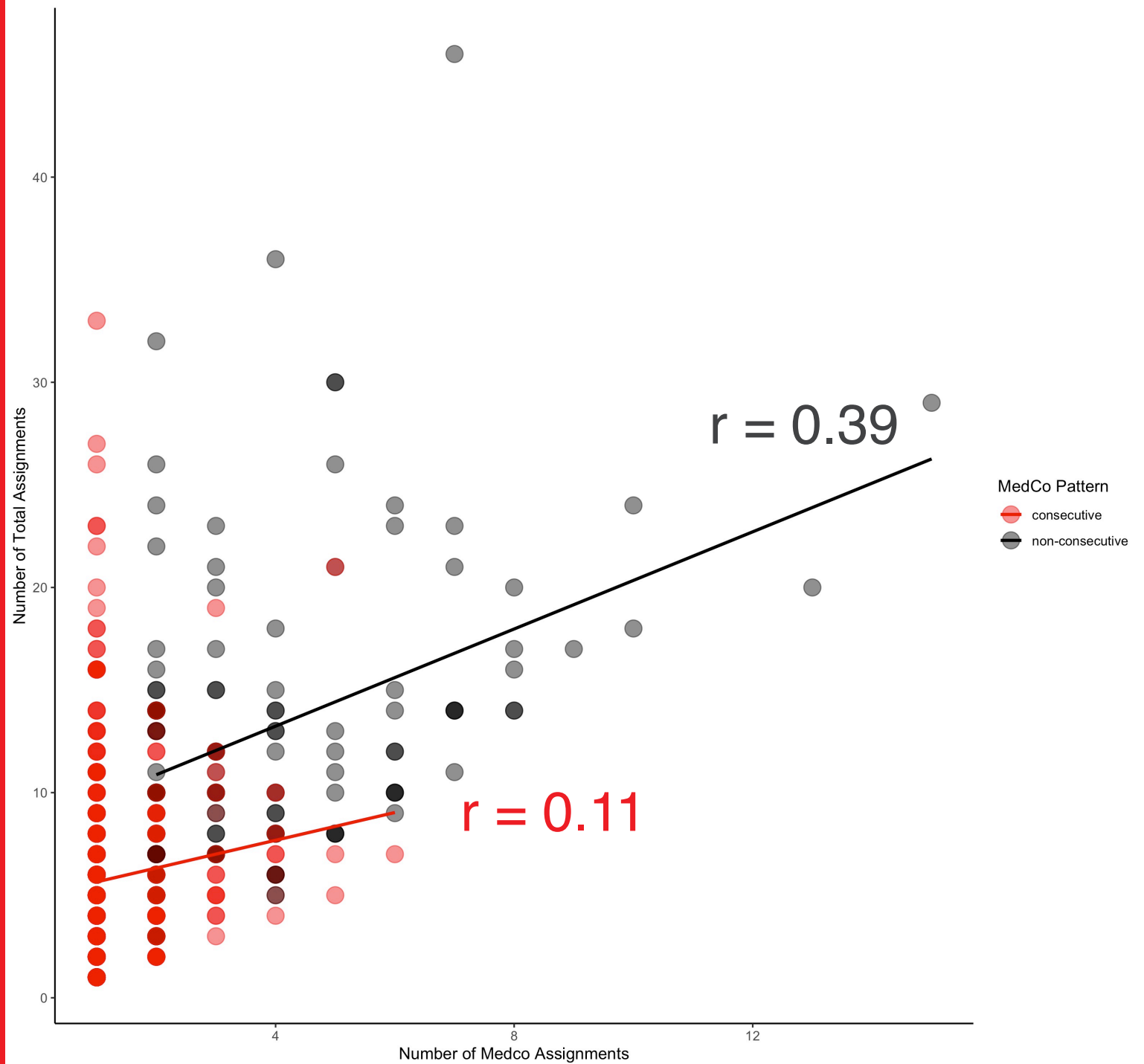


The relationship  
between Number of  
Assignments and  
the Number of  
**MedCo**  
assignments...



## Plot 11a

...*is stronger* for  
people who took  
breaks after a  
MedCo assignment.



## Plot 11a



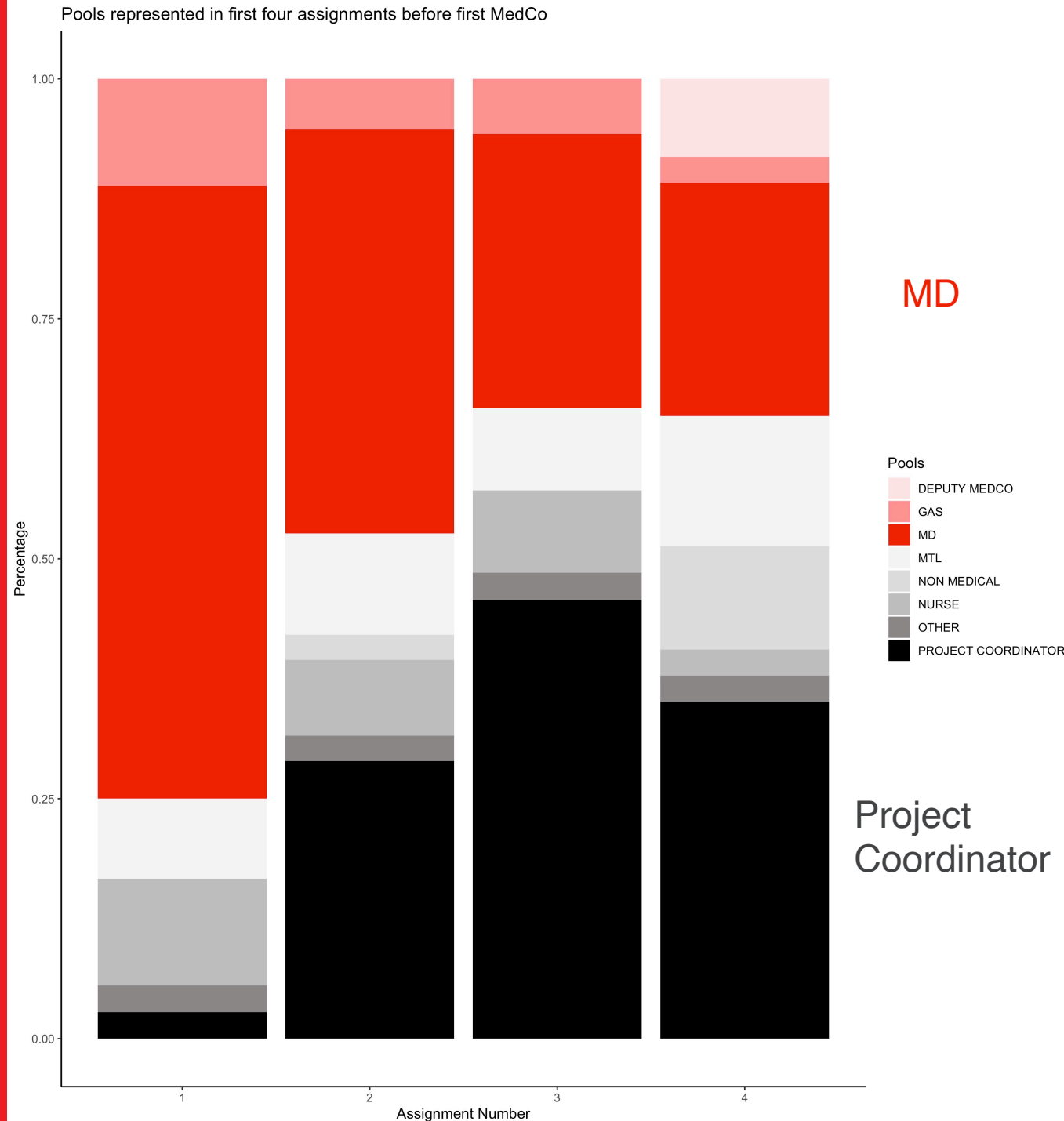
Perhaps gaps are a *good* thing.

What do people do ***before***  
their first MedCo assignment?

If the average position of people's first MedCo is on their 5<sup>th</sup> **assignment**, what did they do on their first *four*?

The **two** prominent positions to help people prepare for their first MedCo are:

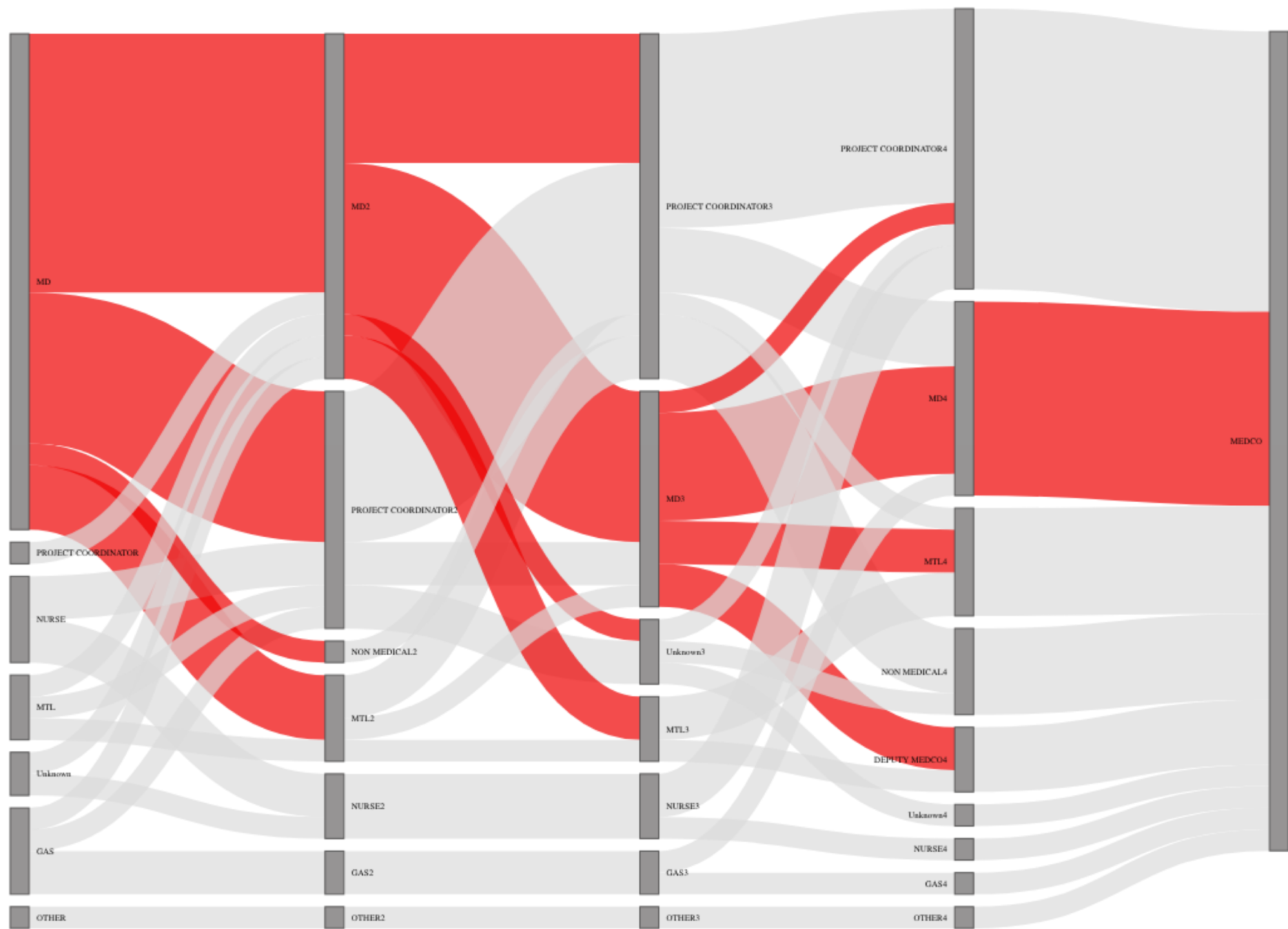
- 1. MD
- 2. Project Coordinator.



Why are MD and  
Project Coordinator roles so  
popular?

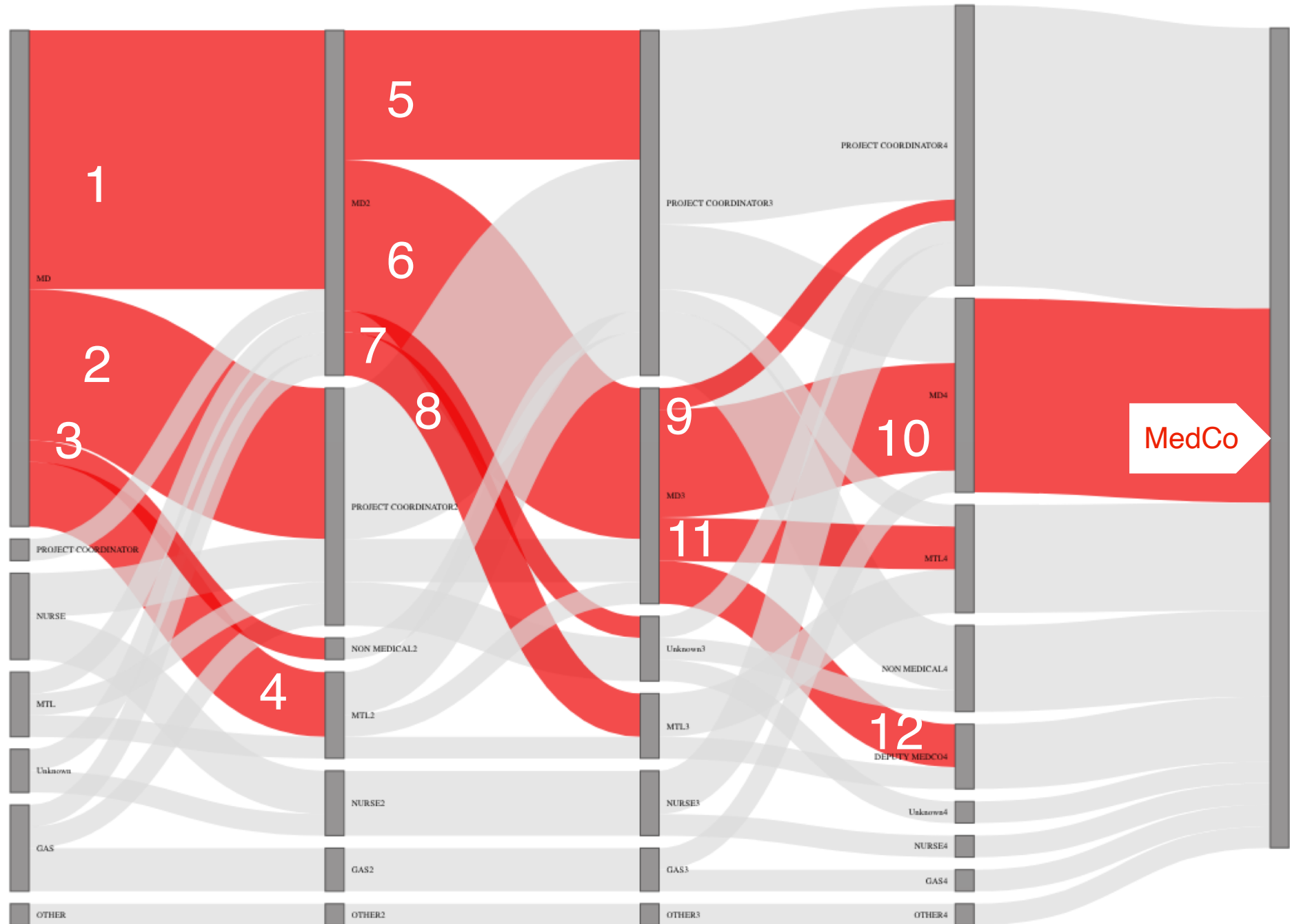
Because MedCos require a medical background, the MD role is a natural starting place for many.

Some prefer medical work and will continue in the MD role for multiple assignments before transitioning to MedCo.

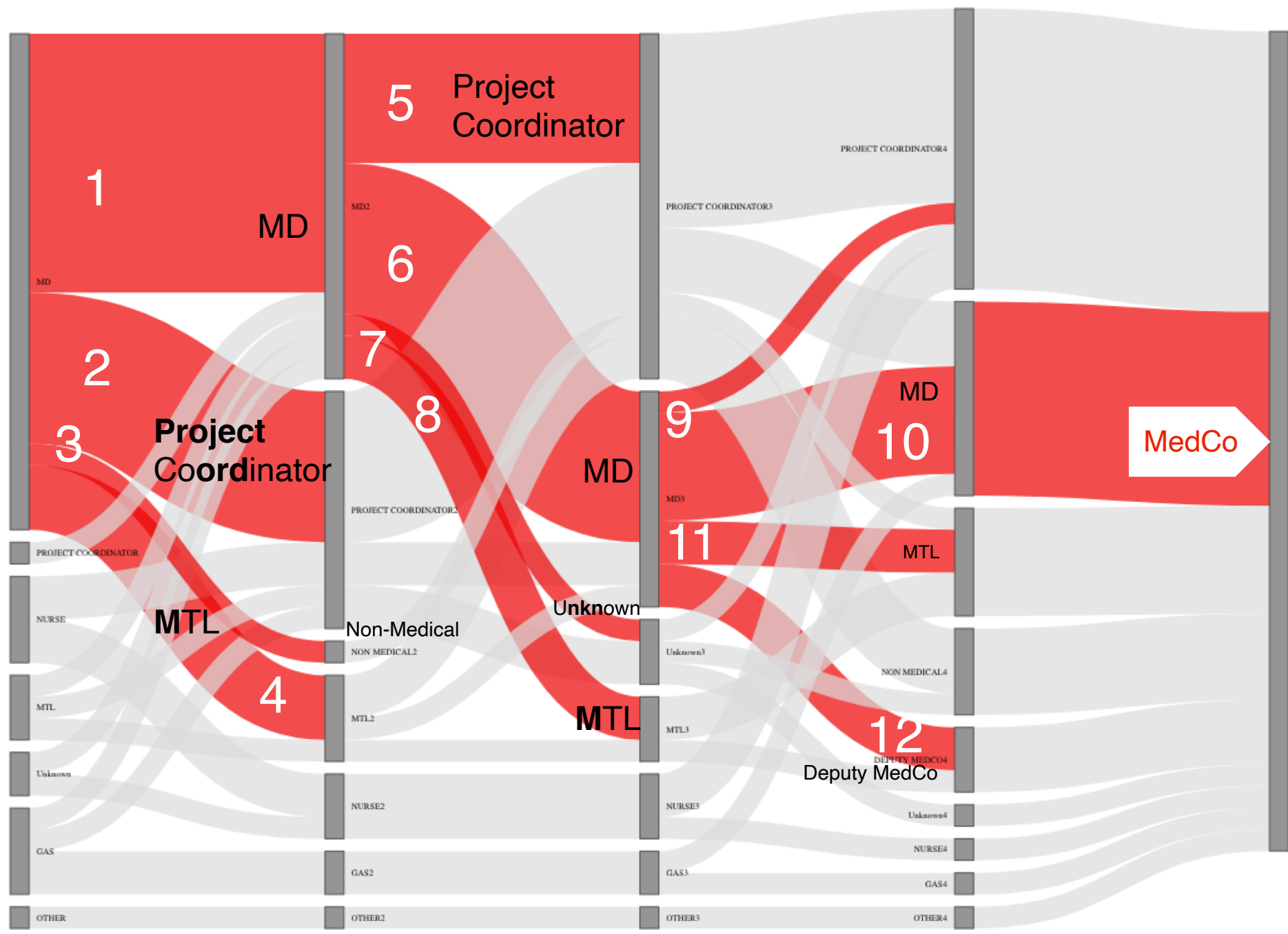


For others, the MD role provides **optionality**.

There are **12 flows** starting from the MD role, giving people a diverse range of career options within MSF before their first MedCo assignment.

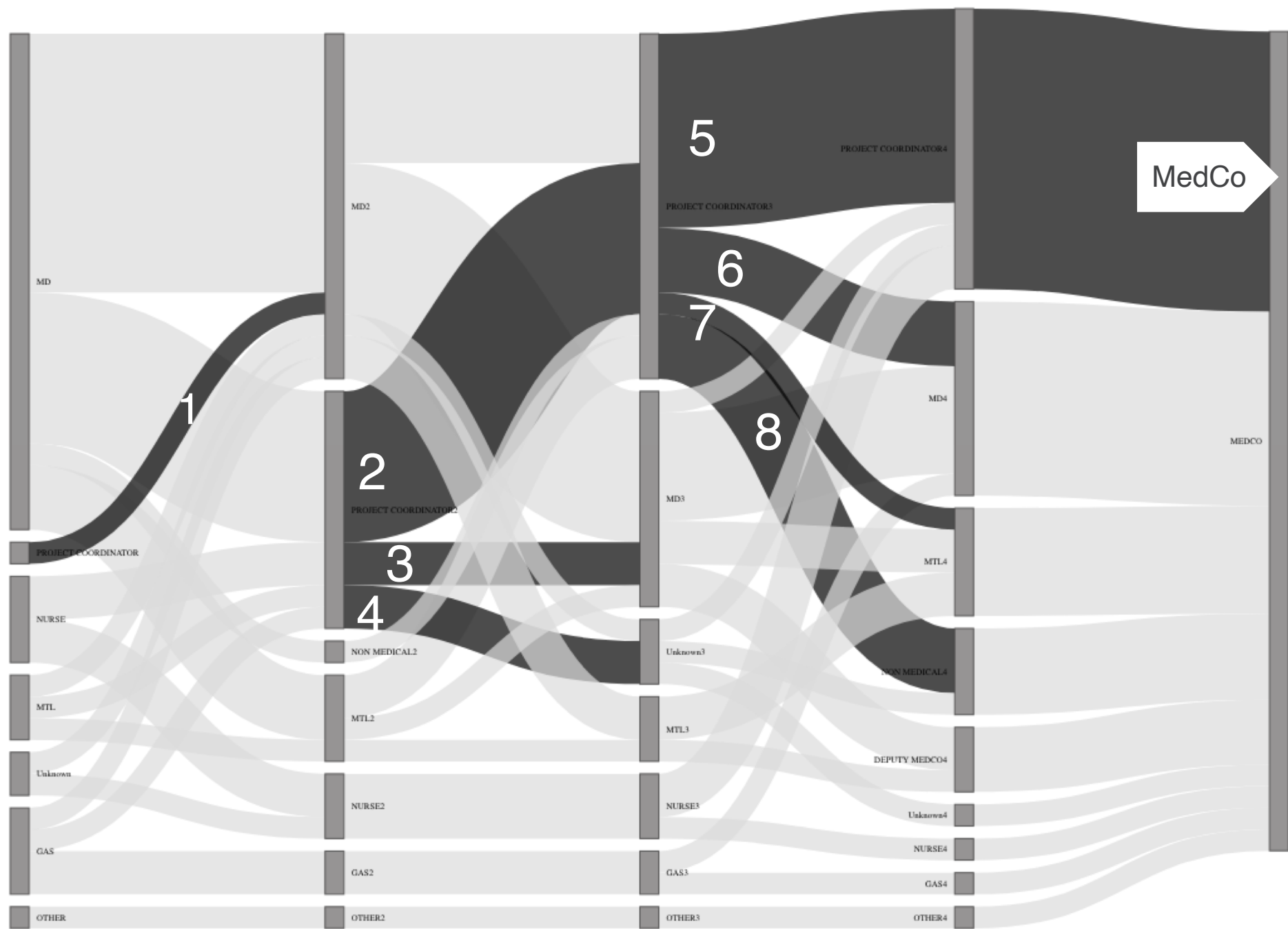


However, most MDs will generally cycle between Project Coordinator, MTL or remaining in MD.



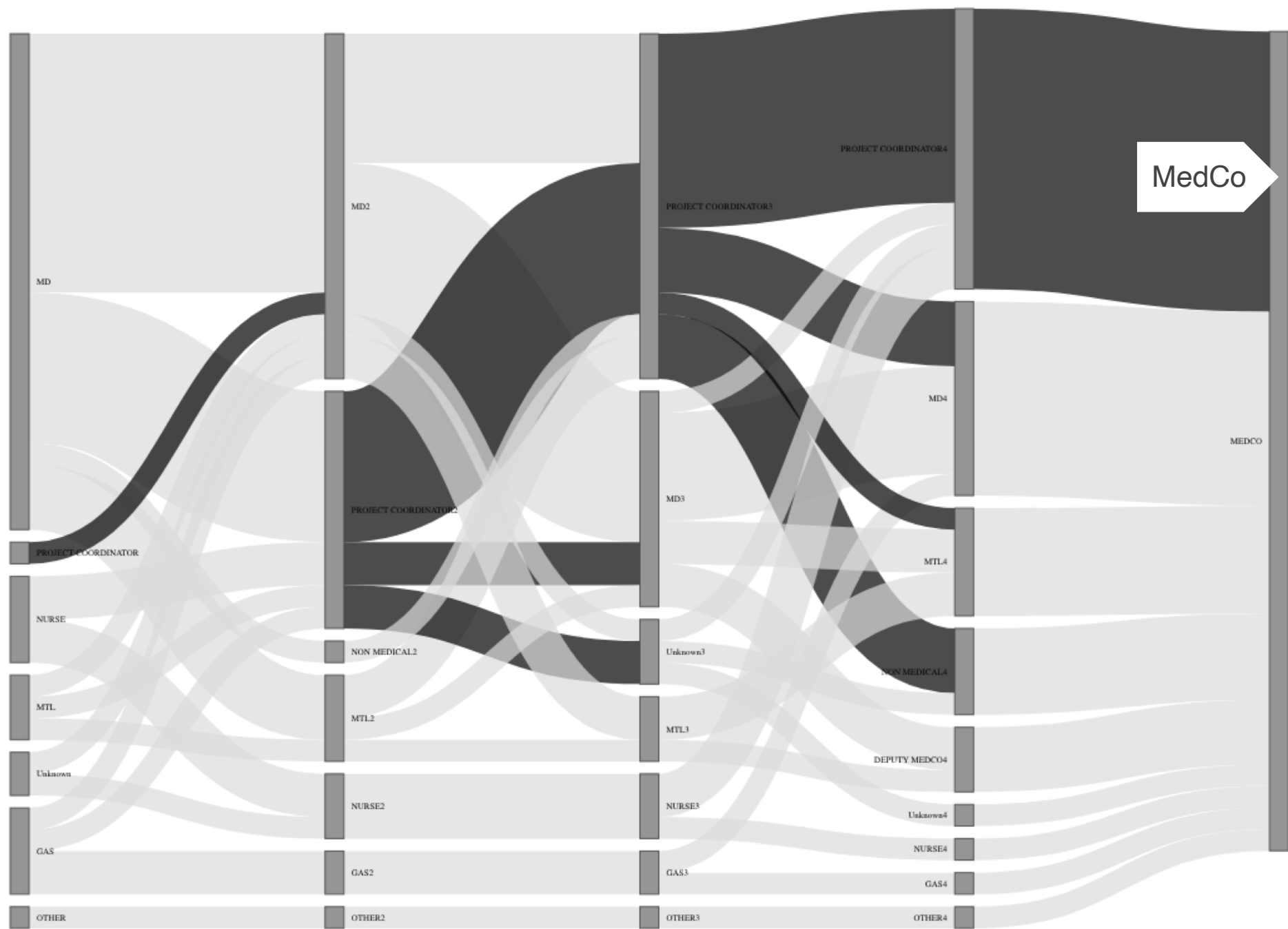


The Project Coordinator role provided the *second* most career optionality, with **8 flows** before MedCo.



People generally do not *start* with the Project Coordinator role.

Consistent with the operational requirements of MedCo, the Project Coordinator role is the go-to role for medical people (MD, Nurses, MTL and Gas) to gain those experiences.



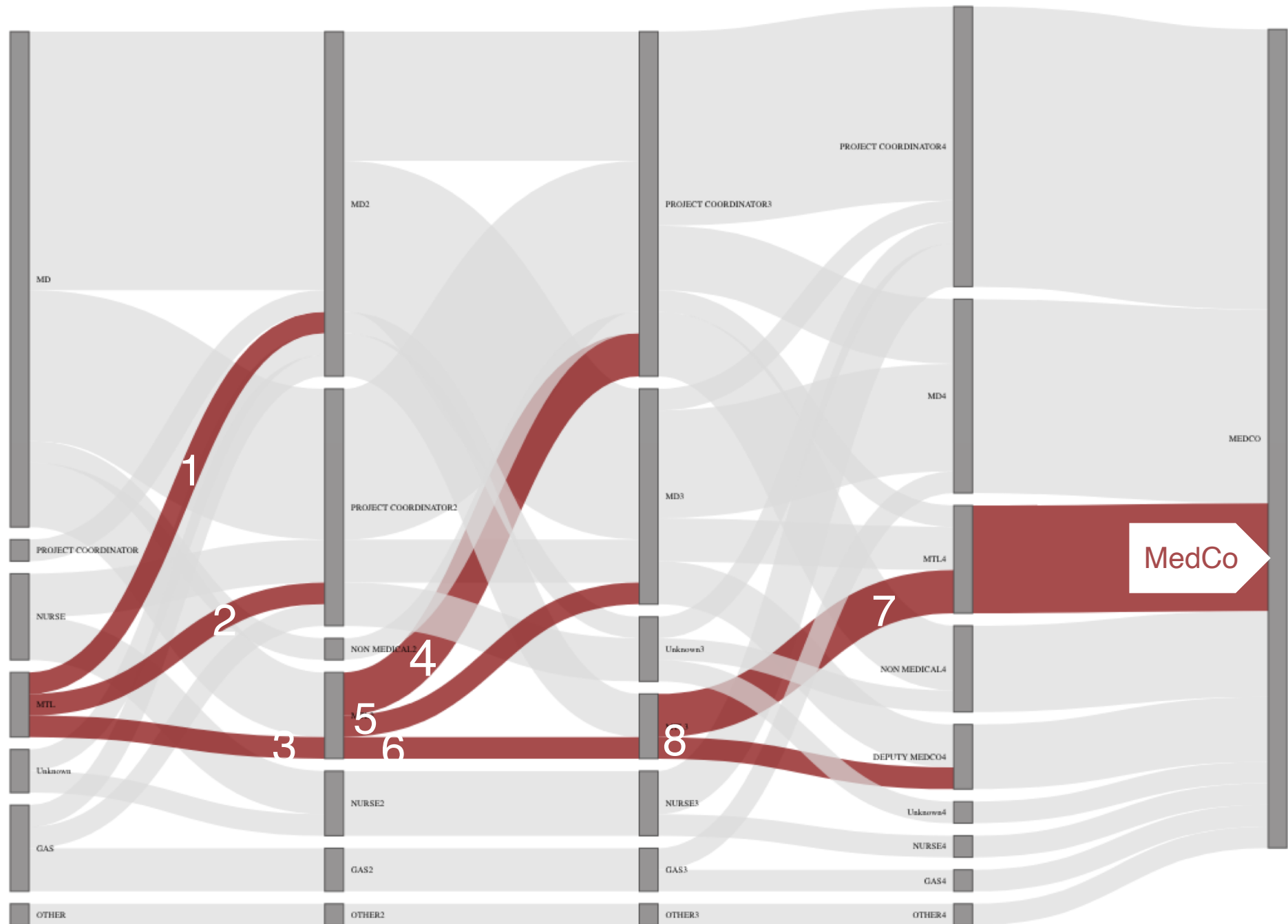
We know that MD and Project Coordinator roles are popular for MedCo's in training...

What *other* roles do people  
use to prepare for MedCo?

The third path toward MedCo is via the Medical Team Lead (MTL) role.

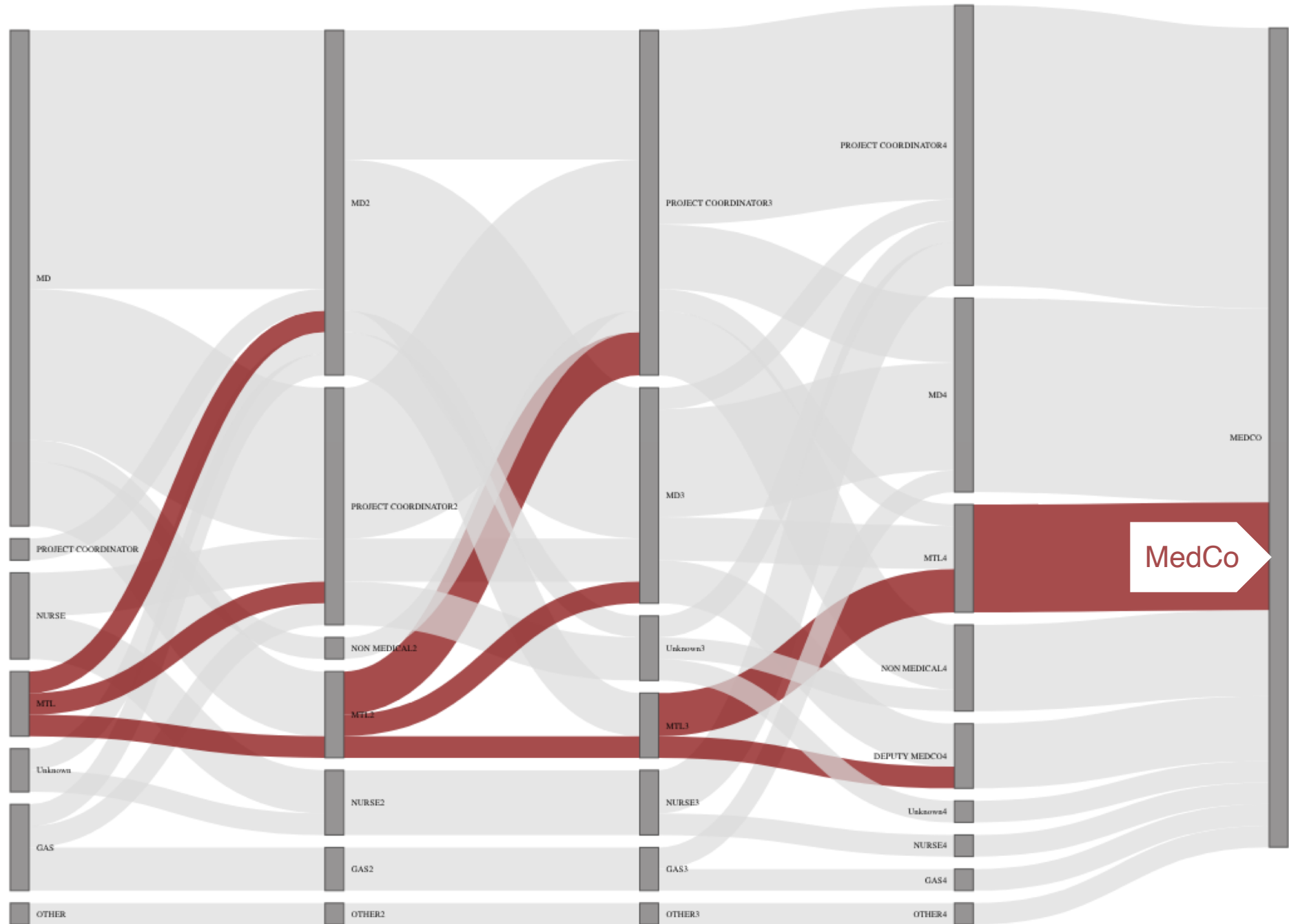
This role provides just as much optionality as the Project Coordinator (**8 flows**).

People can stay in MTL or migrate towards MD or Project Coordinator roles.



Curiously, the MTL path is **not** as popular as the Project Coordinator role, given that it involves coordinating medical care at the project level *and* reporting directly to the MedCo.

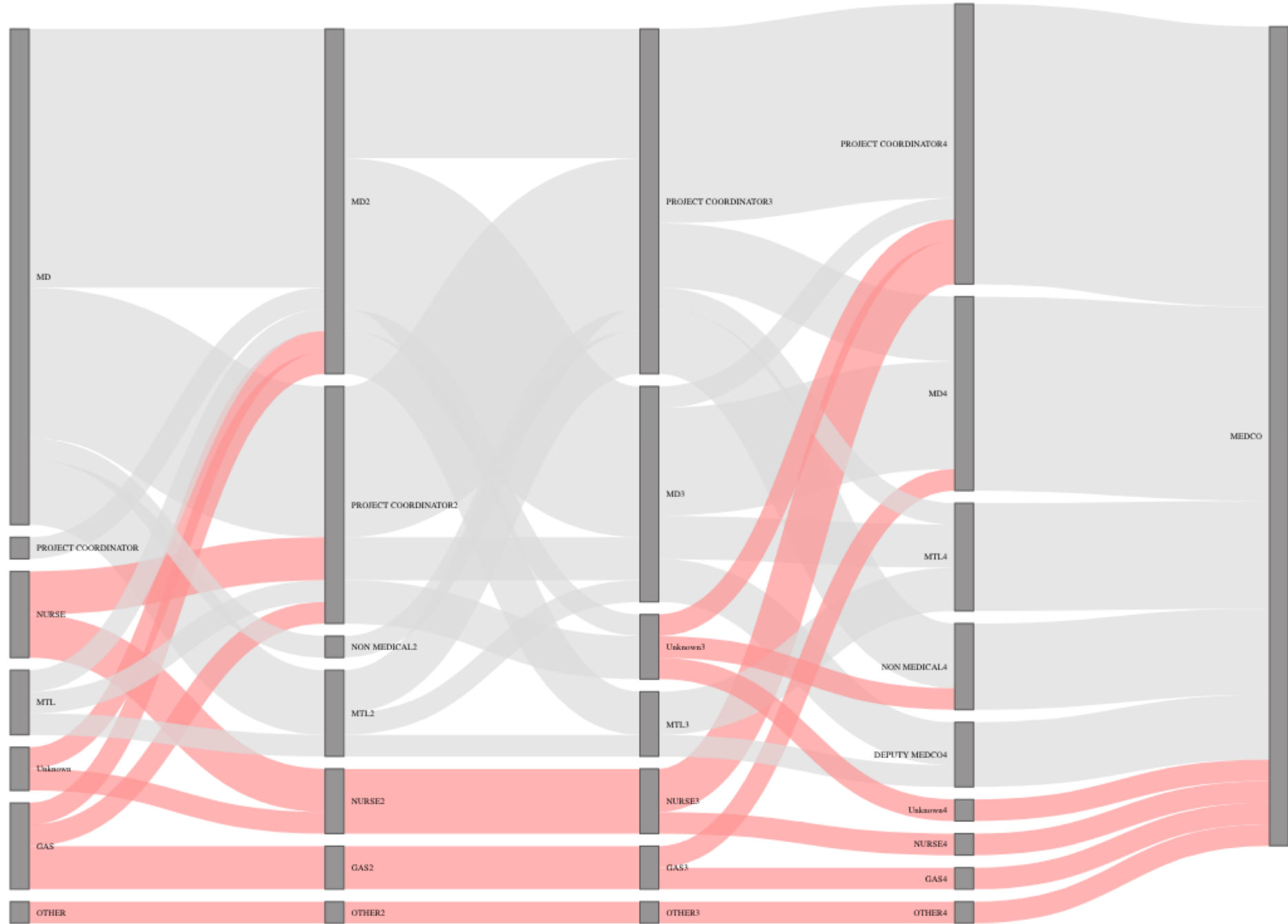
On paper, this role would appear to be a fertile training ground for future MedCos. But somehow it's underrated as a viable path toward MedCo.



Nurse and GAS roles lag behind in terms of career paths towards MedCo.

Between the two, GAS appears to have more optionality. Through GAS, people can switch to MD, Project Coordinator or remain in GAS.

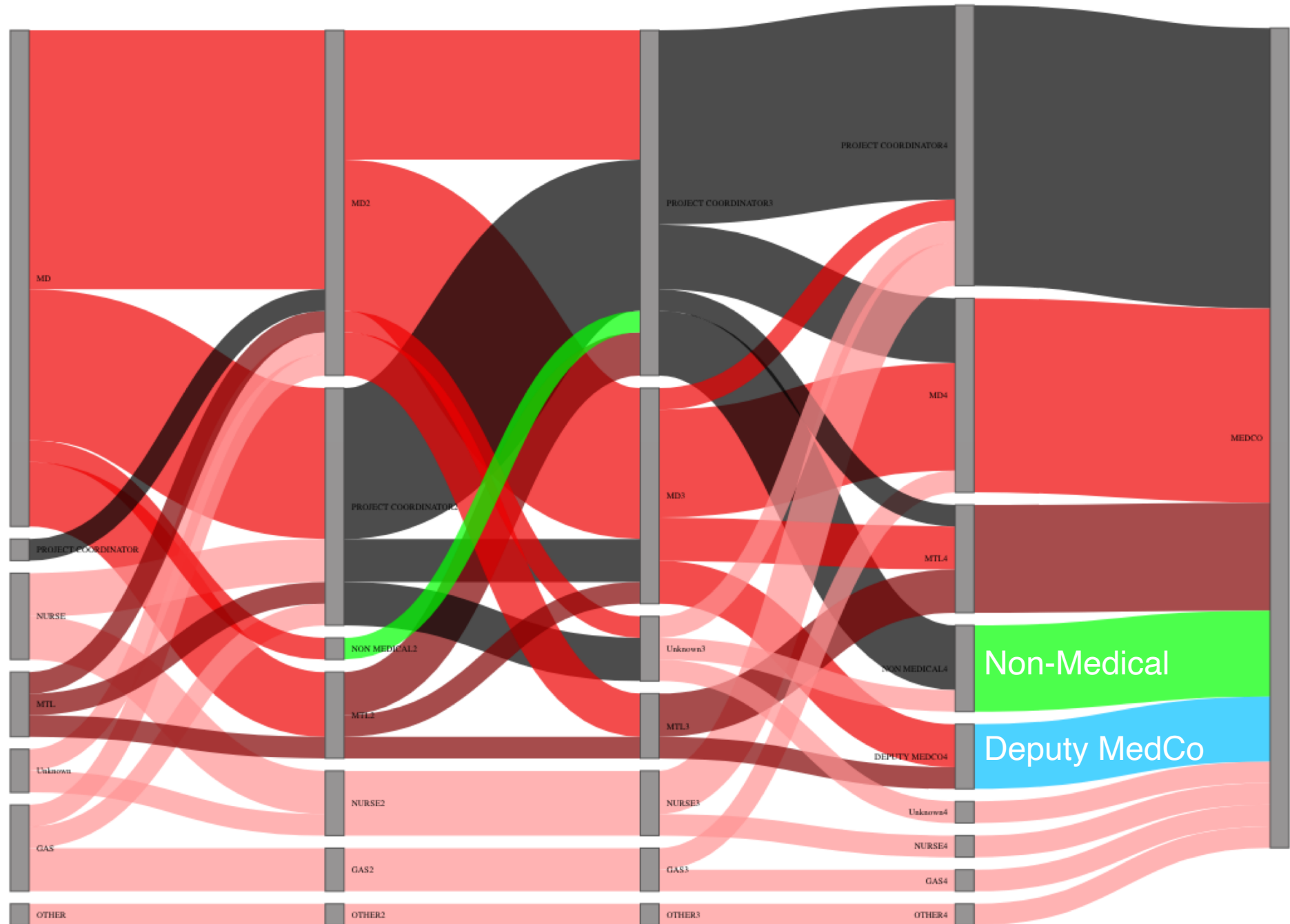
Nurses appear to only choose between Project Coordinator or remaining in Nurse.



The two final roles to highlight are:

1. Non-Medical,
2. Deputy MedCo.

Since the Deputy MedCo *assists* the MedCo, its likely the role with the most realistic job preview for MedCo. Which is why we see it in the fourth assignment before MedCo.

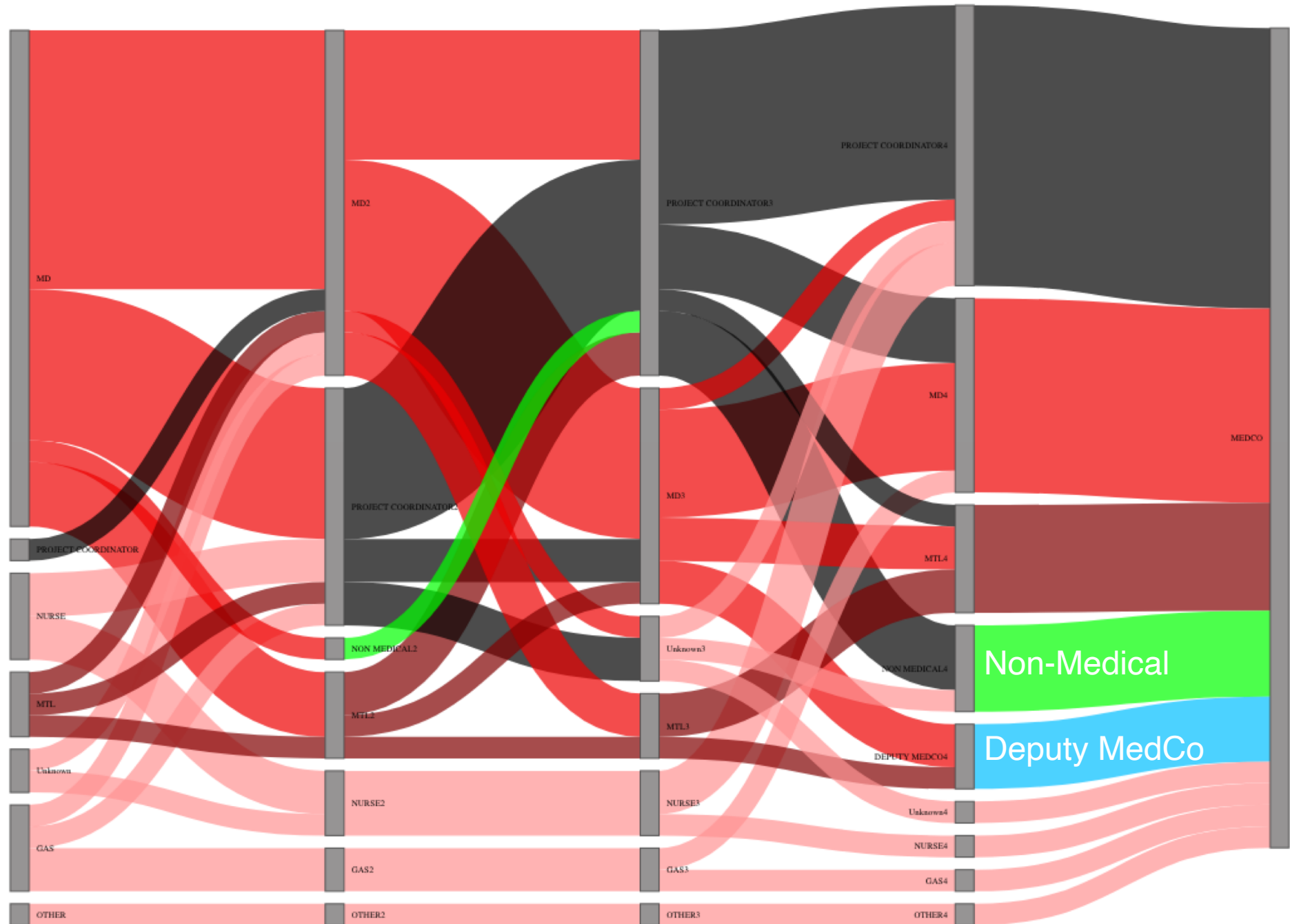




Oddly, few people seem to travel through the Deputy MedCo.

There have only been **170 Deputy MedCo** assignments to **946 MedCo** assignment which is notable, given that the former reports to the latter.

Finally, Non-Medical pools significantly *out number* other pools, but is curiously under-represented in the various paths toward MedCo.



# Recommendations\*

(\*see Recommendation section in memo for further details)

Encourage people to take sufficient time to prepare for their first MedCo assignment.

Encourage lesser traveled career paths towards MedCo (i.e., Nurses, GAS, MTL). Highlight Non-Medical and Deputy MedCo assignments.

Encourage people to take breaks after they've completed a MedCo assignment to pause, reflect and replenish.

Create formal structures for feedback, coaching and mentorship while someone is doing a MedCo, particularly for first timers.