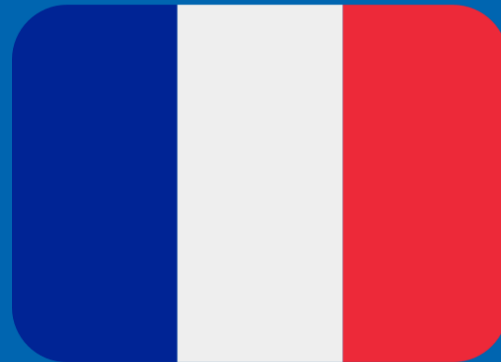




# AGORA 2022

*Using Evidence in Healthcare Management*



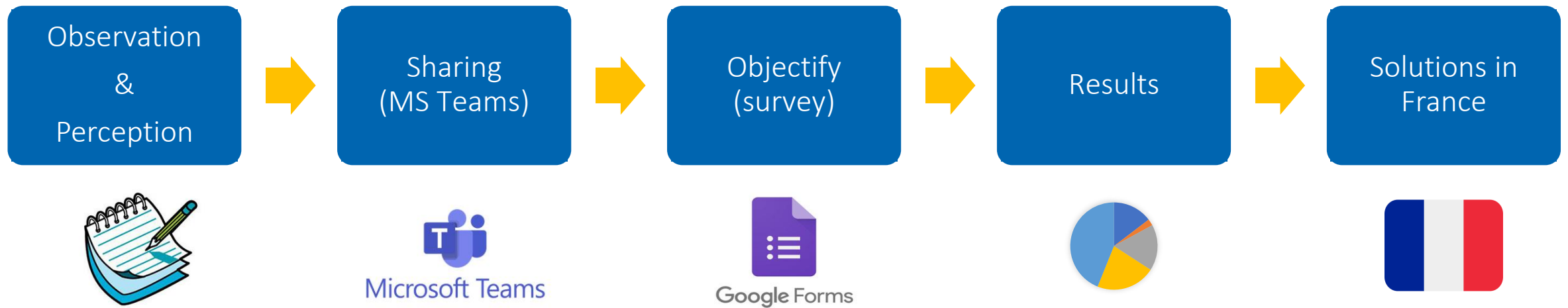
June 4th - Brussels, Belgium

# Evidence Used for Decision-Making in Health Care Environments During the SARS-CoV-2 Pandemic in France

*Survey Analysis Across Six French Hospitals*



# Introduction



# Survey Covering Three Themes



1

Shortage of  
Healthcare  
Personnel



2

Management of  
Hospital Beds

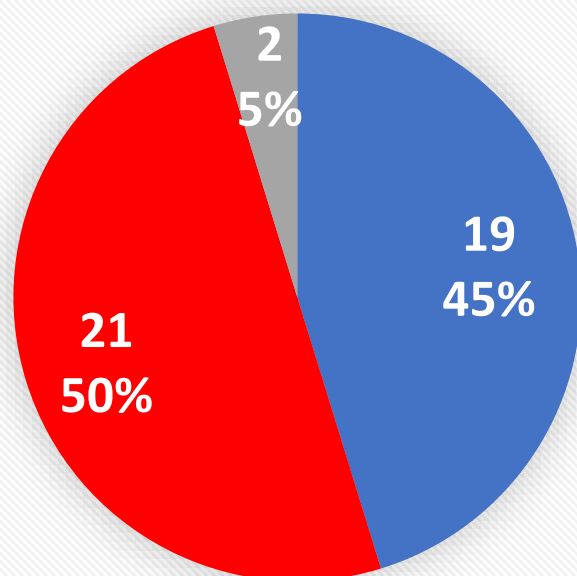


3

Lack of Medical  
Materials

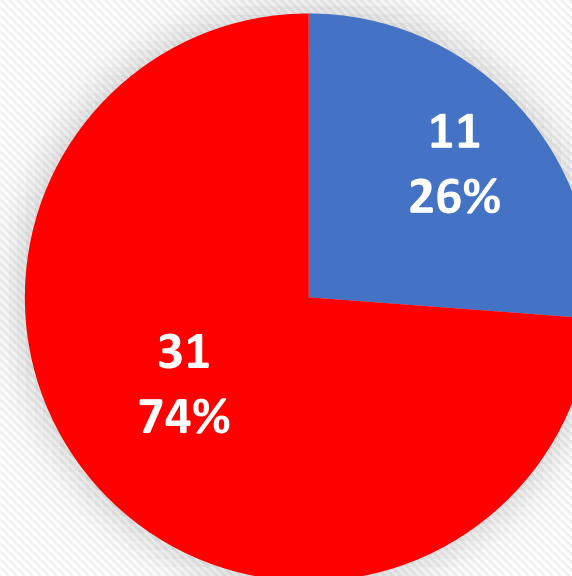
# Demographics (1)

## Age groups



■ 20 -> 45 yo ■ 46 -> 65 yo ■ Other

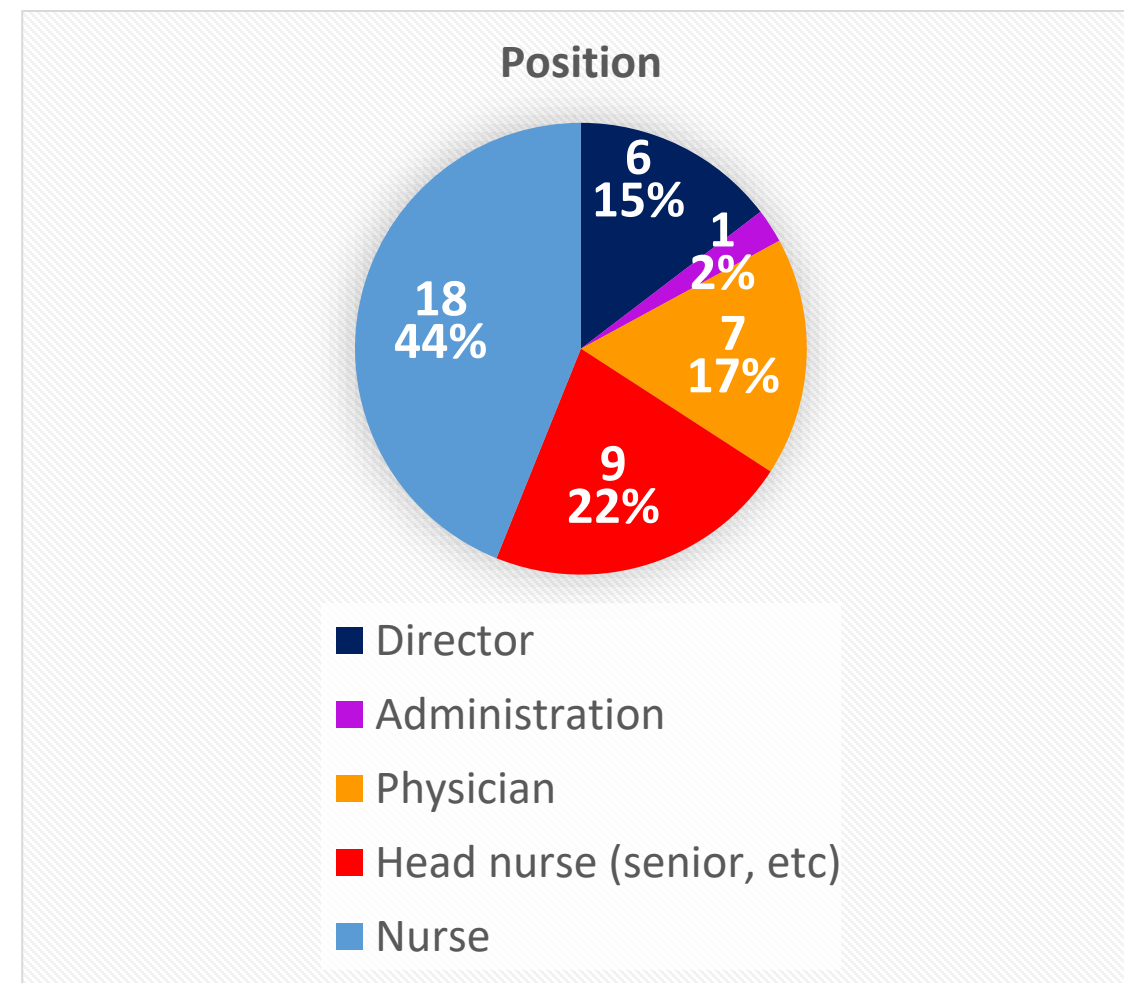
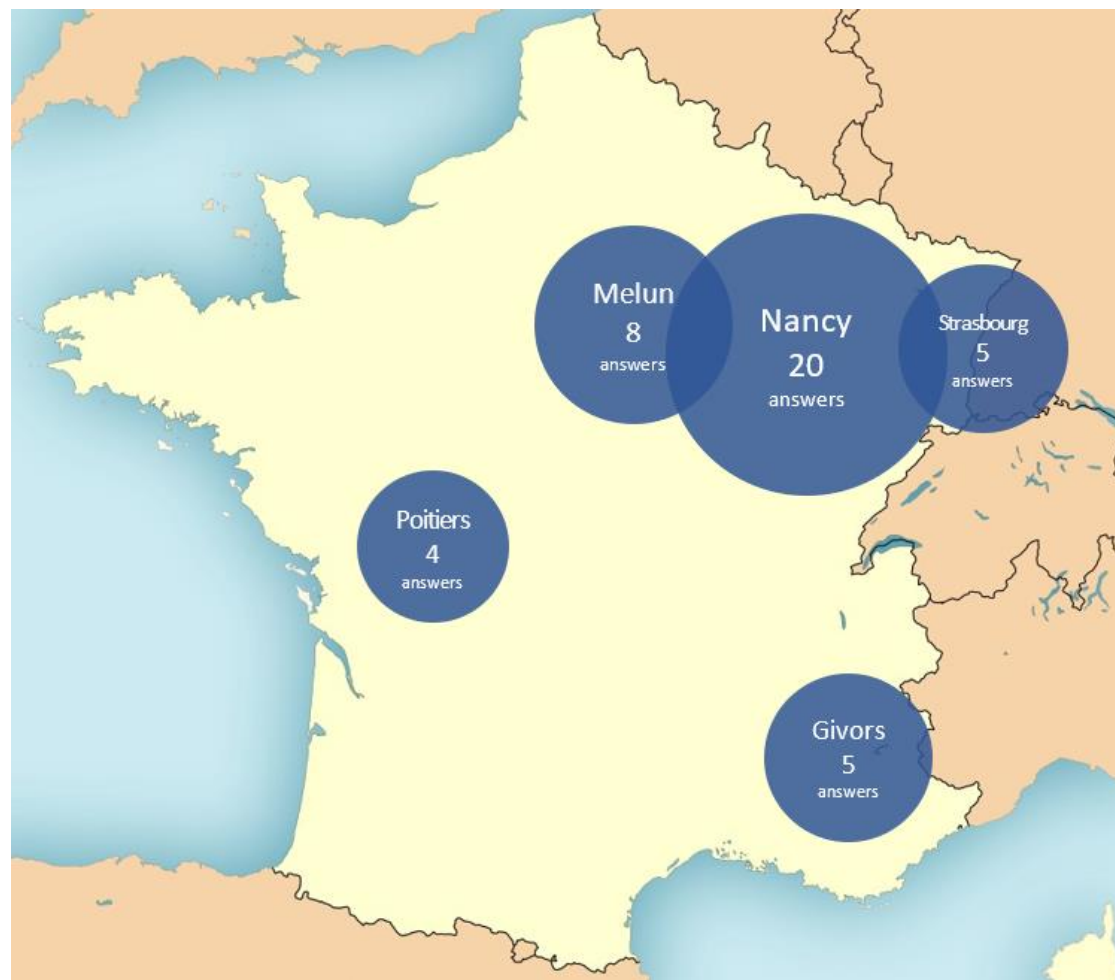
## Gender



■ Male ■ Female

Sample Size: 42

# Demographics (2)



1

# Shortage of Healthcare Personnel

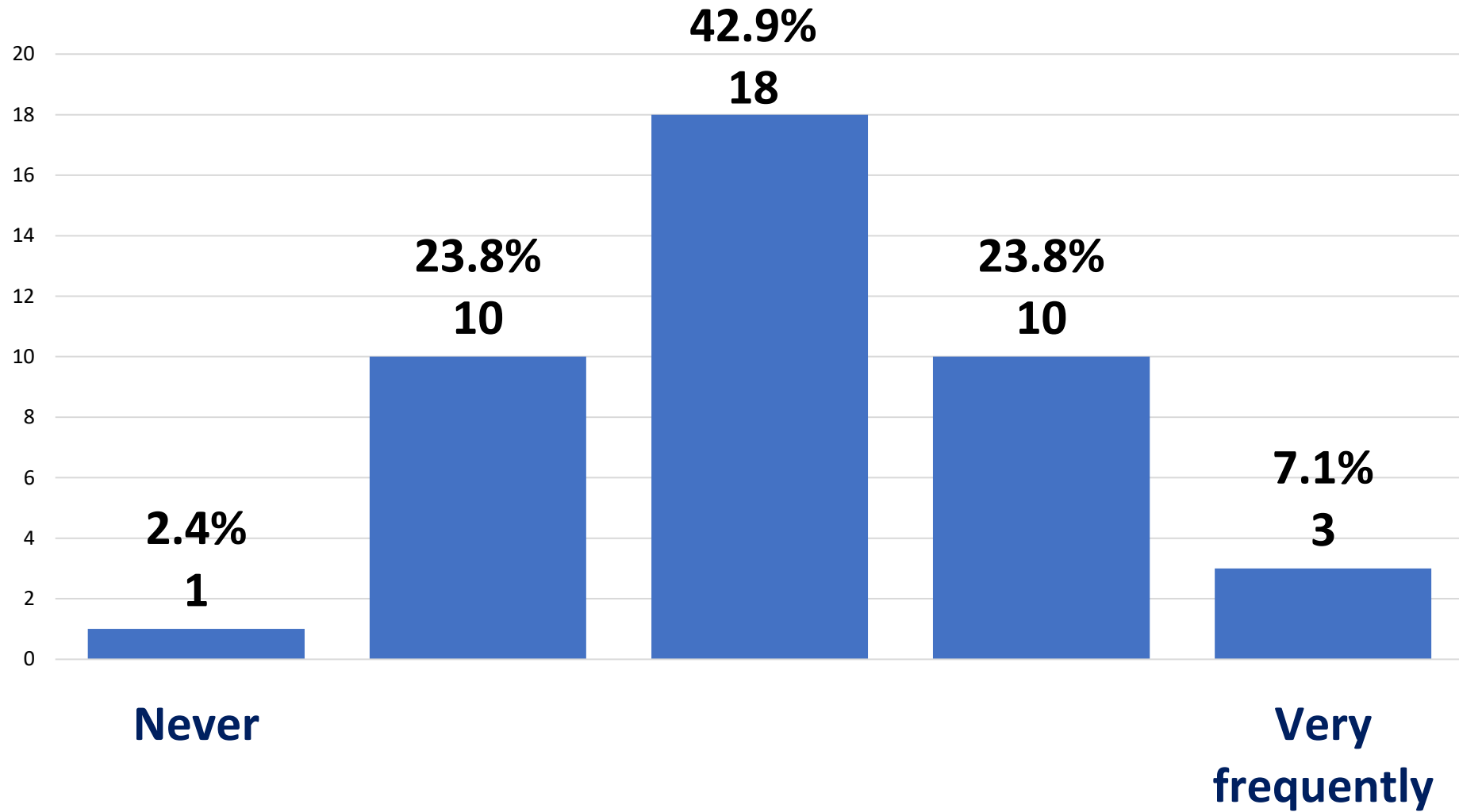
Before  
COVID-19

During  
COVID-19

Last month



# Personnel Shortage

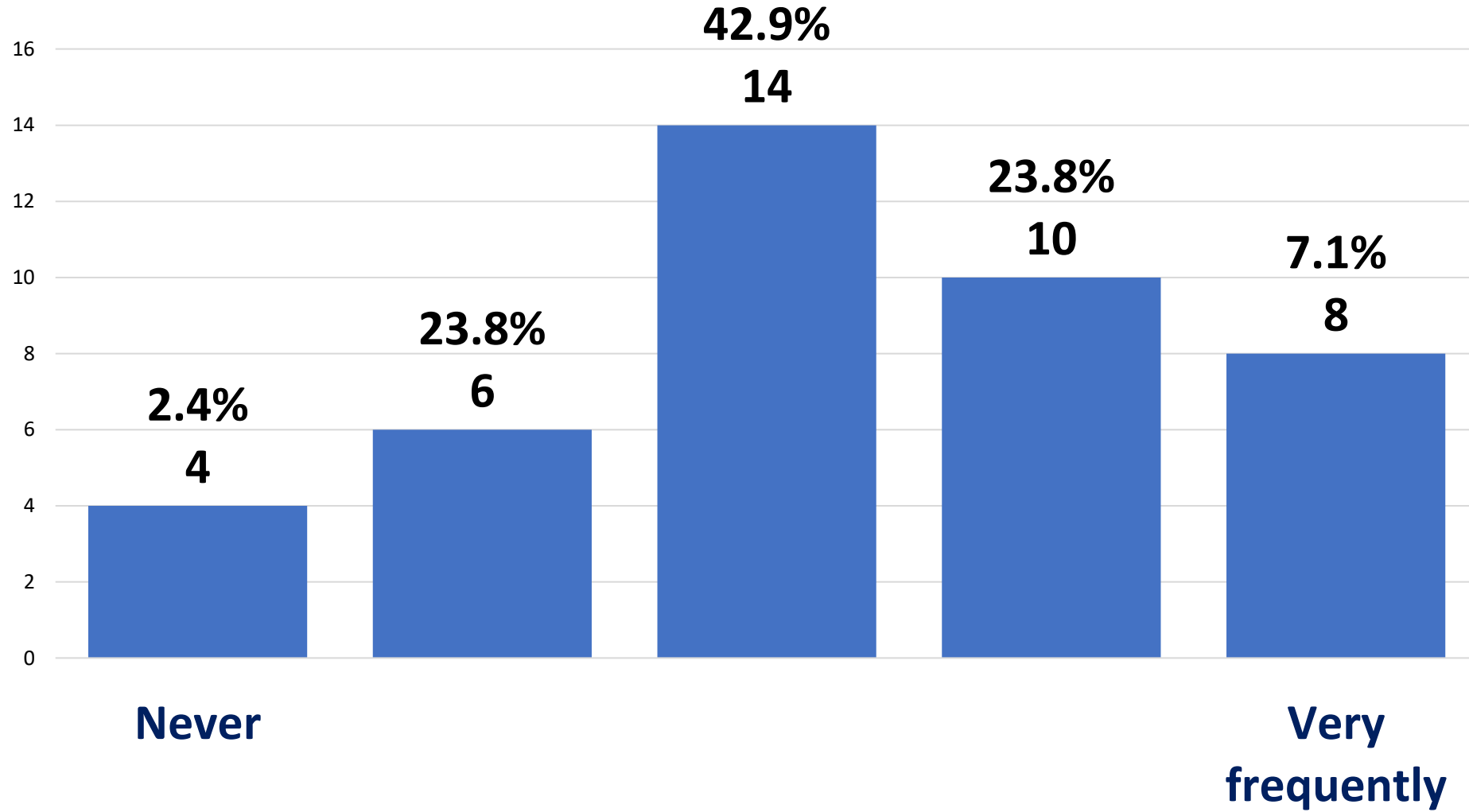


Before  
COVID-19

During  
COVID-19

Last month

# Personnel Shortage

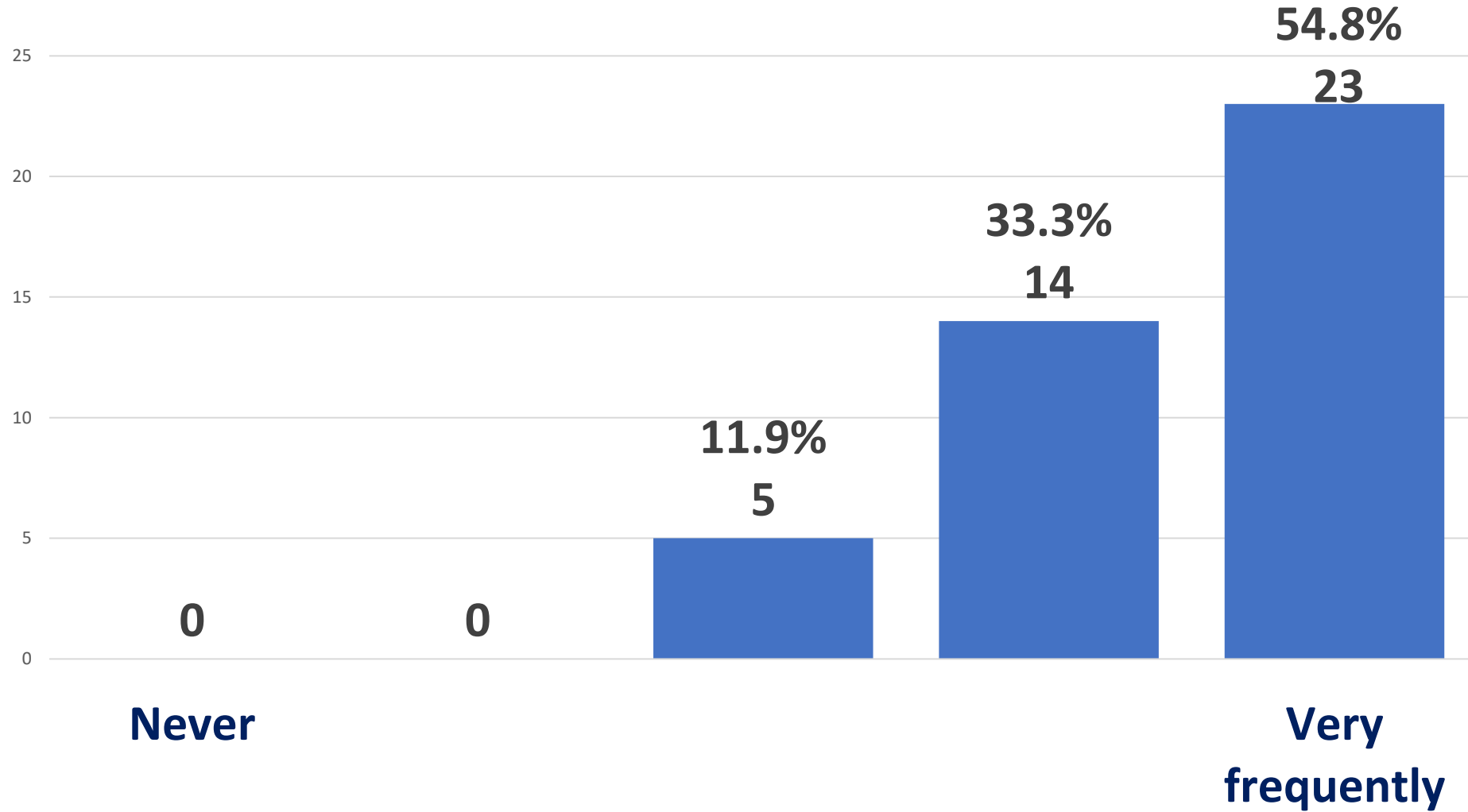


Before  
COVID-19

During  
COVID-19

Last month

# Personnel Shortage

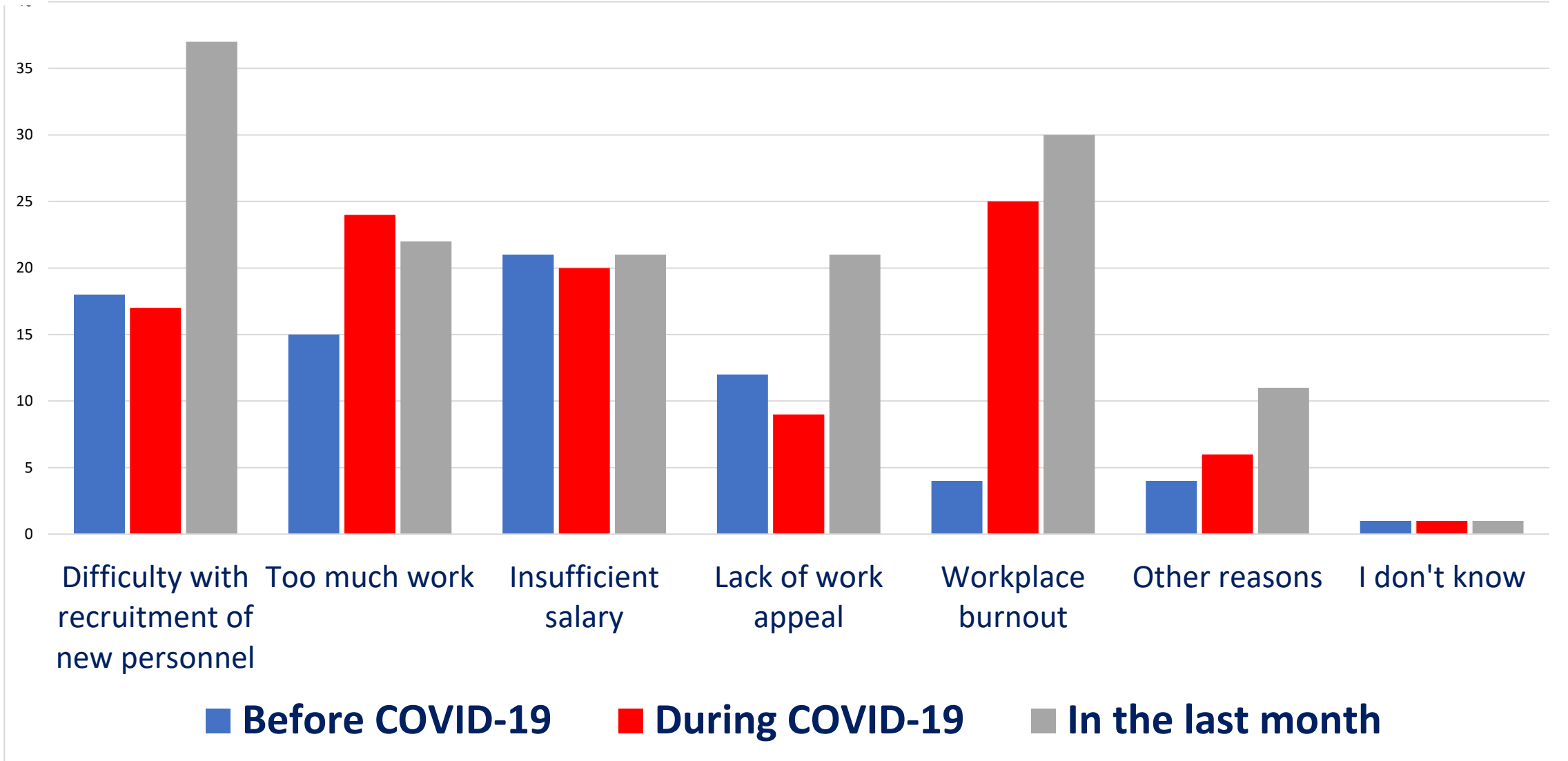


Before  
COVID-19

During  
COVID-19

Last month

# Personnel Shortage: Causes



2

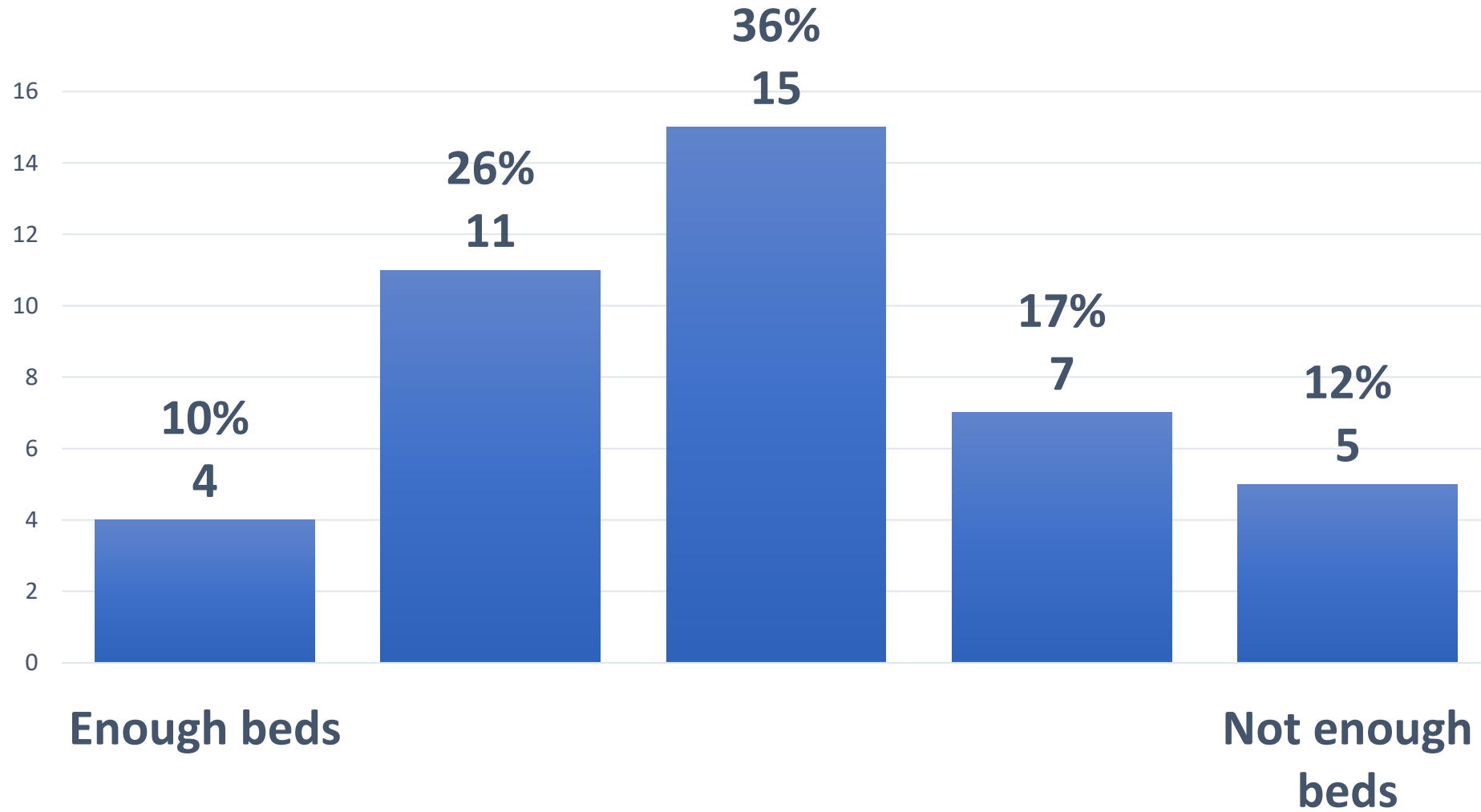
# Management of Hospital Beds

Before  
COVID-19

During  
COVID-19

Last month

# Hospitals Beds

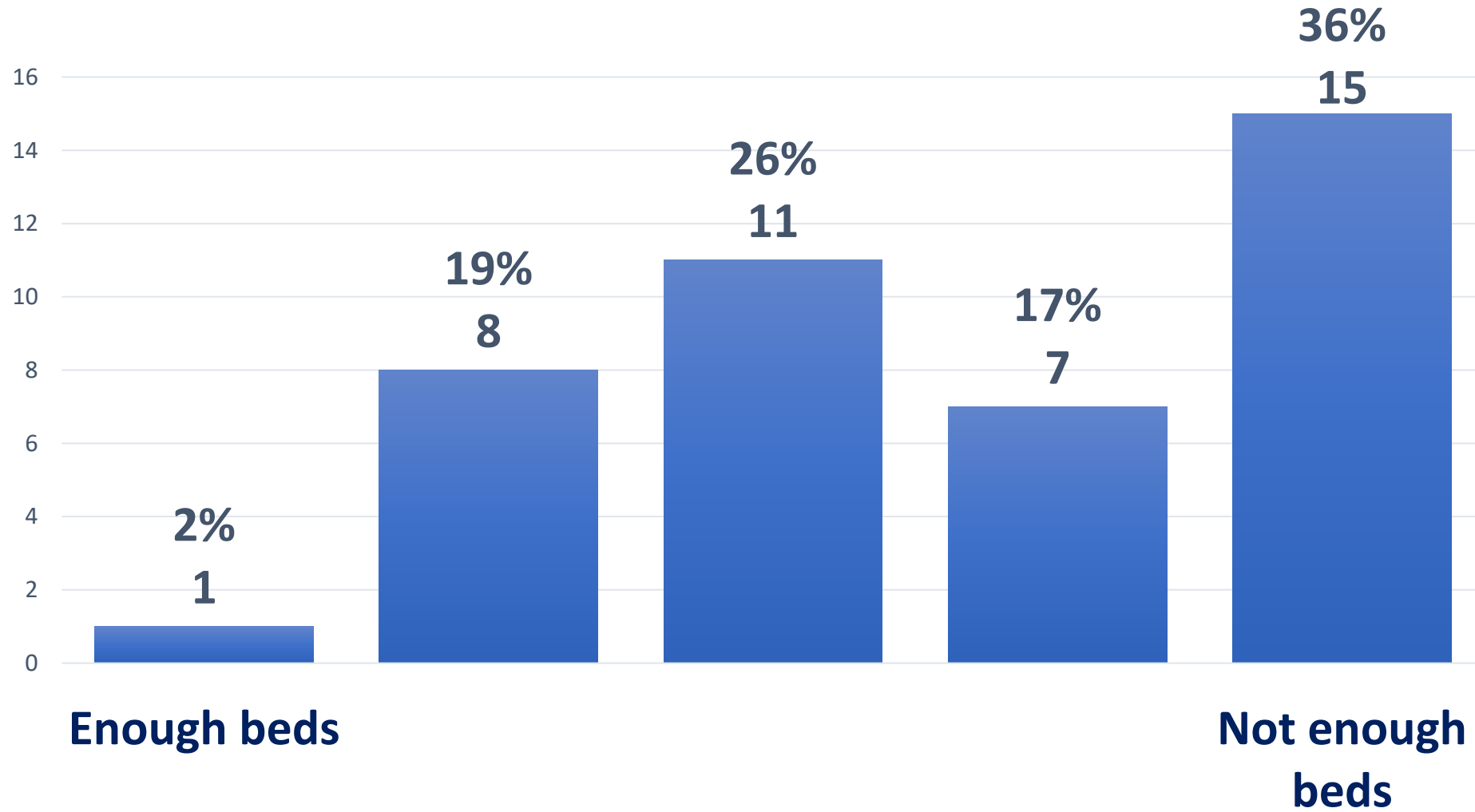


Before  
COVID-19

During  
COVID-19

Last month

# Hospitals Beds

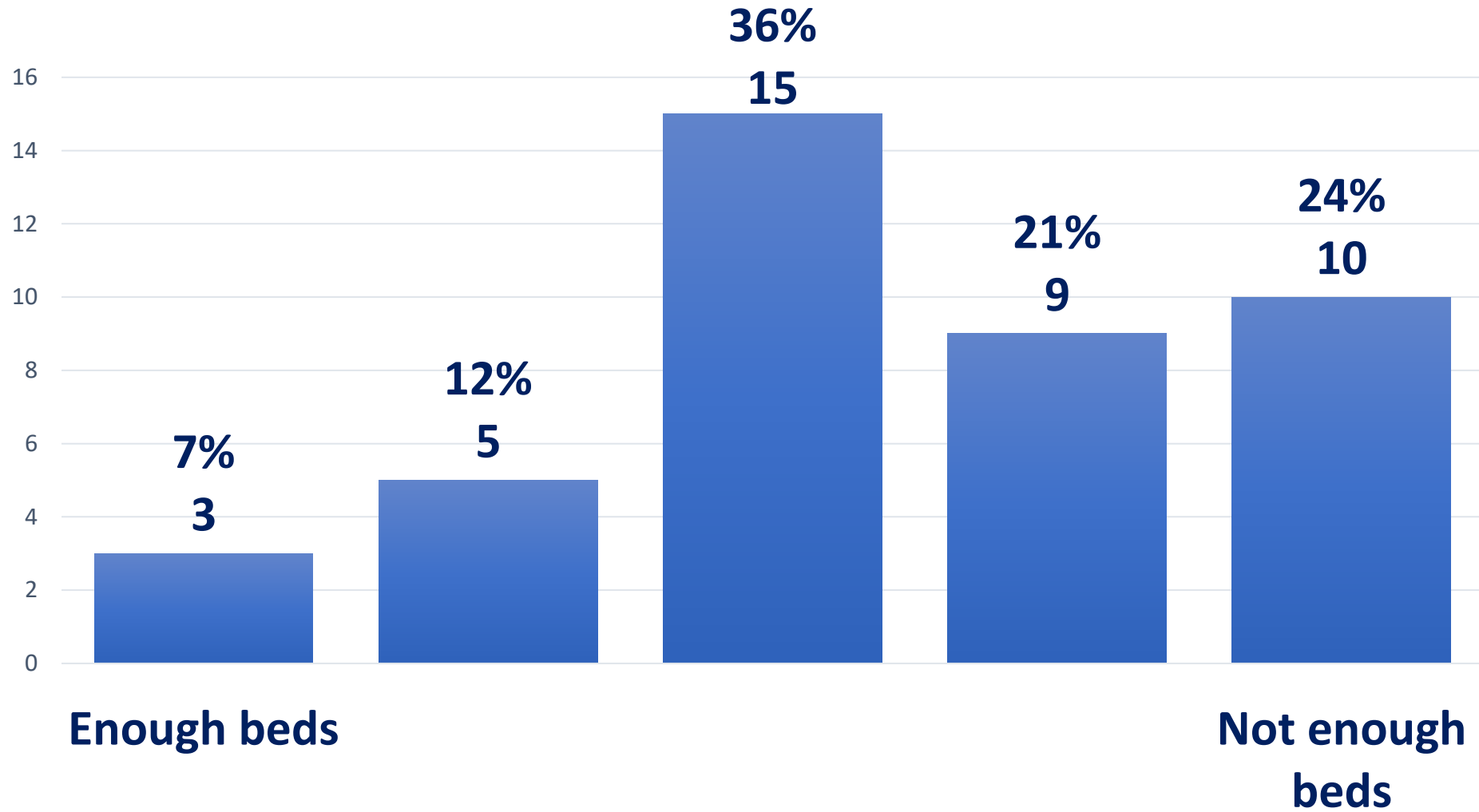


Before  
COVID-19

During  
COVID-19

Last month

# Hospitals Beds



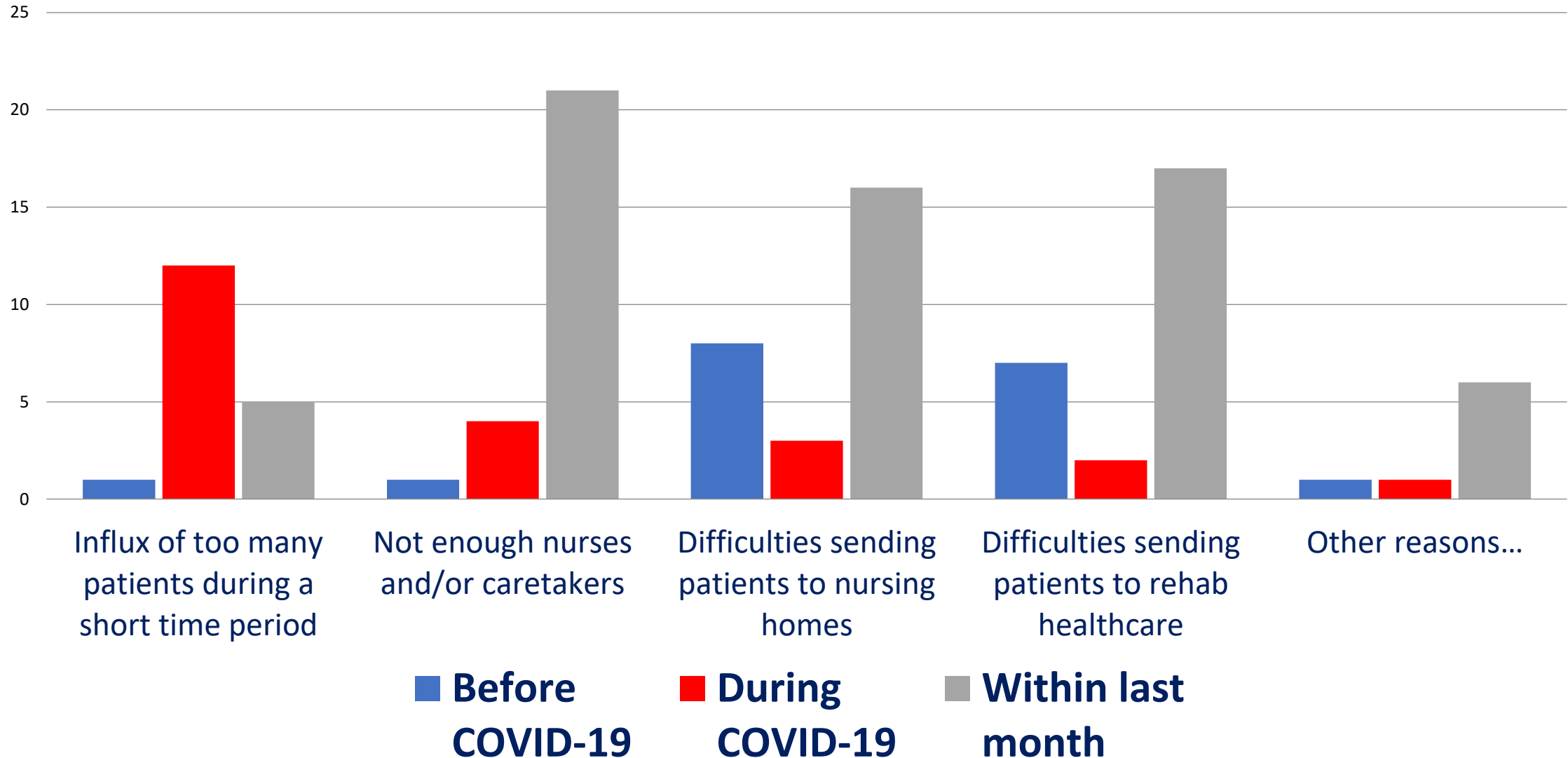
Before  
COVID-19

During  
COVID-19

Last month



# Hospitals Beds: Causes



3

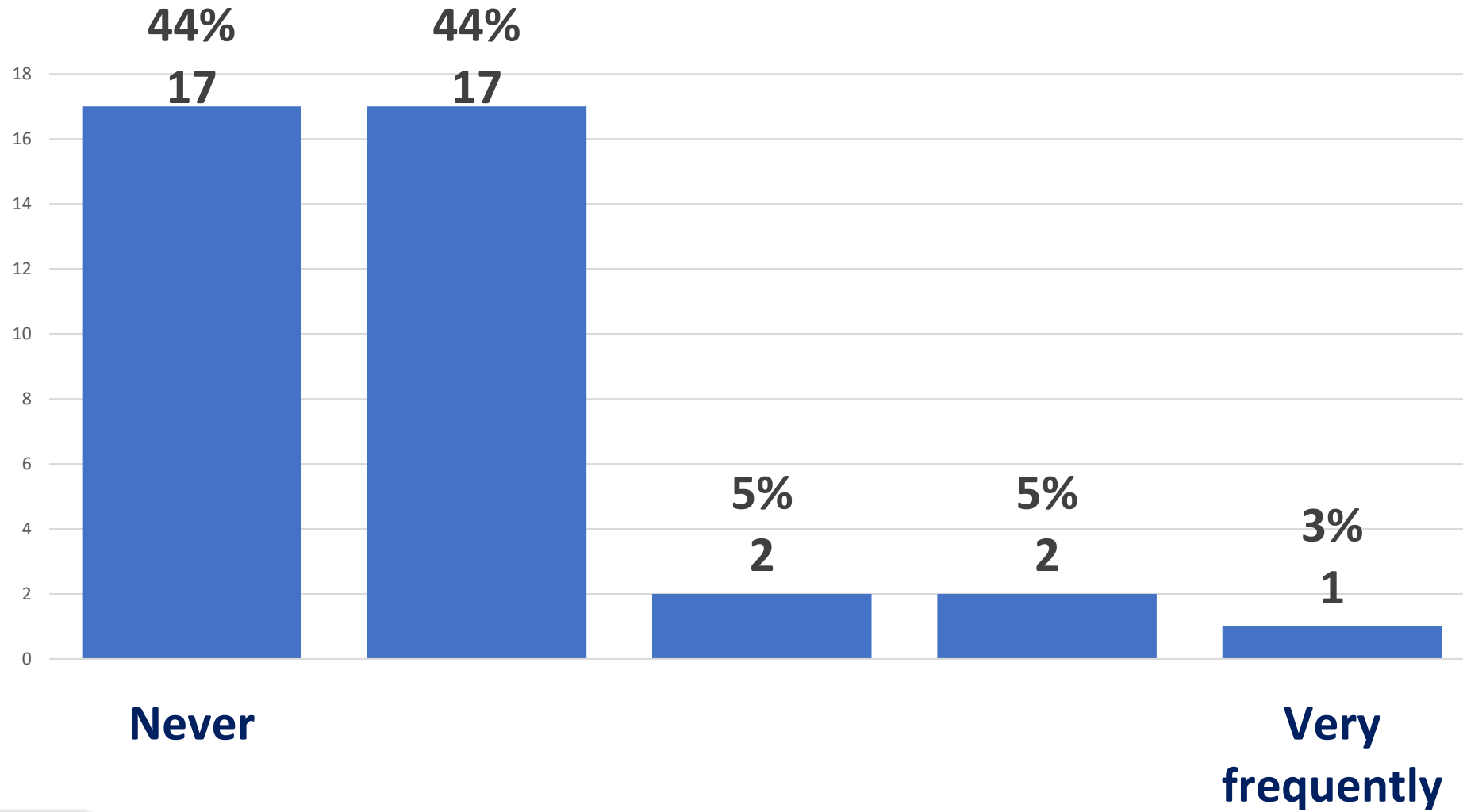
# Lack of Medical Materials

Before  
COVID-19

During  
COVID-19

Last month

# Medical Materials

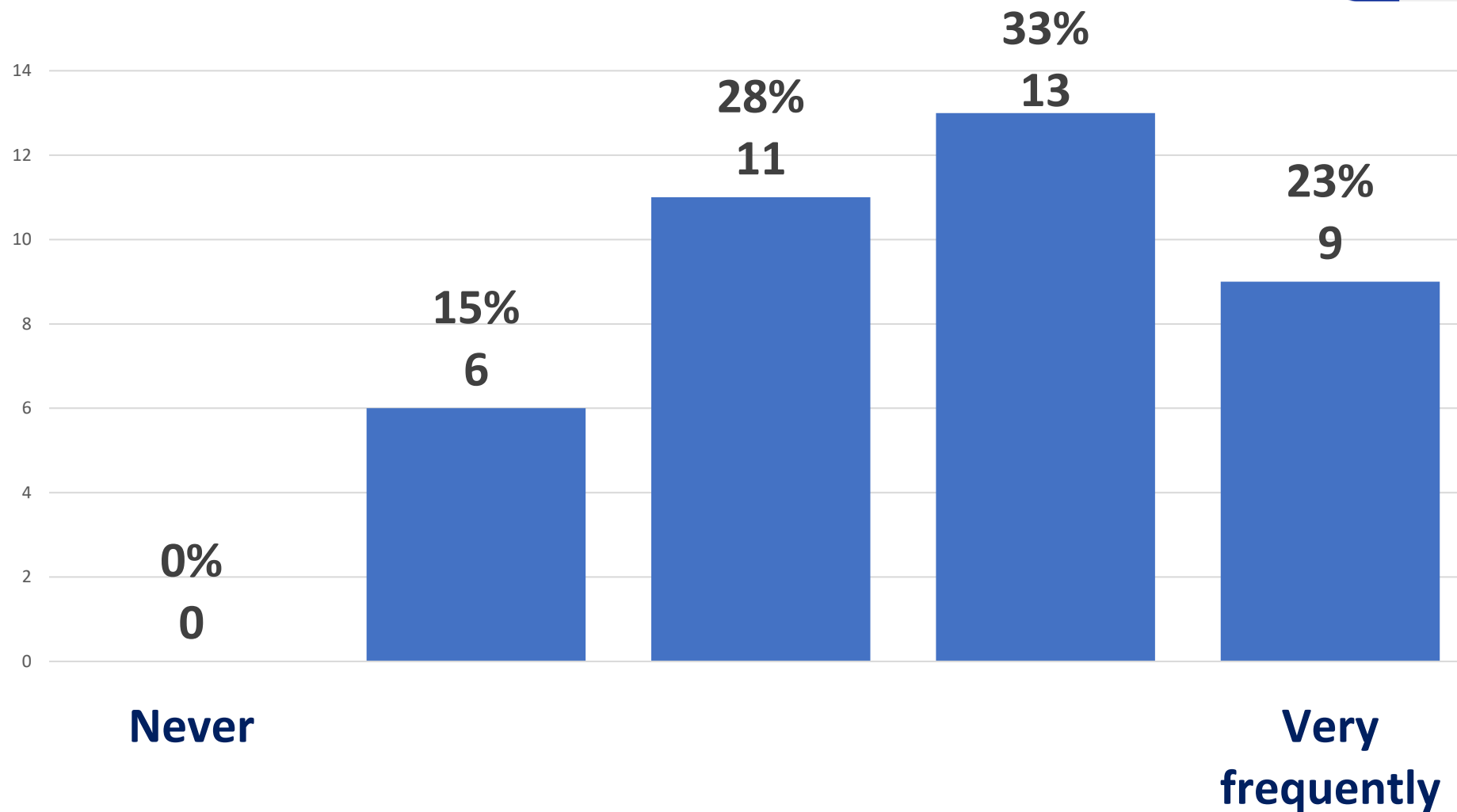


Before  
COVID-19

During  
COVID-19

Last month

# Medical Materials

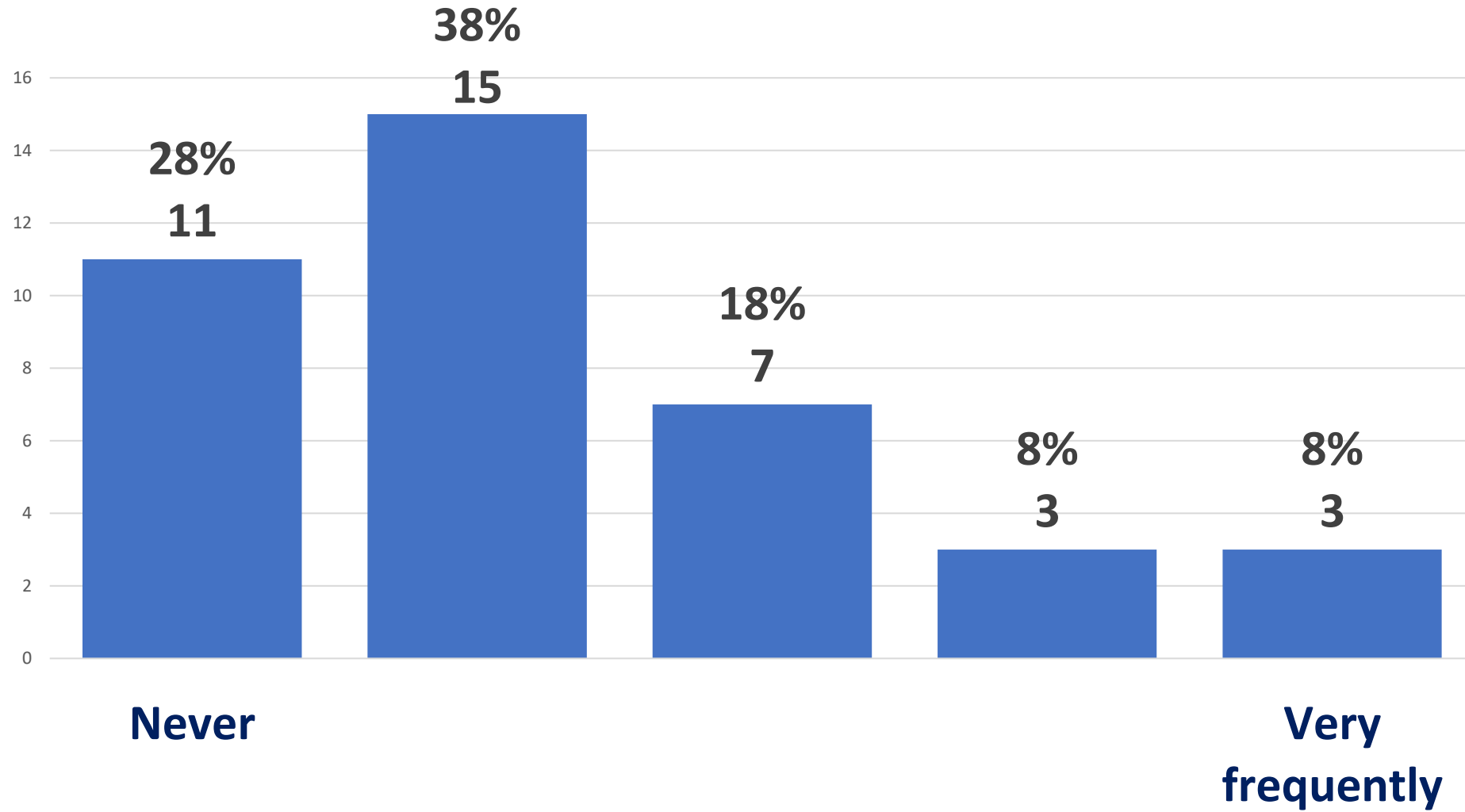


Before  
COVID-19

During  
COVID-19

Last month

# Medical Materials

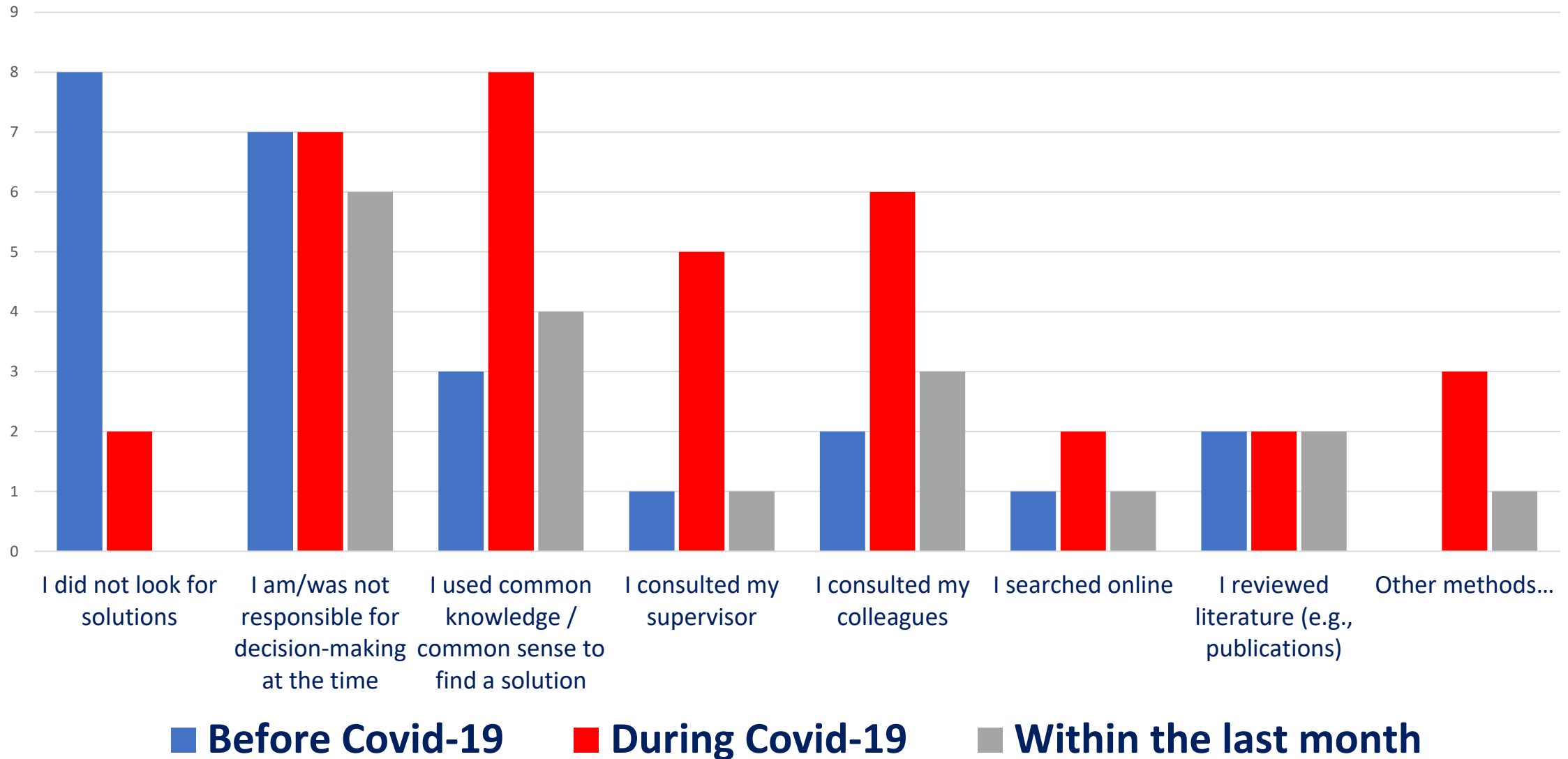


Before  
COVID-19

During  
COVID-19

Last month

# Medical Materials: Finding solutions



# Solutions in France

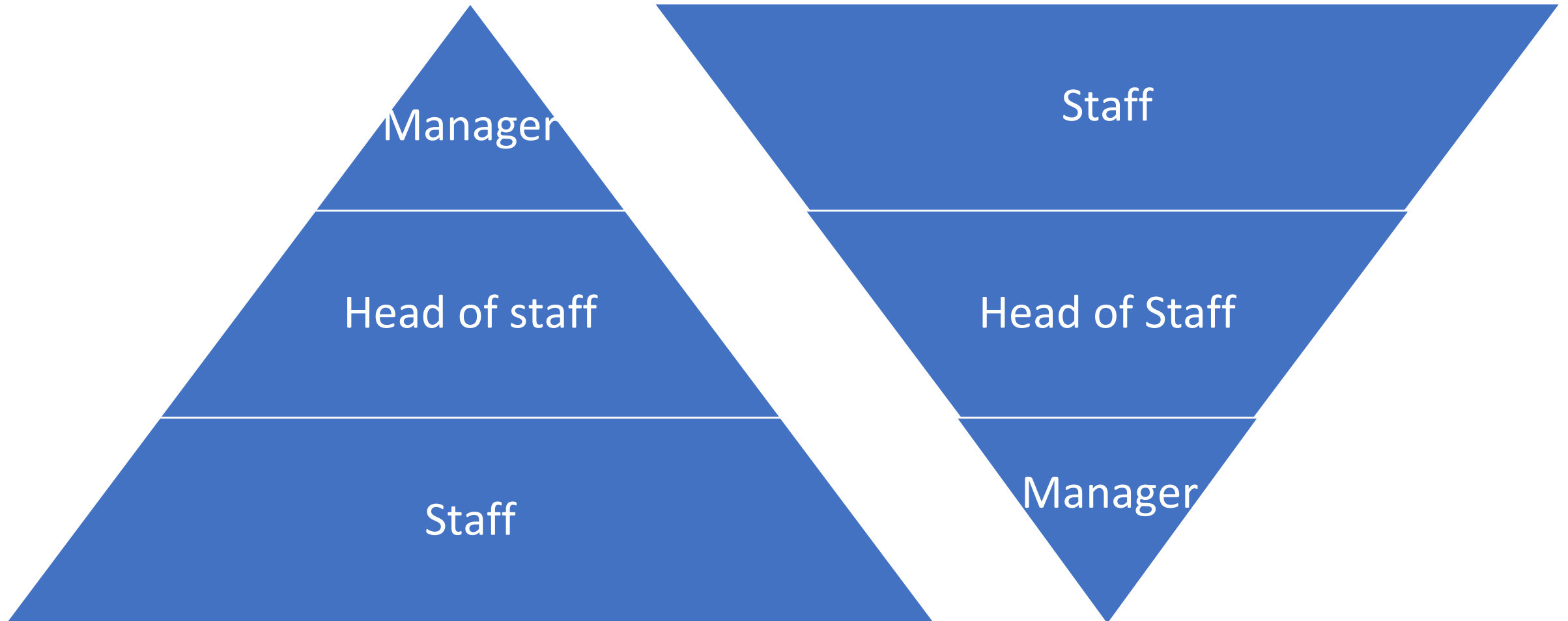
# 1 Shortage of Healthcare Personnel

Solutions in  
France



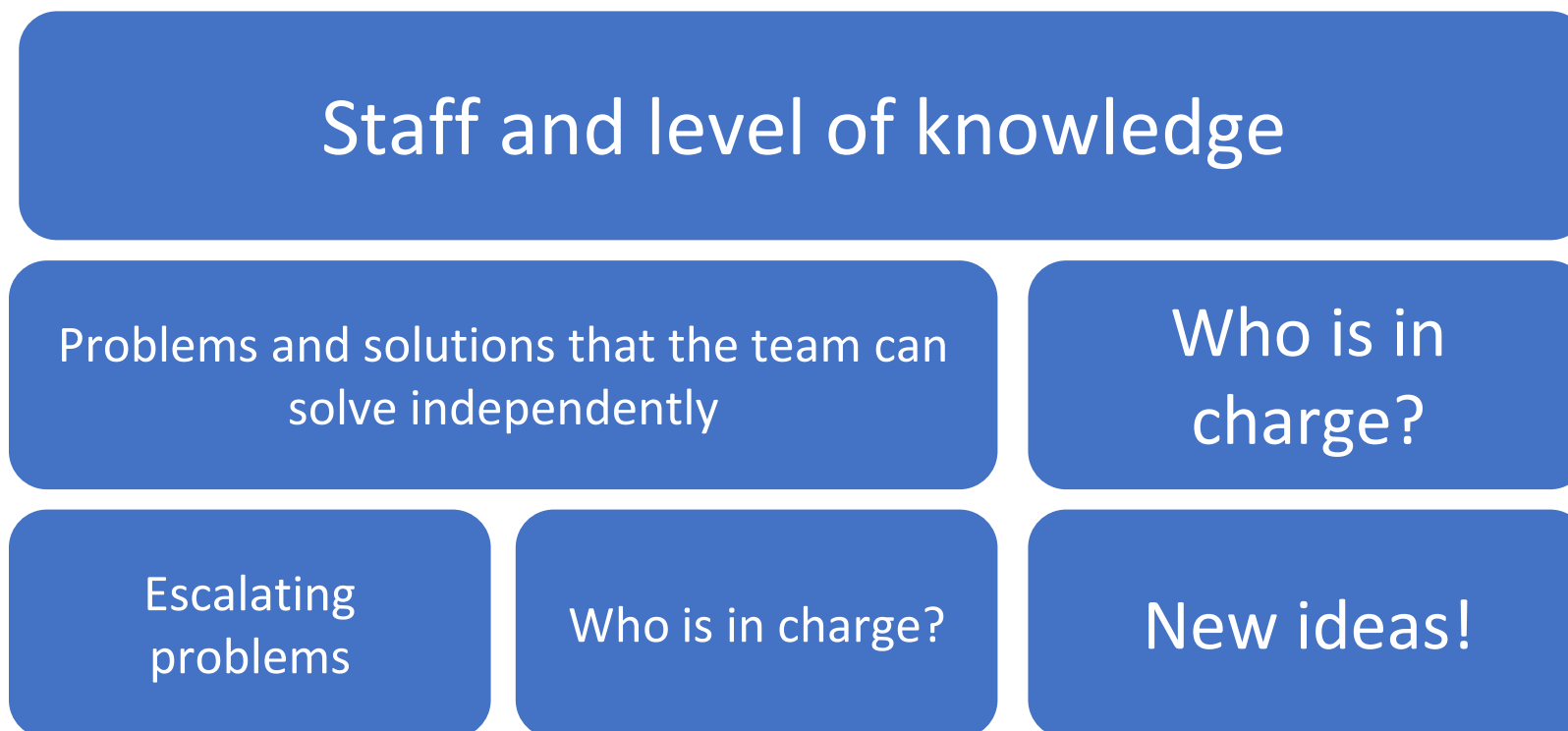


# Lean Management



# Management board

The team and management uses a board where all of the staff at hand are presented with their level of knowledge in terms of Covid-19 and speciality:



2

# Management of Hospital Beds

Solutions in  
France



# Hospitals Beds:

## Hospital of Poitiers - ER Improvement Plan



### Adult ER Situation at University Hospital of Poitiers in 2013:

- Patients staying overnight on stretchers
- Patients not attended by a proper specialist
- ER doctors isolated from other specialists

# Hospitals Beds:

## Hospital of Poitiers - ER Improvement Plan



### Goal:

→ to control the daily random entries and try to determine the required overall bed capacity in hospital care units to accommodate these patients.

- *Scheduled activity* (financing according to the occupancy rate)
- *Emergency activity* (dedicated beds)

# Hospitals Beds:

## Hospital of Poitiers - ER Improvement Plan



No significant fluctuations were found:

- By rate of hospitalizations (40% of ER patients were hospitalized)
- By month and week days
- By speciality (20% surgery; 80% medicine)

But...

They discovered a **strong variation** of the hospitalization rate each day

# Hospitals Beds:

## Hospital of Poitiers - ER Improvement Plan



How to determine the number of beds necessary to be reserved for ER inpatients?

→ cross the needs of ER with percentage of hospital occupation using **specialized software**

# Hospitals Beds:

## Hospital of Poitiers - ER Improvement Plan





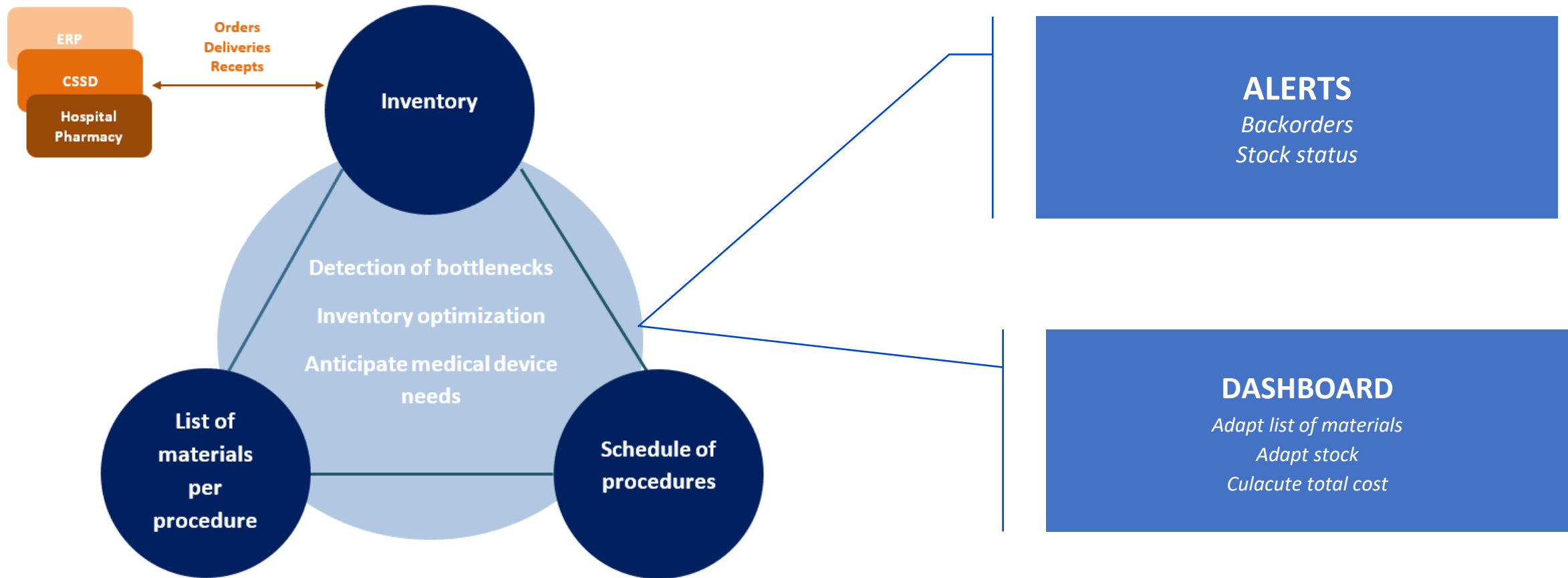
3

# Lack of Medical Materials

Solutions in  
France



# Medical Materials: Supply Chain of Operating Theatre



# Conclusion

# Conclusion (1)

- Decision-making strategies during COVID-19 wrt. **medical materials shortage**:
  - Common knowledge
  - Consulting supervisors and colleagues
  - No significant difference in use of scientific literature across time  
→ Poor use of evidence?
- **Shortage of personnel** is *more important* within the **last month** than during the peak Covid-19 outbreak
  - Main factor:  
**difficulty with recruitment**
- Management of beds and medical materials is steadily returning to pre-Covid-19 levels within past month
  - However current **shortage of personnel** is the main factor affecting management of beds

# Conclusion (2)



- COVID-19 - a major strain on hospitals and personnel
- Initial survey of French hospitals provided very valuable information
- Three examples of successful evidence management related to our three survey themes

# Future Work

- Survey of greater sample size
  - Analysing results across different levels of management
  - Acquiring patient perspective
- Focus on ***why*** use *scientific literature* was not increased to aid in decision-making during pandemic
  - Motivation: *let's increase its use!*
- Explore strategies for recruitment of new medical personnel
- New questions relating to continually evolving pandemic situation

# THANK YOU!

*"The best time to plant a tree was 20 years ago.  
The second best time is now."*

*-- Chinese proverb*

# References

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