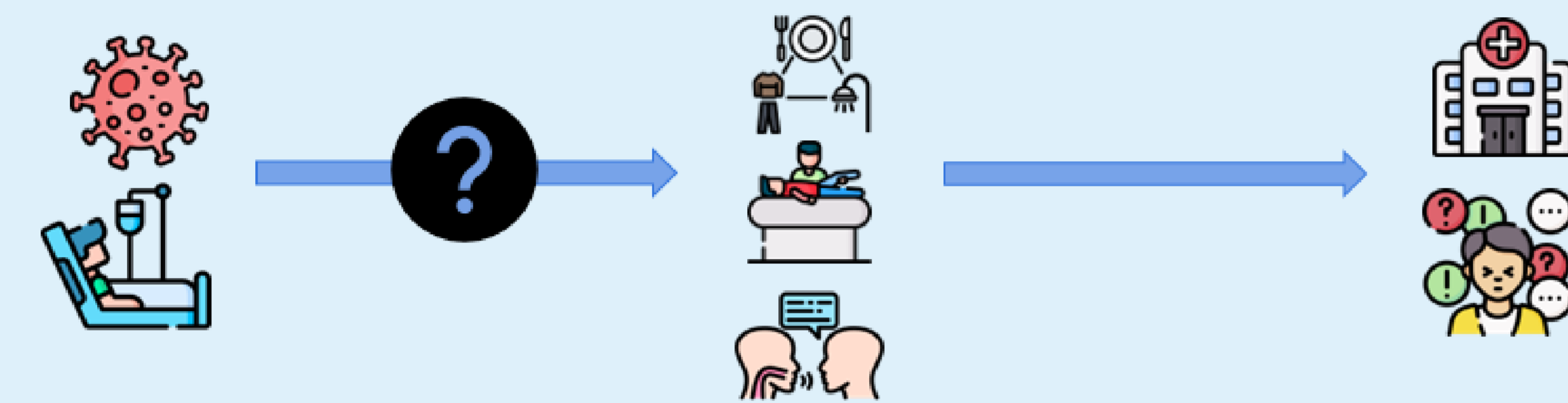


# In-hospital rehabilitation interventions in critically ill patients with COVID-19: preliminary findings from a systematic review



## INTRODUCTION

The nature & capacity of rehabilitation interventions for critically ill patients with COVID-19 is not well understood.



Rehabilitation interventions started in the intensive care unit (ICU) have been shown to improve outcomes for critical care survivors.<sup>1,2</sup>

1. Needham DM et al. AJRCCM. 2014;189(10):1214-1224.  
2. Fuke R, et al. BMJ Open 2018;8(5):e019998.

## OBJECTIVES

- To summarize the **types of rehabilitation interventions** conducted in the ICU in patients with COVID-19 (PROSPERO 2023 CRD42023340256).
- To determine whether rehabilitation interventions performed by regulated allied health professionals (AHPs) in the ICU during the pandemic **improved outcomes** in survivors of COVID-19.



## METHODS: SYSTEMATIC REVIEW

### Inclusion Criteria

- Original research
- Adults (≥ 18 years)
- Critical care/ICU due to COVID-19
- Rehab interventions
- Outcomes of interest

### Article review process

- Two-stage (abstract & full-text), in duplicate
- Insightscope:
  - 18 reviewers recruited
  - Posters, social media posts, etc.



### Data abstraction process



- In duplicate

- Data extracted:
- Demographics
  - Rehabilitation details
  - Outcomes of interest:
    - Functional & psychological outcomes
    - Adverse safety events
    - Respiratory support
    - Length of stay
    - Frailty status

## AUTHORS

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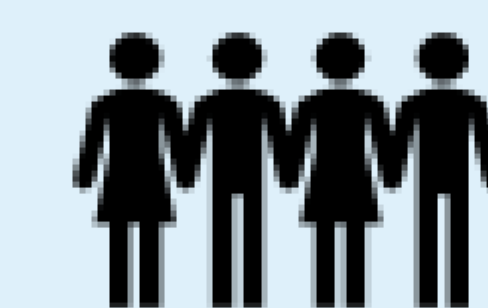
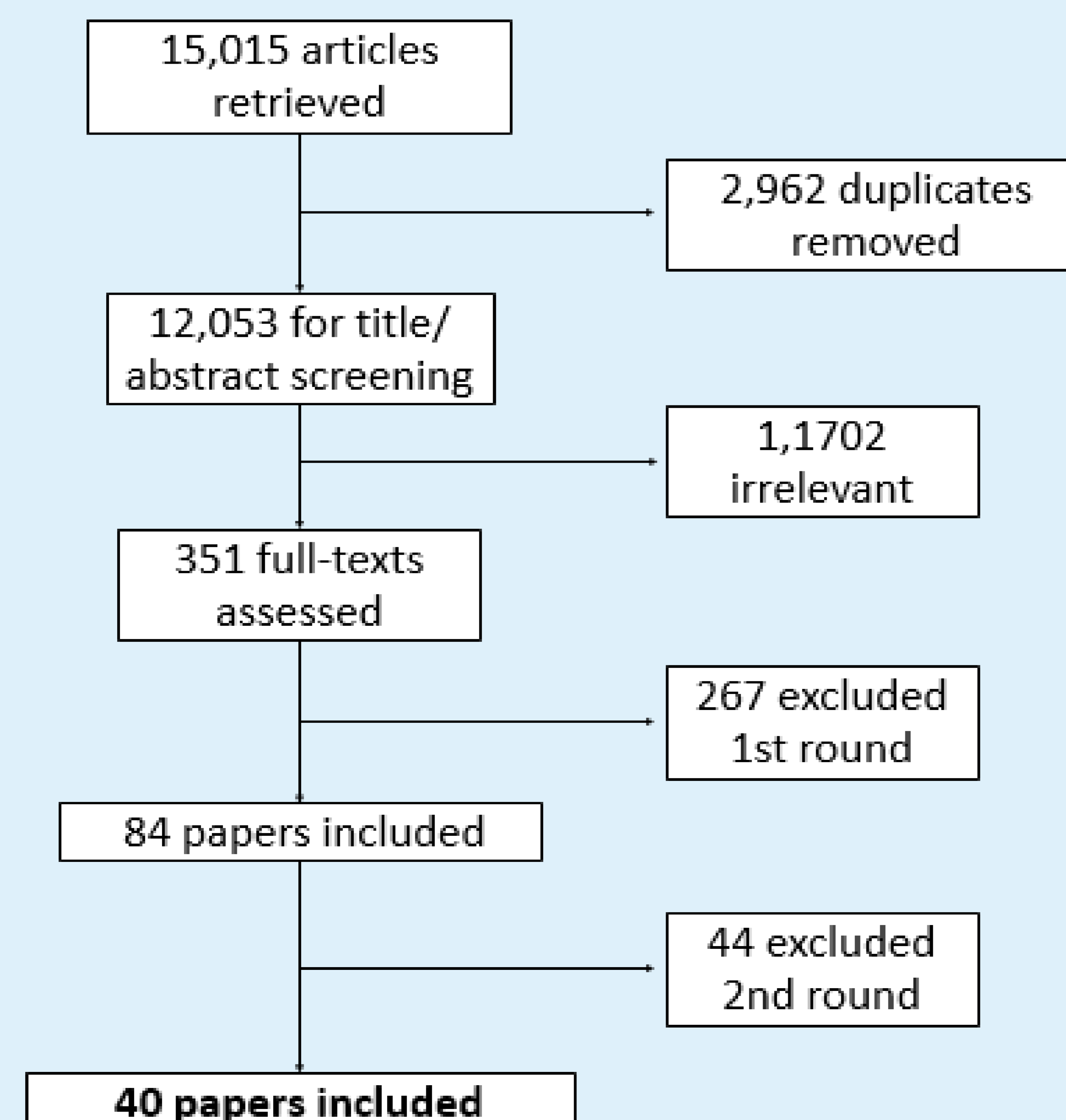
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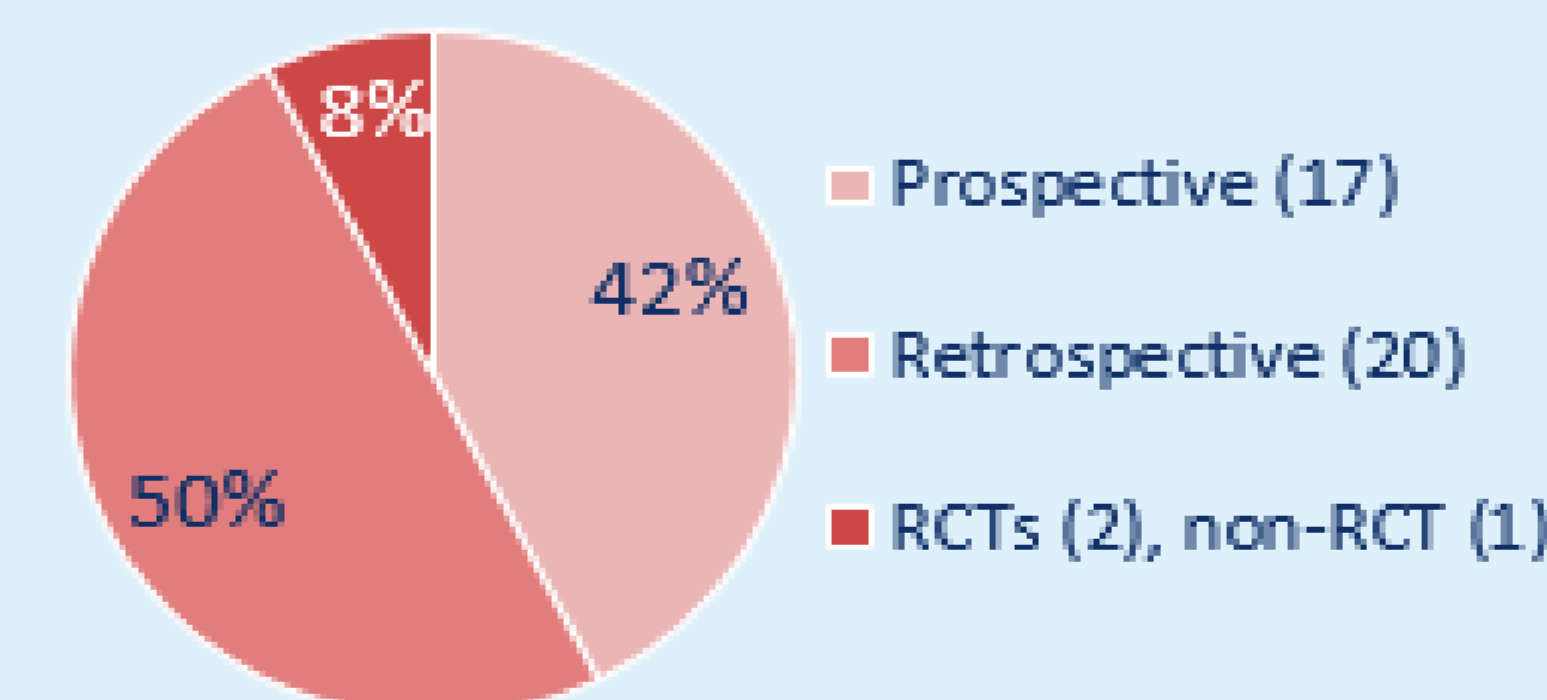
For more information on the systematic review and the REVIVE research program, please contact the REVIVE Methods Centre: [revive@mcmaster.ca](mailto:revive@mcmaster.ca)  
Website: <https://icurevive.com/>

## PRELIMINARY RESULTS

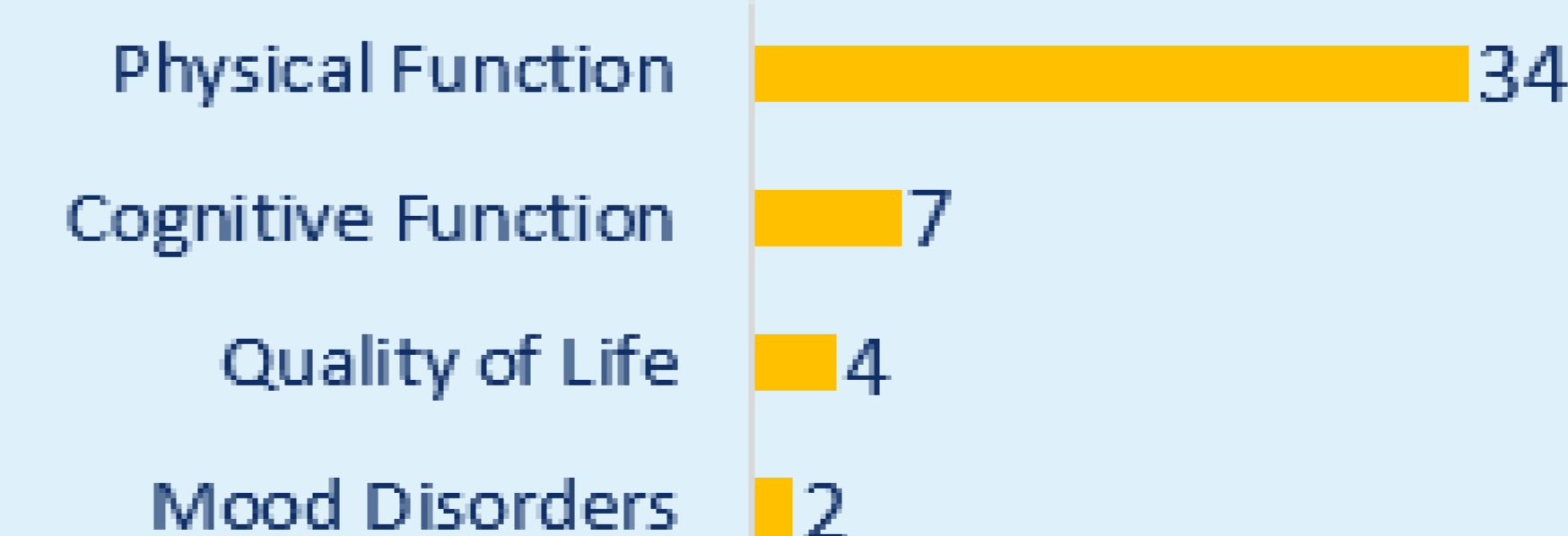


5,315 patients

### Study Type



### Outcomes Assessed



### Intervention types:

- Airway clearance
- Mobility/Range of Motion exercises
- Swallowing
- Cognition

## CONCLUSIONS & NEXT STEPS

- Despite challenges during the pandemic, critically ill patients did receive rehabilitation interventions delivered by various regulated AHPs.
- Most studies were observational and retrospective; additional RCTs ought to be performed to evaluate the efficacy of interventions in critically ill patients with COVID-19.
- Summarize outcome assessments and pool findings; meta-analyses will be conducted if appropriate
- Risk of bias assessments

## ACKNOWLEDGEMENTS

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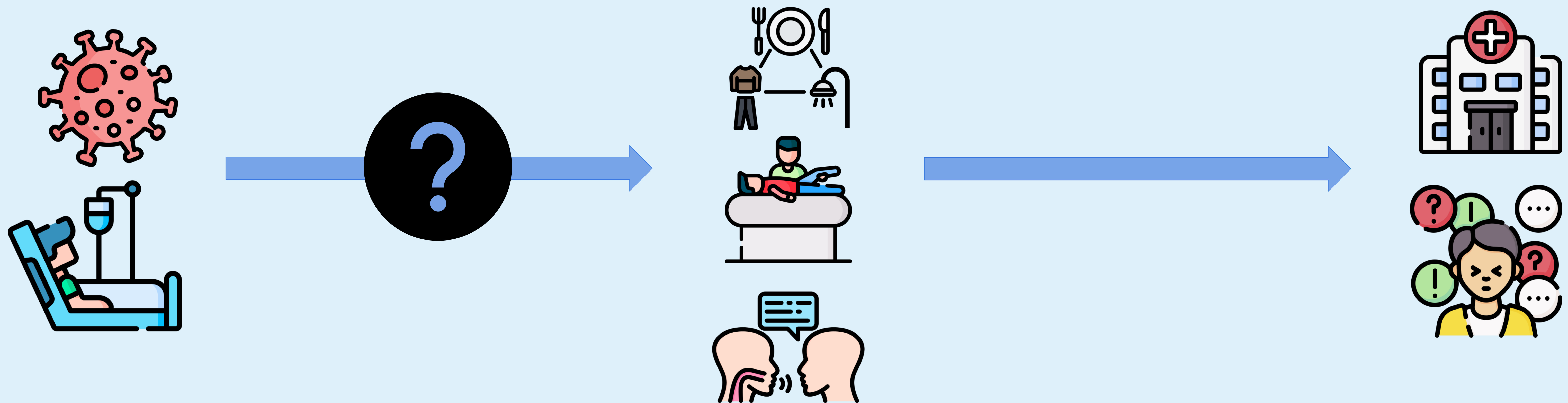
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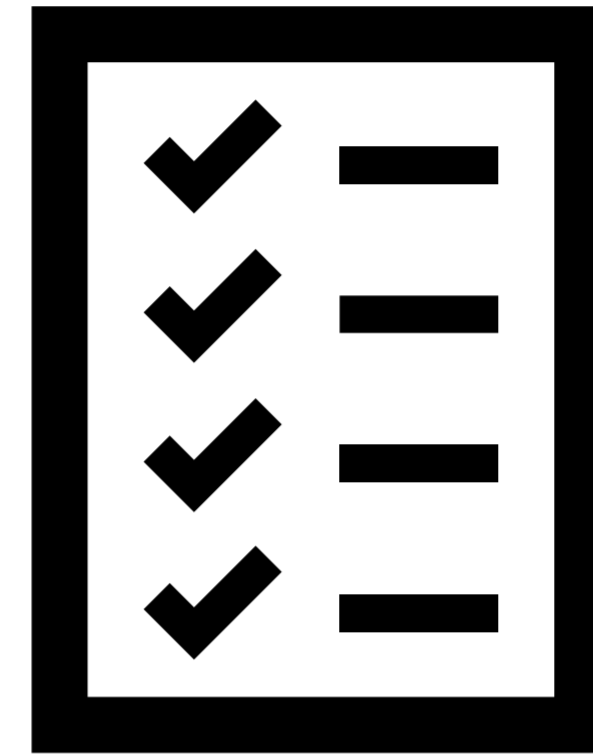




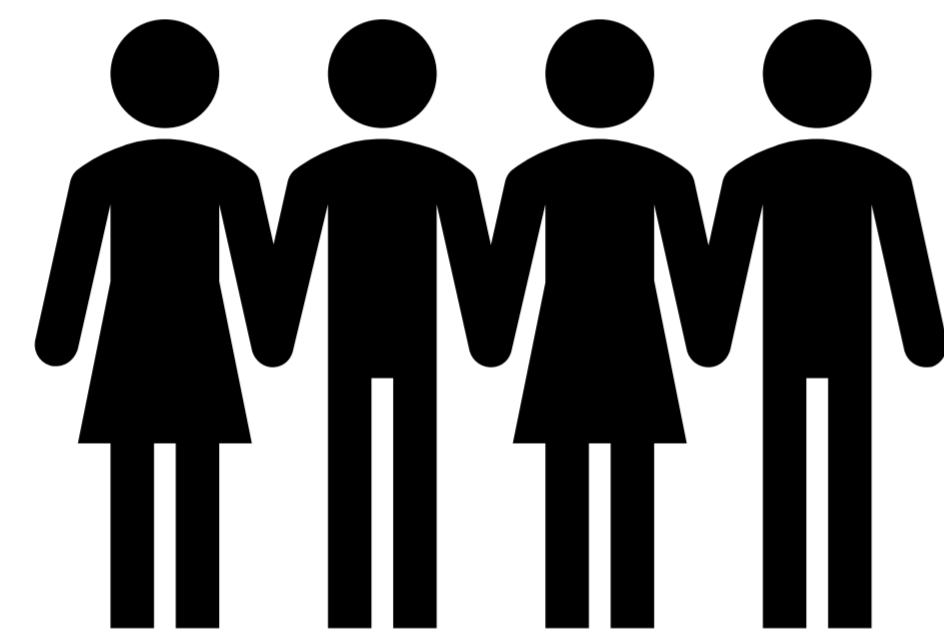
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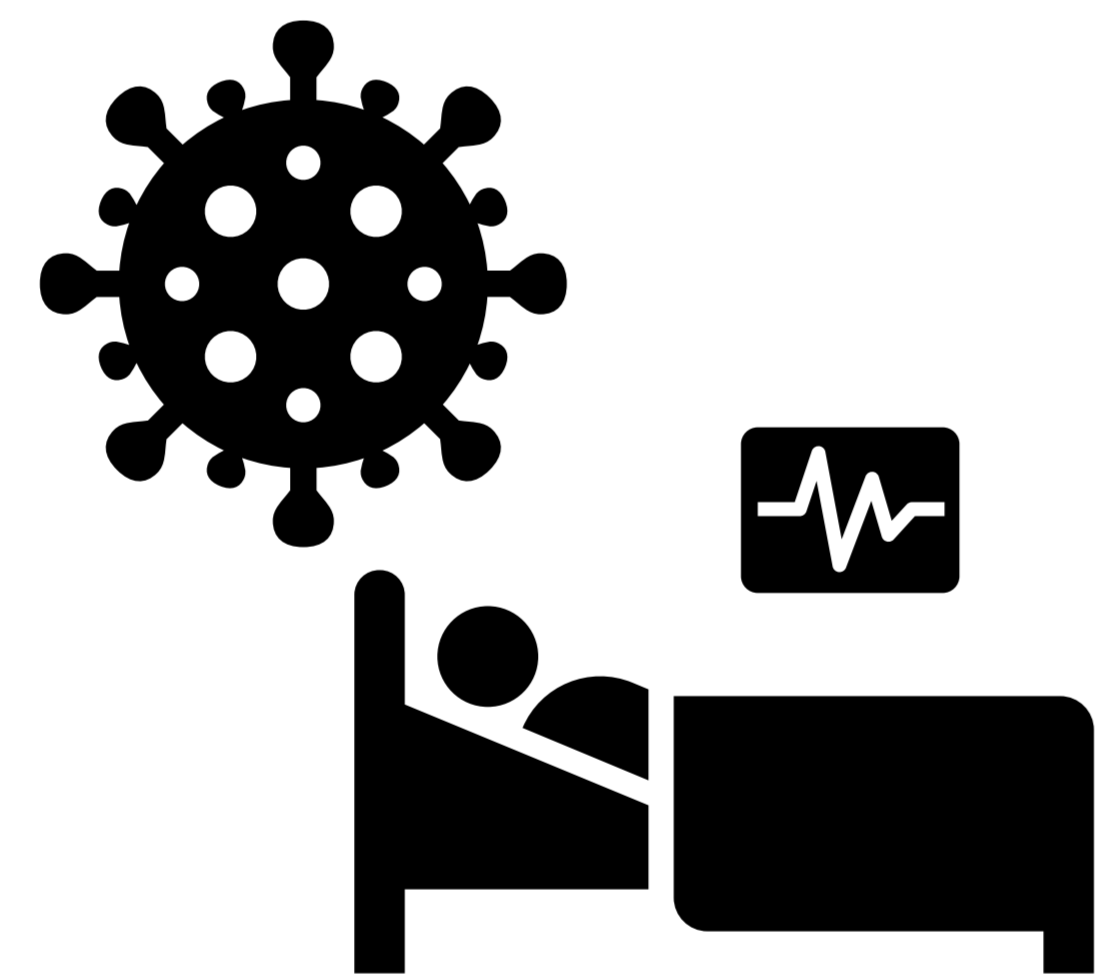
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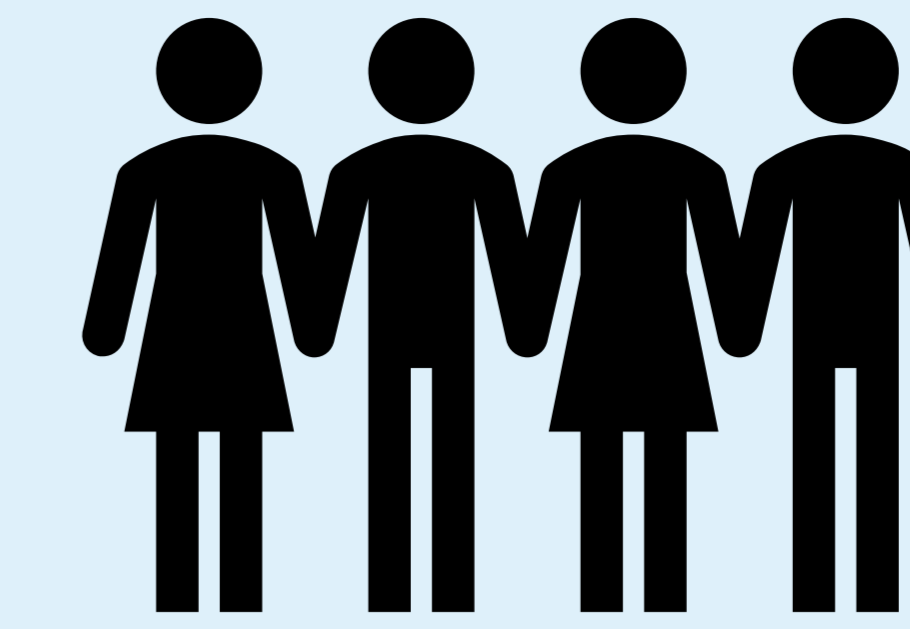


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### Data extracted:

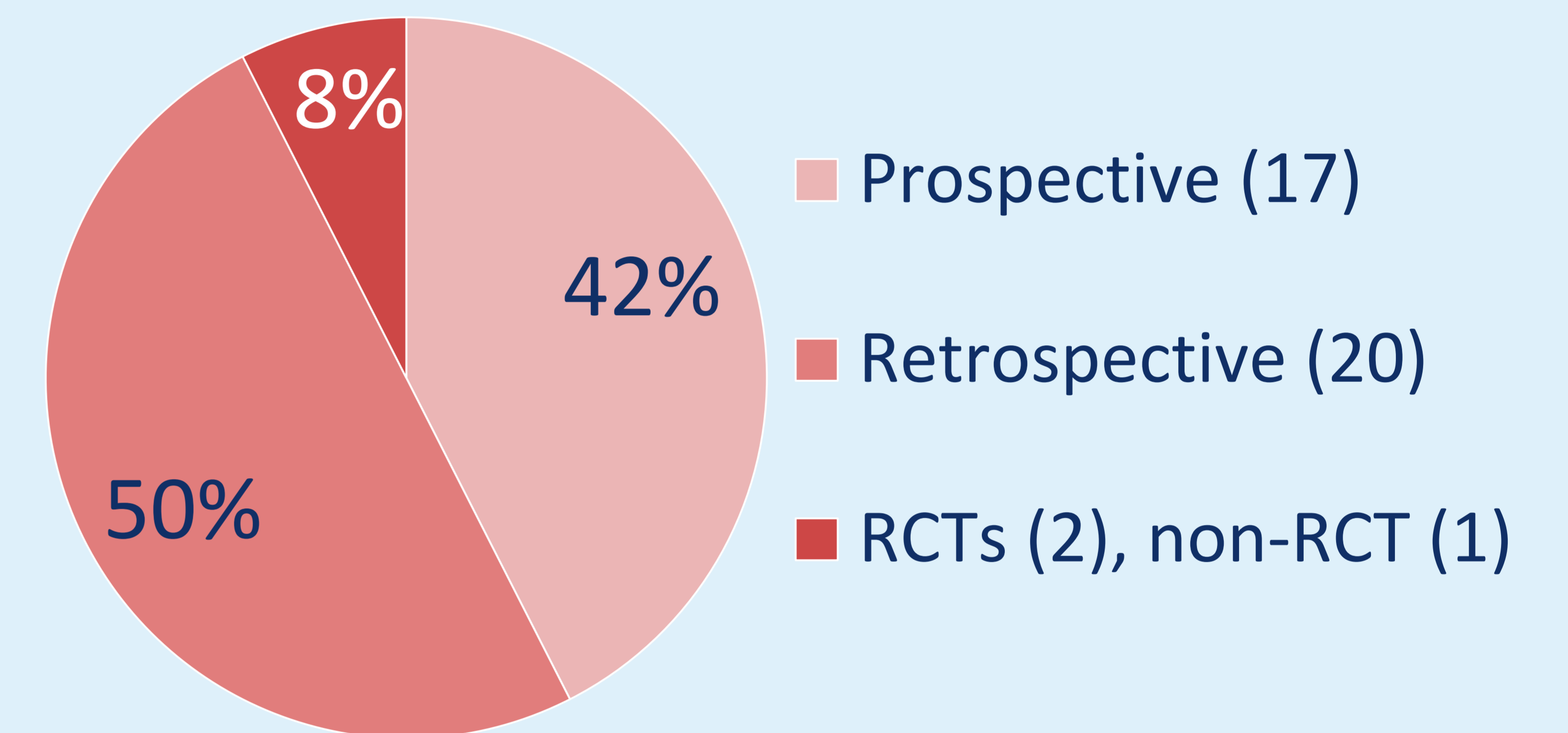
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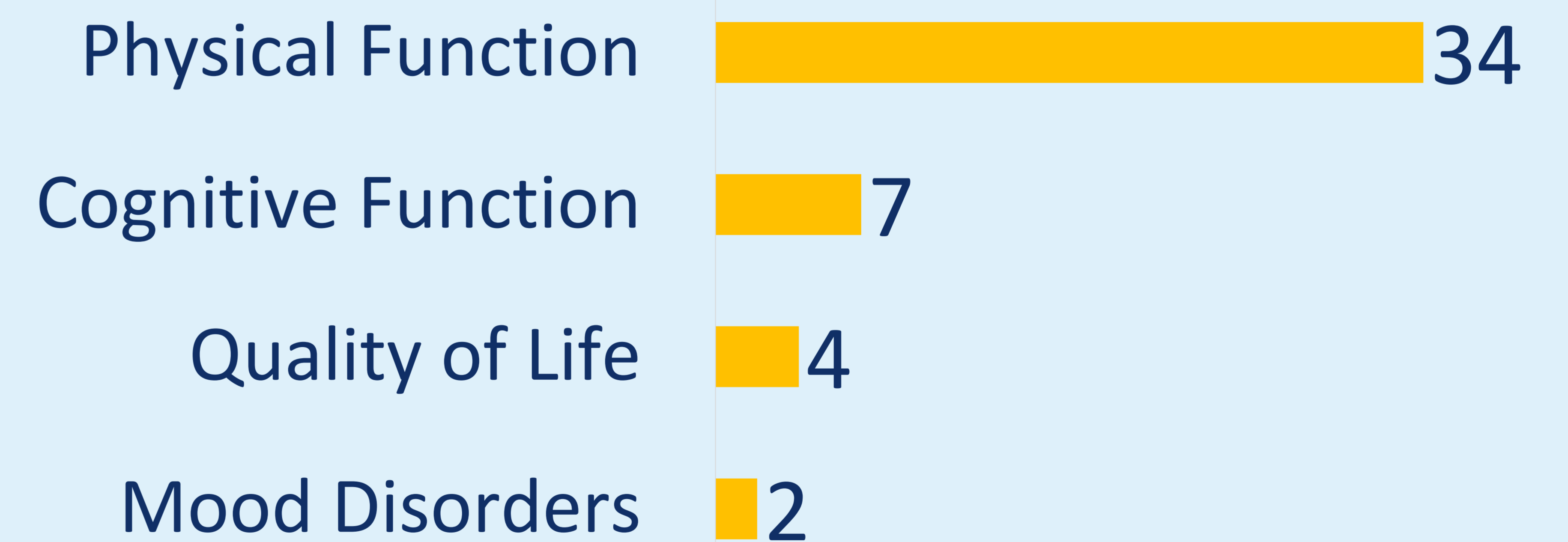


**5,315 patients**

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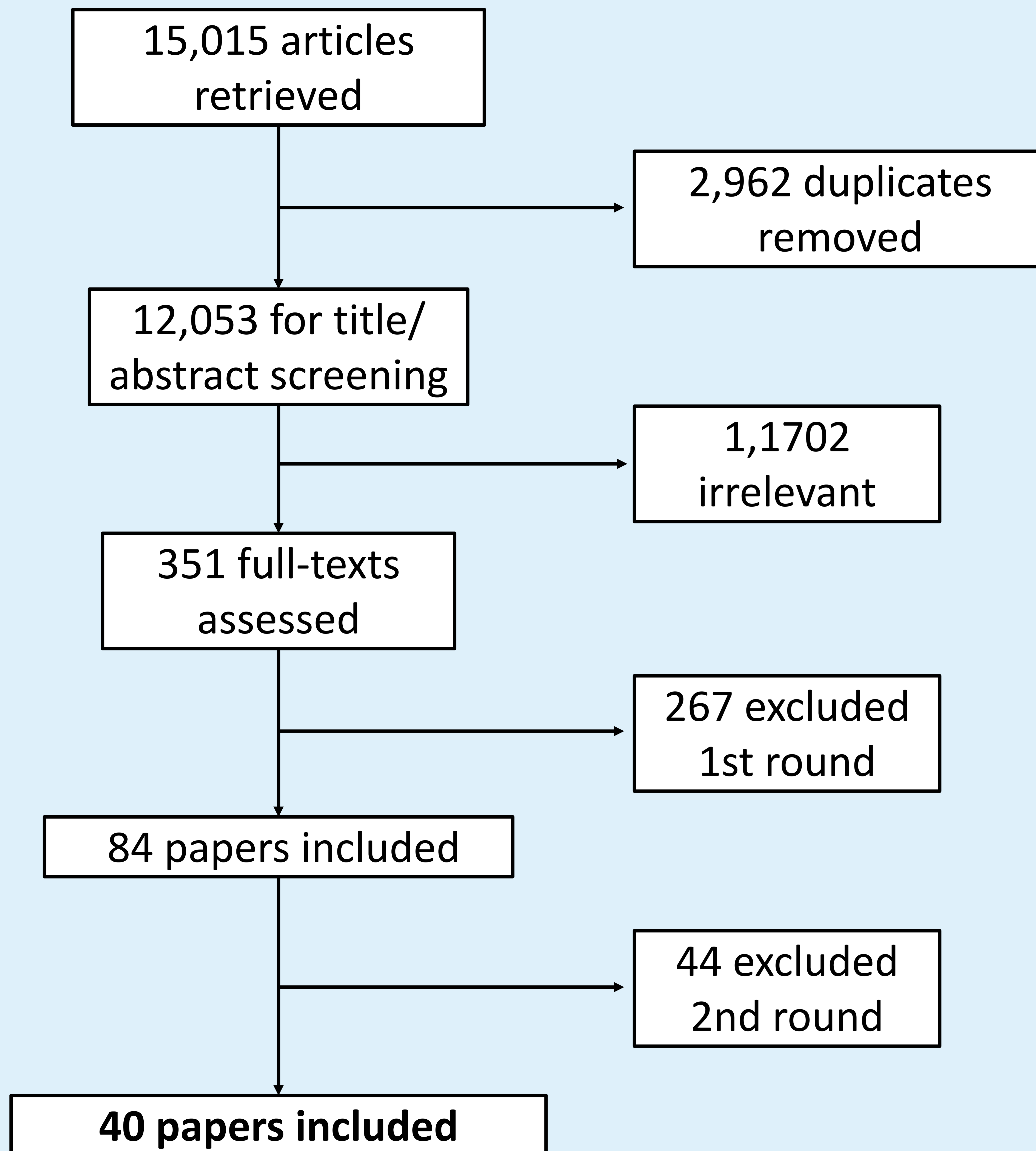


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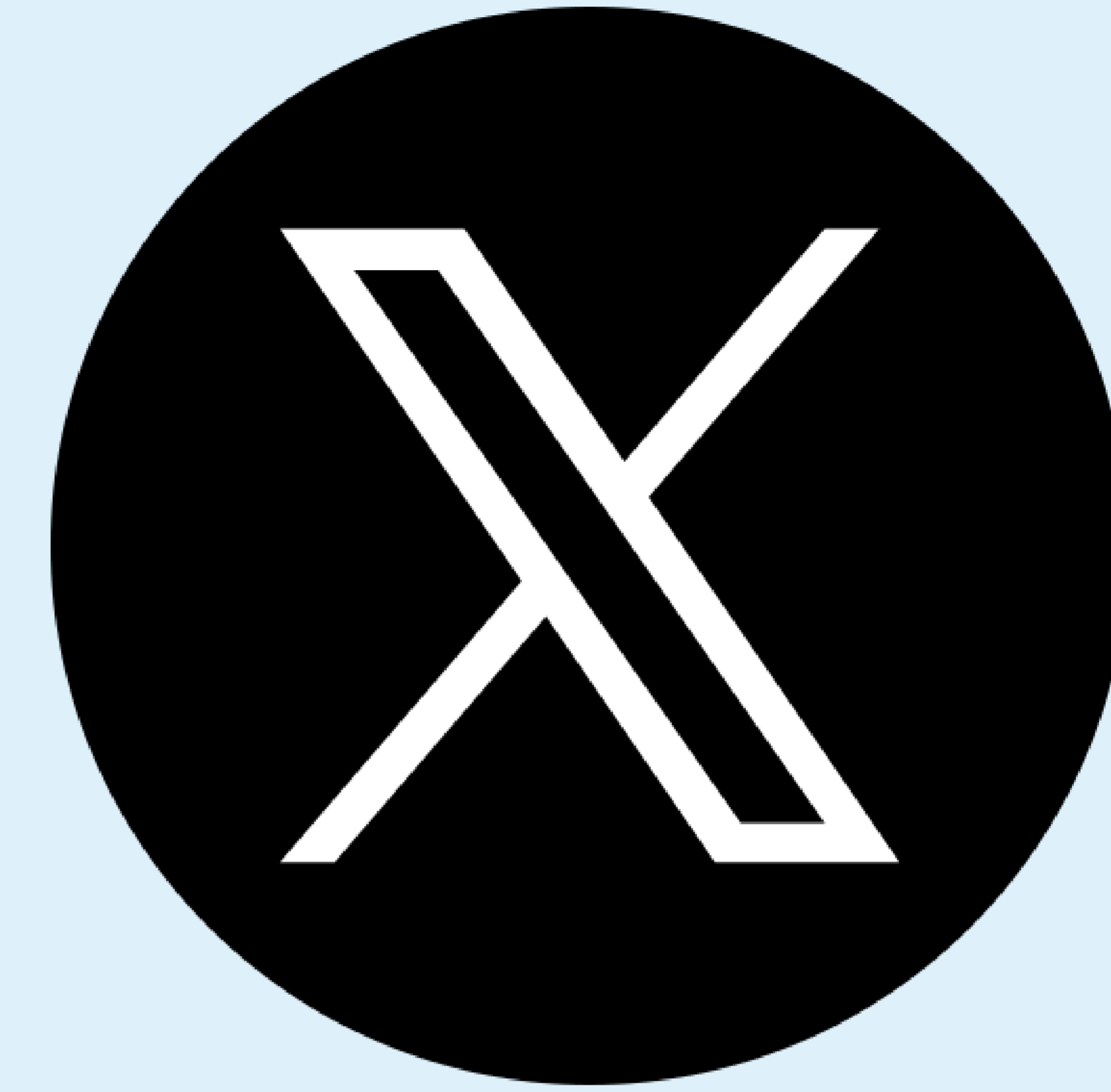
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