

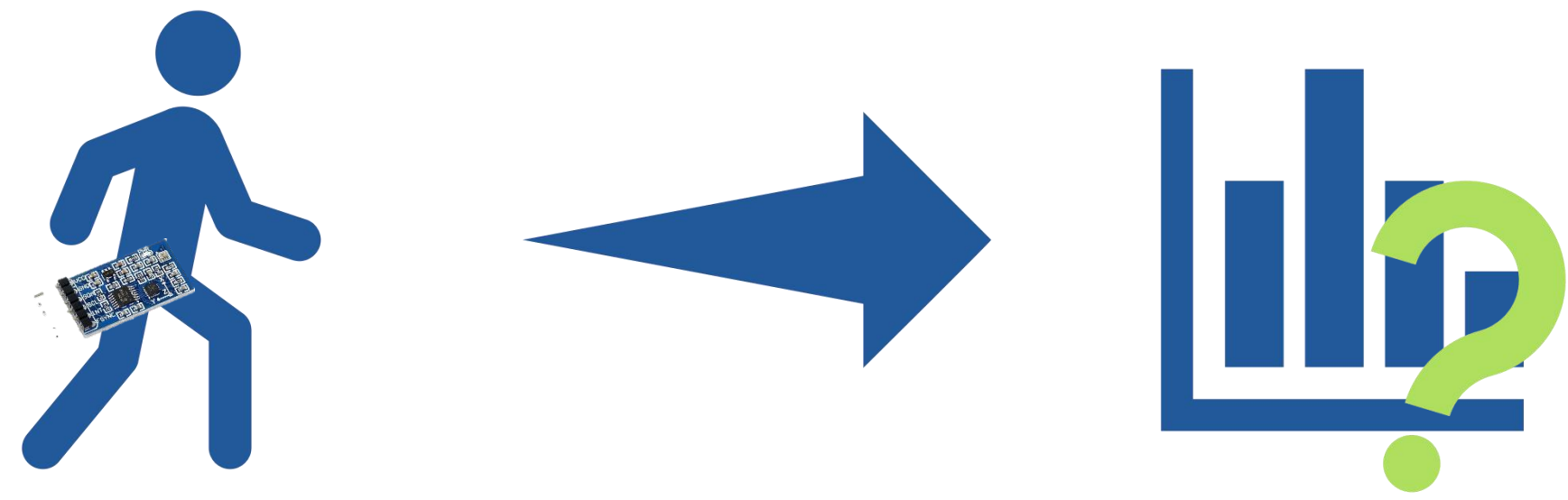
# How do people want their mobility data over time visualized? Ongoing adapted Delphi study with patients

Authors

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## Background

- Mobilise-D aims to validate and approve digital mobility outcomes to accurately measure a person's real-world mobility.



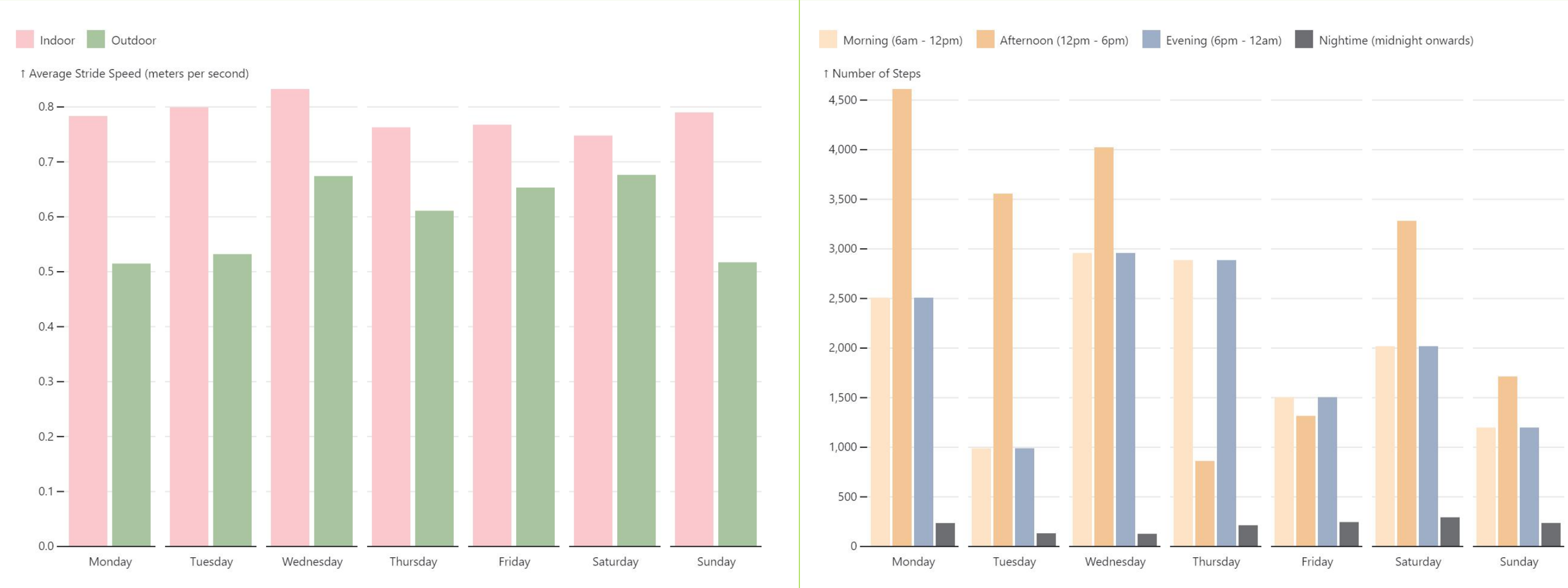
- It is important that the data from wearable devices can be visualised in an understandable way to patients (1).

## Methods

- This study is based on the Delphi process, we iteratively gathered feedback from patients to refine their preferences (2)



- Patients from PD, MS, COPD or PFF cohorts took part.
- The research was steered by members of the public and patient advisory group of Mobilise-D.
- Round 1 explored elements of people's mobility they feel are most influenced by their condition.
- Round 2 presented several draft visualisations based on



- These visualisations were presented alongside explanations of each DMO:

“Balance is an important aspect of mobility that helps us to feel steady on our feet and prevents us from falling. Balance relates to many aspects of a person's mobility. The walking parameters that we study in Mobilise-D such as stride speed can be related to balance. We have picked out stride speed specifically as a single measure that might be useful for people to see how their balance is impacted as if you feel unsteady you may expect to walk slower.”

- Patients rated the usefulness and ease of understanding as well as provided comments on each visualisation.

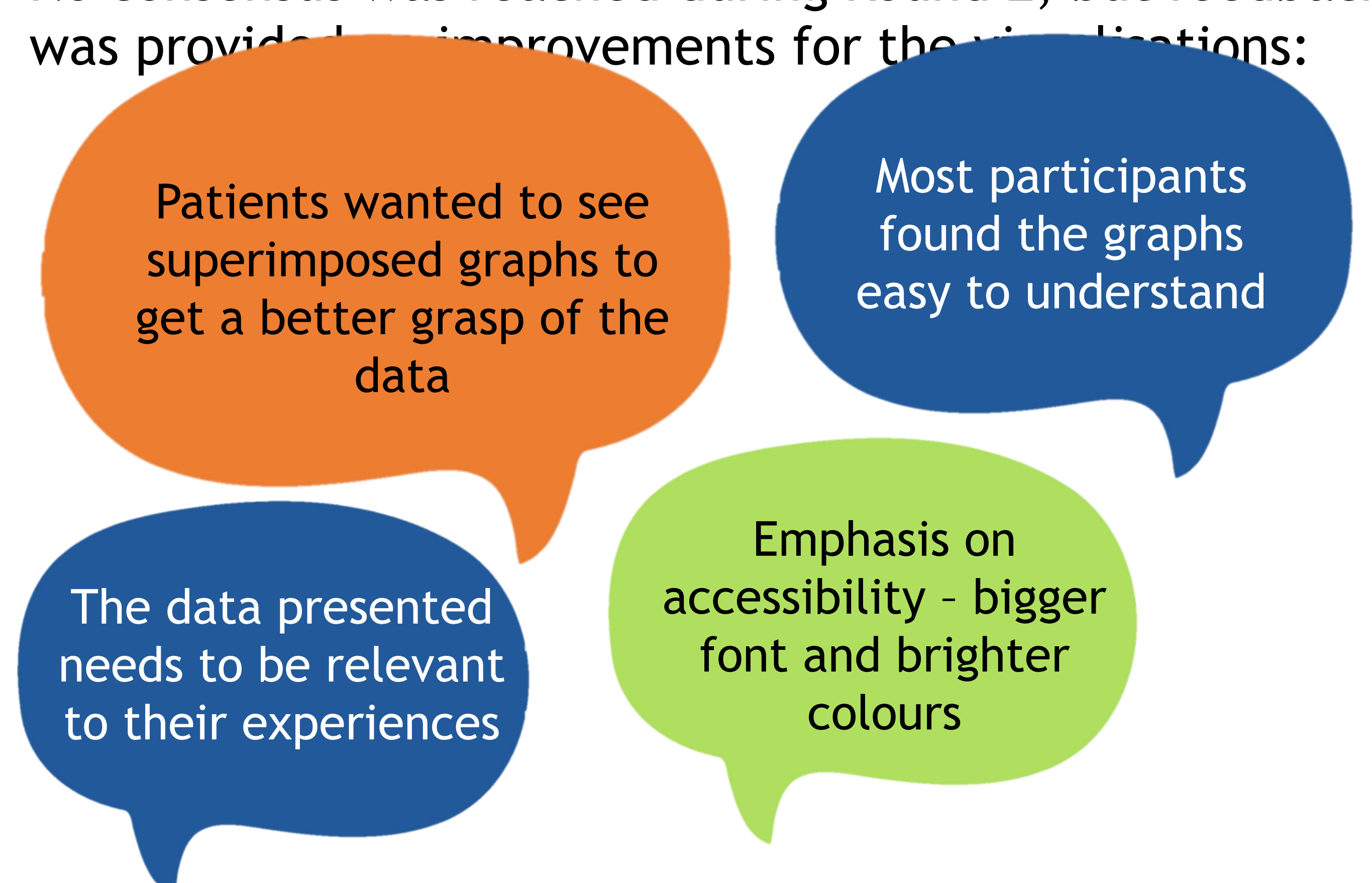
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## Results

- Round 1 resulted in mobility themes which were mapped using the data and linked to DMOs:



- The themes were used to justify the graphs shown in Round 2.
- No consensus was reached during Round 2, but feedback was provided for improvements for the visualisations:



## Conclusion

- Patients can understand graphs of their mobility data.
- Graphs need to represent relevant data to improve usefulness.
- This work is still in progress. No consensus was reached during Round 2. A third round will be sent out using the comments from round 2 to improve the draft visualisations.

## References

- Polhemus et al. Data Visualization for Chronic Neurological and Mental Health Condition Self-management: Systematic Review of User Perspectives. JMIR Ment Health. 2022
- Jones & Hunter. Consensus methods for medical and health services research. Bmj. 1995

## Acknowledgements

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