

Evaluation of the use of digital technology to improve medication engagement in children using spacers

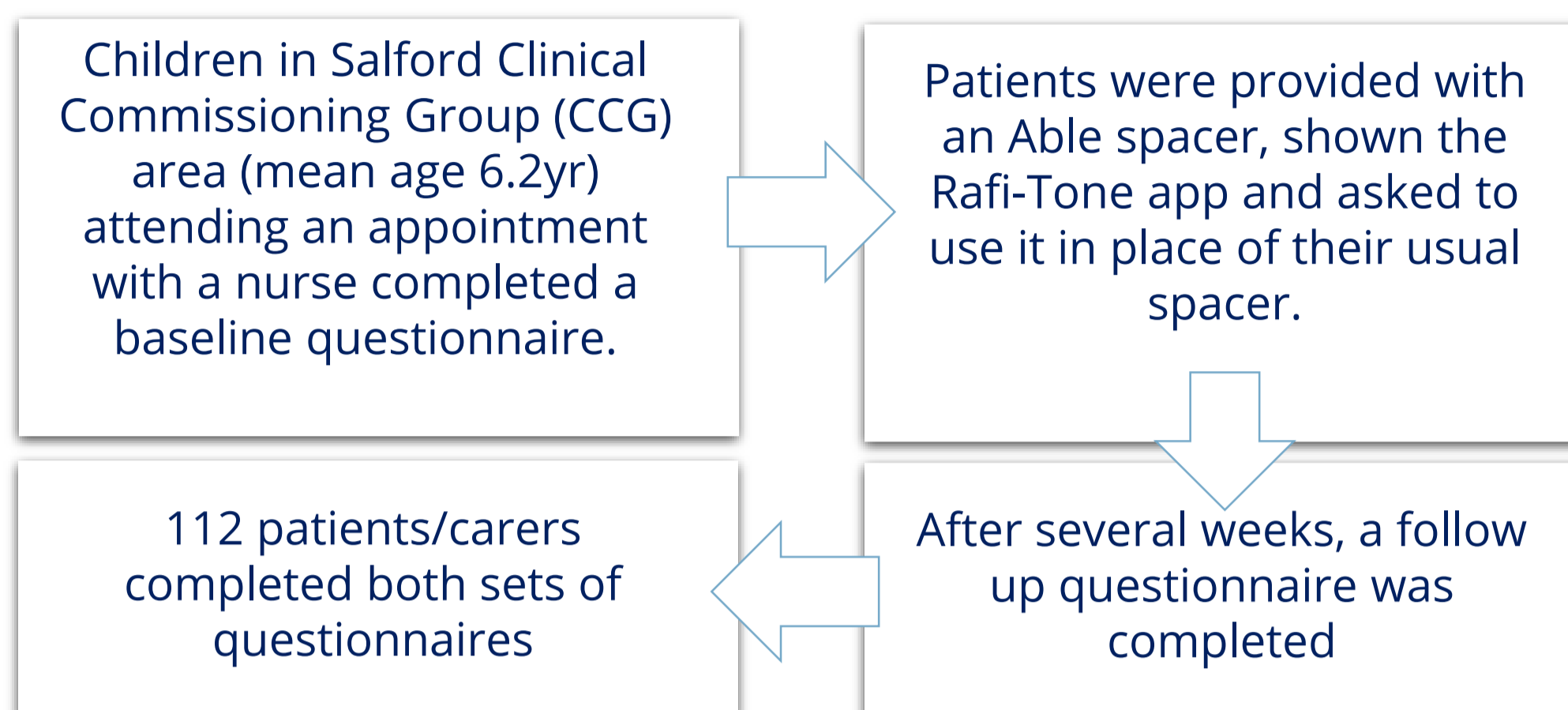
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Introduction

Digital technologies are a ubiquitous part of most children's lives. Many parents use smartphone games to distract and entertain their children. Using a spacer is known to be linked to better outcomes in young children^{1,2}. Rafi-Tone™ is a smartphone app which works with an Able Spacer® to engage and encourage a child to use the spacer effectively. The aim of this evaluation was to validate previous findings that the app helps children accept the spacer mask³ and to investigate the subsequent impacts on treatment distress, general asthma, and use of healthcare services.

Method



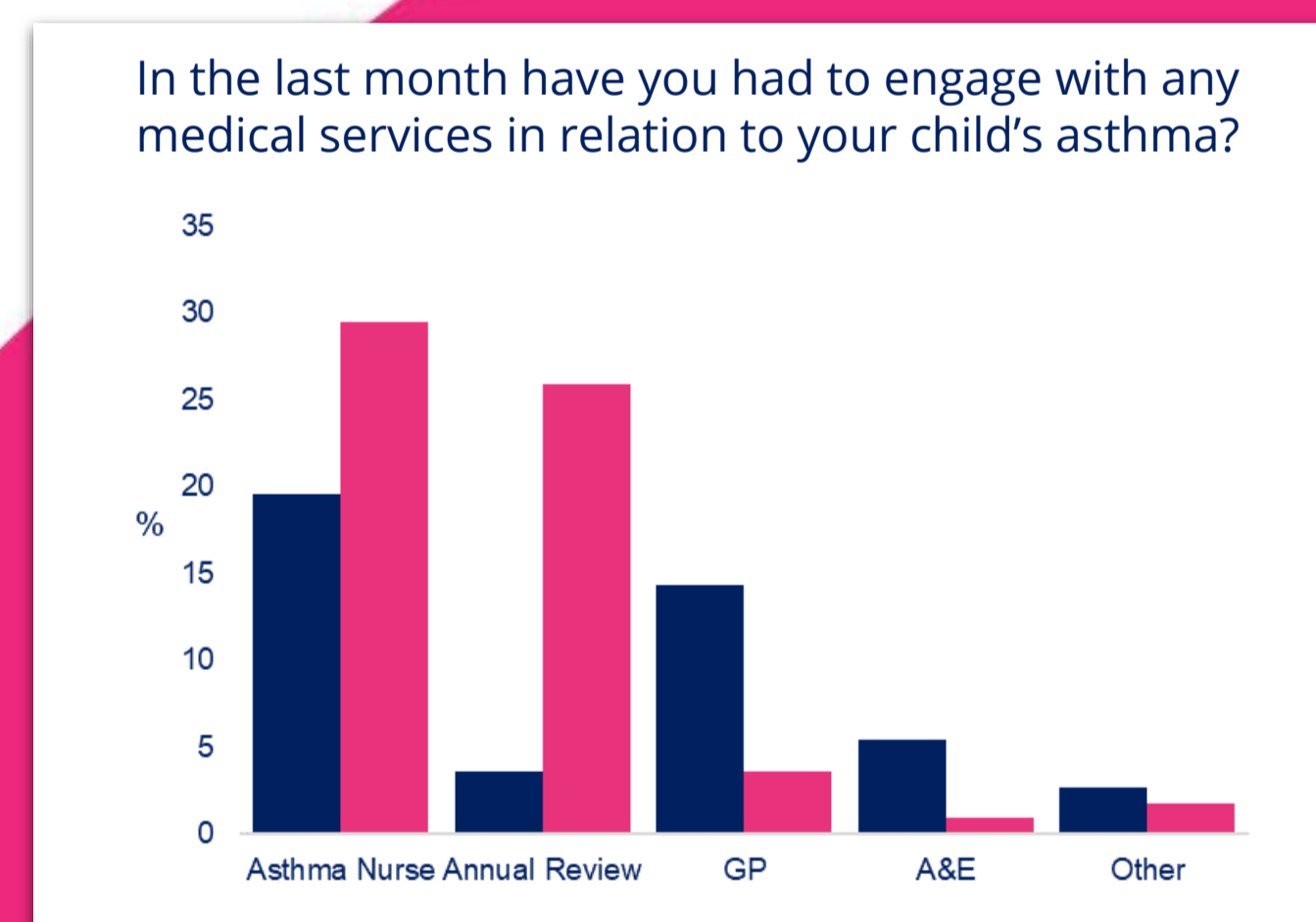
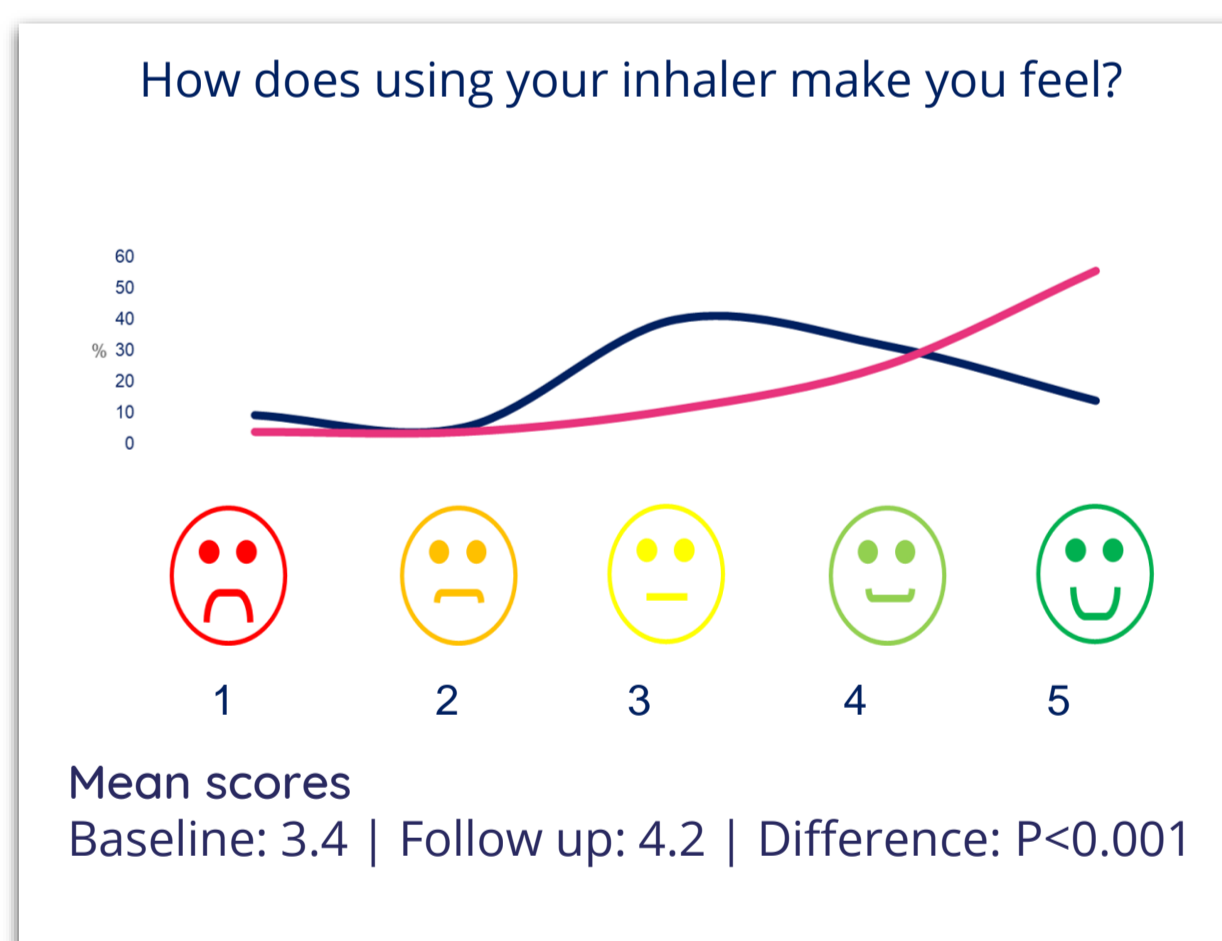
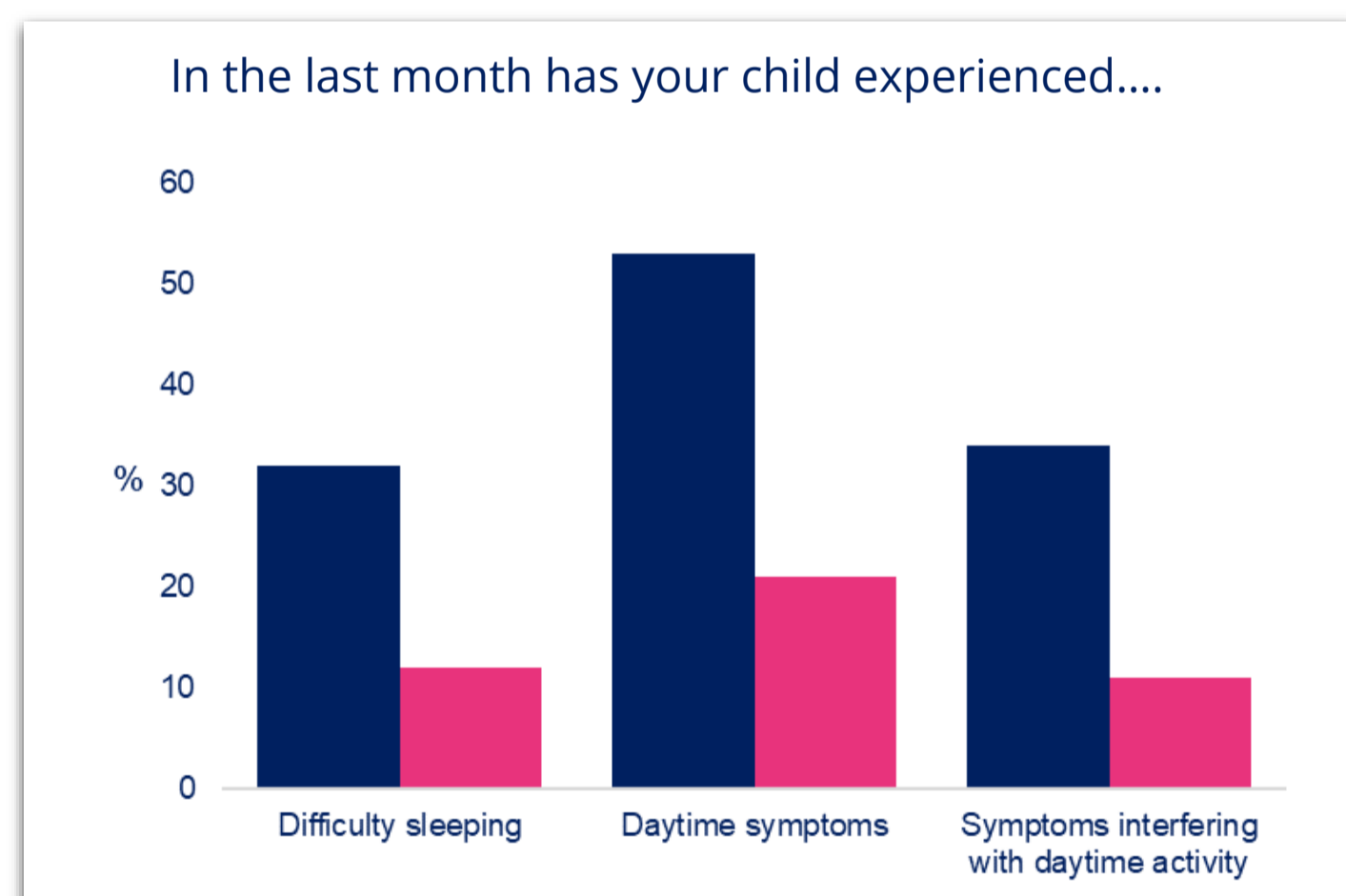
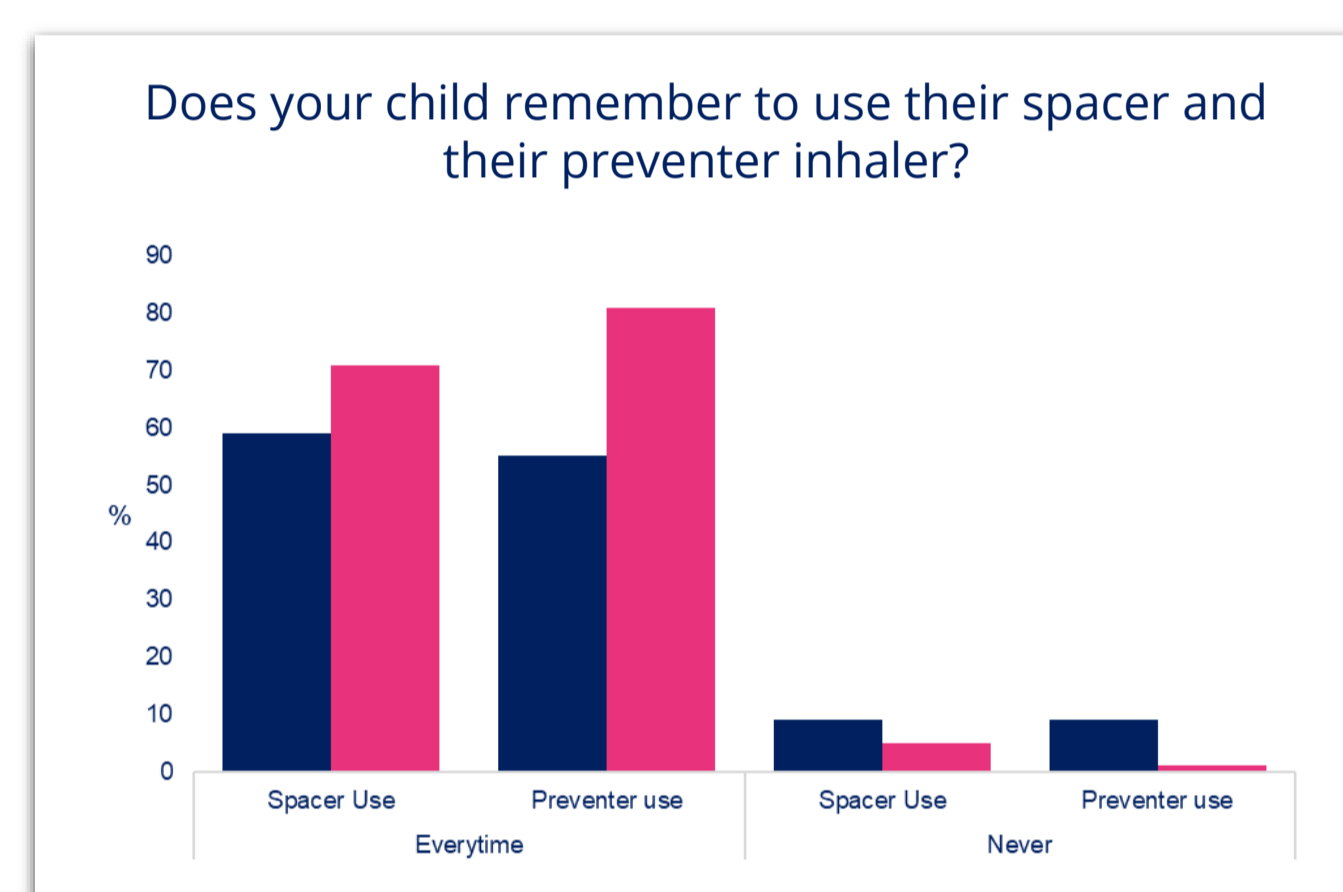
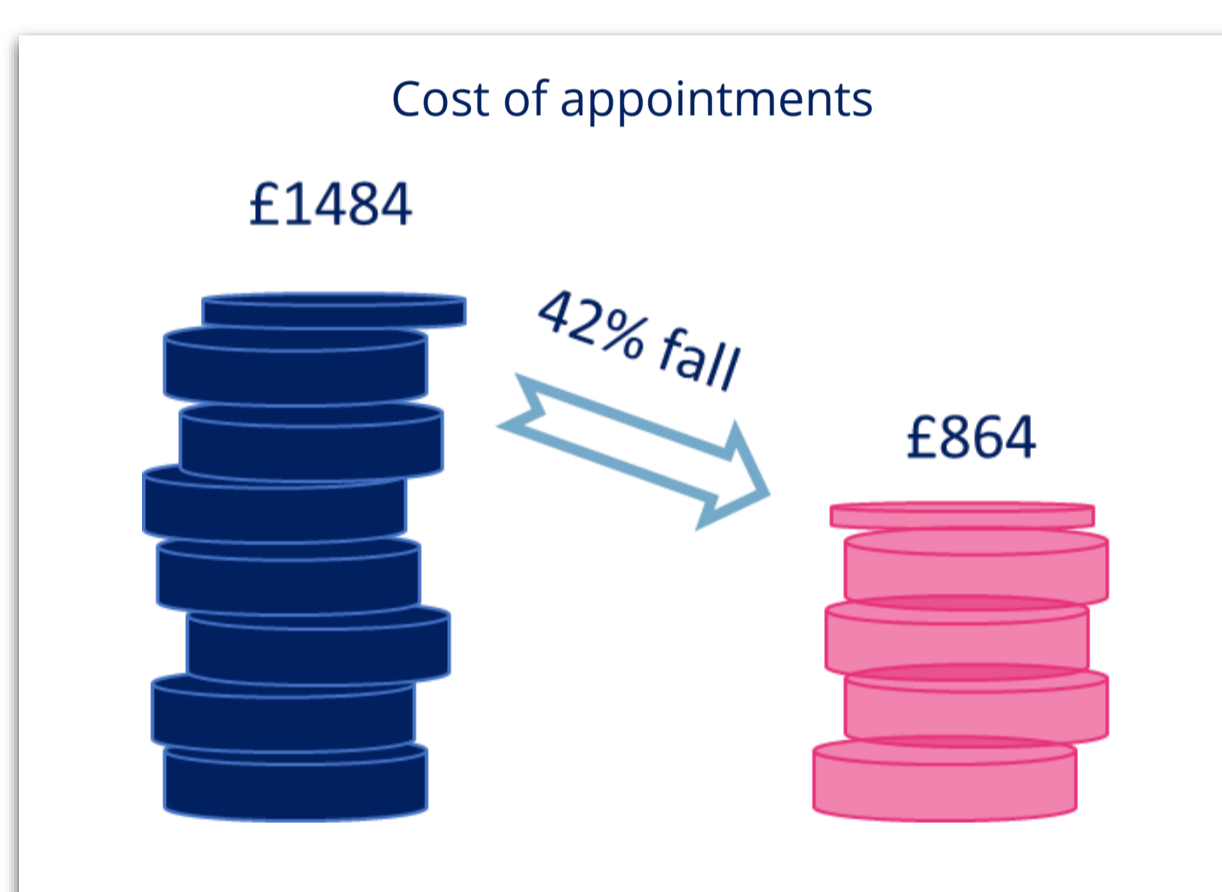
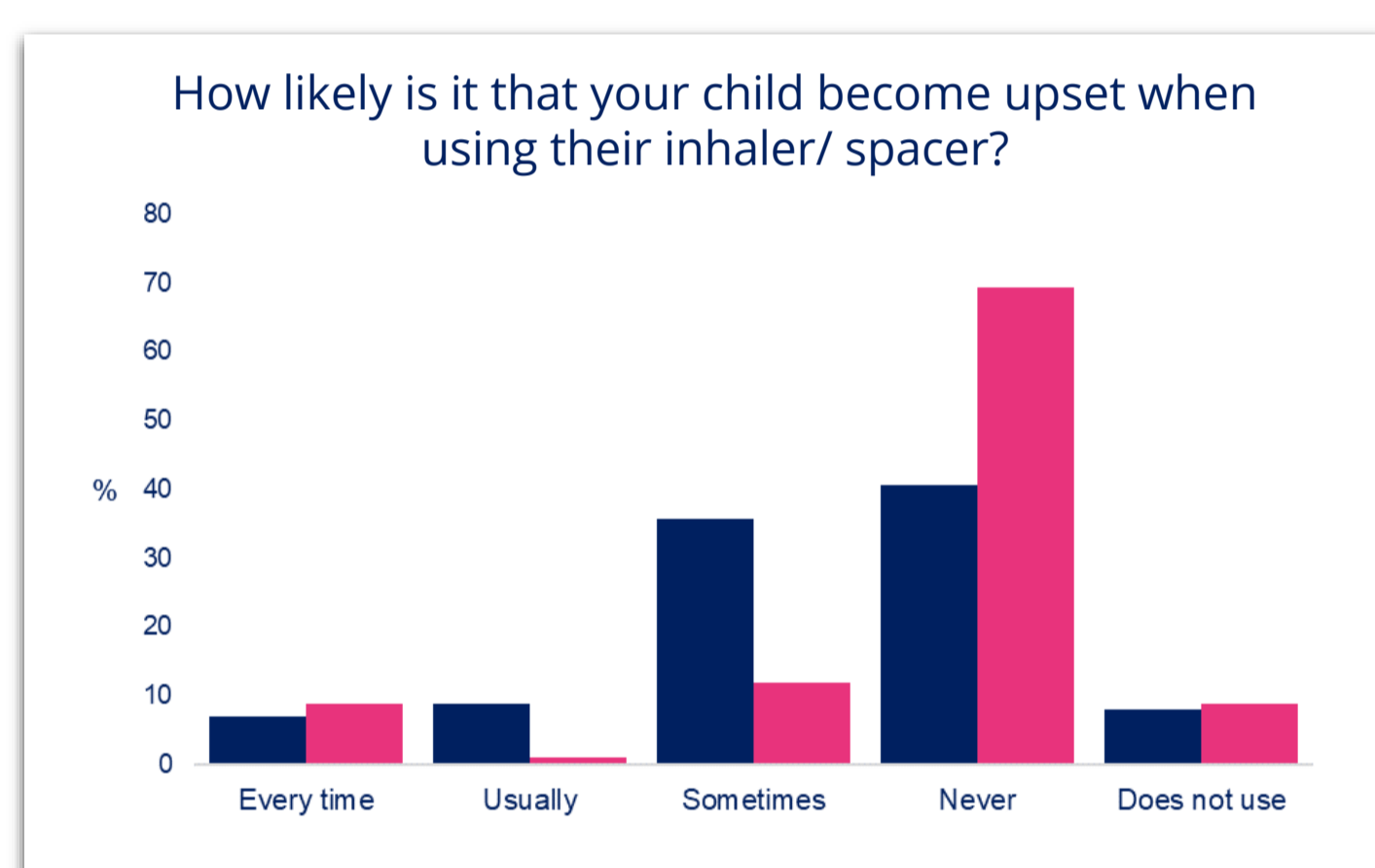
Nurses at participating practices also completed questionnaires



Results

■ Baseline

■ Follow-up



Conclusions

The results of this evaluation, show Rafi-Tone has a significant impact on children's acceptance of their inhaler medication. The subsequent affects of this greater acceptance can have important clinical and economic impacts including:

- Improved compliance with spacer/ preventer
- Improvement in reported symptoms
- Fewer A+E and GP appointments

Nurses using Able Spacer/ Rafi-Tone were positive about patients' acceptance and hence it can be a useful, value added alternative to other spacers.

References

- ¹ Kocks et al, NPJ Prim Care Resp Med 2018, 16; 28: 43 pp6
- ² Price et al, Respir. Med 2013; 107 (1):37-46
- ³ Murray et al, Pulm Ther 2016; 2: pp189-197

Acknowledgements

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