

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

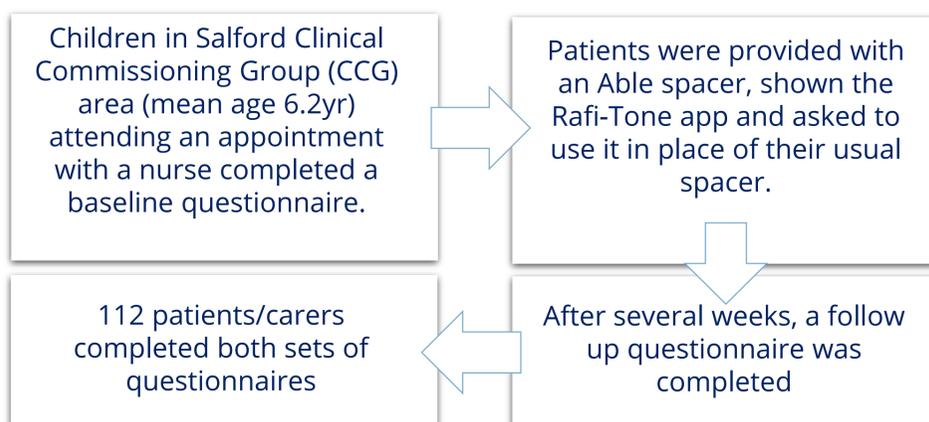
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## Introduction

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<sup>1,2</sup>. 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 mask<sup>3</sup> and to investigate the subsequent impacts on treatment distress, general asthma, and use of healthcare services.

## Method

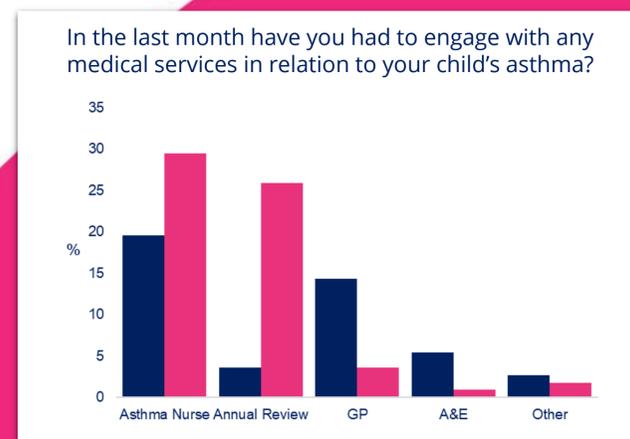
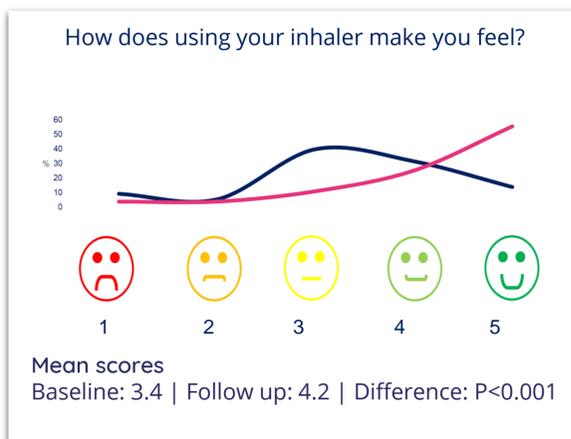
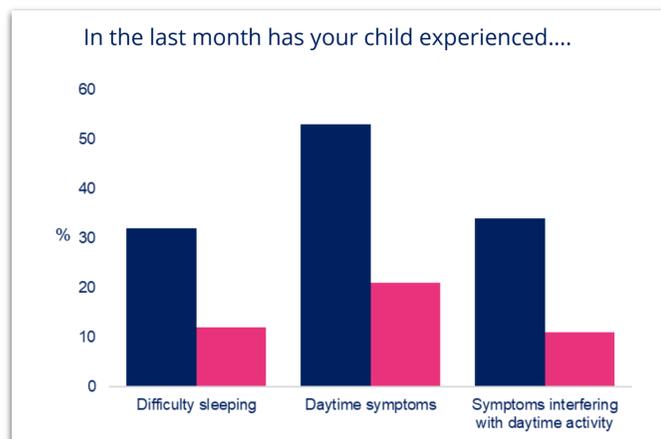
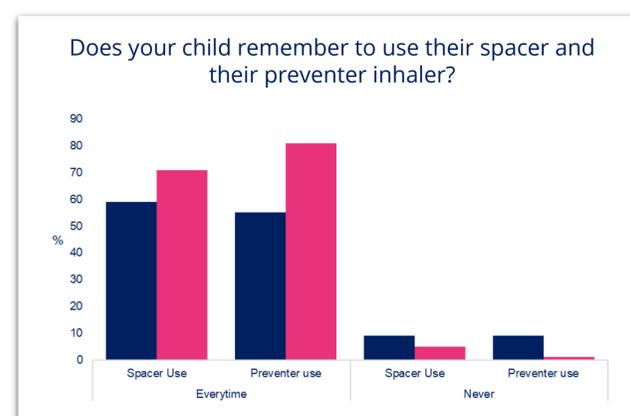
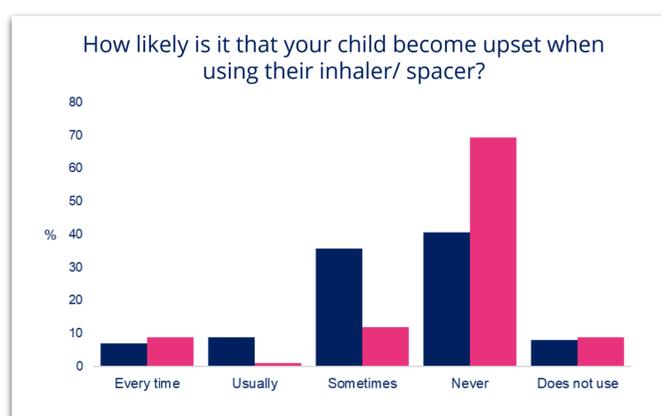


Nurses at participating practices also completed questionnaires



## 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

The authors wish to acknowledge funding for the study from the NHS Salford CCG Digital Health Innovation Fund and participation of the practices in the Salford CCG area who took part in the project and helped collect the data.