

Implications for paediatric asthma care from gamification of inhaler spacer technique.

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INTRODUCTION

- Encouraging effective spacer technique when using an inhaler is known to improve outcomes^{1,2}.
- Effective delivery of medication may be influenced in a number of ways including understanding of treatment through communication with the carer, confidence in administration technique, and demeanour of the child³.
- Rafi-Tone™ (Clin-e-cal) is a CE-marked, sound-analysis, paediatric gamification app designed to make spacer-use instructive and enjoyable.
- We report our findings from a post-marketing survey of 6-10 weeks' use of the app plus Able Spacer® with whistle-mask.



METHOD

Asthmatic children (\bar{x} age 6.2 y) or parents in Salford Clinical Commissioning Group (CCG) area completed a baseline questionnaire during an appointment with a nurse.

Patients were provided with Able Spacer with whistle mask and the Rafi-Tone app was demonstrated. Both were to be used in place of their usual spacer

112 patients/carers completed both sets of questionnaires

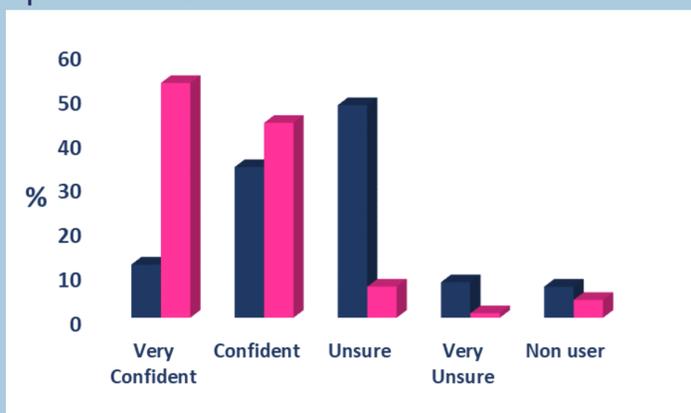
After 6-10 weeks, a follow up questionnaire was completed

Nurses at participating practices also completed a CPD-linked training feedback questionnaire

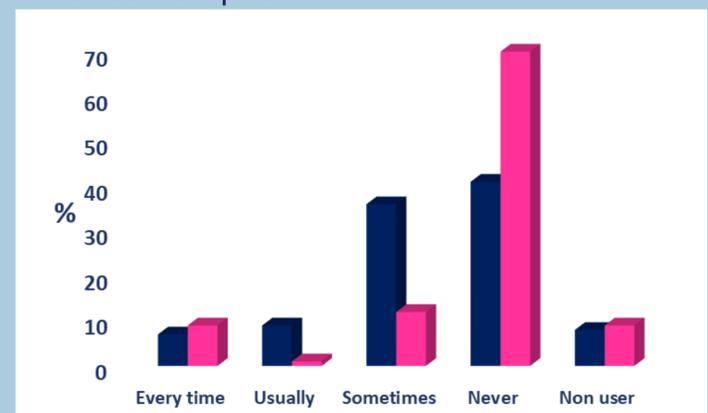
Baseline ■ Follow up ■

RESULTS

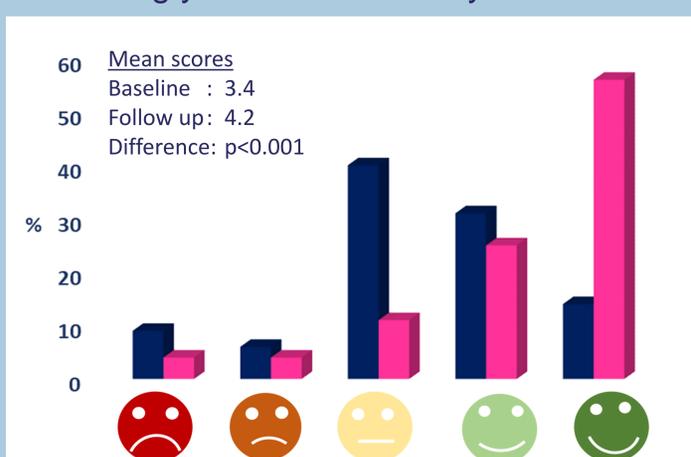
Q. How confident are you that the spacer is delivering the required dose?



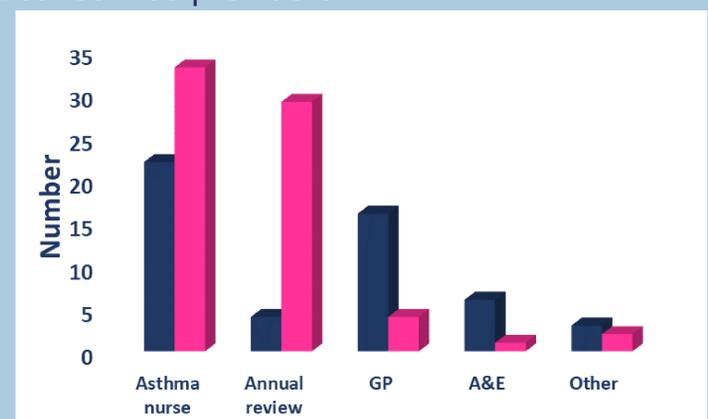
Q. When using the spacer, how likely is it that your child will become upset?



Q. How does using your inhaler make you feel?



Q. In the last month have you had to engage with medical service providers?



CONCLUSIONS

- This survey has shown that Rafi-Tone/ Able Spacer system
- had a significant impact on child acceptance of their inhaler
 - impacted on parent confidence in the spacer
 - reduced GP and A&E visits during the survey period.

This suggests that facilitating improved child compliance, parent education, and empowerment may have an impact on the use of high cost healthcare services.

REFERENCES

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