

Abstract Presentations

6. Rob Horne, UK

Identifying and addressing patient beliefs driving SABA use and over-reliance using an online digital intervention

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Breathing and feeling well through universal access to right care

Acknowledgements

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Conflict of interest disclosure

Rob Horne

**Affiliation / Financial
 interest**

Commercial Company

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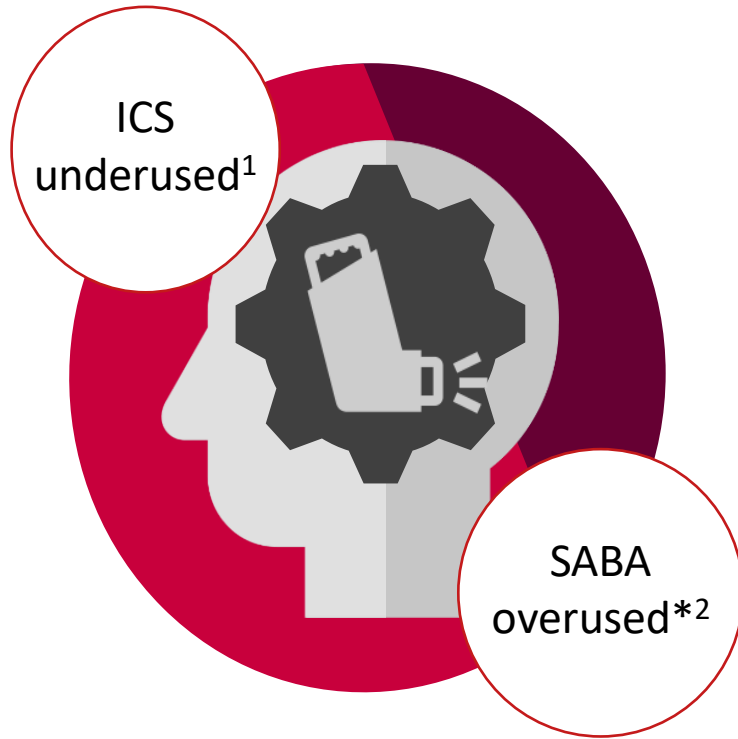
Stock shareholder:

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The 2019 GINA strategy report: ‘The most important change in asthma management in 30 years’?



*SABA overuse = 3 or more canisters/year

Global Initiative for Asthma (GINA)²

- No longer recommends treatment with SABA alone as reliever across all severities
- Recommends symptom-driven or daily low-dose ICS-based (anti-inflammatory) treatment
- SABA over-reliance may be indicated by one of four signs of uncontrolled asthma:
 - daytime symptoms 3 or more times a week
 - woken by asthma at night
 - needed reliever 3 or more times a week
 - activity limited by asthma



1. Demoly P, Paggiaro P, Plaza V, et al. Prevalence of asthma control among adults in France, Germany, Italy, Spain and the UK. European Respiratory Review. 2009; 18(112):105-112. 2. Global Initiative for Asthma (GINA). Pocket Guide for asthma management and prevention (for adults and children older than 5 years). 2019. Available from: www.ginasthma.org [last accessed 01.08.19].

The information – action gap

Information

Information is essential
to enable adherence

BUT...

Giving more information
does not guarantee adherence



Action

To result in action,
information must either:

Concur with our existing **beliefs**

OR

Change them



BELIEFS

Common-sense evaluations of treatment influence adherence: The Necessity-Concerns Framework



Meta-analysis of **94 studies** in **25,072 patients** across **18 countries** and **24 different long-term conditions**:

Necessity OR=1.74, $p<0.0001$ [CI 1.57–1.93];
Concerns OR=0.50, $p<0.0001$ [CI 0.45–0.56]¹

Why guidelines alone won't change practice: Perceived necessity and concerns drive patient engagement and adherence

SABA:

Patients don't see necessity for change

High perceived necessity

*"It saved me"
"I've always got one"*

Low concerns

"I don't like having to depend on it but it's better than taking a steroid"



Based on beliefs, experience and sensation

ICS-based therapy:

Patients have concerns about change

Low perceived necessity

"SABA works fine. It feels better than ICS"

High concerns

"It's a steroid. I don't want to take steroids"

Necessity-Concerns Framework: Where we need to get to

SABA

Lower perceived necessity, e.g.:

“I don’t need to rely on my blue reliever inhaler”

Higher concerns, e.g.:

“Over-using my SABA is bad for me”



Inhaled corticosteroid (ICS)-based anti-inflammatory reliever

Higher perceived necessity, e.g.:

“I understand why I need an anti-inflammatory to manage my asthma”

Lower concerns, e.g.:

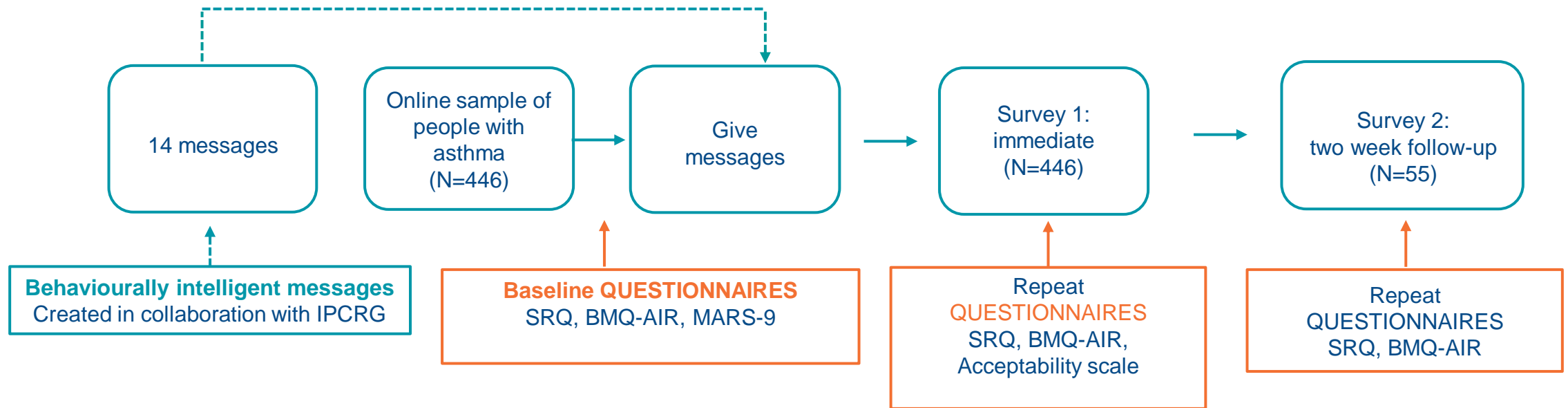
“I accept that the dose of ICS is significantly lower than in other steroid drugs, and that it is safe to use”

Leads to less reliance on SABA and increase in engagement with ICS-based anti-inflammatory reliever; a shift in behaviour in line with the guidelines

Study design

Aim: To develop and pilot test messages to help HCPs start discussions to reduce over-reliance on SABA and increase engagement with ICS-based anti-inflammatory reliever treatment

Method: Study design – Perceptions Lab™



* TM Spoonful of Sugar (SoS).

IPCRG: International Primary Care Respiratory Group, SRQ: SABA Reliance Questionnaire, BMQ-AIR: Beliefs about Medicines Questionnaire adapted for anti-inflammatory reliever, MARS-9: Medication Adherence Rating Scale 9-item version

1. Horne R, Weinman J, Hankins M. The Beliefs about Medicines Questionnaire: the development and evaluation of a new method for assessing the cognitive representation of medication. *Psychology & Health*. 1999; 14:1-24.

Methods: Materials

14 Messages addressing:

- SABA over-reliance
- Doubts about the necessity of inhaled steroids
- Concerns about inhaled steroids
- The need for anti-inflammatory relievers

Message 11:

“Taking your anti-inflammatory reliever regularly will mean you are less likely to get symptoms like breathlessness or have an asthma attack. This means you can get on with doing what you enjoy without your asthma getting in the way.”

Acceptability of messages:

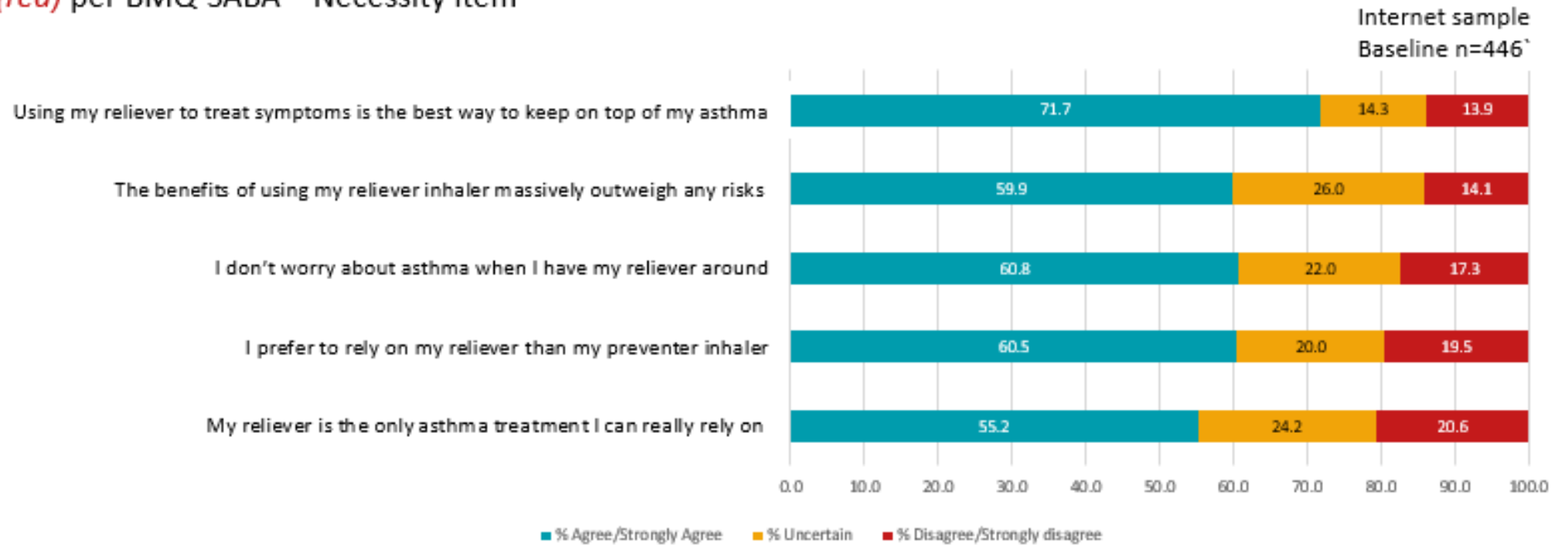
- 7-item scale rated on a 3 point Likert scale (Agree, Unsure, Disagree)
- Example items: ‘This information was easy to understand’ or ‘This information changed my view’

Message 3:

“The best way to get on top of asthma, so you can get on with life, is to prevent the attacks from occurring in the first place. So, in the long term, the PREVENTER treatment is actually more important than the reliever, even though you can't actually feel it working.”

SABA Reliance Questionnaire (SRQ)

Percentage responding *Agree, Strongly agree (teal)* versus *Uncertain (amber)* versus *Disagree, Strongly disagree (red)* per BMQ-SABA™ Necessity item



Adapted from the Beliefs about Medicines Questionnaire (BMQ),¹ endorsed by the International Primary Care Respiratory Group (IPCRG) and Asthma Right Care, and fully funded by AstraZeneca UK Limited.

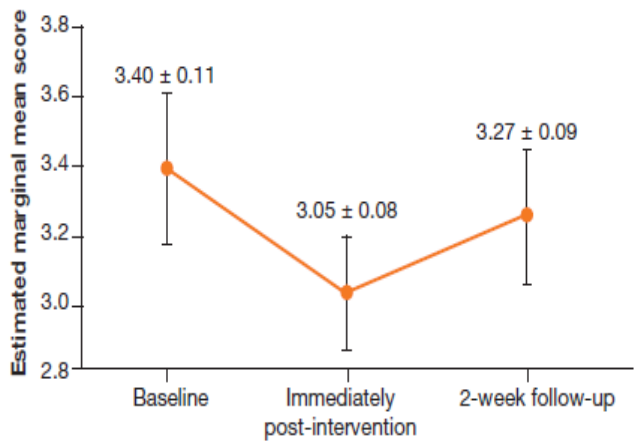
1. Horne R, Weinman J, Hankins M. The Beliefs about Medicines Questionnaire: the development and evaluation of a new method for assessing the cognitive representation of medication. *Psychology & Health*. 1999; 14:1-24.

How did messages impact on perceptions....

....of SABA?

SABA Reliance Questionnaire (SRQ)

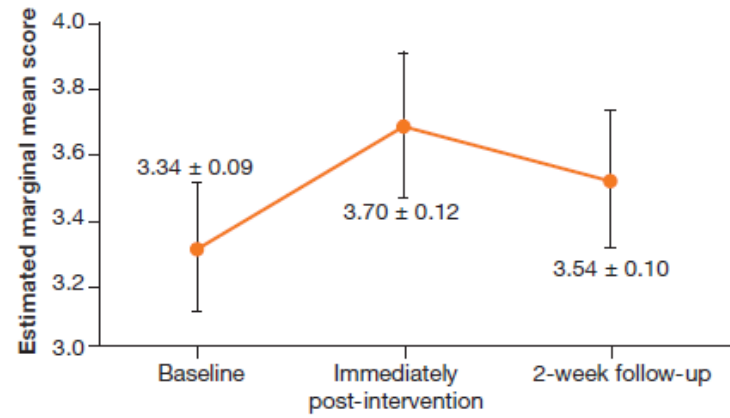
Decrease in SABA reliance over time ($p < 0.0001$)*



...of anti-inflammatory reliever?

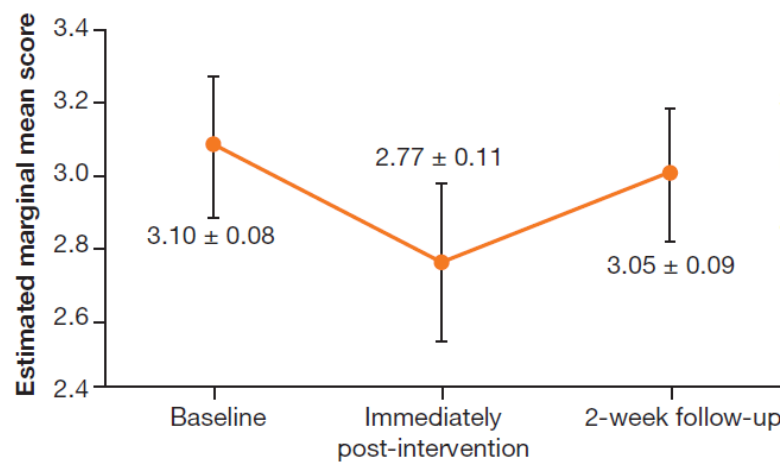
BMQ – Anti-Inflammatory Reliever Necessity Beliefs

Increase in BMQ – Anti-Inflammatory Reliever Necessity Beliefs over time ($p < 0.0001$)*



BMQ – Anti-Inflammatory Reliever Concerns

Decrease in BMQ – Anti-Inflammatory Reliever Concerns over time ($p = 0.002$)*



*Highly significant effect primarily due to change between baseline and time point 1 (immediate). BMQ, Beliefs about Medicines Questionnaire.

N=55. Errors bars: 95% CI. Score range: 1-5. Higher scores indicate higher reliance, higher perceived Necessity and higher Concerns.

Conclusions

- High prevalence of ‘attachment’ to SABA – unlikely to be overcome by change in Asthma Guidelines alone
- Messages were acceptable to recipients and had a strong initial effect for:



- But many patients shift back to original views after reflection
- Initial messages offer potential to engage asthma patients but further discussion/support likely to be necessary to achieve sustained behaviour change: reducing over-reliance on SABA and increasing engagement with ICS-based anti-inflammatory reliever