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SPEAKER SERIES

# Asthma management in NZ primary care: How we do more with less

[GPCME Rotorua]

Making Education Easy

2019

## About the speaker



Dr Api Talemaitoga

Dr Api Talemaitoga is a practicing GP at Normans Road Surgery, Christchurch and in June 2015, also started at a new practice in South Auckland. Dr Talemaitoga has in his time, contributed to the National Health Committee's advice on the management of long-term conditions, worked in the Pacific both as a personal physician to Fijian leaders and, more recently across the Melanesian and Polynesian region, facilitating access to specialist services in New Zealand. Dr Talemaitoga also served on the Board of the Canterbury District Health Board, the Board of the RNZCGP from 2014-17 and was Chief Advisor, Pacific Health at the Ministry of Health 2008-13. In 2017 Api was awarded a Distinguished Fellowship for outstanding and sustained services to the College and medical profession.

Apart from clinical practice, Api Chairs the Pasifika GP Network and the Pacific Chapter of the RNZCGP.

### Abbreviations used in this review

ICS = inhaled corticosteroid

LABA = long-acting  $\beta_2$ -agonist

RCT = randomised controlled trial

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This review is a summary of a presentation given by Dr Api Talemaitoga, General Practitioner, South Auckland, at the 2019 General Practice Conference and Medical Exhibition (GPCME), held in Rotorua in June. He spoke at a breakfast meeting sponsored by GSK. Dr Api Talemaitoga is not a GSK employee, but did receive an honorarium for this talk. This publication has been created with funding from GSK. The content is based on published studies and the author's opinions. It may not reflect the views of GSK.

## The impact of respiratory disease

Respiratory illnesses affect over 700,000 New Zealanders and contribute substantially to this country's health burden.<sup>1</sup> Such illnesses are responsible for 1 in 10 overnight hospitalisations and cost New Zealand over \$6 billion annually.<sup>2</sup> A disturbing pattern of inequality is seen across the socio-economic spectrum, with respiratory-related hospitalisation rates three times higher among New Zealanders living in the most deprived versus the least deprived households.<sup>2</sup> Furthermore, over half of the individuals admitted to hospital with a poverty-related illness are there because of a respiratory problem such as asthma, bronchiolitis, acute infection or pneumonia.<sup>2</sup> Such inequalities are also seen across ethnic groups, with substantially higher rates of respiratory illness for Māori and Pacific peoples.<sup>2</sup>

## The impact of asthma

In New Zealand, asthma affects 1 in 9 adults and 1 in 7 children, and more than 60 people die from this disease each year.<sup>1</sup> A recent New Zealand health survey indicates that over 597,000 people take medication for their asthma.<sup>1</sup> However, over 3000 children per year are still being admitted to hospital with asthma, with some experiencing potentially life-threatening attacks.<sup>2</sup>

Māori and Pacific peoples are disproportionately represented in asthma hospitalisations in New Zealand, with rates in 2015 of 382.4 and 441.4 per 100,000 versus 154.2 and 122.0 per 100,000 in Asian and non-Māori/non-Pacific/non-Asian populations, respectively.<sup>2</sup> Correspondingly, Māori and Pacific peoples exhibit higher asthma mortality rates than their Asian and non-Māori/non-Pacific/non-Asian counterparts, with rates of 5.84, 5.20, 1.34 and 1.14 per 100,000 population, respectively.<sup>2</sup>

## The impact of poor health literacy

New Zealanders generally have poor health knowledge (or literacy), the degree to which also varies across different ethnicities, with Pacific people having poorer health literacy than non-Pacific people and Māori living in rural locations having the poorest health literacy skills.<sup>3,4</sup>

Poor health literacy has been identified as one of the barriers that hinder Pacific people's access to, and utilisation of primary care services.<sup>4</sup> Poor health literacy is associated with a lack of understanding about asthma control and has been identified as a major factor accounting for the high hospitalisation rates among Pacific children in our country.<sup>4,5</sup>

Dr Talemaitoga stressed the importance of recognising the health literacy level of the individuals we treat, and that it is essential to pitch the discussions around their diagnosis, management plan and potential side effects of treatment at an appropriate level. He believes that in order to improve adherence and compliance, we must spend extra time and care in our consultations with individuals with lower health literacy. He also encouraged the use of interpreters if language is a barrier.

As an example of the impact of poor health literacy, Dr Talemaitoga recalled a case where he had prescribed antibiotics to a sick child attending his South Auckland Clinic. Concerned about the child, he followed up with the family the following day via telephone and was informed that they had given the antibiotics to the grandmother who had a chest infection and was perceived to be sicker than the child. He added that GPs need to be aware of the potential for these sorts of things to happen in their communities.

Of concern, many patients do not understand what is meant by 'asthma control'. In the UK Living and Breathing study, a high proportion of patients believed that their asthma was well controlled, even when it was not.<sup>3</sup> It was revealed that most patients have low expectations of what can be achieved by asthma management and many do not realise that their condition can be improved. Dr Talemaitoga explained



that some patients have what he refers to as an ‘asthma reset’, where they reset their expectations as to what good asthma control looks like for them; for example it becomes the new normal for them to wake 3 times at night due to their symptoms, which is better than the 6 times they were waking, or they have a bit of a cough, but this is better than coughing continuously. These patients do not realise that their asthma can be improved further and instead make adjustments to their lives in order to cope with their asthma.

Unfortunately, poor health literacy is not something that can be fixed overnight. For asthma education to be successful, it should not be considered as a one-off initiative, but rather a process over time involving a consistent relationship between the health professional and the patient. It is essential that GPs strongly encourage their asthma patients to come back for follow-up appointments. In Dr Talemaitoga’s view, GPs and their practice nurses are in an ideal situation to provide non-threatening, non-judgemental, culturally and clinically competent information to patients regarding their condition, its symptoms, the medication prescribed and any side effects they might experience.

## Adherence as a barrier to disease control

One of the most prevalent barriers that we encounter when talking about respiratory medicine and even medicine as a whole, is that many patients are non-adherent when it comes to managing their asthma and using their inhalers as intended. With regard to seeking treatment and treatment adherence, patient-reported barriers include lack of transport, their lived reality (commitments to the Church, to their family in Aotearoa and abroad, to their community and to their work), and costs, including the cost of prescriptions and the cost of taking time off work.<sup>6</sup>

It is well recognised that a supportive family network helps patients better manage their disease, as do good time management skills and the ability to prioritise their health. Having their GP explain their management plan clearly and in their native language if necessary also aids treatment compliance (personal communication - Dr Kuinileti Chang Wai).

If we plot the patient journey from when a patient presents with their disease all the way to achieving control, we can identify a number of points at which patients have the potential to be lost (Figure 1).<sup>7</sup> In the first instance, a significant number of patients with asthma symptoms don’t even present to clinic for disease diagnosis, a

number then don’t fill their scripts, and of those who do, some will not take their medication consistently, correctly, or at all. Dr Talemaitoga explained the importance of following up with less adherent patients to remind them to renew their prescriptions when they are due. This can be done by any member of the primary care team using the ‘recalls’ or ‘task’ functions on the Practice Management System.

Patients are lost at each stage of the pathway to achieving disease control\*

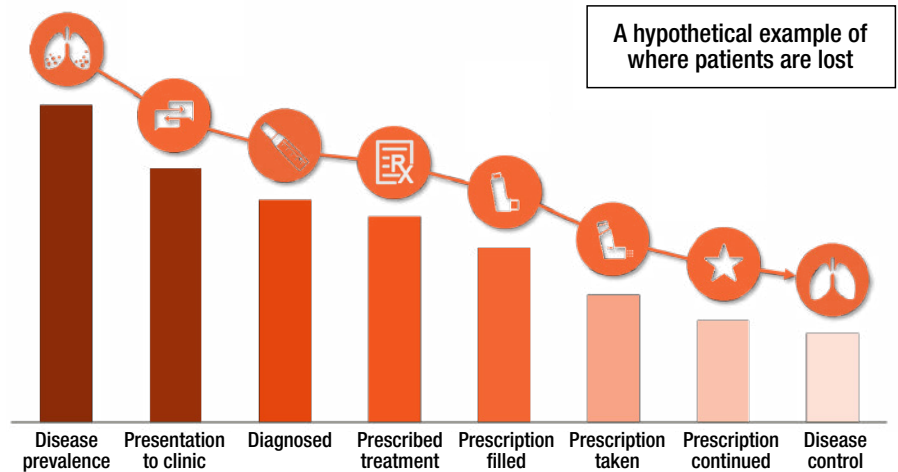


Figure 1. Stages at which patients are typically lost along the pathway to achieving disease control.

[Adapted from Braido F. 2013]<sup>7</sup>

\*Figure is based on known patient pattern and not quantitative data

## Addressing the gaps in asthma care

Dr Talemaitoga explained that we must get the following basic principles right for our patients to achieve the best outcomes.

### Assess asthma control

In assessing asthma control, we need to use validated screening tools such as The Asthma Control Test, which is available online: <https://www.asthmacontroltest.com>. This tool helps us to determine if our patient is getting the maximum benefit from their treatment. This assessment should be repeated at every follow-up appointment.

The Asthma Control Test asks questions about activity limitation, shortness of breath, awaking due to asthma symptoms, reliever medication use and a personal assessment of asthma control.<sup>8</sup> All of the items refer to the previous 4 weeks and are scaled from 1 to 5. The total score indicates current asthma control and future healthcare status with values of:

- ≥20 = well controlled
- 16-19 = not well controlled
- 5-15 = very poor control

### Shared decision-making

Engaging patients in the management of their asthma is of utmost importance. Treatment options should be discussed and their relative merits in terms of patient goals and preferences considered. A US study in patients with poorly controlled asthma has shown that when shared decision-making is employed, improvements in asthma controller medication adherence and clinical outcomes including quality of life are seen.<sup>9</sup> Patients often report that they feel valued when they are included in decision-making about their treatment.

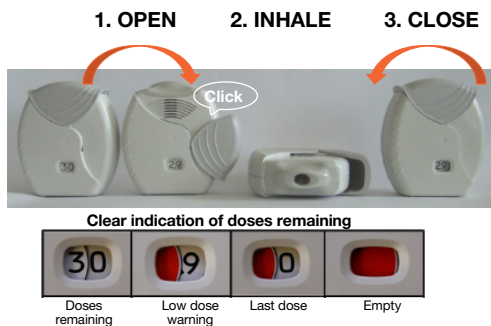
### Choose the most effective and safe treatment

The key element to choosing the most effective and safe treatment is to consider the options available with each specific patient’s unique qualities, including health literacy level and needs. Dr Talemaitoga stressed that practitioners must tailor treatment to each patient and set the bar high with regard to treatment goals. He also discussed the desire for some patients to receive a ‘diet’ or ‘natural’ treatment instead of medication for their asthma and that GPs need to manage those expectations. It is often difficult to fit all of these discussions into a 15-minute consultation.



## Breo® Ellipta® – a potential solution meeting the needs of doctors and patients

Breo® Ellipta® [fluticasone furoate/vilanterol] is an ICS/LABA combination dry powder inhaler designed to be used once daily. This inhaler exhibits a true 24-hour efficacy with long-lasting molecules and has high patient preference.<sup>10-13</sup> Dr Talemaitoga considers Breo® Ellipta® to be a good option to consider for patients with asthma – especially those patients who may be challenged with lower health literacy, who may have difficulty with adherence to medication and who may have poor inhaler technique resulting in higher critical errors. He explained that the Breo® Ellipta® inhaler is very easy to use and it gives a clear indication to the patient of doses remaining (**Figure 2**).



**Figure 2.** The Breo® Ellipta® inhaler

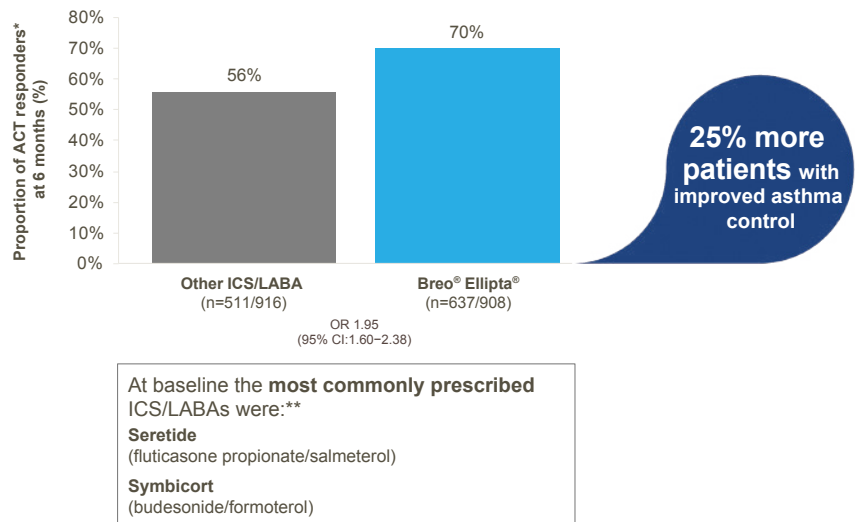
## The Salford Lung Study

The Salford Lung Study involving 4233 adult patients with asthma taking a maintenance inhaler, was the world's first pre-licence pragmatic RCT designed to compare the real-world effectiveness in routine primary care of fluticasone furoate/vilanterol 100/25 µg or 200/25 µg (not funded in NZ) once daily versus optimised usual care.<sup>14</sup> The study used electronic patient records for remote monitoring and safety endpoints.

The primary endpoint was the percentage of patients at week 24 with either an Asthma Control Test score of 20 or greater or an increase in the Asthma Control Test score from baseline of 3 or greater (responders).<sup>15</sup> Subjects had a mean age of 50 years, 41% were male, 20% were current smokers, 33% were former smokers and a large portion had poorly controlled asthma.

At week 24, a significantly higher percentage of patients on fluticasone furoate/vilanterol had improved asthma symptom control (as measured by the Asthma Control Test) compared with those receiving other ICS/LABAs (**Figure 3**).<sup>15</sup>

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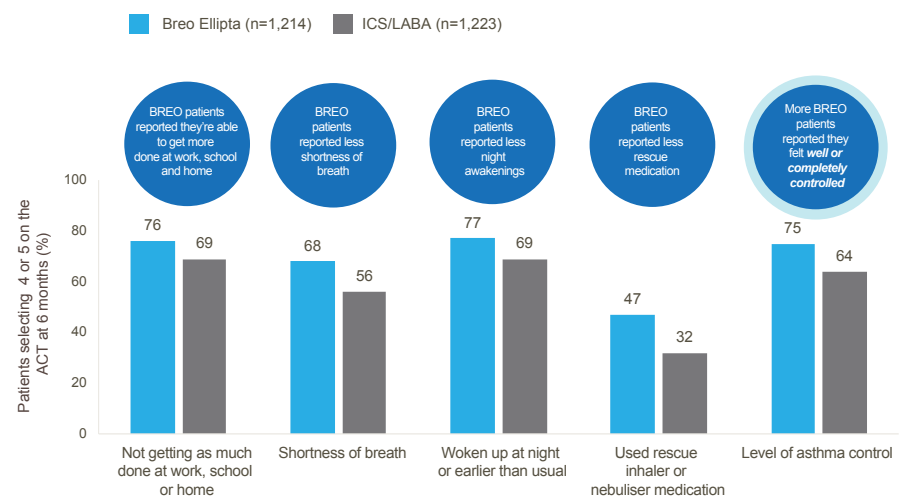
**Figure 3.** Proportions of Asthma Control Test responders\* at 6 months in the Salford Lung Study.<sup>15</sup>

\*Asthma Control Test score of 20 or greater or an increase in the Asthma Control Test score from baseline of 3 or greater

\*\* GSK Clinical Study Report 2017;HZA115150, Table 27 p 114

ACT = Asthma Control Test; ICS = inhaled corticosteroid; LABA = long-acting β2-agonist

In the study, patients treated with fluticasone furoate/vilanterol demonstrated greater improvements across all 5 Asthma Control Test components compared with patients receiving other ICS/LABAs (**Figure 4**).<sup>16</sup>



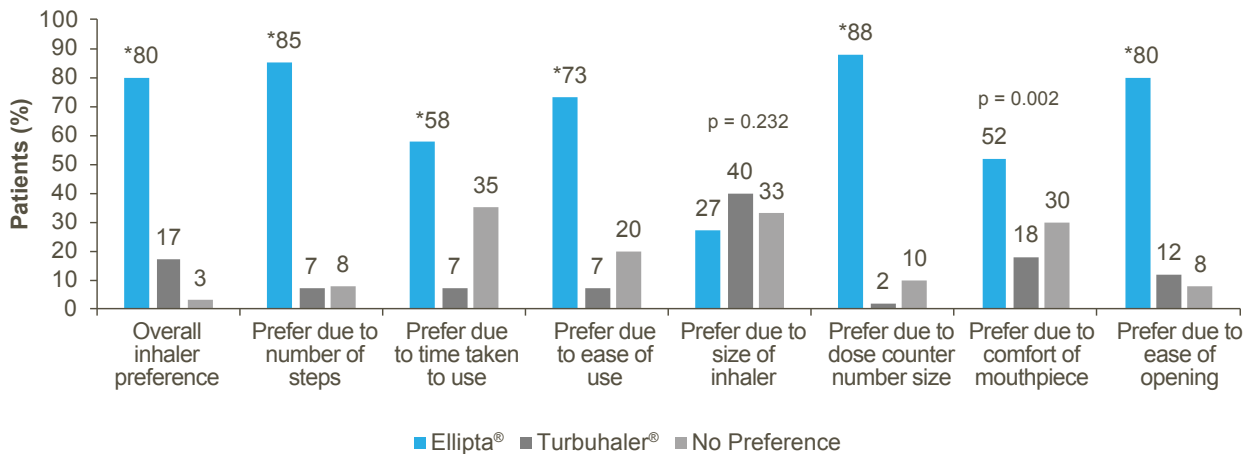
**Figure 4.** Proportions of patients selecting 4 or 5 on the Asthma Control Test at 6 months in the Salford Lung Study.<sup>16</sup>

## Fewer inhaler errors

Rates of critical inhaler device error (little or no drug delivered) are surprisingly high across all devices, ranging from 14-92%.<sup>17</sup> Breo® Ellipta® is very easy to use and as few as 4-6% of patients make critical errors with this inhaler device.<sup>12</sup> Furthermore, it takes little time to teach patients the correct Ellipta® inhaler technique (teaching correct technique was numerically faster with Ellipta® vs metered-dose inhaler or Turbuhaler®, however, there were no significant differences between training times).<sup>18</sup>

## Preferred by patients

Breo® Ellipta® is preferred by asthma patients compared to the Turbuhaler® across multiple attributes according to a study from the UK and the Netherlands (**Figure 5**).<sup>12</sup>



n=60, \*p ≤ 0.001 for all other comparisons

**Figure 5.** Percentage of patients with a preference for the Breo® Ellipta® and Turbuhaler® inhalers. [Adapted from van der Palen et al. 2016]<sup>12</sup>

## TAKE-HOME MESSAGES

- We can improve asthma outcomes through assessing control, shared decision-making and appropriate prescribing
- The Asthma Control Test is a validated tool that can be used to objectively assess a patient's level of asthma control
- Breo® Ellipta® has been shown to be more effective at helping patients improve asthma control in an everyday setting compared with other ICS/LABAs
- Once-daily treatment in an easy-to-use device reduces errors
- Treatment choices should be informed by effectiveness data, in addition to efficacy, and how to overcome the challenges we face in general practice.

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