

Clinical indicator

Reducing the proportion of patients with asthma aged 12+ who are regularly using a SABA who are not using a regular ICS or ICS/LABA combination.

Why is this important?

Asthma prevalence rates in Aotearoa New Zealand are higher than other countries internationally and affects up to 15 per cent of the population.¹ Māori and Pasifika peoples have a higher prevalence of asthma and are more likely to have poorer outcomes than NZ European people. Pacific and Māori adults (15-49 years) were approximately three times more likely to be admitted to hospital with asthma than NZ European / other. People living in the most deprived areas are 1.4 times more likely to have asthma than those living in least deprived areas.^{2,3,4}

NZ Asthma Guidelines were updated during 2020. These reflect the changes in evidence around the benefits of therapies such as maintenance reliever therapy (MART) and anti-inflammatory reliever (AIR). There is evidence to suggest short acting beta agonists (SABAs) on their own increase the risk of asthma exacerbations, worsening airway inflammation and asthma related death.⁵

An inhaled corticosteroid (ICS) should be prescribed to all patients with asthma. For newly diagnosed patients, they should be started on AIR treatment which includes budesonide / formoterol but an ICS with as needed SABA is an alternative for patients not switched to AIR.

The budesonide/formoterol combination can also be used for immediate symptom relief (in place of a SABA). Of all the ICS/LABA combinations, ones with formoterol are the only ones that can be used for immediate symptom relief due to its rapid onset of action.

A quick guide has been developed summarising the asthma guidelines.⁶

¹ Barnard L, Zhang J. 2021 The impact of respiratory disease in NZ 2020 update.

² HQSC (2019) Atlas data of variation Asthma.

³ Beasley R, Beckert L et al. (2020) Asthma and Respiratory Foundation NZ Adolescent and Adult Asthma Guidelines 2020: a quick reference guide NZMJ Vol 133 No 1517.

⁴ BPAC 2020 The pharmacological management of asthma in adolescents and adults has changed.

⁵ Asthma Foundation (2020) NZ Adolescent and Adult Asthma Guidelines. Available <https://www.asthmafoundation.org.nz/health-professionals/management-guidelines/nz-adolescent-and-adult-asthma-guidelines-2020>

⁶ Asthma foundation (2020) NZ Asthma guidelines quick reference guide. Available from https://www.nzrespiratoryguidelines.co.nz/uploads/8/3/0/1/83014052/nz_asthma_guidelines_summary_2020_no_lionf_print_09-21.pdf

What is the gap nationally?

Nationally, to the end of September 2023, 38 per cent of patients aged 12 years and older were dispensed a SABA alone. Of these, 37.4 per cent NZ European, 45.8 per cent Pasifika 37.1 per cent Māori and 46.9 per cent are Asian.⁷

What is the gap locally?

Currently, (June 2024) 41 per cent of patients in the Pinnacle Network diagnosed as asthmatic aged 12 years and older are on a SABA alone. Of these 43 per cent were Māori, and 40 per cent non-Māori.

What is being measured?⁸

Clinical indicator: Reducing the proportion of patients with asthma aged 12+ who are regularly using a SABA who are not using a regular ICS or ICS/LABA combination.

Source: Respiratory Clinical Dashboard [Quality Improvement Dashboard].

Numerator: Patients with asthma aged 12+ who have been prescribed a SABA and have not been prescribed a preventer inhaler.

Denominator: Patients with asthma aged 12+ who have been prescribed a SABA.

Definition of asthma: A recorded diagnosis of asthma without an accompanying diagnosis of COPD (see list for SNOMED codes).

Definition of being prescribed a SABA: In the past four quarters, a patient has been prescribed a SABA in three or more different quarters (see list for identified drugs).

Definition of being prescribed a preventer inhaler: In the past four quarters, a patient has been prescribed an ICS or ICS/LABA combination in three or more different quarters (see list for identified inhalers).

How can I use this for the equity and CQI modules of Cornerstone?

He Ako Hiringa have developed a CQI activity that is endorsed by RNZCGP for both the CQI and equity modules within Cornerstone. Your Power BI dashboard can be used to populate the audit. More information can be found here: www.akohiringa.co.nz/education/epic-reflect-audit-asthma

⁷ He Ako Hiringa (2023) SABA use only EPIC dashboard Note: this includes non-coded patients on SABAs

⁸ Data dictionary clinical indicators

Other useful resources

- www.asthmafoundation.org.nz/health-professionals/management-guidelines/nz-child-asthma-guidelines
- www.akohiringa.co.nz/sites/default/files/public/2022-09/PDF_Asthma%20article_29Sep22.pdf
- www.nzrespiratoryguidelines.co.nz/uploads/8/3/0/1/83014052/nz_asthma_guidelines_summary_2020_no_lionf_print_09-21.pdf
- www.asthmafoundation.org.nz/assets/documents/Respiratory-Impact-report-final-2021Aug11.pdf
- www.akohiringa.co.nz/tags/asthma (15 minutes)
- www.akohiringa.co.nz/education/asthma-resource-hub

Key acronyms

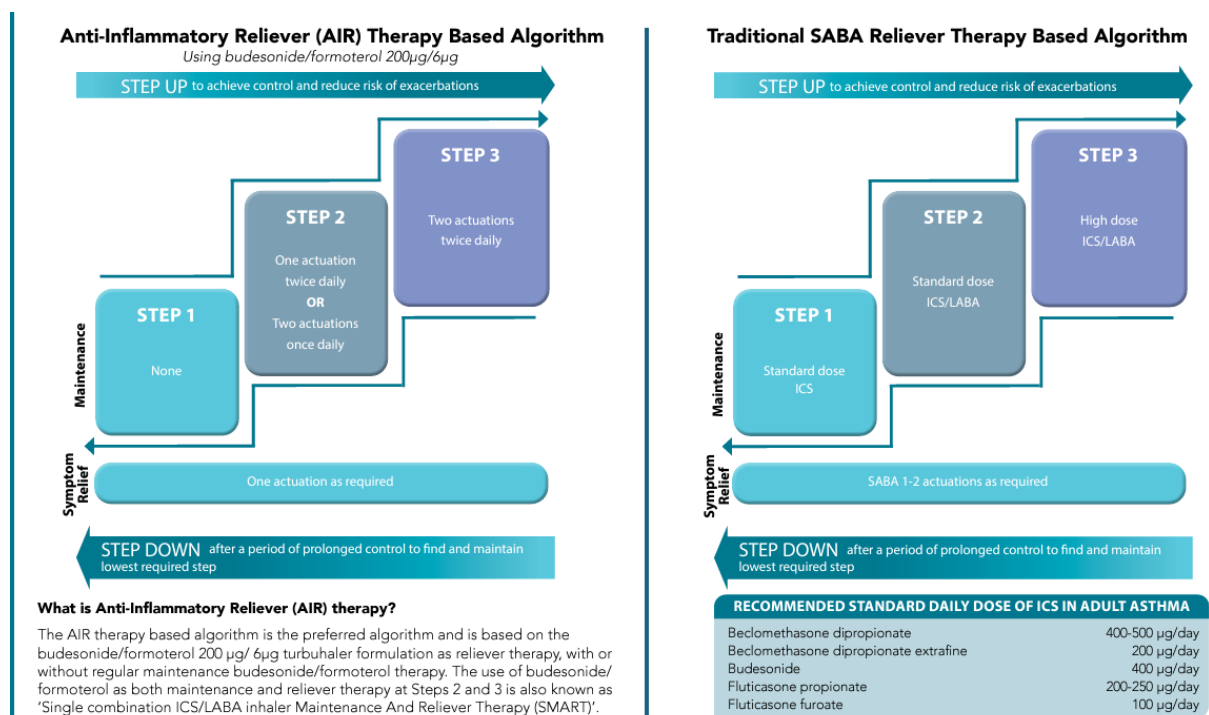
AIR: anti-inflammatory reliever.

ICS: inhaled corticosteroid.

LABA: long-acting beta agonist.

MART (formerly SMART): maintenance and reliever therapy.

SABA: short acting beta agonist.



Examples of other indicators practices may use to support their quality improvement project

To improve coding:

- 'The proportion of patients aged 12+ who are regularly using a SABA who are not using a regular ICS or ICS/LABA combination'.

To reduce exposure to external factors:

- 'The proportion of patients with asthma aged 12+ with a smoking code recorded with no brief advice in the last 12 months'.
- 'The proportion of patients with asthma aged 12+ without a seasonal flu vaccination'.
- 'The proportion of patients with asthma aged 12+ who are on a LABA without a ICS'.