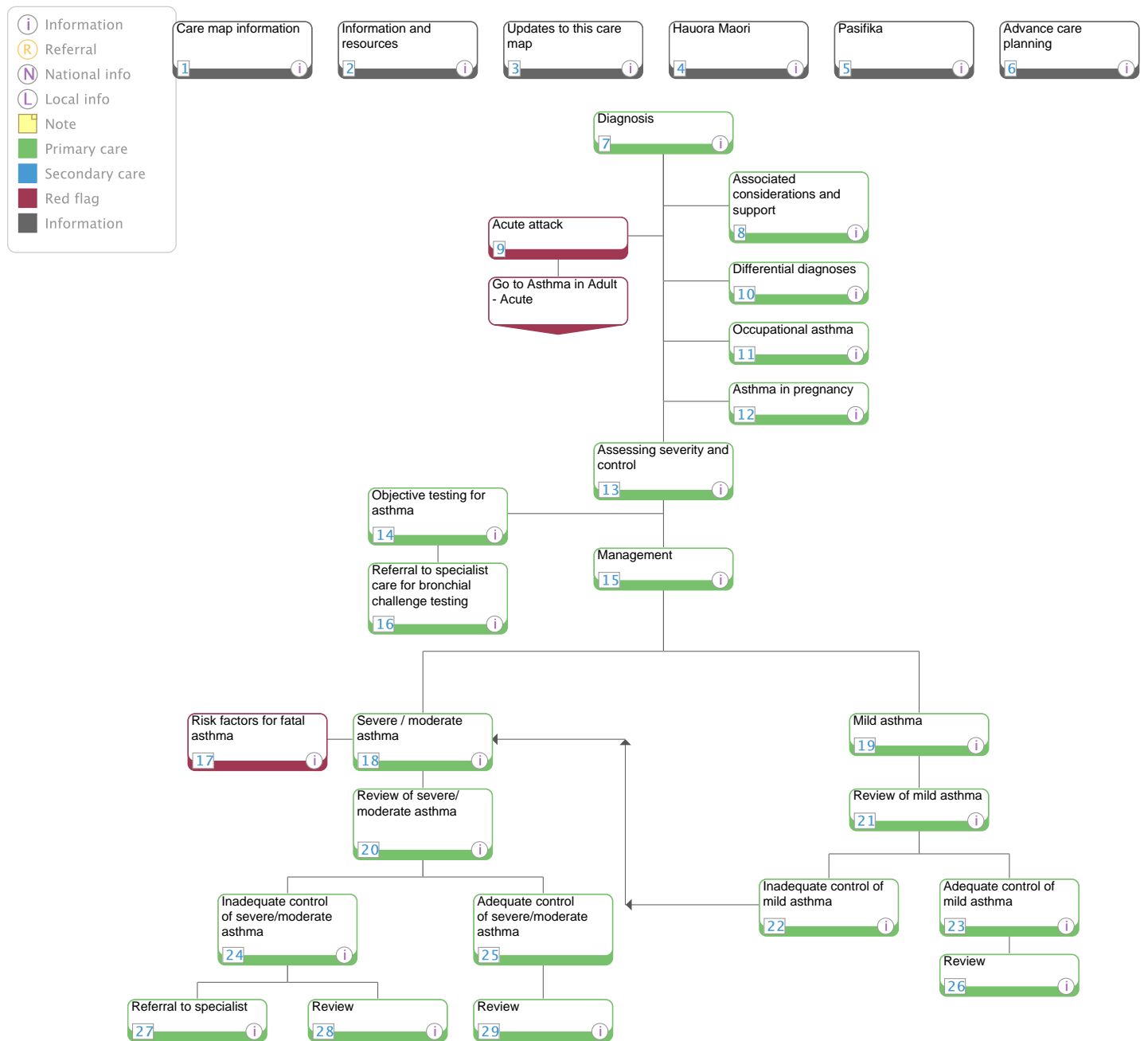


Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults



Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

1 Care map information

Quick info:

This pathway is intended for use with adult patients (16 years and over) with symptoms of asthma.

This Pathway should be used only for patients in which it will influence the patient management. It is to be used as a guide and doesn't replace clinical judgement. This pathway is not an educational tool for medical diagnosis.

2 Information and resources

Quick info:

Resources:

See [Asthma Foundation](#) for additional resources and the [National Respiratory Strategy](#)

Inhalers:

- [Inhaler chart for practices and pharmacy](#)
- [typical inhaler formulations](#) (updated 2017)
- [step wise approach to asthma management](#)

Inhaler technique and spacer use:

- [using a spacer](#)
- [Respimat device](#)
- [Breezhaler device](#)
- [Turbuhaler device](#)
- [Handihaler device](#)
- [accuhaler device](#)
- [Ellipta device](#)

Develop asthma self-management plan:

- [three stage action plan](#)
- [four stage action plan](#)
- [SMART action plan](#)

Language translation assistance:

HBDHB Interpreting Service. To make an appointment (charges may apply):

- phone 06 878 8109 ext 5805 or
- email interpreting@hawkesbaydhb.govt.nz

These websites may help with simple words and phrases:

- [Babelfish](#)
- [Google translate](#)

[Language Line](#). Professional interpreters are available, free of charge, for telephone-based sessions (44 languages are supported):

- email language.line@dia.govt.nz
- Phone 0800 656 656
- Monday - Friday 9am - 6pm
- Saturday 9am - 2pm

Bookings are not usually necessary. For longer consultations it is best to make a booking at least 24 hours in advance.

3 Updates to this care map

Quick info:

Date of publication: January 2016

Date of review and republication: November 2017

Next review due: November 2019

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Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

This care map has been developed in line with consideration to evidenced based guidelines.
For further information on contributors and references please see the Pathway's Provenance Certificate.

4 Hauora Maori

Quick info:

Maori are a diverse people and whilst there is no single Maori identity, it is vital practitioners offer culturally appropriate care when working with Maori whanau. It is important for practitioners to have a baseline understanding of the issues surrounding Maori health. This knowledge can be actualised by (not in any order of priority):

- considering the importance of introductions ('whanaungatanga') - a process that enables the exchange of information to support interaction and meaningful connections between individuals and groups. This means taking a little time to ask where this person is from or to where they have significant connections
- asking Maori people if they would like their whanau or significant others to be involved in assessment and treatment
- asking Maori people about any particular cultural beliefs they or their whanau have that might impact on assessment and treatment of the particular health issues

Maori health services

HBDHB contracts Maori health providers to deliver community based nursing and social support services. A referral to one of these providers may assist Maori people to feel more comfortable about receiving these services.

Central Hawke's Bay:

[Central Health](#)

Cnr Herbert & Ruataniwha Streets, Waipukurau

Phone: 06 858 9559 Fax: 06 858 9229

Email: reception@centralhealth.co.nz

[Referral Form](#)

Hastings:

[Te Taiwhenua o Heretaunga](#)

821 Orchard Road, Hastings 4156

Phone: 06 871 5350 Fax: 06 871 535

Email: taiwhenua.heretaunga@ttoh.iwi.nz

[Referral Form](#)

[Kahungunu Health Services](#) (Choices)

500 Maraekakaho Road, Hastings

Phone: 06 878 7616

Email: kahungunu@paradise.net.nz

[Referral Form](#)

Napier:

[Te Kupenga Hauora](#)

5 Sale Street, Napier

Phone: 06 835 1840

Email: info@tkh.org.nz

[Referral Form](#)

Wairoa:

Kahungunu Executive (no website)

65 Queen Street, Wairoa 4108

Phone: 06 838 6835 Fax: 06 838 7290

Email: kahu-exec@xtra.co.nz

Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

Secondary care Maori Health Services:

Hawke's Bay DHB - Te Wahanga Hauora Maori Health Services

Phone: 06 878 8109 ext. 5779, 06 878 1654 or 0800 333 671 Email: admin.maorihealth@hawkesbaydhb.govt.nz

Further Information

Practitioners should be versed in the knowledge of:

- historical overview of legislation that impacted on Maori well-being
- Maori models of health, such as [Te Whare Tapa Wha](#) and Te Wheke when working with Maori whanau
- national Maori Health Strategies:
 - Mai Maori Health Strategy 2014-2019 - [Full file](#) or [Summary diagram](#)
 - He Korowai Oranga: Maori Health Strategy - sets the [Government's overarching framework](#) to achieving the best health outcomes for Maori
- local [Hawke's Bay health sector's strategies and initiatives](#) for improving Maori health and wellbeing

Cultural Competency Training

Training is available through the Hawke's Bay DHB to assist you to better understand Maori culture and to better engage with Maori people. Contact the coordinator

Email: education@hbdhb.govt.nz to request details of the next courses.

5 Pasifika

Quick info:

Pacific people value their culture, language, families, education and their health and wellbeing. Many Pacific families have a religious affiliation to a local church group.

The Pacific people are a diverse and dynamic population:

- more than 22 nations represented in New Zealand
- each with their own unique culture, language, history, and health status
- share many similarities which we have shared with you in order to help you work with Pacific people more effectively
- for many families language, cost and access to care are barriers

Pacific ethnic groups in Hawke's Bay include Samoa, Cook Islands, Fiji, Tonga, Niue, Tokelau, Kiribati and Tuvalu. Samoan and Cook Island groups are the largest and make up two thirds of the total Pacific population. There is a growing trend of inter-ethnic relationships and New Zealand born Pacific populations.

Acknowledge [The FonaFale Model](#) (Pacific model of health) when working with Pacific people and families.

General guidelines when working with Pacific people and families (information developed by Central PHO, Manawatu):

- [Cultural protocols and greetings](#)
- [Building relationships](#) with your Pacific people
- [Involving family support and religion](#) during assessments and in the hospital
- [Home visits](#)

Hawke's Bay-based resources:

- [HBDHB interpreting service website](#) or phone 06 8788 109 ext.. 5805 (no charge for the hospital; charges may apply for community-based translations) or contact coordinator at interpreting@hbdhb.govt.nz
- Pacific Navigation Services Ltd Phone: 027 971 9199
- services to assist Pacific people to access healthcare ([SIA](#))
- [Improving the Health of Pacific People in Hawke's Bay](#) - Pacific Health action Plan

Ministry of Health resources:

- [Ala Mo'ui](#) Pathways to Pacific Health and wellbeing 2014-2018
- [Primary Care for Pacific people](#): a Pacific and health systems approach
- Health education resources in [Pacific languages](#) (links to a web page where you can download resources)

Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

6 Advance care planning

Quick info:

Advance Care Planning:

Advance Care Planning is a voluntary process of discussion and shared planning for future health care. It involves the person who is preparing the plan, and usually involves family/whanau and health care professionals.

Advance Care Plan:

An Advance Care Plan is the outcome of Advance Care Planning. It is formulated by the person and sets out their views about care towards the end of their life. It may also include views about medical care and a wide range of other matters. An Advance Care Plan may include an Advance Directive.

Advance Directive:

An Advance Directive is a statement a person makes about their medical care in the future and becomes effective if a person ceases to be competent to make decisions for themselves. An Advance Directive is legally binding if made in appropriate circumstances.

Competency and Advance Care Planning:

Competent people have the right to make autonomous decisions that as medical professionals we may regard as imprudent, and sometimes such decisions are a reflection of the person's longstanding personality, beliefs or lifestyle. This right is described in the Health and Disability Consumers Rights Acts.

According to ACP - A Guide for the NZ Health Care Workforce - "in the context of ACP, competency relates to an individual's ability to make a decision regarding their own health care (that is, competence at decision-making or decision-capacity). At a minimum, decision making capacity requires the ability to understand and communicate, to reason and deliberate, and the possession of a set of values".

Helpful websites:

- [The code of rights](#)
- [Advance care planning guide Ministry of Health](#)
- [Advance care planning resources](#)

7 Diagnosis

Quick info:

Make a diagnosis of asthma by:

- considering asthma in patients who present with dyspnoea, chest tightness, wheeze or cough
- looking for diurnal and/or seasonal variation, triggers (allergens, exercise, cold air, irritants, viral infections, medication such as beta blockers, aspirin and other NSAIDs, and employment), and response to treatment (reliever medication). These all make asthma more likely
- considering and excluding other conditions that present with similar symptoms
- differentiating between asthma and COPD - consider use of Respiratory Diagnosis and Management form (attached to Patient Management System)
- looking for a family history, or if there are childhood symptoms and a history of atopy, asthma is more likely
- incorporating use of post-bronchodilator spirometry/peak flows

8 Associated considerations and support

Quick info:

• **Smoking:**

- patients should be offered appropriate support to stop smoking
- smoking cessation for patient:
 - [Quitline](#)
 - [TTOH](#)
 - [Te Kupenga](#)
 - [COPD pathway](#)
 - [Smoking Cessation pathway](#)

Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

- **Flu Vaccination:**
 - should be offered
- **Rhinitis/Hayfever:**
 - needs to be well controlled
 - [Rhinosinusitis pathway](#)
- **Exercise induced asthma:**
 - pre-exercise, short-acting beta-agonist
 - improve overall asthma control
 - montelukast to be considered in patients with chronic asthma complicated by exercise-induced asthma
 - professional athletes should check their medication is permitted by [Drug Free Sport NZ](#)

Support:

- **housing (subject to approval):**
 - [Curtain Bank](#)
- **WINZ**
 - [disability allowance information](#)
- **Breathe Hawke's Bay** - 0800 ASTHMA
- **physiotherapy:** if breathing dysfunction thought to be a factor once medicines reviewed, anxiety regarding breathing/ breathlessness (particularly with exercise) or productive cough with difficulty clearing secretions. Referral form available via Patient Management System
- breathing exercise programmes

Other:

- weight loss
- encourage trigger avoidance

10 Differential diagnoses

Quick info:

Conditions that present similar to asthma:

- COPD
- bronchiectasis
- upper airway abnormalities (including paradoxical laryngospasm)
- heart failure
- obesity or poor fitness
- gastro-oesophageal reflux disease

11 Occupational asthma

Quick info:

Occupational cause process

If an occupational cause is suspected, follow both these processes:

- notify [Worksafe](#) to investigate the workplace
- lodge an ACC claim (via electronic form on PMS where available)

Occupational causes

High risk work for occupational asthma includes:

- baking or pastry making
- woodwork
- spray painting

Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

- welding, soldering, metalwork
- laboratory animal work
- healthcare, dental care
- food processing, chemical processing
- textile, plastics and rubber manufacture
- farming and other jobs with exposure to dusts and fumes

Recognition and control of exposure to the causative agent is the most important means of controlling the asthma.

12 Asthma in pregnancy

Quick info:

When pregnant, it is important to not stop preventative inhaler therapy. Reassure patient that inhaled corticosteroid therapy (ICS) is considered safe during pregnancy.

The risk to the baby of poor asthma control in pregnancy outweighs any theoretical risk of any asthma medications. Oral steroids should be used as normal during pregnancy for women with severe asthma. Acute severe asthma in pregnancy is a medical emergency and should be treated in hospital.

Asthma symptoms can improve or deteriorate during pregnancy.

Regularly review asthma to ensure optimal inhaler therapy and control.

Considerations:

- [Asthma and pregnancy article](#)
- smoking cessation:
 - [Quitline](#)
 - [Smoking Cessation pathway](#)
- Boostrix
- flu vaccine (in season)

13 Assessing severity and control

Quick info:

Use closed questions to determine severity and encourage an honest response to determine compliance. Consider use of GASP Advance Form if available (attached to PMS).

Useful questions:

- how many puffs per day / week of your reliever (blue) inhaler do you use?
- how many nights in the last week / month have you woken with asthma symptoms (including cough)?
- has your asthma interfered with work / school / home activities in the last month?
- most people forget to use their preventer inhalers from time to time. How many times have you used your preventer over the last month? Never, occasionally, most of the time, or almost all the time? (Setting the bar low often encourages a realistic admission of overall use of inhaled steroid medications).
- review diagnosis
- check [ACT score](#)

14 Objective testing for asthma

Quick info:

Response to treatment

Spirometry/peak flow monitoring:

- spirometry with reversibility testing is preferable to the measurement of peak expiratory flow. Spirometry allows clearer identification of airflow obstruction, and is less dependent on effort
- normal spirometry when the patient is not symptomatic does not exclude asthma

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Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

- normal spirometry when the patient is symptomatic makes asthma less likely
- serial peak flow measurements twice daily have more benefit than single assessment, e.g. when exploring workplace exposure and symptoms, or the effects of exercise

Spirometry is also available from [Breathe Hawke's Bay](#) (0800 ASTHMA). Charges apply for testing.

Other tests to consider:

- chest x-ray for atypical features
- blood test - full blood count
- routine allergen testing is not usually helpful
- refer to specialist care to consider Bronchial Challenge testing

15 Management

Quick info:

Management:

- inhaler technique and spacer use:
 - [using a spacer](#)
 - [Respimat device](#)
 - [Breezhaler device](#)
 - [Turbuhaler device](#)
 - [Handihaler device](#)
 - [accuhaler device](#)
 - [Ellipta device](#)
- assess compliance
- smoking cessation
- associated factors:
 - gastro-oesophageal reflux disease
 - bronchiectasis
 - obstructive sleep apnoea
 - anxiety
 - rhinosinusitis
 - obesity
- develop asthma self-management plan:
 - [three stage action plan](#)
 - [four stage action plan](#)
 - [SMART action plan](#)
- routine home nebuliser use is not recommended
- [Step-wise approach to asthma management](#)
- yearly (minimum) review of asthma control

16 Referral to specialist care for bronchial challenge testing

Quick info:

Use e.referral form in PMS to refer to respiratory specialist.

17 Risk factors for fatal asthma

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Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

Quick info:

Risk factors:

- previous ventilation or ICU for asthma attack
- previous admission for asthma in last year
- requires three or more classes of asthma medication
- high use of beta-agonist (short and long-acting) [1]
- frequent attenders for emergency treatment (general practice, after hour surgeries, emergency departments)
- precipitous asthma (onset to severe in less than four hours)
- non-compliance with treatment or monitoring, including failure to attend appointments
- isolated Long Acting Beta Agonist (LABA) use (ie. should be LABA/Inhaled Corticosteroid combination)

Also important:

- smoking, psychosis, depression, other psychiatric illness, low socioeconomic status, no self-management plan

References:

[1] NZ Asthma and Respiratory Foundation, *Adult Asthma Guidelines*, Accessed at <http://www.nzasthmaguidelines.co.nz/adultguidelines.html> : 2017

18 Severe / moderate asthma

Quick info:

At least one of the following:

- ACT score under 20
- daytime symptoms > 2 days per week
- need for reliever > 2 days per week
- any limitation of activities
- any symptoms during the night or on waking

See [Stepwise approach to asthma management](#) , steps 3-5.

If stability is maintained, consider reduction of ICS/LABA therapy.

Ensure asthma plan is up to date.

19 Mild asthma

Quick info:

Well controlled:

- Asthma Control Test (ACT) over 19
- Short Acting Beta Agonist (SABA) two or fewer times per week
- no limitation of activities

Low dose ICS

- 50mcg FLU / 100mcg BDP / BUD bd

See [Stepwise approach to asthma management](#) , steps 1-2.

Ensure asthma plan is up to date.

20 Review of severe/moderate asthma

Quick info:

Consider repeat spirometry/serial peak flow monitoring (twice daily). Adjust treatment as necessary.

Minimum yearly review.

Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

21 Review of mild asthma

Quick info:

Review at least annually (GASP assessment) and consult respiratory practice champion if needed.

22 Inadequate control of mild asthma

Quick info:

If inadequate control:

- check compliance and inhaler technique
- review diagnosis.
- step up medication

If control is inadequate, move to Severe/Moderate pathway.

23 Adequate control of mild asthma

Quick info:

If adequate control:

- continue current therapy
- consider ICS reduction
- reiterate importance of compliance

24 Inadequate control of severe/moderate asthma

Quick info:

If inadequate control:

- review diagnosis
- step up if not on [maximum therapy](#)
- reexplore possible triggers
- check compliance and inhaler technique

If ongoing poor control, refer to specialist.

26 Review

Quick info:

Review at least annually (GASP assessment) and consult respiratory practice champion if needed:

- reinforce compliance and inhaler technique
- ensure has self-management plan

27 Referral to specialist

Quick info:

Refer to specialist if:

- the diagnosis is unclear, or there are unexpected clinical findings such as crackles, clubbing or cyanosis
- unexplained restrictive spirometry
- suspected occupational asthma

Asthma in Adults - Chronic

Medicine > Respiratory > Asthma in adults

- persistent non-variable breathlessness
- monophonic wheeze or stridor
- systemic features such as weight loss, myalgia, fever
- chest x-ray abnormality
- marked peripheral blood eosinophilia ($>1 \times 10^9/L$)
- poor response to asthma treatment after addressing inhaler technique, compliance, and smoking cessation
- poorly controlled asthma in pregnancy

Referral should include:

- CXR
- FBC
- spirometry from within one year
- medication history

Use e.referral if possible.

28 Review

Quick info:

Review at least annually (GASP assessment) and consult respiratory practice champion if needed:

- reinforce compliance and inhaler technique
- ensure has self-management plan

29 Review

Quick info:

Review at least annually (GASP assessment) and consult respiratory practice champion if needed:

- reinforce compliance and inhaler technique
- ensure has self-management plan

Asthma in Adults Provenance Certificate – review and republish

Overview

This document describes the provenance of Hawke's Bay District Health Board's **Asthma in Adults** Pathway. It was developed August-September 2015 and first published in January 2016. A review of the Pathway was completed in October 2017. The next review is due in October 2019.

The Collaborative Clinical Pathways programme is one initiative stemming from the *Transform and Sustain* agenda. The main aims of CCP are to:

- Identify opportunities to improve how health and disability care is planned and delivered within the district to improve patient access to a wider range of health services that are both closer to home and reduce avoidable hospital admissions.
- Provide health professionals throughout the Hawke's Bay district with best practice, evidence-based clinical pathways that are available at the point of care.

Outcomes we expect to achieve include faster access to definitive care, improved health equity and outcomes, better value from publically-funded resources, and better patient experience through clear expectations, improved access and greater health literacy. These outcomes are clearly aligned to the NZ healthcare *Triple Aim* and *Better, Sooner, More Convenient* policy directions.

Editorial methodology

This Pathway was based on high-quality information and known Best Practice guidelines from New Zealand and around the world including Map of Medicine editorial methodology. It was developed by individuals with front-line clinical experience (see Contributors section of this document) and has undergone consultation to gain feedback and input from the wider clinical community.

Map of Medicine Pathways are constantly updated in response to new evidence. Continuous evidence searching means that Pathways can be updated rapidly in response to any change in the information landscape. Indexed and grey literature is monitored for new evidence, and feedback is collected from users year-round. The information is triaged so that important changes to the information landscape are incorporated into the Pathways through the quarterly publication cycle.

An update to this Pathway is scheduled for 12 months after first publication. However, feedback is welcomed at any time, with important updates added at the earliest opportunity within the Map of Medicine publishing schedule (the third Friday of each month).

References

This Pathway has been developed according to the Map of Medicine editorial methodology. Its content is based on high-quality guidelines and practice-based knowledge provided by contributors with front-line clinical experience. Feedback on this Pathway was received from stakeholders during a consultation process.

1	NZ Asthma and Respiratory Foundation, <i>Adult Asthma Guidelines</i> , Accessed at http://www.nzasthmaguidelines.co.nz/adultguidelines.html : 2017
2	<i>Global Initiative for Asthma (GINA): 2015</i>
3	National Institute for Health and Care Excellence. <i>Asthma Management: 2015</i>

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Disclaimers

Clinical Pathways Steering Group, Hawke’s Bay DHB and Health Hawke’s Bay – Te Oranga Hawke’s Bay

It is not the function of the Clinical Pathways Steering Group, Hawke’s Bay DHB and Health Hawke’s Bay – Te Oranga Hawke’s Bay to substitute for the role of the clinician, but to support the clinician in enabling access to know-how and knowledge. Users of the Map of Medicine are therefore urged to use their own professional judgement to ensure that the patient receives the best possible care. Whilst reasonable efforts have been made to ensure the accuracy of the information on this online clinical knowledge resource, we cannot guarantee its correctness and completeness. The information on the Map of Medicine is subject to change and we cannot guarantee that it is up-to-date.