Mahitahi Hauora Long Term Conditions Funding

Asthma Whanau Wellness Respiratory Clinic Funding

Background

Asthma is a chronic inflammatory disorder of the conducting airways. It is characterised by hyper-responsive airways that constrict easily in response to a wide range of endogenous and exogenous stimuli. Symptoms include recurrent episodes of wheeze, shortness of breath, chest tightness and cough (most common at night-time or early mornings). These episodes may be absent for prolonged periods at a time with periods of feeling well in between.

Epidemiology

New Zealand has one of the highest prevalences of asthma in the developed world. Māori, Pacific and those living in social deprivation are disproportionately affected in terms of prevalence, exacerbation, hospitalisation and mortality. Furthermore, Māori and Pasifika are less likely to receive inhaled corticosteroid (ICS) treatment than NZ European patients and are more likely to be prescribed short acting bronchodilator (SABA) only medication regimes.

Aetiology

Asthma can be genetically linked or caused by environmental factors. There is a higher incidence of asthma in patients who have been exposed to antibiotics early in life.

Pathophysiology

Eosinophil infiltration within the bronchial airways predisposes the airways to hyper-reactivity following exposure to endogenous or exogenous triggers. Smooth muscle contraction occurs, resulting in bronchospasm and airflow obstruction which is reversible.

Associated Conditions (treatable traits)

Atopic asthma is closely linked to eczema/dermatitis and allergic rhinosinusitis. Other conditions that impact on asthma include gastro-oesophageal reflux (particularly silent reflux); obstructive sleep apnoea; anxiety and depression. Severe uncontrolled asthma is strongly associated with the development of Chronic Obstructive Pulmonary Disease (COPD). Poor oral health may also be observed in patients with asthma: dental cavities and erosions may be caused by reduced saliva production from inhaler use; oral thrush is associated with ICS use. This can be reduced by using a spacer and rinsing mouth with water, gargling and spitting out.

Impact

Uncontrolled asthma represents a significant burden in New Zealand and has a significant impact on wellbeing. A survey conducted by the Asthma and Respiratory Foundation in 2023 found that around 1/3 of patients report that their asthma had stopped them from

participating in daily activities like sport, exercise, work or school. In addition, ¼ of those surveyed reported that their asthma had significantly reduced their quality of life (1).

Asthma management in New Zealand remains inadequate. The Asthma and Respiratory Foundation survey showed that whilst 74% of patients believed that their asthma was under control, just 18% of them had good control when objectively measured (1). The Health Quality and Safety Commission (HQSC) Atlas of variation reports around 40% of patients admitted to hospital with acute exacerbations of asthma were not prescribed an ICS and 85% were not given the influenza vaccination within the year *after* admission (2).

The Asthma Whanau Wellness consult checklist

This consult should be nurse-led. It attracts additional funding of $100 (GST exclusive) and should be free for the patient. Payment is automatic when AWW is entered into the PMS as an invoice service code. Please refer to claiming guidance in partner portal for further information *(General Documents>Guidelines > Claiming Guidance for Practices – Long Term Conditions).*

The most common reason for asthma exacerbation is inadequate inhaler technique and poor compliance/adherence to the medication regime. Effective communication and patient education are essential for optimal asthma management and should form the focus of this consultation.

Adult (> 12 years old) Asthma Checklist

Ages 12 to 16 years	Over 17 years
Unlimited funded annual review with either: • Been prescribed an ICS in last 6 months OR • Been prescribed at least 3 inhalers in the last 12 months OR • All patients with a diagnosis of asthma and are turning 12 this calendar year or over, up to and including age 16 (from 1st Jan 2025) AND • Meets the eligibility criteria below also	The number of funded adult consults available for your practice for the calendar year 2025 is limited to 5 per 1000 of total enrolled patients with your practice It is to be a one-off review (not annual) for those with severe or poorly controlled asthma and who also meet the eligibility criteria below

Eligibility Criteria

The following patients are eligible for a fully funded (and no cost to the patient) nurse-led consult to review their asthma control and management. They must have a diagnosis of asthma and at least one of the following:

- Māori or Pacific ethnicity
- Community Service card holders (or dependent of a CSC cardholder)
- Living in quintiles 4 or 5
- Have significant financial hardship
- Are currently pregnant

Preparing for the asthma review

1. On booking the appointment, advise patients to bring in **all** of their inhalers on the day of the consult. This may include montelukast which is a tablet form of medication.
2. Provide patients with the Asthma Control Test form upon arrival for their consult (electronic copies of the form can be accessed here: https://www.asthmacontroltest.com/ or see appendix) to be completed in the waiting room and prior to the consult. Consider whether the patient may benefit from health coach, kaiawhina or HCA support to complete the form.
3. Ensure up to date height, weight, BP and PEFR are completed by a member of the clinical support team prior to the consult.
4. Ensure the patient dashboard is up to date including asking about smoking/vaping status and offering support to quit.

The consult

1. Assessment of Asthma control and medication use
    a. Review answers to the Asthma Control Test and document severity in notes:
        i. 20-25: well-controlled
        ii. 16-19: partly controlled
        iii. 5-15: poorly controlled
    b. Review today's peak flow rate as an objective marker of asthma control. Appropriate Peak flow meter technique can be observed here: How to use a peak flow meter | Asthma + Lung UK (youtube.com)
    c. Ask about any severe asthma attacks within the past 12 months (requiring urgent medical review, oral corticosteroids or nebuliser use)
    d. Assess inhaler utilisation, technique and acceptability to patient
    e. Check compliance with medications (number of inhalers dispensed over previous 12 months)

2. Review of other conditions impacting well-being (treatable traits)

    a. Smoking status

b. High BMI: exacerbates asthma via inflammatory processes as well as physical expiratory flow limitations.
c. Rhinitis +/- nasal polyps: increase risk of developing asthma. Treatment of rhinitis reduces prevalence of asthma symptoms
d. Gastro-oesophageal Reflux (GOR): silent nocturnal aspiration can induce/exacerbate respiratory symptoms
e. Obstructive Sleep Apnoea (OSA): patients with asthma are at higher risk of OSA
f. Psychosocial review: depression and anxiety are associated with poor asthma control
g. Triggers: house dust mites, pollens, pet dander, NSAIDS, foodstuffs
h. Occupational exposure: chemical dusts; animal substances; organic dusts; metals
i. COPD overlap: consider whether spirometry may be appropriate

3. Ensure Appropriate Prescribing Practices
   a. Short-acting Beta Agonists (SABA) inhalers (e.g. Salbutamol) should never be prescribed alone in the management of asthma. Current guidelines recommend no more than 1 prescription of Salbutamol inhaler per year to be used in emergencies only.
   b. AIR (Anti-inflammatory Reliever) Therapy is recommended as first line for all patients over 12 years old at diagnosis of asthma.
   c. The following inhalers are fully funded for AIR therapy in New Zealand:
   d. Vannair is not currently recommended for AIR therapy in New Zealand. It can still be used as a preventer but would require a separate SABA for exacerbations. Some prescribers may choose to use it off licence as AIR therapy after consultation with their patient

DuoResp Spiromax	Budesonide 200mcg/actuation+formoterol 6mcg/actuation Budesonide 400mcg/actuation + formoterol 12mcg/actuation*
Symbicort	Budesonide 100mcg/actuation + formoterol 6mcg/actuation Budesonide 200mcg/actuation + formoterol 6mcg/actuation Budesonide 400mcg/actuation + formoterol 12mcg/actuation*

*Prescribing restrictions apply

   e. An acceptable alternative prescribing option is ICS+SABA or Long-Acting Beta Agonist (LABA) (dependent on severity) but should be considered second line.
   f. If high risk, ensure a back pocket prescription of oral corticosteroid is made available to the patient. Current guidelines recommend the following regimes:
      i. Prednisone 40mg once daily for 5 days
      ii. Prednisone 40mg once daily until symptom resolution, 20mg once daily for the same number of days.

g. Patients who have metered dose inhalers (MDI) should be given a spacer. These can be ordered on a **Practitioners Supply Order**.

4. Consider whether dose escalation needs to occur and discuss with patient

Dose escalation for AIR Therapy (preferred option)

	Step 1	Step 2	Step 3
Maintenance	None	1 actuation BD OR 2 actuations OD	2 actuations BD
Symptom relief	1 actuation PRN (max 8-12 daily)	1 actuation PRN (max 8-12 daily)	1 actuation PRN (max 8-12 daily)

Dose escalation for ICS+SABA or LABA therapy (second line)

	Step 1	Step 2	Step 3
Maintenance	Standard ICS	Standard ICS + LABA	High ICS plus LABA
Symptom Relief	SABA 1-2 puffs via spacer as required Repeat every few minutes if necessary	SABA 1-2 puffs via spacer as required Repeat every few minutes as necessary	SABA 1- 2 puffs via spacer as required Repeat every few minutes as necessary

5. Complete Asthma Action Plan with patient
    a. Provide education on inhaler technique
    b. Discuss the patient's understanding of their asthma and how to manage exacerbations
    c. Action plans can be accessed here: air interactive (nzrespiratoryguidelines.co.nz)
    d. Paper copies can be ordered here Asthma Action Plans | Asthma Foundation NZ
    e. Photocopies are available as part of the AsthmaWW resource pack
    f. Consider whether regular PEFR monitoring is required (if ACT score is < 19); ensure patient has a peak flow meter and chart at home, advise on how often this should be checked.
    g. Provide any immunisations due (including influenza, COVID and any overdue immunisations)

6. Consider onward referral or provide information for additional support
    a. Health Improvement Practitioner (HIP): Psychosocial support, mood disturbance
    b. Health coach: service navigation; health literacy; additional social supports required
    c. Toki rau: smoking cessation services
    d. Healthy Homes/Manawa ora; Habitat for Humanity Healthy Homes programme

e. Kia ora vision: if 2 or more long term conditions and requires further intensive management
f. Ngati Hine Respiratory Nurse: home visits, further education if living within Ngati Hine boundaries.
g. Other whanau ora providers: Te Hiku Hauora (Kaitaia, Muriwhenua), Te Ha Oranga O Ngati Whatua (Kaipara region); Whakawhiti Ora Pae (Te Hapua, Te Kao, Ngataki, Pukenui). See health pathways for how to make a referral.
h. Spirometry: If diagnostic uncertainty, elements of COPD overlap or poorly controlled symptoms.
i. Green Prescription: regular exercise can help with symptom control
j. Asthma New Zealand: support groups, nurse educator appointments
k. WINZ
l. High User Health Card
m. Prescription subsidy scheme

7. Documentation
    a. Ensure Asthma is added as a classification and highlighted as long term
    b. Ensure any asthma medications are highlighted as long-term medications
    c. Add recall for annual asthma review.
    d. Add alert in PMS if the patient is high risk* for exacerbation/hospitalisation or poorly controlled (score 5-15 on Asthma Control Test).
    e. Māori, Pacific peoples and those over 65 yrs have a higher incidence of severe, life threatening, or fatal asthma due to an increased exposure to risk factors.

*High risk features:

A. Asthma

- Poor symptom control
- One or more exacerbation requiring oral corticosteroids in the last year
- Hospitalisation or emergency department visit in the last year
- High SABA use (≥3 canisters per year)
- Home nebuliser
- History of sudden asthma attacks
- Impaired lung function (FEV1 <60% predicted)
- Raised blood eosinophil count
- Intensive Care Unit admission or intubation (ever)
- Requirement for long term oral corticosteroids

B. Comorbidity

- Psychotropic medications
- Major psychosocial problems
- Smoking
- Food allergy/anaphylaxis
- Alcohol and drug abuse
- Aspirin or other non-steroidal anti-inflammatory drug sensitivity

C. Other factors

- Underuse or poor adherence to ICS treatment
- Discontinuity of medical care
- Socioeconomic disadvantage and poor housing
- Māori and Pacific ethnicity
- Occupational asthma

Escalation to GP/NP

Patients may be referred for further review in any of (but not limited to) the following situations:

- Diagnostic uncertainty, complexity or atypical features
- Any ED or White Cross presentation within the past 12 months (and has not been seen by GP/NP following attendance)
- Any history of oral corticosteroid prescribing (and has not been seen by GP/NP following prescribing)
- History of > 3 SABA prescriptions within 12-month period
- SABA only prescription within 12 months
- Further review of any treatable traits

Child (5-11 years old) Asthma Checklist

Eligibility Criteria

The following patients are eligible for a fully funded (and no cost to the patient) nurse-led annual consult to review their asthma control and management:

- Māori or Pacific ethnicity
- Caregiver holds a community service card
- Living in quintile 4 or 5 or rural (R2 or R3) as defined by the Geographic Classification for Health (GCH)
- Evidence of significant financial hardship
- Been prescribed an ICS in last 6 months
- Been prescribed at least 3 inhalers in the last 12 months
- All patients with a diagnosis of asthma and are turning 5 this calendar year or over, up to and including age 11 (from 1st Jan 2025)

Preparing for the annual asthma review

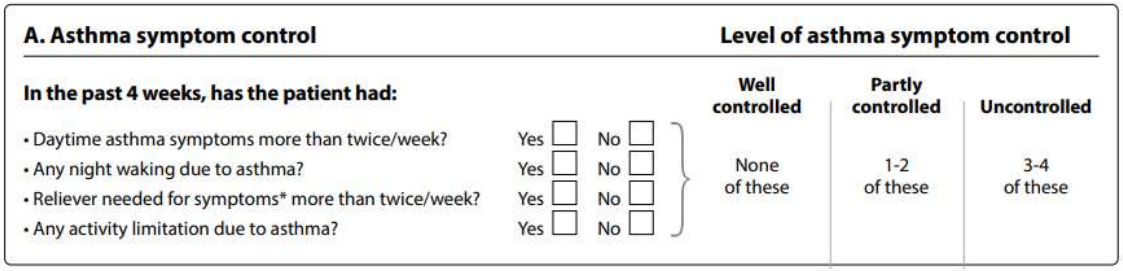
1. On booking the appointment, advise patients to bring in **all** of their inhalers on the day of the consult.
2. Provide patients with the Asthma Control Test form (paediatric version) upon arrival for their consult (electronic copies of the form can be accessed here: Children Quiz (asthmacontroltest.com) or see appendix) to be completed in the waiting room and prior to the consult. Consider whether the child and caregiver may benefit from health coach, kaiawhina or HCA support to complete the form.
3. Ensure up to date height, weight and PEFR are completed by a member of the clinical support team. Ensure height and weight are plotted on a percentile chart.

The consult

4. Perform an assessment of Asthma control and medication use
    a. Review answers to the Asthma Control test and document severity in notes:

i. 20 – 27: well controlled
ii. 12 – 20: poorly controlled
iii. 0 – 12: very poorly controlled

b. Alternative assessment of control can be ascertained by asking the following questions:



A. Asthma symptom control			Level of asthma symptom control		
In the past 4 weeks, has the patient had:			Well controlled	Partly controlled	Uncontrolled
• Daytime asthma symptoms more than twice/week?	Yes ☐	No ☐	None of these	1-2 of these	3-4 of these
• Any night waking due to asthma?	Yes ☐	No ☐			
• Reliever needed for symptoms* more than twice/week?	Yes ☐	No ☐			
• Any activity limitation due to asthma?	Yes ☐	No ☐			

c. Review today's peak flow rate (if able) as an objective marker of asthma control
d. Review symptom diary (if completed)
e. Count and document how many consultations for asthma symptoms within the past 12 months.
f. Ask about any severe asthma attacks within the past 12 months (requiring urgent medical review, oral corticosteroids or nebuliser use)
g. Assess inhaler utilisation, technique and acceptability to the child and their care giver
h. Check compliance with medications (number of inhalers dispensed over previous 12 months)
i. Check wording on prescription allows for enough inhalers to be dispensed per 90 day period.
j. Consider whether multiple inhalers need to be prescribed e.g. for school, child living between different homes.
k. Ask about housing and any unhealthy features e.g. over-crowding, cold, damp homes, unflued gas heaters
l. Ask about family income and difficulties accessing care. A number of patients do not present or present late due to concerns about family debts with the practice.

5. Review of other conditions impacting well-being (treatable traits)

a. Ask about smoke exposure, including vaping, within the household and car.
b. High BMI: exacerbates asthma via inflammatory processes as well as physical expiratory flow limitations.
c. Rhinitis +/- nasal polyps: increase risk of developing asthma. Treatment of rhinitis reduces prevalence of asthma symptoms
d. Undiagnosed aspiration (may have history of recurrent lower respiratory tract infections)

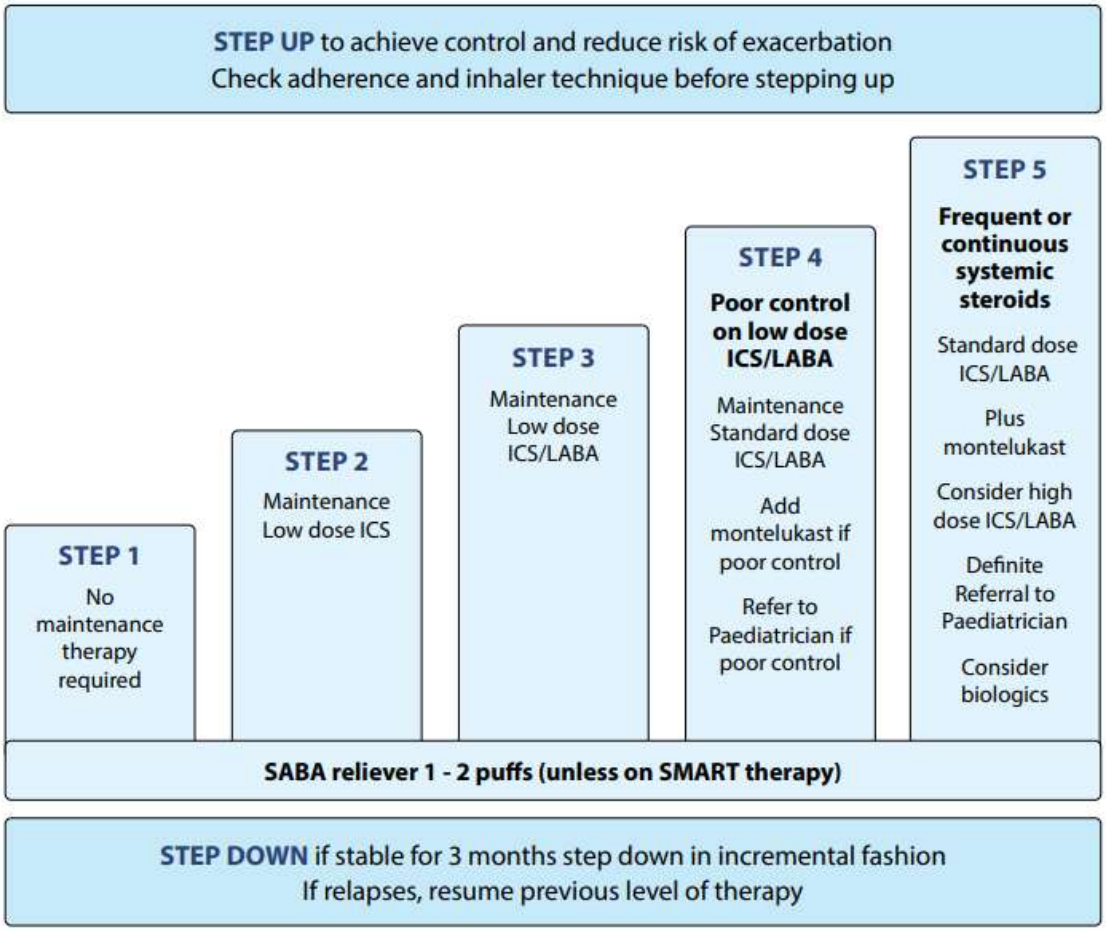
e. Psychosocial review: depression and anxiety are associated with poor asthma control
f. Triggers: house dust mites, pollens, pet dander, NSAIDS, foodstuffs, chlorinated swimming pools

6. Ensure Appropriate Prescribing Practices
    a. Ensure the inhaler device prescribed is appropriate for age as below:

Inhaler device	< 2 years	2-4 years	5-7 years	8-11 years
pMDI, small volume spacer & mask	Yes	May transition to no mask		
pMDI & spacer No mask		Possible	Yes	Yes
pMDI (alone)*				Possible, but use with a spacer is preferable
Dry powder device			Possible	Yes
Breath-activated device			Possible	Yes

**A spacer should be used with the pMDI for the regular administration of ICS, and for the administration of SABA in the setting of an acute attack.*

    b. Ensure patient is on the appropriate stepwise management:



NB dose of ICS therapy in children is lower than that for adults – higher doses do not confer any benefit and increase risk of adverse medication effects.

Low dose		**Standard dose**	
Beclomethasone dipropionate	200 mcg/day	Beclomethasone dipropionate	400-500 mcg/day
Beclomethasone dipropionate ultrafine	100 mcg/day	Beclomethasone dipropionate ultrafine	200 mcg/day
Budesonide	200 mcg/day	Budesonide	400mcg/day
Fluticasone propionate	100 mcg/day	Fluticasone propionate	200-250mcg/day

7. Consider whether dose escalation needs to occur and discuss with patient and prescriber

    a. ICS therapy should be introduced in the following circumstances:
        i. Asthma symptoms > 2 times per week

ii. Use of reliever inhaler > 2 times per week
iii. Regular night waking in the past month
iv. Any flare-up in the past year (especially if requiring oral steroids)
v. Seasonal symptoms: ICS should be prescribed for use during these periods
vi. Or more SABA prescriptions within the past 12 months
vii. An ICS should ALWAYS be prescribed if commencing a LABA

b. Step up is required if asthma is partially controlled or uncontrolled.
c. There is insufficient evidence to recommend SMART therapy (combined ICS/LABA) in children < 11 years old however this may be considered in children with poor control on discussion with a respiratory SMO.
d. Montelukast may be trialled if poor control on ICS/LABA therapy. Please note that there are neuropsychiatric side effects (sleep, behavioural disturbance and suicidal ideation) in some patients and parents should be warned to look out for this and stop medication immediately.
e. Consider a specialist referral in the following circumstances:
    i. Frequent doses of oral corticosteroids (> 14 days in a 12-month period)
    ii. Persistent wheezing or breathlessness affecting exercise or sleep AND good compliance with 200mcg/day of ICS plus LABA.

8. Complete Asthma Action Plan with patient and caregiver
    a. Provide education on inhaler technique
    b. Ascertain the child and whanau understanding of their asthma and how to manage exacerbations including in the home and at school.
    c. Action plans can be accessed here: Child-Asthma-Plan-EN-10-22-web.pdf (asthmafoundation.org.nz)
    d. Paper copies can be ordered here Asthma Action Plans | Asthma Foundation NZ
    e. Photocopies are available as part of the AsthmaWW resource pack
    f. Consider whether regular symptom monitoring is required (if ACT score < 20) (See appendix 3). Electronic copies can be found here: Child-Symptom-Diary-EN-10-22-web.pdf (asthmafoundation.org.nz); paper copies can be ordered here: Child Asthma Symptom Diary | Asthma Foundation NZ. Photocopies are available as part of the AsthmaWW resource pack.
    g. Provide any immunisations due (including influenza and any overdue childhood immunisations). **N.B Annual influenza vaccine should be offered to all children with persistent wheeze from 6 months of age.**

9. Consider onward referral or provide information for additional support

    a. Health coach: service navigation; health literacy; additional social supports required; knowledge around repeat prescriptions

b. Encourage reduction of tobacco smoke exposure in the child's environment (home and car) and recommend smoking cessation. If appropriate, give advice and refer to Toki Rau, or Quitline (0800 778 778). Provide Health Sponsorship Council's pamphlet A Guide to Making Your Home and Car Smokefree www.healthed.govt.nz/
c. Healthy Homes/Manawa ora; Habitat for Humanity Healthy Homes programme
d. Ngati Hine Respiratory Nurse: home visits, further education if living within Ngati Hine boundaries.
e. Other whanau ora providers: Te Hiku Hauora (Kaitaia, Muriwhenua), Te Ha Oranga O Ngati Whatua (Kaipara region); Whakawhiti Ora Pae (Te Hapua, Te Kao, Ngataki, Pukenui). See health pathways for how to make a referral.
f. Green Prescription (Active Families programme): regular exercise can help with symptom control
g. Asthma New Zealand: support groups, nurse educator appointments
h. WINZ: Child Disability Allowance for uncontrolled persistent asthma
i. High User Health Card
j. Prescription subsidy scheme

10. Documentation
    a. Ensure Asthma is added as a classification and highlighted as long term
    b. Ensure any asthma medications are highlighted as long-term medications
    c. Ensure that directions are written on prescriptions so the pharmacist may dispense the number of inhalers required by the patient as allowed within the 3-month supply limit. Consider whether additional inhalers may be required for children living across two households or needing extra inhalers for school.
    d. Add recall for annual asthma review
    e. Add Alert in PMS if the patient is high risk* for exacerbation/hospitalisation or evidence of poor control (ACT score < 20)

*high risk features in children

Mahitahi Hauora

A. Asthma

- Poor asthma control.
- Hospitalisation or emergency department visit for asthma in the last year.
- Extreme inhaled bronchodilator use (>1 canister per month).
- History of sudden asthma attacks.
- Intensive care admission or intubation (ever).
- Requirement for long-term oral steroids.

B. Comorbidity

- Major psychosocial problems.
- Alcohol and drug abuse in family.
- Severe food allergy and anaphylaxis.

C. Other factors

- Poor inhaler technique.
- Underuse or poor adherence to ICS treatment.
- Tobacco smoke exposure.
- Discontinuous medical care.
- Socioeconomic disadvantage.
- Financial hardship.
- Unhealthy housing.
- Māori and Pacific ethnicity.
- Child protection issues (consider Vulnerable Children Act 2014). www.legislation.govt.nz/act/public/2014/0040/latest/DLM5501618.html

Escalation to GP/NP

Patients may be referred for further review in any of (but not limited to) the following situations:

- Faltering growth (crossing 2 or more percentiles on growth chart)
- Diagnostic uncertainty, complexity or atypical features
- Any ED or White Cross presentation within the past 12 months (and has not been seen by GP/NP following attendance)
- Any history of oral corticosteroid prescribing (and has not been seen by GP/NP following prescribing)
- History of > 3 SABA prescriptions within 12-month period (this suggests requirement to need an increase in stepwise management to a regular ICS)
- Requires an increase in stepwise management (especially to step 4 or 5)

Impact

Māori and Pacific children with asthma are more likely to have severe asthma symptoms and be hospitalised but are less likely to be prescribed an inhaled corticosteroid (ICS), have an action plan, or receive adequate asthma education (see 4.5, 4.6)

Clinician Resources

- www.nzasthmaguidelines.co.nz/resources
- www.nationalasthma.org.au/living-with-asthma/how-to-videos
- Inhaler devices | Healthify
- Asthma | He Ako Hiringa

Patient Resources

- Asthma apps | Healthify
- https://www.asthma.org.nz/

Appendix 1: ACT (Adult)

Mahitahi Hauora

Name_____

Date of birth_____

beat asthma

Asthma Control Test Score for People 12 years and Older

Step 1: Write the number of each answer in the score box provided.

Step 2: Add the score boxes for your total.

Step 3: Take the test to your doctor to talk about your score.

1. In the past 4 weeks, how much of the time did you asthma keep you from getting as much done at work, school or home?

Score

1	2	3	4	5
All of the time	Most of the time	Some of the time	A little of the time	None of the time

2. During the past 4 weeks, how often have you had shortness of breath?

1	2	3	4	5
More than once a day	Once a day	3-6 times a week	Once or twice a week	Not at all

3. During the last 4 weeks, how often did your asthma symptoms wake you up at night or earlier than usual?

1	2	3	4	5
4 or more nights a week	2 or 3 nights a week	Once a week	Once or twice	Not at all

4 During the last 4 weeks, how often have you used your reliever medication?

1	2	3	4	5
3 or more times per day	1 or 2 times per day	2 or 3 times per week	Once a week or less	Not at all

5 How would you rate your asthma control during the past 4 weeks?

1	2	3	4	5
Not controlled at all	Poorly controlled	Somewhat controlled	Well controlled	Completely controlled

Total Score

19 If your score is 19 or less, your asthma may not be as controlled as it could be. Talk to your doctor to see if things can be improved.

www.beatasthma.co.uk

Version 2: Asthma Checklist Partner Portal			
Created	14/01/2025	Last Updated	9am 25/03/2025

Mahitahi Hauora

Appendix 2 (ACT – child)

Is your child's (4-11yrs) asthma under control?

Asthma Control Test™

The first step to achieving control over your child's asthma is to know where they're at right now.

This test is a way of assessing your child's present level of asthma control.[1,2] It will provide a score that may help your health care professional determine if your child's asthma treatment plan is working or if it might be time for a change.

Take five minutes now and do this simple 3 step test with your child.

STEP 1

Let your child answer these questions. You may help, but let your child select the response.

Q1 How is your asthma today?

SCORE

Q2 How much of a problem is your asthma when you run, exercise or play sports?

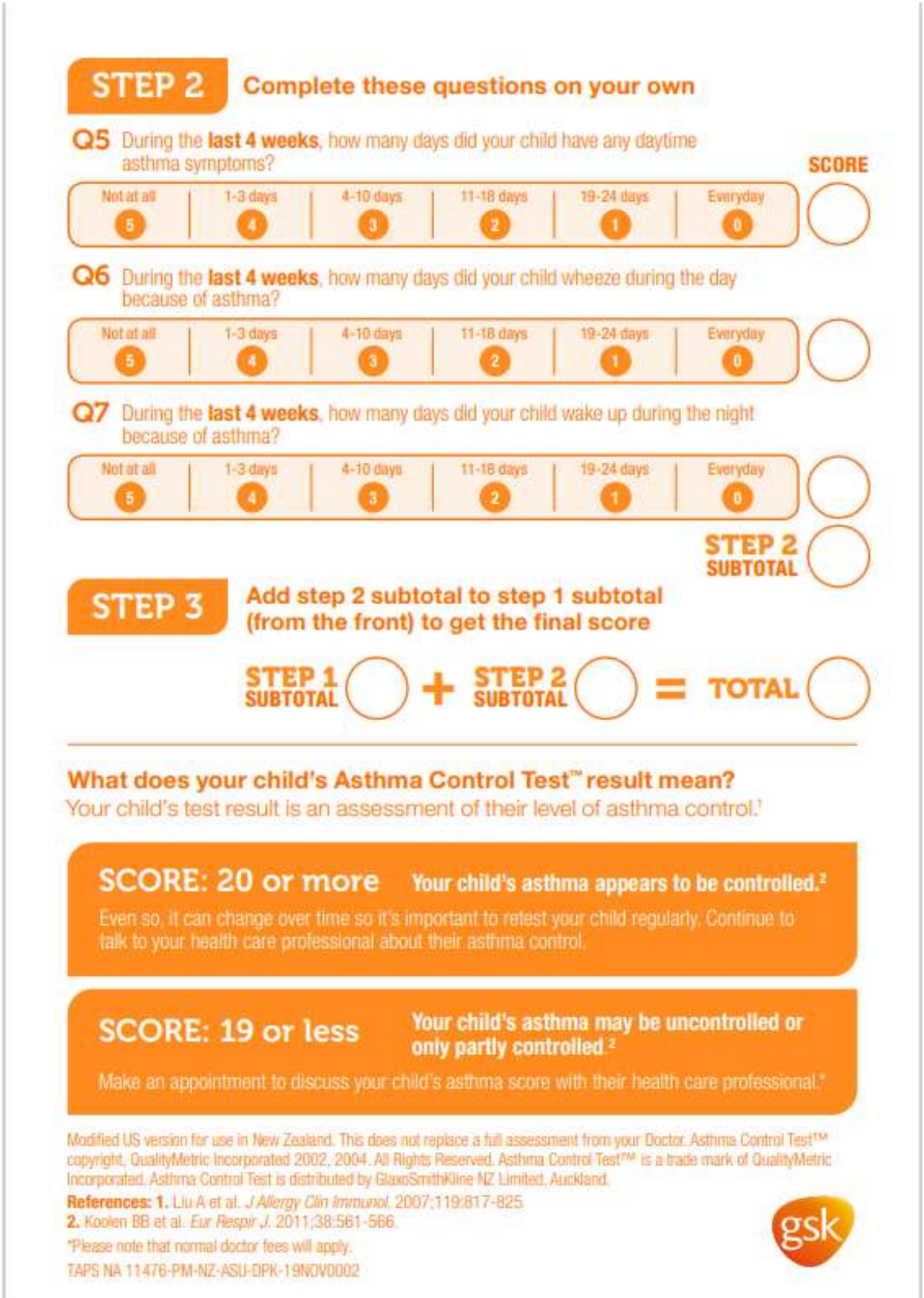
Q3 Do you cough because of your asthma?

Q4 Do you wake up at night because of your asthma?

STEP 1 SUBTOTAL

Continue the test over

Mahitahi Hauora



STEP 2 Complete these questions on your own

Q5 During the **last 4 weeks**, how many days did your child have any daytime asthma symptoms?

SCORE

Not at all	1-3 days	4-10 days	11-18 days	19-24 days	Everyday
5	4	3	2	1	0

Q6 During the **last 4 weeks**, how many days did your child wheeze during the day because of asthma?

Not at all	1-3 days	4-10 days	11-18 days	19-24 days	Everyday
5	4	3	2	1	0

Q7 During the **last 4 weeks**, how many days did your child wake up during the night because of asthma?

Not at all	1-3 days	4-10 days	11-18 days	19-24 days	Everyday
5	4	3	2	1	0

STEP 2 SUBTOTAL

STEP 3 Add step 2 subtotal to step 1 subtotal (from the front) to get the final score

STEP 1 SUBTOTAL + **STEP 2 SUBTOTAL** = **TOTAL**

What does your child's Asthma Control Test™ result mean?

Your child's test result is an assessment of their level of asthma control.[1]

SCORE: 20 or more **Your child's asthma appears to be controlled.[2]**

Even so, it can change over time so it's important to retest your child regularly. Continue to talk to your health care professional about their asthma control.

SCORE: 19 or less **Your child's asthma may be uncontrolled or only partly controlled.[2]**

Make an appointment to discuss your child's asthma score with their health care professional.*

References: 1. Liu A et al. *J Allergy Clin Immunol.* 2007;119:817-825.
2. Koolen BB et al. *Eur Respir J.* 2011;38:561-566.

*Please note that normal doctor fees will apply.

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Appendix 3: symptom diary

Version 2: Asthma Checklist Partner Portal			
Created	14/01/2025	Last Updated	9am 25/03/2025

Mahitahi Hauora

Key to symptoms

Most days you should be free of asthma symptoms but triggers may make your asthma worse. Using this diary can help you to identify your triggers, and along with your Asthma Action Plan it will help you to know when to change your usual treatment.

Things to look for include: coughing, wheezing, difficulty breathing, not being able to play like you usually do, waking at night with asthma, and using the reliever more than 2 times per week.

Tick the boxes on the chart to show how bad your symptoms are, use the key below as a guide:

Symptom	Well	Worse	Worried	Asthma Emergency
Did you cough today?	No not at all.	Yes I coughed some of the time.	I coughed most of the day & found it hard to breathe.	I'm coughing & finding it very hard to breathe.
Did you wheeze today?	No not at all.	Yes I wheezed some of the time.	I wheezed often during the day & found it hard to breathe.	I'm wheezing & finding it very hard to breathe.
Did your asthma affect normal activity?	No not at all.	Just when I got excited.	I couldn't play or do things like I usually do.	I'm distressed. Gasping for breath. I'm pale and quiet.
Did your asthma wake you up last night?	No I slept well.	Yes for some of the night.	Yes for most of the night.	My asthma symptoms are really bad and I can't sleep.
How many doses of reliever did you take?	None.	I needed two puffs.	I needed 6 puffs.	My reliever isn't working.

Recognising worsening asthma

Worse

- I cough or wheeze and it's hard to breathe, or
- I'm waking at night because of my asthma, or
- I cough or wheeze when I play, or
- I need my reliever puffer to control my asthma more than 2 times per week

Worried

- My reliever puffer isn't helping, or
- I'm finding it hard to breathe, or
- I'm breathing hard and fast, or
- I'm sucking in around my ribs/throat, you may need to look under my shirt, or
- I'm looking pale or blue

- Sit me down and try to stay calm
- Give me 6 puffs of reliever through a spacer, taking 6 breaths for each puff
- **If I don't start to improve I need help now**

Emergency

DIAL 111 and ask for an ambulance
WHILE YOU'RE WAITING:

- Try to stay calm and keep me sitting upright
- Give 6 puffs of reliever through a spacer every 6 minutes with 6 breaths for each puff until help arrives

Produced by the Asthma and Respiratory Foundation NZ

Asthma + Respiratory FOUNDATION NZ

Child Asthma Symptom Diary

Name:

Better breathing, better living

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Doctor: ____________________ Preventer: ____________________ Reliever: ____________________

If you are frightened at any stage call 111

Refer to the symptoms key to help you fill in the symptom diary chart below. Use this Symptom Diary along side your Asthma Action Plan.

Well → If you have ticked only the green boxes, things are going really well.

Worse → If you have ticked any of the yellow boxes, increase your treatment in line with your action plan. If you're not getting better see your doctor today.

Worried → If you have ticked any of the orange boxes, see a doctor today.

Asthma Emergency If you have ticked any of the red boxes, you need to dial 111 and ask for an ambulance.

Date	Did you cough today?				Did you wheeze today?				Did your asthma affect your normal activity?				Did your asthma wake you up in the night?				How many doses of reliever did you take today?				Comments

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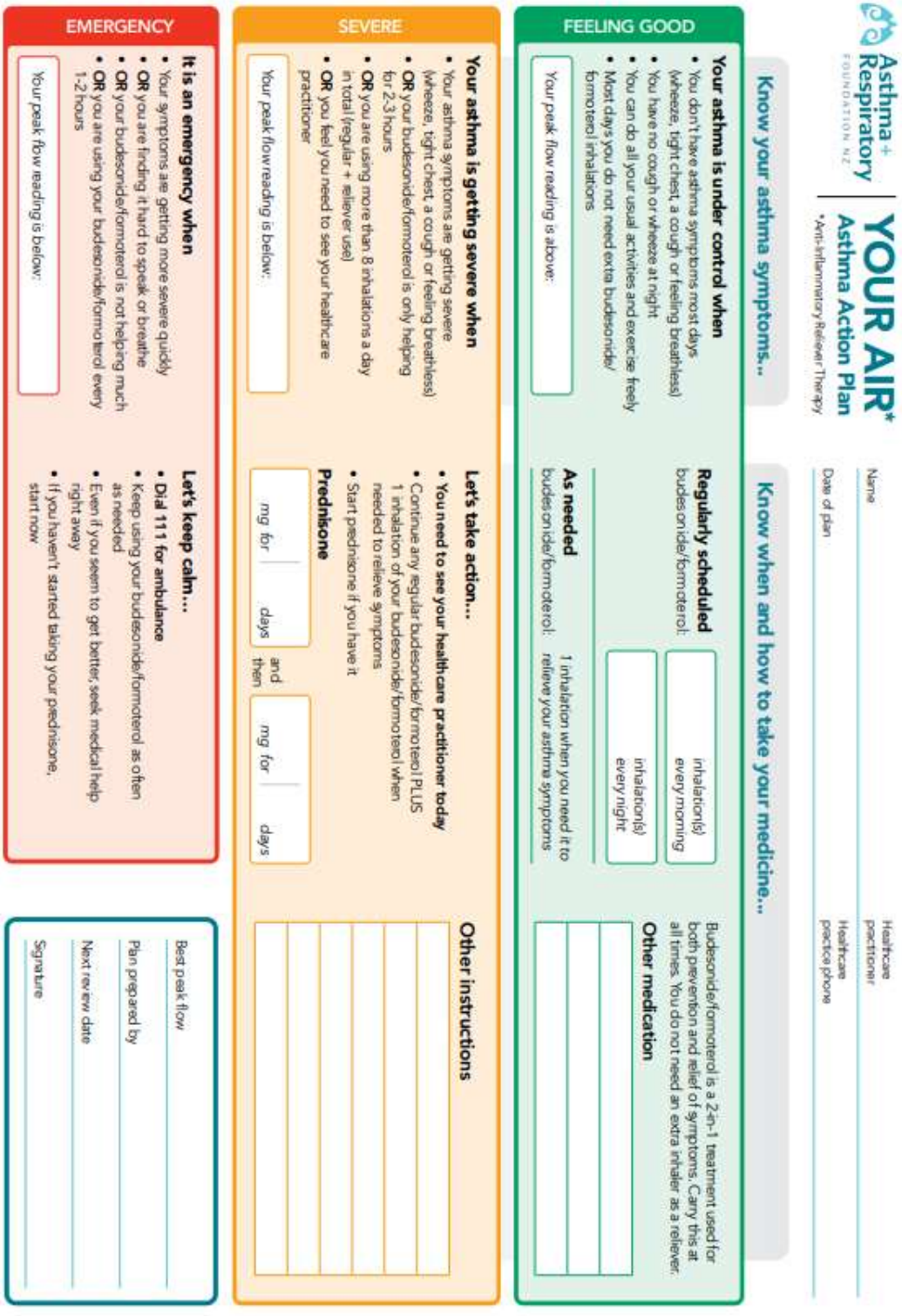
Appendix 4: Adult Asthma Action plans



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3-stage Adult Asthma Action Plan

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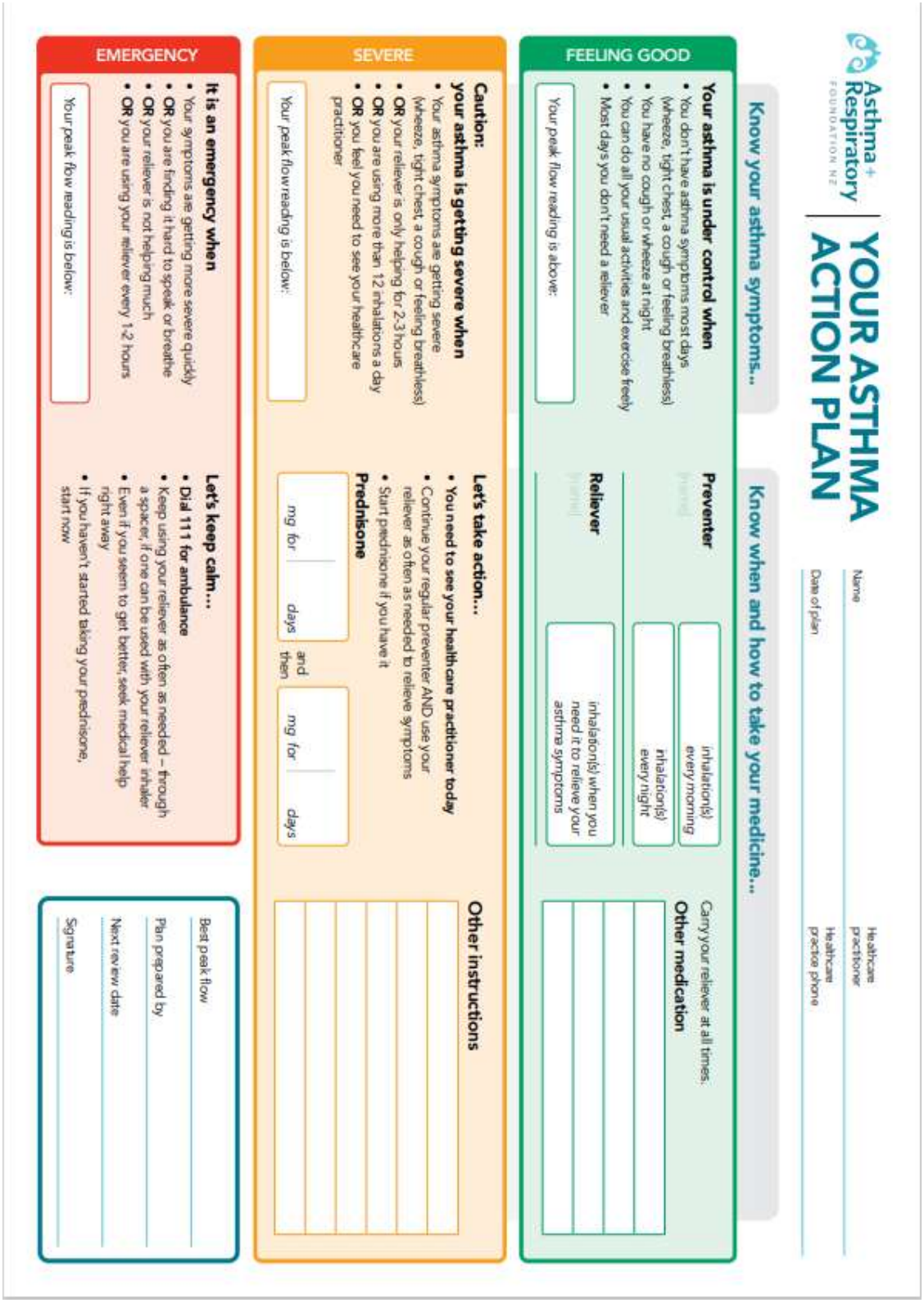

Adult 4-stage Asthma Action Plan

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YOUR ASTHMA ACTION PLAN

Name

Date of plan

Healthcare practitioner

Healthcare practice phone

Know your asthma symptoms...

FEELING GOOD

Your asthma is under control when

- You don't have asthma symptoms most days (wheeze, tight chest, a cough or feeling breathless)
- You have no cough or wheeze at night
- You can do all your usual activities and exercise freely
- Most days you don't need a reliever

Your peak flow reading is above:

GETTING WORSE

Caution: your asthma is getting worse when

- You have symptoms most days (wheeze, tight chest, a cough or feeling breathless)
- You are waking at night with symptoms
- You are getting a cold
- You feel short of breath when you exercise

Your peak flow reading is below:

SEVERE

Caution: your asthma is getting severe when

- Your asthma symptoms are getting severe (wheeze, tight chest, a cough or feeling breathless)
- **OR** your reliever is only helping for 2-3 hours
- **OR** you are using more than 12 inhalations a day
- **OR** you feel you need to see your healthcare practitioner

Your peak flow reading is below:

EMERGENCY

It is an emergency when

- Your symptoms are getting more severe quickly
- **OR** you are finding it hard to speak or breathe
- **OR** your reliever is not helping much
- **OR** you are using your reliever every 1-2 hours

Your peak flow reading is below:

Know when and how to take your medicine...

Preventer

[name] — inhalation(s) every morning

[name] — inhalation(s) every night

Reliever

[name] — inhalation(s) when you need it to relieve your asthma symptoms

Carry your reliever at all times.

Other medication

Let's get prepared...

- Step up your preventer medicine:
- Take [ ] inhalations four times each day
- Use your reliever as often as needed – through a spacer, if one can be used with your reliever inhaler

Other instructions

Let's take action...

- **You need to see your healthcare practitioner today**
- Continue your medicine for "getting worse"
- Start prednisone if you have it

Prednisone

[ ] mg for [ ] days and then [ ] mg for [ ] days

Other instructions

Let's keep calm...

- **Dial 111 for ambulance**
- Keep using your reliever as often as needed – through a spacer, if one can be used with your reliever inhaler
- Even if you seem to get better, seek medical help right away
- If you haven't started taking your prednisone, start now

Best peak flow

Plan prepared by

Next review date

Signature

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Appendix 5: Child Asthma Action Plan

Well

When I'm well:

- I have no cough
- I play just like other children
- I use my reliever puffer less than 2 times a week

My puffers are:

Preventer: I take this every day even when I'm well.
The name of my preventer is _____ The colour is _____
I take ____ puffs in the morning and ____ puffs at night through a spacer.

Reliever: I take this only when I need it
The name of my reliever is _____ The colour is _____
I take ____ puffs through a spacer when I wheeze, cough or when it's hard to breathe

If I find it hard to breathe when I exercise I should: Take ____ puffs of my reliever

Worse

When my asthma is getting worse:

- I cough or wheeze and it's hard to breathe, or
- I'm waking at night because of my asthma, or
- I cough or wheeze when I play, or
- I need my reliever inhaler to control my asthma more than 2 times per week

If my asthma gets worse I should:

Keep taking my preventer every day as normal and take ____ puffs of my reliever every 4 hours
If I'm not getting better doing this I should see my doctor today

Contact:

Worried

My asthma is a worry when:

- My reliever isn't helping, or
- I'm finding it hard to breathe, or
- I'm breathing hard and fast, or
- I'm sucking in around my ribs/throat, try looking under my shirt
- I'm looking pale or blue

- Sit me down and try to stay calm
- Give me 6 puffs of reliever through a spacer, taking 6 breaths for each puff
- **If I don't start to improve I need help now**

Emergency

DIAL 111 and ask for an ambulance

WHILE YOU'RE WAITING:

- Try to stay calm and keep me sitting upright
- Give 6 puffs of reliever through a spacer every 6 minutes with 6 breaths for each puff until help arrives

Date Prepared: _____ Doctor/Nurse Signature: _____ Plan to be reviewed when treatment changed

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Appendix 6

Suggested quick key wording

For further information on how to set up keywords within your PMS, see Medtech Master E-Learning

How to set up keywords in medtech:

1. Click on 'Setup' tab
2. Click on 'Keywords' tab
3. Click on 'add new'
4. Follow instructions to enter text and new keyword for corresponding text

How to use keywords in the clinical consult:

1. Within the consult box, typ a full stop and then the keyword text e.g. .AsthmaWW
2. Press Enter: the corresponding text will automatically appear within the consult template.

Suggested text:

Asthma WW Annual Review

ACT score:
PEFR:
Asthma attacks within 12/12:
Medication adherence:
Treatable traits/ co-morbidities:
Current inhalers:
Review of Inhaler technique completed
Asthma Action Plan completed
Immunisations administered:
Additional supports/referrals completed:
Dashboard, recalls and alerts updated

References

1. Asthma in New Zealand: 2023 survey findings. Asthma and Respiratory Foundation NZ. ARFNZ-asthma-in-NZ-survey-2023-Final.pdf (asthmafoundation.org.nz)
2. Health Quality and Safety Commissions Atlas of Variation: Asthma. Atlas of Healthcare Variation | Te Tāhū Hauora Health Quality & Safety Commission (hqsc.govt.nz)