Supplementary Materials

Continuity of care in the management of asthma attacks and relevance during a pandemic

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Table S1. Treatment of acute attacks of asthma in primary care and acute care in adults and teenagers^{1,2,3}

Severity of attack	Primary care management	Acute care facility management
Life-threatening	 Urgent transfer to acute care facility While waiting for transport, administer salbutamol (5mg) and ipratropium bromide (0.5 mg) via oxygen-driven nebuliser or via pMDI and spacer, commence prednisolone (40-50 mg) or hydrocortisone IV (100 mg), controlled oxygen therapy Patient under close continuous observation of HCP in primary care facility until transport arrives Written referral to ED/hospital 	 Most appropriately managed in acute care (e.g., ED or ICU) Commence salbutamol 5 mg every 15–30 mins (or continuous administration 5–10 mg/h) via oxygen-driven nebuliser, add ipratropium bromide 0.5 mg 4–6 hourly, controlled oxygen therapy and oral prednisolone (or IV hydrocortisone 100 mg) Measure ABGs Discuss with senior clinician and ICU Consider adding IV magnesium sulphate (1.2–2g over 20 min^a) Correct any fluid and electrolyte disturbances Transfer to ICU for possible intubation and mechanical ventilation
Severe	 Transfer to an acute care facility While waiting, administer salbutamol via oxygen-driven nebuliser (5 mg) or via pMDI and spacer, commence prednisolone (40-50 mg) or hydrocortisone IV (100 mg), controlled oxygen therapy (aim SaO₂ 93–95%), maximum 98% Patient to remain under close continuous observation of a HCP in the primary care facility until transport arrives Written referral to ED/hospital 	 Most appropriately managed in ED, ICU or hospital ward Commence salbutamol 5 mg every 15–30 mins via oxygen- driven nebuliser plus ipratropium bromide 0.5 mg 4–6 hourly, controlled oxygen therapy, and oral prednisolone (or IV hydrocortisone 100 mg) Consider IV magnesium sulphate^b Consider high-dose ICS within the first hour of presentation^c Measure ABGs on initial presentation and after 1 hour If continuing deterioration, discuss with senior clinician and ICU, treat as life-threatening and prepare for transfer to ICU Monitor PEF 15–30 mins after initiating treatment

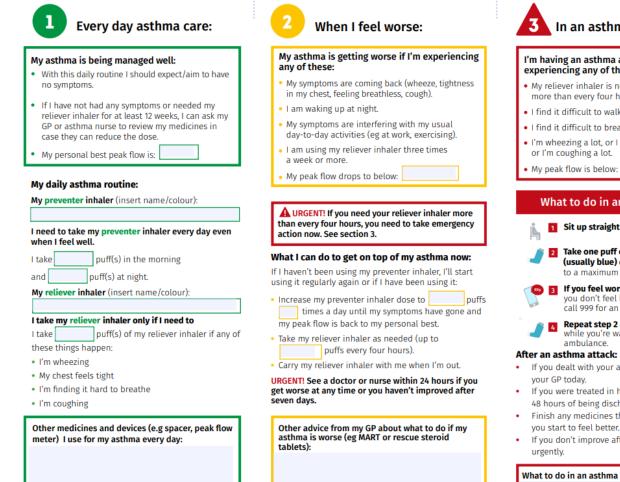
Mild or Moderate	 Administer salbutamol (100 μg/actuation) inhaler via spacer and pMDI, OCS 40–50 mg (adult), Consider controlled flow oxygen if hypoxemic (aim SaO₂ 93–95%, maximum 98%) Monitor SaO₂ and observe patient (minimum 1 hour) within primary care facility Consider transfer to acute care if symptoms fail to improve or deteriorate Symptoms resolved, minimal need for SABA – patient can be sent home with OCS, follow-up appointment, asthma action plan and preventative and relief therapy (consider increasing regular ICS dose if needed) 	 On presentation to ED, administer salbutamol (100 μg/actuation) inhaler via pMDI + spacer, or 5 mg via oxygen-driven nebuliser, consider adding ipratropium bromide 0.5 mg nebuliser 4–6 hourly, administer controlled oxygen (aim SaO₂ 93–95%, maximum 98%) if hypoxemic, and commence OCS Measure lung function 1 hour after initial treatment FEV₁/PEF at least 50% predicted or PB^d, normal physical examination, no distress, consider discharge home with primary care follow-up, asthma action plan and continued OCS FEV₁/PEF <50% or continuing symptom deterioration, treat as severe and assess for hospital admission
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ABG, arterial blood gas; ED, emergency department; FEV₁, forced expiratory volume in 1 second; HCP, healthcare provider; ICS, inhaled corticosteroid; ICU, intensive care unit; IV, intravenous; OCS, oral corticosteroid; PB, personal best; PEF, peak expiratory flow; pMDI, pressurised metered-dose inhaler; SABA, short-acting β_2 -agonist; SaO₂, saturated oxygen

^aDoses stated as per BTS recommendation³; ^bRecommended in NAEPP¹ and GINA²; ^cRecommended in GINA only²; ^dNAEPP: >70%¹, GINA 60-80%², BTS: >50%³

Figure S1. Example asthma action plan⁴

Image reproduced with permission from Asthma UK. The full asthma action plan resource and most up-to-date version is available at https://www.asthma.org.uk/advice/resources/





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