V0.18: IUC CAS Mild Paediatric Asthma Pathway – for use in children aged 5 – 16 years old (GP ONLY)

Telephone/Video review of current clinical status (this may have changed/deteriorated since original triage)
Video Consultation must be used if available – If no video then will need F2F for anything other than mild asthma

Assessment:
A: Able to complete sentences? Audible wheeze (stridor/ other added sounds)
B: Respiratory Rate (carer to count or clinician to count if video available) faster than normal? Peak Expiratory Flow (PEF) & calculate PEF% compared with predicted/best, WOB (accessory muscles, nasal flare, tracheal tug, abdominal breathing, tripoding), cough
C: Warm peripheries / colour / carer to perform Capillary Refill time - press down for 5 sec and release (<2s is normal)
D: Level of consciousness – Normal behaviour? Drowsy? Confused?

What medication/dose has been administered already? (inhaler? spacer used?)
Always consider other Dx e.g. LRTI/Croup/Foreign body/Epiglottitis/Anaphylaxis/ Sepsis

Mild Asthma in patients aged 5 to 16 years old with a confirmed diagnosis of asthma with no exclusion criteria (see box on right)

Mild Symptoms

Decision regarding need for Urgent Treatment

History taking (Full Asthma Hx on Page 3)
HPC: duration of symptoms, are symptoms worsening, previous help sought, treatment used, is treatment working/are inhalers effective, triggers, associated symptoms (fever, rash, coryzal, covid symptoms), appetite, fluid intake, activity level, urine output
PMHx: other conditions, admissions to hospital/ITU, recent D/C
DHx: inhaler use, steroid use, other meds, epipen, immunisations
Allergies: atopy, allergies, anaphylaxis
Other: what's normal for this child? Level of concern/anxiety; capacity/experience of carer to manage child at home

Close monitoring at home for 4 hrs +/-Salbutamol administration.
If deteriorates at any time give up to 10 puffs of Salbutamol and call back 111 for urgent assessment. If deterioration is significant call 999.

Check if adequate Salbutamol supply available at home – if not, ePrescription to local pharmacy or urgent referral to primary care if F2F needed or no pharmacies open.

Safety-net or book 4hr review if needed

Advise GP r/v in 24-48 hrs

If carer or clinician has any doubts/ concerns/ communication issues – refer for immediate F2F assessment

Exclusion criteria
Immediate referral to local ED for all cases even if classified as mild if:

- **Treatment not working/ineffective (relief not lasting up to 4 hrs or at any point needed 10 puffs of Salbutamol)**
- **Patient on oral maintenance steroids**
- **Hx of Severe or difficult to treat asthma**
- **Hx of high dose SABA in the preceding hrs or days or SABA not effective**
- **Previous IV therapy**
- **Recent discharge or interactions with GP/ED or 111**
- **PICU/PCCU admissions**
- **Comorbidities eg. Previous pneumothorax**
- **If stated in personalised asthma plan to attend ED for any degree of exacerbation**
- **History of poor compliance**
- **Significant parental anxiety**
- **Communication issues/concern regarding carers ability to manage child at home**
- **Safeguarding concerns**

Patient call back/ 4 hour review

- Reassess using ABCD with PEF and Sats if available (see assessment box above) and manage/refer as appropriate
- If no further tx needed over 4hrs then continue PRN Salbutamol and close monitoring at home
- If needing 4 hourly Salbutamol or more regularly or 10 puffs then requires ED assessment.
- Consider ePrescription for course of steroids and inhalers (depending on supply and used by dates) /spacer/ PEF meter)
  - *3 day course of soluble prednisolone 1mg/kg (max 40mg).*
- Book F2F appointment in primary care setting within 24-48hrs (annual review/ compliance/ education/ inhaler and spacer tech/ assess need for secondary referral) - *If this falls in OOH period book appt with OOH for review only*

Information on the assessment of higher acuity presentations and/or any deterioration since initial assessment

Moderate Asthma	Acute severe Asthma	Life-threatening Asthma
BTS Assessment of Asthma Severity		
NB. If a patient has signs & symptoms across categories, always treat according to most severe features		
Alert, active Able to talk in full sentences Drinking fluids Resp rate <30 Requiring 6-10 puffs SLB/ 4 hrs NO FEATURES OF ACUTE SEVERE ASTHMA If PEF / Sats probe available: SpO2 >92% PEF >50% best or predicted	Unable to complete sentences in one breath Use of accessory muscles Respiratory rate of >30/min If PEF / Sats probe available: SpO2 <92% PEF 33-50% best or predicted HR >125/min	Poor respiratory effort Drowsiness/exhaustion Confusion Cyanosis/Colour change If PEF / Sats probe available: SpO2 <92% PEF <33% best or predicted
Refer to emergency department	Category 2 ambulance	Category 1 ambulance
Safety net advice: If patient deteriorates at any time prior to arrival at ED advise up to 10 puffs of Salbutamol and dial 999	Safety net advice: If patient deteriorates prior to ambulance arrival call 999	Safety net advice: If patient deteriorates prior to ambulance arrival call 999

V0.18: IUC CAS Mild Paediatric Asthma Pathway – for use in children aged 5 – 16 years old (GP ONLY)

Detailed Asthma History

No Current Dx of Asthma – Is this Asthma?

✓ One or more of: wheeze, cough, difficulty breathing and chest tightness	✓ Frequent and recurrent symptoms - Worse at night and in the early morning
✓ Exacerbation of symptoms (post exercise/exposure to pets/cold/damp air/ with emotions/ laughter)	✓ Personal history of atopy
✓ History of improvement in response to adequate therapy (suggesting reversibility)	**If there are clinical features which do not fit the pattern, consider alternative diagnoses to rule out other serious conditions such as cystic fibrosis etc.**

Previously confirmed Asthma Dx:

✓ Last asthma r/v? and care provider?	✓ Do they have a written asthma plan?	✓ Age at Dx	✓ PEF diary
✓ Current medication: preventer/reliever/ usage/compliance /number of repeat prescriptions (*having > 6 relievers per yr*) /spacer/ technique/ are medications in date/ adequate supply/ number of steroids courses over last year/ number of courses of Abx in last year/ Epipen	✓ Hx of Recurrent chest infections Pneumonia (Oral Abx courses/Admissions for IV ABx)	✓ Identify modifiable risk factors and known triggers?	✓ Admissions? Recent attendance at GP/ED/ or admission
✓ Missed school days	✓ GP/ED attendances in last year	✓ Previous for IV therapy	✓ PICU admissions

Full PMHx including:

Antenatal/ BHx/ 1ST year of life Gestation, ventilated, Hx of CLD, Home O2 GOR / Hx Swallow difficulties/ aspiration Failure to thrive (Plot Wt) Bronchiolitis	***Other comorbidities*** Not forgetting - Obesity/ snoring/ sleep apnoea/ nasal polyps	***Atopy Hx:*** Eczema – well mx/ current flare/ known to dermatologist/ medication Hayfever – well mx/ medication Allergic Rhinitis – well mx/ Medication Food allergies Anaphylaxis Hx Epipen – do they have 2x in date (good knowledge of how to administer?)	**DHx:** Full – including previous Asthma regimes / ?NKDA **Imms:** UTD **FHx:** Family Hx of Atopy	**SHx:** Living conditions **-** Smokers**/**Pets/sleeps in bunk bed (lower bunk)/carpets Education/Development Known vulnerabilities in this family (SW, CP, CIN, MASH, MARAC) Travel Hx