## PART 2

## Clinical Management of Acute Exacerbations of Asthma and Wheeze

Integrated Care Pathway for Children aged 1-16 years

### PLEASE USE in conjunction withn Part 1 & 3 Clinical Management of Acute Exacerbations of Asthma and Wheeze Integrated Care Pathway for Children aged 1-16 years

3.0			
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LNWHT Drugs & Therapeutics Committee			
October 2015			
October 2017			
All paediatric medical and A&E staff			

## **References**

- 1. Network BTS/SIGN 141. British guideline on the management of asthma. http://www.sign.ac.uk/guidelines/fulltext/141/
- 2. Brand PL, et al. Classification and pharmacological treatment of preschool wheezing: changes since 2008. Eur Respir J 2014;43:1172-7
- 3. BNF for children 2015
- 4. J. Panickar et al., Oral Prednisolone for Preschool Children with Acute Viral-induced Wheezing, N Engl J Med 2009; Jan 22;360 (4):329-338
- 5. Bush A, Fleming L. Diagnosis and management of asthma in children. BMJ 2015;350:h996
- 6. Global Initiative on Asthma (GINA) particularly Chapter 2: http://www.ginasthma.org/local/uploads/files/GINA\_Report\_2015\_Aug11.pdf

DOB:

Hospital Number:

History: - please circle/tick when appropriate

Assessment of previous Asthma control:			
Previous emergency attendances for asthma/wheeze:	No	Yes	Number (last 12 months):
Previous IV Salbutamol/Aminophylline/Magnesium;	No	Yes	Number (last 12 months):
Previous Life-Threatening Asthma Attack;	No	Yes	When:
Previous admissions to PICU:	No	Yes	When:
History of Atopy:	No	Yes	if <b>YES</b> specify below:
🗌 Eczema 🗌 H	ayfever		Food Allergies
Known to Paediatrician/Asthma Nurse	No	Yes	Name/Hospital:
(Please inform known professional of attendance)			
Previous CXR	No	Yes	If YES Date: Result:
Has the child got a valid Personal Asthma Action Plan:	No	Yes	(If no give one before discharge)
Other Investigations (eg SPT, LuFu):			

#### Asthma/Wheeze control assessment:

Interval symptoms	No	Yes	if YES specify below:
Using reliever >2x/week Nocturnal cough/symptoms >1x/week Symptoms with exercise >1-2x/week			Previous steroids over last 12months (number of courses) Missed school/nursery/activities due to symptoms
If <b>YES</b> for any of above	e - discuss <u>need for pre</u>	venter trea	atment or stepping up of current medication with Paediatric SpR or
Cons	ultant prior to discharg	e / Refer to	Paediatric Community Respiratory Nurse (page 5)

Other Past Medical His	story:			
Medication: <u>1.</u> 2.	_ Dose: Dose:	<u> </u>	Dose: Dose:	
Adherence on history:	□ Good	Poor	Concern might be poor Reaction:	

Allergies: (please state so if none known)

Birth History:	/40 gestation	Immunisations: up to date / inco	mplete	2	
Developmental Histo	ry:	Social History:			
<b>Family History:</b> Asthma: Eczema: Other:	Food Allergies: Hayfever:	Environmental History: Passive smoking? Pets? Mould in the house? Carpets in bedroom?	No No No No	Yes Yes Yes Yes	

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Name: DOB: Hospital	Number:		Stronger Together		London North West Healthcare NHS
Physical Ex	amination:				
<b>RS:</b> PEF/FEV1:	RR	SpO <sub>2</sub> % in air SpO <sub>2</sub> % inI/min O <sub>2</sub>		GIT:	
cvs:	HR	CRTsec		Neuro:	
	HS				
ENT:	Ears:			Skin:	
	Throat:				
	Nose:				
	VPRESSION	1:			
DIAGNOSIS MANAGEN	S: 1ENT PLAN:				
				Time: Signature:	

Time of next review:

#### ADDITIONAL INVESTIGATIONS/RESULTS:

#### Chest X-ray:

Do not routinely request (rarely provides useful additional information)

Patchy areas of consolidation often indicate mucous plugging (true pneumonia should be accompanied with signs of high fever etc.) Indicated in life threatening asthma not responding to treatment, subcutaneous emphysema or persisting unilateral signs suggesting pneumothorax, lobar collapse or consolidation

Designation:

#### ADDITIONAL INFORMATION/NURSING COMMENTS:

- Children on bronchodilators will need regular re-assessment of symptom severity and PEF to adjust frequency of bronchodilator treatment 1 hourly initially reducing frequency on improvement (*document on continuation sheet*)
- Consider early discussion with Paediatric SpR/Consultant for severe asthma/wheeze not responding to initial treatment or any deterioration in symptoms during treatment
- > Consult a senior doctor if any features of risk of near-fatal asthma OR any signs of Acute Severe or Life-Threatening Asthma (Flowchart 1& 2)

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## Discharge Checklist – <u>Please sign once completed</u>

- ✓ Check inhaler technique (Nurse/Doctor)
- ✓ Give and explain asthma/wheeze action plan (Nurse/Doctor)
- ✓ Give and explain Salbutamol weaning plan (Nurse/Doctor)
- ✓ Consider need for change of treatment (Doctor)-check asthma control assessment box p7
   Preventer prescribed/treatment increased
   Yes
   No
- ✓ Check and provide TTA medication (Nurse/Doctor)
  - Salbutamol MDI and age-appropriate spacer device given
  - Course of Prednisolone given (*if required*)
  - Prescription for preventer given (if required)

**Guidelines for Follow-Up with Respiratory Nurses at LNWHT** 

# Please refer appropriate patients to the paediatric community respiratory nurses using referral form attached (page 5)

- 1. One or more previous attendance(s) with wheeze/asthma in last 12 months
- 2. Previous severe exacerbation requiring IV treatment or PICU admission
- 3. Admission to Jack's Place in last 12 months.
- 4. Concerns about inhaler technique or general management and understanding of condition
- 5. Any tick in the Asthma Control Assessment Box on page 2



## Referral form for follow-up with community respiratory nurses

## For children living in □ <u>Harrow,</u> □ <u>Brent</u> or □ <u>Ealing</u>

#### Please put patient sticker on top for a referral!!!!!

Dear Paediatric Community Respiratory Team,

Please see this patient for a review who had an unscheduled attendance at LNWHT with an asthma/wheezy episode.

The reason for this referral is (*please tick*):

- □ One or more previous attendance(s) with wheeze/asthma in last 12 months
- □ Previous severe exacerbation requiring IV treatment or PICU admission
- □ Admission to Jack's Place in the last 12 months
- □ Concerns about inhaler technique or general management and understanding of condition
- Any tick in the Asthma Control Assessment Box on page 2
- □ Any other concern (specify): \_\_\_\_

#### Please complete and put in respiratory nurses letterbox in A&E

or

in community nurses office for ward patients

Name: DOB: Hospital Number:



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## **MY ASTHMA and WHEEZE ACTION PLAN**

## WHAT TO DO IN AN ACUTE ASTHMA/WHEEZE ATTACK

#### Step 1:

- Give 2 puffs of RELIEVER (Salbutamol-BLUE inhaler) immediately through a spacer (one puff at a time through a spacer)
- This should ease symptoms by making the airways open wider

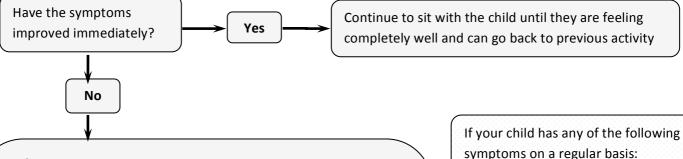
#### Step 2:

- Sit the child upright and get them to take slow steady breaths
- Keep calm and try to keep them calm

#### Signs of an acute asthma/wheeze attack can include any of these:



- Coughing
- Being short of breath
- Wheezy breathing
- Tightness in the chest
- **BLUE RELIEVER is not** helping



Stronger

Together

#### Step 3:

Give 1 puff of Salbutamol every 30 to 60 seconds - up to 10 puffs

#### Step 4:

If the child does not feel better after taking Salbutamol as above or if you are worried at any time seek medical attention or call 999 for an ambulance

#### Step 5:

• If an ambulance does not arrive within 15 minutes and your child feels still unwell repeat step 3 while you wait

If your child is on a **PREVENTER** (usually brown or purple inhaler)...

- . Continue with the preventer inhaler every day, even when your symptoms have gone – to prevent symptoms from coming back
- Do not stop unless directed by your doctor or asthma nurse
- If you have a spacer device, you must use it for your inhalers

My PREVENTER is .....x per day

symptoms on a regular basis:

- Using blue inhaler more than 2 times per week
- Waking more than 1 night a week due to coughing
- Limitation of activity due to cough/breathlessness
- Missing school due to wheeze regularly

.... the asthma/wheeze may not be well controlled and you need to see your GP or asthma nurse

You can find useful information here:

- www.asthma.org.uk
- Asthma UK Advice line 03002225800

(Mon to Fri 9am to 5pm) Try to put this action plan up on a fridge or where you can always see it.

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## Salbutamol Weaning Plan

> Take the BLUE inhaler (Salbutamol/Ventolin) via your spacer as directed below:

DAY 1:	10 puffs every 4 hours
DAY 2:	4-6 puffs every 4 hours (if better)
DAY 3:	2-4 puffs every 4 hours (if better)
DAY 4:	2 puffs only when needed (if better) <i>or</i> as indicated by your doctor/nurse

- Take PREDNISOLONE ....... mg = .......... tablets until your child better (off regular Salbutamol)
   (YOU MUST get an URGENT APPOINTMENT for a review within 48h by your GP)
- Take your PREVENTER ......x daily

Make sure you are seen by your GP within 48 hours

## A few things to remember ...

- ✓ Your child should stay home from nursery/school whilst on above weaning plan
- ✓ We advise you to complete the above weaning plan fully continue with the inhalers even at night
- ✓ You may stop the blue inhaler if your child does not have any further symptoms on day 4
- ✓ Return to your GP if your child is still having symptoms (wheezing, chest tightness or shortness of breath) after day 4
- ✓ Keep your BLUE inhaler in case symptoms are coming back and get a replacement from your GP in time before it is finished