**PATIENT GROUP DIRECTION (PGD)**

**ADMINISTRATION OF INHALED SALBUTAMOL FOR THE EMERGENCY TREATMENT OF ACUTE ASTHMA OR COPD EXACERBATION AT HMP FORD**

**Version Number:** 03HMP

**Patient Group Direction originally drawn up by:**

<table>
<thead>
<tr>
<th>Name: Daniel Barry</th>
<th>Position: Lead Pharmacist Mental Health – Chichester Locality</th>
<th>Signature:</th>
<th>Date:</th>
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<tbody>
<tr>
<td>Name: Dr Davie Robertson</td>
<td>Position: General Practitioner, HMP Ford</td>
<td>Signature:</td>
<td>Date:</td>
</tr>
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<td>Name: Mary-Jayne Bosley</td>
<td>Position: Clinical Nurse Manager, HMP Ford</td>
<td>Signature:</td>
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**Patient Group Direction authorised by:**

<table>
<thead>
<tr>
<th>Name: Dr Rick Fraser</th>
<th>Position: Medical Director, on behalf of the organisation</th>
<th>Signature:</th>
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<tr>
<td>Name: Jed Hewitt</td>
<td>Position: Chief Pharmacist</td>
<td>Signature:</td>
<td>Date:</td>
</tr>
<tr>
<td>Name: Diane Hull</td>
<td>Position: Director of Nursing Standards &amp; Safety</td>
<td>Signature:</td>
<td>Date:</td>
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</tbody>
</table>

**Date Protocol agreed**

April 2017

**Proposed review date**

January 2019

**Date Protocol expires**

April 2019
# PATIENT GROUP DIRECTION DETAILS

| Staff characteristics | • Professional qualification: NMC Registered Nurse  
• At least 12 months post registration experience  
• Evidence of training in basic life support and anaphylaxis, updated annually  
• Has attended a PGD foundation course  
• Has successfully completed the 'Key topics of Pharmacy’ questionnaire for administration of salbutamol in acute asthma or COPD exacerbation  

# CLINICAL DETAILS

<table>
<thead>
<tr>
<th>Diagnosis / condition treated</th>
<th>Emergency treatment of acute asthma or COPD exacerbation in adults</th>
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</thead>
<tbody>
<tr>
<td>Criteria for inclusion</td>
<td>Adults with a known diagnosis of asthma or COPD which is relieved by the administration of salbutamol.</td>
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</tbody>
</table>
| Criteria for exclusion      | • Patients with a known or reported hypersensitivity to salbutamol or any of the excipients  
• Breathlessness caused by a condition other than asthma e.g. physical obstruction caused by a foreign body, heart failure, pneumothorax |
| Cautions                    | • Hyperthyroidism or thyrotoxicosis  
• Diabetes mellitus (monitor blood glucose)  
• In severe asthma, hypokalaemia may result from repeated salbutamol therapy because the effect is potentiated by hypoxia or concurrent administration with theophylline and its derivatives, corticosteroids or diuretics.  
• Concomitant use of drugs known to cause QT-interval prolongation.  
• Significant cardiovascular disease |
| Clinical features of acute asthma or COPD exacerbation | Any one of:  
• Increasing symptoms i.e breathlessness, chest tightness, wheeze  
• Peak flow: 33-75% best or predicted.  
• Respiratory rate > 25/min  
• Heart rate > 110/min  
• Inability to complete sentences in one breath |
| Criteria for immediate transfer to hospital | Symptoms suggestive of life threatening acute asthma; altered conscious level, exhaustion, arrhythmia, hypotension, cyanosis, silent chest, poor respiratory effort, peak flow <33% best or predicted, pulse oximetry<92%, non-responsive to repeated doses of salbutamol. |
| Actions to be taken for patients who are excluded from treatment under the protocol and arrangements for referral | • If patient meets exclusion criteria, explain reason to the patient and record reason. See also referral criteria  
• Refer patients to A&E as appropriate  
• Document reasons for exclusion and any action taken in patient clinical record |
| Actions to be taken for patients who do not wish to receive or do not adhere to care under the protocol and arrangements for referral | • Document refusal and action taken in patient’s clinical record  
• Advise re-attendance to HMP Ford Healthcare if symptoms worsen or do not improve  
• Advise attendance to an appointment at HMP Ford Healthcare at earliest opportunity to review symptoms with GP or specialist nurse  
• Provide further advice or information as necessary |

### DESCRIPTION OF TREATMENT

<table>
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<tr>
<th>Generic name</th>
<th>Salbutamol</th>
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<tr>
<td>Formulation and route</td>
<td>Inhalation via a metered dose inhaler (MDI) and spacer</td>
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<td>Strength</td>
<td>Salbutamol metered dose inhaler 100 micrograms per inhalation.</td>
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</table>

**Dose(s) and frequency of administration**

Treat according to the dosing schedule below. Continuous reassessment of the patient is essential, with early transfer to acute hospital if no improvement observed for all degrees of exacerbation. Monitor pulse oximetry and respirations in all patients. All classifications as per BTS guidelines 2014:

**Moderate asthma exacerbations:**

*Salbutamol 100 microgram/actuation inhaler:* Give four puffs initially, each inhaled separately via a large volume spacer device. Give repeated doses of two puffs every two minutes according to clinical response up to a maximum of ten puffs. This regimen can be repeated once after 10-20 minutes if necessary.

Monitor clinical response for 30 minutes. If response is poor, arrange immediate transfer to hospital. If a relapse occurs within 4 hours administer further doses of salbutamol (as per direction above). Transfer to hospital may be required.

**Severe acute asthma exacerbations or life threatening acute asthma:**

Start treatment below and arrange immediate transfer to hospital.

*Salbutamol 100 microgram/actuation inhaler:* Give four puffs initially, each inhaled separately via a large volume spacer device. Give repeated doses of two puffs every two minutes according to clinical response up to a maximum of ten puffs. This regimen can be repeated at 10-20 minute intervals if necessary until transfer to hospital.

**Duration of treatment** As specified until clinically stable or emergency services take over

**Legal status** Prescription Only Medicine (POM)

**Storage** Metered dose inhaler: Store below 30°C. Protect from frost and direct sunlight. The canister should not be broken, punctured or burnt, even when apparently empty. The therapeutic effect of this medication may decrease if the canister is cold. After use, replace the mouthpiece cover and firmly snap into position.
### Patient Group Direction (PGD) for the administration of inhaled salbutamol for the emergency treatment of acute asthma or COPD exacerbation at HMP Ford

| **Adverse effects which require immediate medical assessment** | • Paradoxical bronchospasm may occur with immediate increase in wheezing. In this situation the salbutamol medication should be discontinued immediately and the patient assessed.
• Hypersensitivity reactions including angioedema, urticaria, bronchospasm, hypotension and collapse.
• Palpitations
• Cardiac arrhythmias
• Myocardial ischaemia

Please refer to the current BNF or SPC for full details. Use the Yellow Card System to report serious adverse drug reactions to the MHRA. Yellow cards and guidance on use of Yellow Cards are available at the back of the BNF or online via http://yellowcard.mhra.gov.uk |

| **Adverse effects which require no further assessments** | • Muscle cramps
• Hyperactivity
• Mouth and throat irritation
• Tremor (usually in the hands)
• Headache
• Peripheral vasodilation
• Tachycardia |

| **Advice to be given to the patient** | • Explain treatment and course of action
• Advise on possible adverse effects as described above
• Offer patient a copy of the patient information leaflet and discuss as required. These can be printed off from www.medicines.org.uk
• Advise patient to attend a review appointment the next working day at HMP Ford Healthcare with a GP or specialist nurse.
• If appropriate, advise patient to monitor peak flow readings with peak flow meter.
• Check inhaler technique if appropriate
• If symptoms relapse within 4 hours, advise re-attendance to HMP Ford Healthcare.
• If salbutamol treatment becomes less effective or more inhalations are required than usual to relieve symptoms, advise the patient to attend a review appointment at HMP Ford Healthcare.
• Advise the patient that worsening asthma can be fatal and should be treated as an acute emergency i.e. seek urgent medical attention |

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**AUDIT TRAIL**  
Records required for a documented audit trail

| SystmOne patient record | • The diagnosis and treatment  
| | • The name of the staff member administering the medication  
| | • The date and time of administration  
| | • The name, form, dose and route of the medication administered  
| | • The frequency of administration and duration of the treatment  
| | • Advice and information given to patient  
| | • Details of any adverse drug reaction and actions taken  
| | • Referral arrangements  

| Trust Incident Form | To be completed in the event of a suspected adverse drug reaction. The incident must be reported immediately to the relevant member of staff.  

| Report on suspected Adverse Drug Reactions (Yellow form in back of the BNF) | To be completed for a significant adverse event by a doctor, pharmacist or nurse.  

<table>
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<tr>
<td>Designation (tick appropriate box)</td>
<td>NMC Registered Nurse</td>
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| Competency/Qualifications (tick when checked) | - Professional qualification: NMC Registered Nurse  
- At least 12 months post registration experience  
- Evidence of training in basic life support and anaphylaxis, and to remain updated annually  
- Has attended a PGD foundation course  
- Has successfully completed the 'Key topics of Pharmacy' questionnaire for administration of salbutamol in acute asthma or COPD exacerbation |
| Evidence checked by:    |                                                                                                                                   |
| Name                    |                                                                                                                                   |
| Designation             |                                                                                                                                   |
| Signature               |                                                                                                                                   |
| Review of competency    | Two years or following a significant change in the Patient Group Direction.                                                      |
| Competency expires      | Two years or following a significant change in the Patient Group Direction.                                                      |
AUTHORISATION OF PROFESSIONAL TO USE
THE PATIENT GROUP DIRECTION

<table>
<thead>
<tr>
<th>Date valid from:</th>
<th>Date of expiry:</th>
</tr>
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</table>

This confirms that I:

Name:
- understand the PGD
- have received the necessary education and training
- am of the opinion I am competent to implement the PGD effectively
- agree to work within the PGD

Signature:

Date:

SIGNATURE OF CLINICAL NURSE MANAGER

Name:

Date:

REFERENCES
3. PGD for administration of inhaled salbutamol for the emergency treatment of acute exacerbation of asthma or COPD. Angela Reynolds. Cumbria Partnership NHS Foundation Trust. 2012
KEY ASPECTS OF PHARMACY QUESTIONNAIRE – Administration of salbutamol for acute asthma or exacerbation of COPD
(To be completed without access to the PGD or drug text books, eg BNF.)

Professional’s name: Job Title:

1. Symptoms/criteria under which the patient will be eligible for treatment under the PGD

2. Forms and strengths available

3. Mode of action

4. Exclusion criteria

5. Dose

6. Route of administration

7. What potentially significant side effects and drug interactions are there?

8. What written/verbal advice must be given to the patient/carer on the identification and management of significant potential side effects?

I confirm that at the time of completion the answers provided showed an acceptable level knowledge.

Name: Signature:

Designation: Date: