University Hospitals of Derby and Burton NHS Foundation Trust

PATIENT GROUP DIRECTION (PGD)

Administration of Salbutamol Nebuliser Solution By Registered UHDB Staff in Adult UHDB services

Documentation details

Reference no:	UHDB193
Version no:	1
Valid from:	12/07/2022
Review date:	12/01/2025
Expiry date:	11/07/2025

Change history

Version number	Change details	Date
1	New template – Extended for all UHDB staff on any site	

Glossary

Abbreviation	Definition

1. PGD template development (PGD Working Group)

PGD Working Group Membership (minimum requirement of consultant, pharmacist and a registered professional who can work under a PGD (or manages the staff who do). If this is a review of existing PGD, replace previous names with the individuals involved for this version

Name	Designation
James Hooley	Medicines Safety Officer (Pharmacist)
Core Adult PGD list maintained by Medicines Safety Group.	Note: No PGD working group convened as this PGD is created by merging detail from multiple authorised PGDs in active use across UHDB which have been developed previously with nursing and medical input.

Where an antimicrobial is included, confirm the name, designation and date of the antimicrobial pharmacist who has reviewed this version

Name of antimicrobial pharmacist	Designation	Date Reviewed
N/A	-	-

2. Organisational authorisations

The PGD is not legally valid until it has had the relevant organisational authorisation.

University Hospitals of Derby & Burton NHS Foundation Trust authorises this PGD for use by the services or providers listed below:

Authorised for use by the following organisation and/or services
All UHDB staff providing UHDB services (includes UHDB staff/services undertaken on non-UHDB premises) This is a core PGD and can be implemented in all adult services where training and resources have been allocated by senior staff to do so (see policy and limitations below if in doubt).
Limitations to authorisation
It is the responsibility of the practitioner working under this PGD to ensure that this PGD is in place in the area they are practising at the time of use. In most cases, this is implicit when a senior manager requests the staff to undertake training and then authorises them in section 7 of this document. However, when working in alternative areas (e.g. internal bank or redeployment) it is important that the practitioner confirms with a departmental manager in the new department that the core PGDs are in-use in their area.

Organisational Authorisation (legal requirement).			
Role	**Name**	**Sign**	**Date**
Chief Pharmacist	**Clive Newman**	**Signed copy held by Pharmacy**	**12/07/2022**

Additional signatories (required as per legislation and locally agreed policy)			
Role	**Name**	**Sign**	**Date**
Medicines Safety Officer (pharmacist) *Clinical Pharmacist from PGD working group*	**James Hooley**	**Signed copy held by Pharmacy**	**14/06/2022**
Medical Director or Deputy *Doctor*	**Dr James Crampton**	**Signed copy held by Pharmacy**	**22/06/2022**
Chief Nurse or deputy *Registered Professional representing users of the PGD*	**Garry Marsh**	**Signed copy held by Pharmacy**	**07/07/2022**

Local enquiries regarding the use of this PGD may be directed to UHDB.PGDgovernance@nhs.net

Section 7 provides a registered health professional authorisation sheet. Individual professionals must be authorised by name to work to this PGD.

3. Characteristics of staff

Qualifications and professional registration	All Divisions, Adult Areas, registered professional with current professional registration operating within their usual scope of practice. Must be a profession permitted by current legislation to practice under a patient group direction.
Initial training	- Completion of all Essential-to-role training as outlined in the UHDB PGD policy. - Individual has read and understood full content of this PGD and signed authorisation (section 7) - Completion of Medicines Management Drug Assessment
Competency assessment	Staff operating under this PGD are encouraged to review their competency using the NICE Competency Framework for health professionals using patient group directions Individuals operating under this PGD are personally responsible for ensuring they remain up to date with the use of all medicines included in the PGD - if any training needs are identified these should be discussed with either the authorising manager (section 7) or the manager within the PGD working group (section 1) so that further training can be provided as required.
Ongoing training and competency	Annual Medicines Safety Training (essential to role) Review/repeat initial training above when this PGD is revised
The decision to supply any medication rests with the individual registered health professional who must abide by the PGD and any associated organisation policies.	

4. Clinical condition or situation to which this PGD applies

Clinical condition or situation to which this PGD applies	Reversible airway obstructive conditions: • Acute asthma • Bronchospasm unresponsive to treatment with bronchodilator via inhaler and spacer

Criteria for inclusion	Adult patients over 16 years old presenting with one of the following indications:
	• Reversible airways obstructions with Oxygen saturations <92% and signs of respiratory distress including:
	  ○ Use of accessory muscles of breathing
	  ○ Cyanosis
	  ○ High respiratory rate (>16 breaths/minute)
	• Bronchospasm unresponsive to treatment with bronchodilator via inhaler and spacer (or where this is not immediately available)

Criteria for exclusion	• Patients under 16 years old • Previous sensitivity or intolerance to the drug or any ingredient
Cautions including any relevant action to be taken	Seek expert advice with the following conditions: • Hyperthyroidism or thyrotoxicosis • Hypokalaemia • Serious cardiac disorders such as severe heart failure, ischaemic heart disease, recent myocardial infarction or arrhythmias • Severe and untreated hypertension • Aneurysm • Diabetes which is difficult to control (monitor glucose) • Pheochromocytoma • Pregnancy and breast-feeding. • Patients taking non-selective beta-blockers e.g., Propranolol Oxygen-driven nebs are only to be used in acute severe asthma indication as per UHDB asthma guidelines
Action to be taken if the patient is excluded	• Record reasons for exclusion in patient notes • Advise patient on alternative treatment • Refer to medical staff or prescriber for review and prescribing of alternative agent if appropriate.
Action to be taken if the patient or carer declines treatment	• Document advice given • Advise patient on alternative treatment • Refer to medical staff if appropriate.
Arrangements for referral for medical advice	Contact your ward or clinic medical team in the first instance except in the event of anaphylaxis/cardiac arrest when you should follow your local medical emergency procedures (e.g. 2222 / 3333 / 999 procedures)

5. Description of treatment

Name, strength & formulation of drug	Salbutamol 2.5mg Nebules Salbutamol 5mg Nebules
Legal category	POM
Route / method of administration	Routinely: Inhaled via air-driven nebuliser. For acute severe asthma indication ONLY: consider administration via oxygen-driven nebuliser as per current UHDB asthma guidelines: 5 mg salbutamol via oxygen driven nebuliser (usually 6-8L/minute flow) To prolong administration time to more than 10 minutes, the nebule solution may be diluted with 0.9% Sodium Chloride for injection or a sodium chloride 0.9% nebule.
Indicate any off-label use (if relevant)	n/a
Dose and frequency of administration	Usually 4-6 hourly but can be every 20-30 minutes if required (see severe acute asthma via oxygen driven nebulizer as above – always refer for urgent medical review when treating acute severe asthma). Maximum normal dose is 40mg in 24 hours.
Duration of treatment	Until cessation of symptoms up to a maximum of 40mg via this PGD. Seek prescription at the earliest opportunity. Always refer for urgent medical review when treating acute severe asthma
Quantity to be supplied (leave blank if PGD is administration ONLY)	n/a – This is an administration-only PGD
Storage	Stock must be securely stored according to UHDB medicines policy and in conditions in line with SPC as detailed below: Store below 25 °C. Store in the original packaging. Ampoules should be opened immediately before use and any solution remaining after use should be discarded.
Drug interactions	• Use with caution in patients receiving other sympathomimetics. • Should not be prescribed alongside non-selective β-receptor blocking drugs • Hypokalaemia can be worsened when used alongside drugs such as: xanthine derivatives, glucocorticoids, diuretics and digoxin. The BNF provides a full list of agents which may predispose to hypokalaemia in combination with salbutamol. • Tricyclic antidepressants may increase the risk of cardiovascular side effects. • Corticosteroids may increase the risk of hyperglycaemia. Combination of nebulised salbutamol and ipratropium bromide has rarely given rise to cases of acute angle-closure glaucoma. A detailed list of drug interactions is available in the SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk

Identification & management of adverse reactions	Potential adverse reactions: • Headache • Local reaction (mouth/throat/tongue irritation) • Fine tremor • Dizziness • Restlessness • Nausea • Taste alteration • Hypersensitivity reaction • Hypokalaemia • Hyperglycaemia • Tachycardia/Arrhythmias/Palpitations • Myocardial Ischaemia • Lactic Acidosis (with high doses) • Muscle cramps • Peripheral vasodilation • Paradoxical bronchospasm Monitor patients complaining of chest pain as this could be a sign of precipitated or exacerbated heart disease. Monitor pulse before and 15-30 minutes after treatment Monitor blood glucose in diabetic patients due to risk of hyperglycaemia. A detailed list of adverse reactions is available in the SPC, which is available from the electronic Medicines Compendium website: www.medicines.org.uk
Management of and reporting procedure for adverse reactions	• Healthcare professionals and patients/carers are encouraged to report suspected adverse reactions to the Medicines and Healthcare products Regulatory Agency (MHRA) using the Yellow Card reporting scheme on: https://yellowcard.mhra.gov.uk • Record all adverse drug reactions (ADRs) in the patient's medical record. Serious adverse reactions (moderate harm or above as per NRLS definition) should be reported via trust incident management system (e.g. Datix) to ensure duty of candour and learning from harm during clinical use.
Written information to be given to patient or carer	Not routinely required for single dose administration. However consider providing marketing authorisation holder's patient information leaflet (PIL) provided with the product (or print these via www.medicines.org.uk
Patient advice / follow up treatment	Advised to seek medical advice in the event of an adverse reaction.
Records	For inpatients, the record of administration must be documented in the ePMA system or medicines chart used in your area. For other areas, an ePMA system should be used if in-use in your area as this will ensure all legal criteria are fulfilled and auditable.

	Otherwise, records can be made in the medical notes or within the patient pathway (e.g. in daycase or triage where a pathway booklet is in use) but must include the legal requirements below. Either the system holding the record, or the healthcare practitioner working under the PGD, must capture/document all of the following: • name of individual, address, date of birth and GP with whom the individual is registered (if relevant) • name of registered health professional • name of medication supplied/administered • date of supply/administration • dose, form and route of supply/administration • quantity supplied/administered • batch number and expiry date (if applicable e.g. injections and implants) • advice given, including advice given if excluded or declines treatment • details of any adverse drug reactions and actions taken • Confirm whether supplied and/or administered via Patient Group Direction (PGD) Records should be signed and dated (or a password controlled e-records). All records should be clear, legible and contemporaneous. If you are not recording in ePMA (or other electronic system which has ability to generate audit reports) then a record of all individuals receiving treatment under this PGD should also be in the clinical area for audit purposes as per UHDB PGD policy.

6. Key references

Key references	*UHDB. Asthma - Management of Acute Exacerbations in Adults – Full Clinical Guideline* *Electronic Medicines Compendium* http://www.medicines.org.uk/ *Electronic BNF* https://bnf.nice.org.uk/ *NICE Medicines practice guideline "Patient Group Directions"* https://www.nice.org.uk/guidance/mpg2

7. Registered health professional authorisation sheet

PGD Name [version]: Salbutamol Nebules in Adult areas [v1] PGD ref: UHDB193

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Before signing check that the document you have read is published on Koha or is an in-date hard-copy with all necessary authorisations signed in section 2. The Name/Version/Ref of the document you have read MUST match this authorisation form.

Registered health professional
By signing this patient group direction you are indicating that

a) You agree to and understand all content and commit to only work within this framework.
b) You have completed any core PGD e-Learning or training records on My Learning Passport or within your department.
c) You meet the staff characteristics and have completed any additional learning/competency outlined in Section 3 of this PGD.

Patient group directions do not remove inherent professional obligations or accountability.
It is the responsibility of each professional to practise only within the bounds of their own competence and professional code of conduct.

I confirm that I have read and understood the content of this Patient Group Direction and that I am willing and competent to work to it within my professional code of conduct.			
Name	**Designation**	**Signature**	**Date**

Authorising manager / Assessor

I confirm that the registered health professionals named above have declared themselves suitably trained and competent to work under this PGD. I give authorisation on behalf of University Hospitals of Derby & Burton NHS Foundation Trust for the above named health care professionals who have signed the PGD to work under it.			
Name	**Designation**	**Signature**	**Date**

Note to authorising manager

Score through unused rows in the list of registered health professionals to prevent additions post managerial authorisation.

This authorisation sheet must be retained by a manager in the clinical department where the PGD is in-use to serve as a record of those registered health professionals authorised to work under this PGD.