University Hospitals of Derby and Burton NHS Foundation Trust

PROTOCOL

Administration of Oxygen By Clinical Physiologists in Clinical Measurement Department at Royal Derby Hospital and Queen's Hospital Burton and Community Diagnostics Centre

Documentation details

Reference no:	UHDB297
Version no:	1.0
Valid from:	25/04/2024
Review date:	24/10/2026
Expiry date:	24/04/2027

Change history

Version number	Change details	Date
1	New UHDB format	16/02/2024

Glossary

Abbreviation	Definition

1. Protocol template development (Protocol Working Group)

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

Name	Designation
Claire Pitcher	Principal Clinical Physiologist
Dr Priya Daniel	Respiratory Consultant - Clinical Lead
James Kerr	Divisional Pharmacist

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	n/a	n/a

2. Organisational authorisations

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

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

Authorised for use by the following organisation and/or services
Clinical measurement Services UHDB
Limitations to authorisation
These protocols are to be used by Clinical Physiologists who cannot carry out administration of medicines under group directions, and therefore have to administer using the protocols. The drug should be requested via the referral form identifying that the attending patient requires medication as part of the test. Method of delivery, dose and frequency should be indicated. The authorised signatory should be a medical prescriber, or Doctor.
Agreed rationale for protocol use in place of a PGD (Patient Group Direction)
To define a framework for staff who are not legally permitted to operate under PGDs to do so after a patient specific direction (from a prescriber) has been received to authorise use of a prescription medicine.

Organisational Authorisation			
Role	**Name**	**Sign**	**Date**
James Hooley *Pharmacist: Medicines Safety Officer, Chief Pharmacist or assigned deputies)*	Medicines Safety Officer	**Signed copy held in Pharmacy**	**25/04/2024**

Additional signatories			
Role	**Name**	**Sign**	**Date**
Divisional Pharmacist *Clinical Pharmacist from Protocol working group*	**James Kerr**	**Signed copy held in Pharmacy**	**19/03/2024**
Respiratory Consultant - Clinical Lead *Doctor*	**Dr. Priya Daniel**	**Signed copy held in Pharmacy**	**22/04/2024**
Principal Clinical Physiologist *Registered Professional representing users of the PROTOCOL*	**Claire Pitcher**	**Signed copy held in Pharmacy**	**19/02/2024**

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

Section 7 provides a healthcare worker authorisation sheet. Individual healthcare workers must be authorised by name to work to this PROTOCOL.

3. Characteristics of staff

Qualifications and professional registration	Clinical Physiologists/Practitioners band 5 and above who have qualified and passed BSC Hons in Clinical Physiology or equivalent experience.
Initial training	- Completion of Medicines Management Drug Assessment - Individual has read and understood full content of this Protocol and signed authorisation (section 7)
Competency assessment	Staff will gain competency as part of their degree requirements and will be signed off by qualified staff. Individuals operating under this direction can use self assessment to ensure competency. Individuals operating under this Protocol are personally responsible for ensuring they remain up to date with the use of all medicines included in the Protocol - if any training needs are identified these should be discussed with the either authorising manager (section 7) or the manager within the Protocol working group (section 1) so that further training can be provided as required.
Ongoing training and competency	Annual BLS with AED (defibrillator) training and competency. Mandatory H&S training Annual appraisal.
The decision to administer or supply any medication rests with the individual healthcare worker operating under this protocol who must abide by the protocol and any associated organisation policies.	

4. Clinical condition or situation to which this Protocol applies

Clinical condition or situation to which this Protocol applies	Assessment for long-term oxygen therapy in patients with chronic respiratory conditions; assessment of fitness to fly; dyspnoea; chest pain as a result of exercise testing. Hypoxia - SaO2 less than 94% with no other previous medical history. Patients already on prescribed oxygen. Type 2 respiratory failure Patients receiving treatment with non invasive ventilation
Criteria for inclusion	Patients who have been referred for LTOT assessment, hypoxic challenge or NIV trial in accordance with relevant Standard Operating Procedure. Patients who attend Clinical Measurements and usually receive Long Term Oxygen Therapy (LTOT) Emergency use in an acutely unwell patient in accordance with Oxygen Use for Adults UHDB Clinical Guidelines Patients over 16 years presenting with the above symptoms.
Criteria for exclusion	Children under 16 years old
Cautions including any relevant action to be taken	Be aware of the risk of hypercapnia leading to respiratory arrest.
Action to be taken if the patient is excluded	• Record reasons for exclusion in patient notes • Advise patient on alternative treatment
Action to be taken if the patient or carer declines treatment	Document refusal, action taken and advice given in nursing documentation and refer to medical staff if appropriate. • Document advice given • Advise patient on alternative treatment
Arrangements for referral for medical advice	Monday to Friday 08:30am – 5pm: Clinical Measurements Department, RDH On call registrar to be contacted during weekday hours. Outside these hours: Patients should contact their GP

5. Description of treatment

Name, strength & formulation of drug	Oxygen therapy
Legal category	POM
Route / method of administration	Inhalation via mask or cannulation
Indicate any unlicensed or off-label use	N/A

(if relevant)	
Dose and frequency of administration	1-8 litres per minute in increments of 0.5 or 1 l/min for oxygen assessment Titrate to target SpO2 during hypoxic challenge test as per BTS 2022 guidelines In emergency - Titrate to achieve target saturations appropriate for the patient based on the Emergency Oxygen Guidelines. Dose range – 1litre / min to 15l/Min via non re- breathe mask. Maximum dose: As required or as per protocol or as directed by the Consultant for the agreed procedure being undertaken
Duration of treatment	Depending on procedure: • LTOT assessment minimum 30 minutes, maximum 2 hours. • Flight assessment maximum 60 minutes. • Emergency oxygen refer to medics for further advice
Quantity to be supplied (leave blank if protocol is administration ONLY)	N/A
Storage	Piped oxygen on walls with oxygen gauge. Switched off when not in use. Gas cylinders and concentrator stored in CMD. Use piped supply wherever possible in preference to cylinders.
Drug interactions	None known. 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	The following side effects may occur: The risk of hypercapnia leading to respiratory arrest is a possibility. High risk in patient with severe respiratory disease such as COPD. 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 workers 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	Monitor for sensitivity reactions; verbal advice on why drug administered, action of the drug and subsequent management of condition.
Patient advice / follow up treatment	Appointment letters and information leaflets. Inform the individual/carer of possible side effects and their management. The individual/carer should be advised to seek medical advice in the event of an adverse reaction.

Records	The authorised healthcare practitioner must sign (print) name in the appropriate records. State 'administered under a protocol' with name and signature of authorised practitioner. **This would either be documented in the Cardiobase records or on the associated test documentation.** Either the system holding the record, or the healthcare practitioner working under the Protocol, 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 Protocol 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 Protocol should also be in the clinical area for audit purposes

6. Key references

Key references	• Electronic BNF https://bnf.nice.org.uk/

7. Registered health professional authorisation sheet

Protocol [version]: UHDB - Clinical Measurements Department - Oxygen[v1.0]
Protocol ref: UHDB297
Valid from: 25/04/2024 Expiry date: 24/04/2027

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 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 protocol.

The decision to administer or supply any medication rests with the individual healthcare worker operating under this protocol who must abide by the protocol and any associated organisation policies.

I confirm that I have read and understood the content of this Protocol and that I am willing and competent to work to it.			
Name	**Designation**	**Signature**	**Date**

Authorising manager / Assessor

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

Note to authorising manager

Score through unused rows in the list of healthcare workers to prevent additions post managerial authorisation.

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