

## STANDARD OPERATING PROCEDURE PULMONARY REHABILITATION SERVICE

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**VALIDITY – All local SOPS should be accessed via the Trust intranet**

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## 1. INTRODUCTION TO STANDARD OPERATING PROCEDURE

The following document aims to outline the rationale for Pulmonary Rehabilitation. It provides a comprehensive overview of how the course is run to allow consistency in the facilitation of Pulmonary Rehabilitation.

This Standard Operating Procedure has been produced in line with recommendations from the British Thoracic Society Guidelines for Pulmonary Rehabilitation, the British Thoracic Society Quality Standards for Pulmonary Rehabilitation in Adults, the Global Initiative for COPD (GOLD), and the NICE quality standard for COPD.

## 2. RATIONALE FOR PULMONARY REHABILITATION

Aims:

- Pulmonary rehabilitation is designed to provide individually tailored exercise and education to patients with chronic respiratory disease.
- The National Institute of Clinical Excellence (NICE) Quality Standard for Chronic Obstructive Pulmonary Disease (2018) and NICE COPD in Adults Quality Standard (2023) highlight those patients with COPD should be offered pulmonary rehabilitation when appropriate.
- Pulmonary Rehabilitation is a key outcome of the COPD commissioning guidelines (2018) to reduce health care utilisation and improve self-management strategies.

## 3. PATIENT GROUP

Patients with long term lung conditions, including:

- Chronic Obstructive Pulmonary Disease (COPD)
- Bronchiectasis
- Interstitial Lung Disease (ILD) *including* Idiopathic Pulmonary Fibrosis (IPF)
- Stable Asthma patients with breathlessness in ADL's will be considered on an individual basis in line with guidelines.

## 4. REFERRALS AND TRIAGE

Referrals are accepted from any health care professional using the Single point of Contact (SPOC) referral form (Appendix 1). This includes staff in primary and secondary care including GP's, nurses, acute inpatient teams, consultants and community therapy teams. The SPOC form should be submitted by electronic referral on SystmOne, emailed to [hnf-tr.csspoc@nhs.net](mailto:hnf-tr.csspoc@nhs.net) or telephoned to SPOC on 01653 609609.

Once the referral has been received it should be added by SPOC staff to the 'Triage - Pulmonary Rehab' caseload on SystmOne.

Once here, the referral should be triaged by the Specialist Respiratory Physiotherapists (Band 6 or 7) within 7 days of receipt. The referral should be either:

- Accepted, with the caseload reassigned to 'Pulmonary Rehab – Scarborough / Ryedale / Whitby', and the patient added to the corresponding waiting list 'Pulmonary Rehabilitation Scarborough / Ryedale / Whitby' and a due date of 3 weeks set.
  - The patient would then be sent an 'PR Opt In Letter' – from S1 letter templates, and given 3 weeks to contact SPOC via telephone to opt in.
  - At this time: the patient would have the due date removed if opted in, or discharged as 'No Response to partial Booking letter' if no contact was made. A 'Discharge – not opted in' letter would be sent to the referring clinician and patients GP.
- The patient opted in would then be booked into the PR pre-assessment clinic as a space becomes available (see procedure below).
- Reviewed – SPOC tasked to request further or supporting information from referrer (mandatory requirements for referral to follow)
- Rejected as inappropriate based on the inclusion / exclusion criteria (see section 5)

When a space becomes available for the patient's local PR class, a clinician from the team would review their S1 record, for any change in their condition or potential contraindications to PR, and if appropriate would contact the patient by telephone to discuss the programme and offer a pre-assessment appointment. A task should then be sent to SPOC with a request to create the appropriate 'Appointment Letter' and send it out to the patient with the appropriate 'PR Enrolment Pack – COPD / Other Diagnosis' which they hold on file.

## 5. INCLUSION / EXCLUSION CRITERIA

Inclusion and exclusion criteria in line with NICE COPD in Adults Quality Standard (2023), NICE Clinical Guidelines for COPD (2018), and BTS Pulmonary Rehabilitation Guidelines (2013)

### **Inclusion Criteria:**

- Patients 18 years of age and over
- Patients with a confirmed respiratory diagnosis (excluding unstable or exercise induced asthma)
- Patients with MRC Dyspnoea Score of 3 or above
- Patients fully optimised with appropriate pharmacological treatment
- Patients who agree to attend the full programme:
  - Patient available weekday afternoons (face to face sessions)
  - Remote, at home, programme available (digital access not necessary)

### **Exclusion Criteria:**

- Under 18 years of age
- Unstable or Exercise Induced Asthma diagnosis
- BMI <18
- Unstable angina / cardiac disease
- MI in the last 3 months
- Second and third degree heart block
- Acute coronary syndrome
- Recent embolism within 8 weeks
- Abdominal Aortic Aneurysm (AAA  $\geq$  5.5cm )
- Significant aortic stenosis
- Uncontrolled hypertension
- Cognitive impairment that restricts compliance to group activities
- Locomotor disability that would inhibit any form of exercise
- Not committed to attend the full programme
- Patients who completed programme within the last year

### **Mandatory fields for the referral to include:**

- Consent to information sharing (preferred)
- Full summary of patient medical history and medications (and if an O2 user)
- MRC Dyspnoea Score
- BMI

### **Useful fields for the referral to include:**

- Spirometry completed within last 6 months – Include scan of the trace please

## **6. LOCATION AND FACILITIES**

Pulmonary Rehabilitation services are delivered in the following venues:

- Malton Community Hospital (MCH)
- Whitby Community Hospital (WCH)
- Scarborough Rugby Club (SRC)

Emergency oxygen will be made available in each class, at each site. Cylinders should be checked at the start of each class to ensure they are at least  $\frac{3}{4}$  full.

Basic first aid equipment is available, this will include: plasters, bandages, nitrile gloves, scissors and tape.

There is access to a defibrillator located within the MSK treatment rooms at SRC and WCH. The grab bag and defibrillator checks are completed daily by staff and documented and its contents checked monthly and documented. Annual checks are performed by the Humber resus team. There is access to the YTHFT Resus Trolley outside the gym at MCH which, under agreement with YTHFT, is checked and maintained by YTHFT staff and procedures.

## **7. WORKFORCE AND STAFFING**

Pulmonary Rehabilitation Service Guidelines (2020) by NHSEI recommend a qualified staffing ratio of 1:8. Therefore, class sizes should be no more than 16 with one physiotherapist and one other member of the respiratory specialist team (band 4 associate respiratory practitioner, band 6 specialist respiratory physiotherapist or band 6 or 7 specialist respiratory nurse). However, community venue space normally allows for a maximum of 14 patients. Capacity and staffing ratio is re-evaluated when there are patients using oxygen during the class. There should be no more than 2 patients using oxygen within a class of 14 patients.

Due to clinical need and PR standards of care, the qualified member of staff should be band 6 or above.

On the rare occasion that Spirometry is deemed necessary, it must be completed by a member of staff with appropriate competencies. Currently this is the Respiratory Nurse Practitioner.

## **8. STAFF TRAINING AND COMPETENCIES**

Staff should complete adequate training in all equipment and procedures involved with Pulmonary Rehabilitation to ensure that they are competent. This includes the programme equipment outlined in section 10.1, and also competent in delivering the walk test (appendix 2 and 3). A competency framework checklist can be found on the local V:Drive.

Staff are also required to review relevant literature / research and encouraged to attend approved training courses in order to maintain continued professional development.

## **9. PRE-ASSESSMENT**

Patients are invited to attend a pre-assessment appointment at Scarborough Rugby Club. The Physiotherapist will introduce the members of staff and the purpose and procedure for the pre-assessment session. Patients are informed about the pulmonary rehabilitation programme, the location, days and times of the sessions, procedure for illness, and the importance of commitment to the programme is emphasised. Patients are provided with class attendance information, including the procedure for illness, and a timetable of sessions.

Database information is checked such as: name, DOB, address and telephone number and patients are asked for their consent to the assessment.

The subjective and objective assessment is recorded, along with SMART Goal, field walk test result and questionnaire scores on the Pulmonary Rehabilitation Assessment Form – this is then scanned in by SPOC admin and uploaded onto the SystmOne patient record.

All contacts are recorded on SystemOne.

If a patient is assessed and not appropriate for PR, or declines to attend, a discharge letter will be sent to the referring clinician and GP (See SystemOne for PR letter templates).

## **9.1. COMPONENTS OF PRE-ASSESSMENT**

### **9.1.1. INFORMED CONSENT AND SUBJECTIVE ASSESSMENT**

The Physiotherapist will introduce the members of staff and the purpose and procedure for the 60 - 90 minute pre-assessment session.

A comprehensive subjective and objective assessment is carried out, by the specialist respiratory physiotherapist or nurse practitioner, including gathering information on the patient's respiratory symptoms, past medical history, medications and physical function. Baseline measurements are taken, such as: SpO<sub>2</sub>, HR, BP, MRC Dyspnoea Score. Contraindications and precautions (taken from exclusion criteria) are checked again with the patient at this point as a risk assessment screen.

Patients will also be provided with Chronic Respiratory Disease Questionnaire (CRDQ) the Hospital Anxiety and Depression questionnaire (HAD) and the COPD Assessment Test (CAT) self-reporting questionnaires to complete. Field walking tests are also completed (including a practice if appropriate). Records of assessments are entered onto SystemOne.

Staff will highlight the importance of a patient's on-going commitment to the course and provide contact details for the patient to use to contact the team if they are unable to attend a session. Patients will be advised to use the same contact details to discuss any decisions to terminate attendance at pulmonary rehabilitation or discuss where expectations of treatment have not been met. The DNA policy will be outlined and patients will be informed that they will be discharged if they DNA on two occasions and do not inform the team of a reason why. Consideration will be given of safeguarding risks and capacity in line with the Was not Brought Policy and Divisional Attendance policy prior to discharge [intranet.humber.nhs.uk/Policies/Clinical Policies/C Policies/Was Not Brought and No Engagement Policy N-072.pdf](https://intranet.humber.nhs.uk/Policies/Clinical/Policies/C%20Policies/Was%20Not%20Brought%20and%20No%20Engagement%20Policy%20N-072.pdf) Finally, patients will be reminded regarding the NHS zero tolerance for aggressive behaviour.

### **9.1.2. SPIROMETRY IS NOT ROUTINELY PERFORMED**

If required, Spirometry should only be performed by a member of staff who has adequate training.

It is the responsibility of the staff member to maintain the spirometry equipment and perform the test as BTS guidelines (<https://www.brit-thoracic.org.uk/document-library/delivery-of-respiratory-care/spirometry/spirometry-in-practice/>).

### **9.1.3. WALK TEST**

The 6-minute walk test (6MWT) is used as the preferred exercise tolerance test as it takes into account patient's mobility, co-morbidities and balance. Staff can also use the incremental shuttle walk test (ISWT) should the clinician feel this is more

appropriate. A practice walk test is completed with all patients. Patients will rest for 20 minutes before repeating the specified walk test. The operating procedure for the ISWT and the 6MWT can be found in Appendix 2 and 3.

#### **9.1.4. BLOOD PRESSURE AND HEART RATE**

Each patient's blood pressure should be taken at the pre-assessment session and compared to previous history or readings as required/appropriate. A systolic blood pressure of more than 180mm Hg, or a diastolic blood pressure of more than 100 mm Hg is deemed a relative contraindication.

Each patient's heart rate should be taken at the pre-assessment session and compared to previous history or readings as required/appropriate. A heart rate of 120 bpm or above (tachycardia) or 40 bpm or below (bradycardia) are deemed relative contraindications. In addition, the identification of any new arrhythmia should be raised with the GP but is not a contraindication of the patient feels well.

#### **9.1.5. SPO2 AND OXYGEN**

Some patients with a chronic lung disease such may require supplemental oxygen therapy to support an adequate arterial oxygenation. There is no clear evidence for supporting the routine use of supplemental oxygen for all PR patients. However, PR provides an opportunity to assess the adequacy of the prescribed flow rate for patients already in receipt of long term or ambulatory oxygen (BTS Pulmonary Rehabilitation Guidelines, 2013) and may highlight patients in need of further assessment by the HOSAR.

If a patient is seen to have resting oxygen saturations at rest consistently below 92% (NICE, 2018) or have a significant decrease during exercise to below 90% or more than 4% drop (NICE, 2018) clinicians to consider referral for long term oxygen therapy (LTOT) or Ambulatory Oxygen Therapy (AOT) assessment to local HOSAR team. So to provide best supportive care to the patient, and so as not to delay treatment; if there is capacity and an appropriate trained clinician present, it may be possible to conduct an AOT assessment on the same day (see HOSAR SOP for more information).

If a patient desaturates below 85% on the ISWT the patient should be rested for 20 minutes (BTS guidelines, 2015) and then complete a 6MWT. This is to gain a better understanding how a patient paces their activities and how this effects their oxygen saturations.

Should the patient's saturation drop below 80% (on room air or supplemental oxygen) during exercise the test will be terminated by the operator, as per ATS guidelines for cardiopulmonary exercise testing (ATS, 2003).

Current oxygen service guidance states that assessment for AOT should ideally be performed after patients have completed a course of pulmonary rehabilitation (Clinical Component for the Home Oxygen Service in England and Wales 2006). However, where obvious desaturation occurs (within clinical parameters), it maybe indicated to conduct a full AOT assessment and potential provision of oxygen, to aid in the completion of the course and maintenance of appropriate oxygen levels.



### **9.1.6. QUESTIONNAIRES**

The patient should be asked to complete the Chronic Respiratory Disease Questionnaire (CRDQ) and the Hospital Anxiety and Depression questionnaire (HAD) and COPD Assessment Test (CAT) where appropriate. These are predominantly used as outcome measure however if severe levels of anxiety or depression are recorded by the HAD the GP should be notified to consider appropriate management. Questionnaires will be provided during the assessment process, with time provided for patients to consider their answers, and with support from staff in completing them if required.

## **10. COMPONENTS OF EXERCISE SESSION**

### **10.1. EQUIPEMENT**

The equipment available onsite for each exercise session should include:

- Aerobic equipment / weights / resistance equipment
- Patient exercise log sheets / clipboard / pen
- Observation equipment: pulse oximeters, BP cuff and sphygmomanometer, weight scales, height chart
- Stopwatches
- Music player
- Two bright cones, tape measure (for walk test)
- Chairs
- Telephone access
- Emergency resus equipment
- Laptop / flipcharts / white boards and supplementary written material for educational sessions.

### **10.2. INTRODUCTIONS AND OBSERVATIONS**

Patients should be directed towards appropriate seating area in the hall / gym and allowed to rest for at least 5 minutes to recover from walking into the venue. Pulmonary rehabilitation staff should speak to each patient and ask how they are feeling that day and if there have been any changes to their health and/or medications which would impact their ability to exercise. Once the patients have recovered their breathing, a member of the pulmonary rehabilitation team will take their SpO2 and Heart Rate readings and record these on the register. These should be within normal parameters for each patient according to their baseline readings.

### **10.3. WARM-UP**

The physiotherapist or physiotherapy assistant will gather the patients in the centre of the hall/gym in a circle. It is the physiotherapist or physiotherapy assistant's role to check that patients have walking aids for the warm-up if required and place a chair next to patients who require additional support for balance or mobility.

The warm-up should allow for patients with different abilities to work at their own pace. The warm-up should consist of graded upper and lower limb range of movement exercises starting with upper and lower limbs separately and then combining them together for some aerobic activity. Walking should be the primary component of the warm-up so exercises should be interspersed with marching on the spot or walking

around the space. Chairs should be provided for patients if they have mobility impairments or severe breathlessness.

Patients should be encouraged to work to a Borg breathlessness score of around 3-5 during the warm-up.

#### **10.4. EXERCISE SESSION**

Patients will each have a clipboard with their exercise record sheets and Borg scale (Appendix 4). They should complete each circuit as individually detailed, being encouraged to utilise breathing control techniques to manage exertional breathlessness.

The physiotherapist, respiratory nurse or physiotherapy assistant should check and help set up oxygen for patients who require it to exercise, although if a patient prescribes AOT is in attendance, they should be asked to bring their own equipment. The cylinder and flow rate should be double checked.

Patients who need supervision on exercises should be identified to all staff members before the class starts and staff members should be allocated to each patient who needs supervision.

Water should be available for patients, and they should be encouraged to drink during the exercise session.

During summer months and when the hall/gym is warm, windows and doors should be open and if fans are available then they should be used. The temperature should be maintained between 18-23 (degrees Celsius). During periods of extreme heat/cold, the pulmonary rehabilitation lead will make the decision if the class needs to be cancelled. Consideration should also be made to adverse weather conditions and the safety of patients travelling to the venue; if it is necessary to cancel a class, patients should be notified as early as possible and encouraged to exercise independently at home if able and appropriate.

Patients should be encouraged to progress through the exercise levels in relation to their Borg scores for each exercise. Staff members should intermittently supervise the patients when recording their reps and Borg scores after each exercise and discuss how they can progress their exercises.

Patients should be observed for safety using equipment and correct technique should be taught.

#### **10.5. COOL DOWN**

Patients should be gathered in the centre of the hall/gym and the physiotherapist or physiotherapy assistant should start the cool down. Upper and lower limb range of movement exercises should be completed at a slower pace than the warm-up and patients should be observed during the cool down to ensure their breathlessness is recovering. Chairs should be provided for patients if they have mobility impairments or severe breathlessness.

## 10.6. EDUCATION SESSIONS

After the cool down the patients are gathered into an appropriate section of the room and invited to take a seat in preparation for the educational talk.

The education sessions are delivered in line with the content set out in the BTS pulmonary rehabilitation quality standards. The education sessions are:

- Living well with your chronic lung condition - understanding your lung condition (e.g. COPD, ILD, Bronchiectasis) and the signs and symptoms of a deterioration in your lung condition (exacerbation)
- Clearing your airways – secretion clearance
- Managing your breathlessness – breathing control
- Understanding your respiratory medications and inhaler techniques
- How will physical activity benefit me?
- Managing your lifestyle – energy conservation, anxiety / stress management / role of OT
- Your nutritional health

In the event the professional who is due to deliver the talk is unavailable another member of staff may deliver the talk provided they have a good understanding and feel it is within their scope of practice. If for unforeseen circumstances no-one is available to deliver the talk the talk should be cancelled and a summary given at the next available slot.

If a patient fails to attend all educational sessions a summary of the missed talk can be given by the physiotherapist at the next session.

Patients are also given written learning material relating to the education classes to take away with them; these can be found on the V:Drive. Booklets from Asthma & Lung UK are also provided (available from [Health Advice Resources – Asthma + Lung UK \(asthmaandlung.org.uk\)](http://HealthAdviceResources-Asthma+LungUK.asthmaandlung.org.uk)). Links to videos and websites are provided within the literature as alternatives to the written material to encourage independent learning.

## 11. POST-ASSESSMENT

The patients will be allocated a time slot of their post-assessment and will attend the venue for approximately 30-45 minutes. Physiotherapist will explain the procedure for the post-assessment session. They will highlight the importance of continuing their commitment to on-going exercise.

### 11.1. COMPONENTS OF POST-ASSESSMENT

#### 11.1.1. REPEAT WALK TEST

The appropriate walk test/s completed at pre-assessment, either 6MWT or ISWT, are repeated in line with SOP's (appendix 2 and 3). Care is taken to ensure replicability of the test and variables minimised.

### **11.1.2. OXYGEN**

Please refer to oxygen guidance in Section 8.1.4

### **11.1.3. QUESTIONNAIRES**

The patient should be asked to repeat the Chronic Respiratory Disease Questionnaire (CRDQ) the Hospital Anxiety and Depression questionnaire (HAD) and the COPD Assessment Test (CAT) if appropriate. These are predominantly used as outcome measure however if severe levels of anxiety or depression are recorded by the HAD the GP should be notified to consider appropriate management. The patient should be given their CRDQ, HAD and CAT at the penultimate exercise session for the patient to complete at home. This allows patients 2 opportunities to bring their questionnaires back before the post assessment session.

### **11.1.4. EVALUATION FORMS**

Patients will be provided evaluation forms (both PR specific and trust friends & family) to be completed at the end of the PR course. Feedback is collated and recorded on a spreadsheet with any comments/feedback reviewed by the Pulmonary Lead to action if required.

### **11.1.5. TRANSITION CARE**

All patients are given a written exercise plan to encourage ongoing exercise and self-management after finishing the programme. These exercise plans should be individualised for each patient, specific to their current level and weight resistance in class and to take into account musculoskeletal or longstanding issues. Patients are also provided with information on continuing exercise in a gym environment, for example through the GP exercise referral scheme. Referrals to this scheme can be completed by a physiotherapist or assistant (information and referral made online at <https://survey.eacommunications.co.uk/home/index?id=1743&NewSession=1>).

### **11.1.6. DISCHARGE PROCEDURE**

When a patient completes the full PR programme, including post-assessment:

- The physiotherapist will complete audit spreadsheets with data as well as completing and sending discharge letters to the referring clinician, the GP and the patient.

If a patient does not complete the full PR programme, due to illness / hospital admission but wishes to resume once well enough:

- The physiotherapist will contact the patient to discuss a suitable option; resuming them onto the programme once appropriately recovered.

If a patient does not complete the full PR programme, due to illness / hospital admission / personal choice and does not wish to resume:

- The physiotherapist will complete audit spreadsheets with data as well as completing and sending discharge letters to the referring clinician, the GP and the patient.

Patients should then be discharged on SystmOne in order to close their referral.

If written informed consent has been gained from the patient, national audit (NRAP – National Respiratory Audit Programme) data is inputted onto the system.

## 12. HEALTH AND SAFETY

Staff should be up to date with statutory and mandatory training as per Trust policy, including Immediate Life support (ILS) for all staff.

### 12.1. INFECTION CONTROL

Pulmonary Rehabilitation participants will all have their own individual station with individual equipment. This equipment will be cleaned prior to use and following each class. All monitoring equipment is to be cleaned between patients using. Any clipboards and pens are to be cleaned after each group session.

Staff are advised to follow IPC recommendations, hand washing prior to contact with patients and to use alcohol-based gel between patients where hand washing is not available.

### 12.2. RISK ASSESSMENT

Risk assessment of the gym and any equipment will be carried out annually, or sooner if need is identified by the Pulmonary Rehabilitation Lead.

Any issues regarding access/gym space/equipment should be log and reported to the Rugby Club Operations Manager ([admin@scarboroughrugby.co.uk](mailto:admin@scarboroughrugby.co.uk)) for Scarborough or the Humber Estate Team ([HNF-TR.Estates@nhs.net](mailto:HNF-TR.Estates@nhs.net)) for Malton

Electrical testing for equipment is completed by the Estates team [HNF-TR.Estates@nhs.net](mailto:HNF-TR.Estates@nhs.net) every 6 or earlier if identified by the Pulmonary Rehabilitation Lead.

Clinical risk assessment should be in line with the Trusts Risk Management Policy (N-064) which is available at

<https://intranet.humber.nhs.uk/document-library/corporate-policies-procedures-sops.htm?AccessLetter=R#:~:text=Risk%20Management%20Policy%20N%2D064>

The clinical risk assessment must include the risk of harm to the service use and other patients, deteriorating health and wellbeing, challenging behaviour, and medical emergencies. The results of the risk assessment must be recorded in the patient record.

### 12.3. ADVERSE EVENTS

A defibrillator, oxygen, pulse oximeter and blood pressure monitor should always be available for use during a Pulmonary Rehabilitation class alongside a first aid box.

In case of emergency, staff should call 999 for an ambulance immediately for medical assistance if a patient is unwell. The procedure is displayed in the venue and outlined in Appendix 5. If a patient requires A&E or Minor Injuries, a qualified member of staff can take the patient to the nearest appropriate hospital.

Any adverse incidents should be reported through the Datix system. The outcome of adverse incident reports specific to pulmonary rehabilitation will be discussed in therapy team meeting and measures will be put in place to mitigate risk of recurrence.

Staff should follow Trust policy when incident reporting (see Incident Reporting Policy N-038 available on the Trust intranet)

In the event of adverse weather conditions e.g. extreme temperatures, hot or cold, the class may be cancelled as deemed appropriate by the pulmonary rehabilitation staff.

## **12.4. RAISING CONCERNS**

### **12.4.1. FRONTLINE STAFF**

It is important that staff can raise any concerns they might have. This could relate to raising general concerns, challenging poor clinical practice, abusive behaviour or harassment. Staff should familiarise themselves with the following Trust Policies regarding raising concerns which can be found on the Trusts Intranet ([Policies, Procedures and SOPs \(humber.nhs.uk\)](#)):-

- Bullying and Harassment Policy HR-002
- Complaints and Feedback Policy (inc. Violence and Harassment) N-047
- Freedom to Speak Up Policy N-040

### **12.4.2. PATIENTS**

Staff should follow the “Complainant Formal Complaint Process Pathway” for any participants wishing to raise a concern or complaint regarding Pulmonary Rehabilitation. This pathway can be found in the Complaints and Feedback Policy (N-047) under “How to deal with a concern/complaint”.

## **13. EQUALITY AND DIVERISTY**

Vulnerable adults / patients with learning disabilities are able to bring their support worker with them to class. One to one support can be offered by a rehabilitation assistant practitioner as required during the programme to support progression and comprehension.

Interpreters can be provided for those patients whose first language is not English. Interpreters will be provided for both assessment and rehabilitation. Interpreters are expected to stay for the educational component of the programme. The use of family and friends as interpreters is discouraged unless it is the patient's choice to use them as interpreters. If patients exercise this choice, it is to be documented on SystemOne.

Transport can be provided for both assessment and classes for those who have trouble accessing the service.

## **14. PRIVACY, DIGNITY AND RESPECT**

Staff should make sure that people using the service are treated with respect and dignity at all times while they are receiving care and treatment. This includes making sure that people have privacy when they need and want it, treating them as equals and providing any support they might need.

Each person's needs and expectations should be identified, recorded, and met as far as is reasonably possible. Patient's relationships with their carers and relatives should be respected and privacy maintained as far as reasonably practicable during pulmonary rehabilitation. Carers and relatives should be involved in decisions regarding care, with the consent of the patient.

Staff should ensure that each patient has their own exercise station, with enough space for their own belongings. Any personal items or valuables that the patient wishes to be away from their own personal exercise station to be stored safely can be within a lockable storage cupboard.

## 15. AUDIT, MONITORING AND REVIEW

Following PR, individual patient outcomes will be collated and audited, which will also include rates of adherence and completion. In addition, patients will be asked to complete the 'Friends and Family' patient experience survey (PR Team Code SC016) (Appendix 6) and the 'Pulmonary Rehabilitation Patient Evaluation Form' (Appendix 7). The responses are collated and reviewed after each PR programme by the service lead, with any negative comments/suggestions for improvement placed on an action plan with clear timescales for completion. Positive feedback will be collated and audited annually.

Following each PR programme, patient data is inputted on the NRAP website to be used as part of the national audit programme. Consent must be gained and documented for the national audit by completing the "Pulmonary Rehabilitation Audit: Patient Consent to Submission of Information Form". A random sample of 3 patients from each cohort inputted onto the NRAP audit website will be reviewed by the Pulmonary Rehabilitation Lead to check for validity and accuracy of the data being inputted.

## 16. REFERENCES

Bolton C.E, Bevan-Smith E.F, Blakey J.D, et al. (2013) British Thoracic Society guideline on pulmonary rehabilitation in adults: accredited by NICE *Thorax*, **68**, 1-30.

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## APPENDIX 1 – REFERRAL FORM

<b>Singe Point of Contact (SPOC) Referral Form</b>	
<b>Personal Details</b>	
NHS Number:	Date of birth:
Title:	First Name:
Surname:	Known as:
Address:	
Post Code:	Telephone:
GP (if not referrer):	Surgery:
Nationality/Language:	Ethnic Origin:
Gender:	Religion:
<b>Next of Kin</b>	
Name:	Relationship:
Address:	
Post Code:	Telephone:
<p>Does the patient have a keysafe/are there any access issues at the patient's residence?</p> <p>Please provide the contact details of a person who can confirm the keysafe number.</p>	

**Please DO NOT write the keysafe number on this form**

When all sections are completed, please forward using electronic referral via SystemOne or email to [hnf-tr.csspoc@nhs.net](mailto:hnf-tr.csspoc@nhs.net)

**Referrer Information**

Referrer name:

Occupation:

Organisation:

Date:

Telephone:

**Intervention required**

<input type="checkbox"/>	Cardiac Rehab	<input type="checkbox"/>	Heart Failure	<input type="checkbox"/>	Respiratory Nursing
<input type="checkbox"/>	Urgent Community Response (Crisis)	<input type="checkbox"/>	Home Oxygen (see HOS-AR form)	<input type="checkbox"/>	Respiratory Physiotherapy
<input type="checkbox"/>	Continence Service	<input type="checkbox"/>	MSK Physio Outpatients	<input type="checkbox"/>	Speech and Language Therapy
<input type="checkbox"/>	Diabetes	<input type="checkbox"/>	Occupational Therapy	<input type="checkbox"/>	Stroke Services
<input type="checkbox"/>	Dietetics	<input type="checkbox"/>	Physiotherapy - Community	<input type="checkbox"/>	Tissue Viability
<input type="checkbox"/>	District Nursing	<input type="checkbox"/>	Pulmonary Rehabilitation	<input type="checkbox"/>	Intermediate Care
<input type="checkbox"/>	Pharmacy	<input type="checkbox"/>	COVID-19 Swab Testing	<input type="checkbox"/>	Elderly Medicine
<input type="checkbox"/>	<b>Virtual Ward - Please ensure the patient meets the criteria for Virtual Ward. When selecting Virtual Ward, no other service should be selected.</b>				

Is this referral      Urgent      Routine

Is a Frailty Assessment required? Yes / No. If yes:

Rockwood Score:

Reason for referral (include relevant previous medical history):

Can this patient be seen in a clinic?      Yes /  No

Has the patient consented to this referral?       Yes       No

**Home Oxygen Service Assessment and Review (HOS-AR) Referral Form  
Scarborough, Ryedale and Whitby**

**(Please also see referral pathway for guidance)**

**MEDICAL HISTORY**

Diagnosis:

Resting SpO<sub>2</sub> on Air:

Last exacerbation date:

Spirometry (date):

FEV<sup>1</sup>

FEV<sup>1</sup> %

FVC

Completed and reviewed within 3 months of referral:

CXR

ECG / ECHO

FBC

Is patient fully optimised?

Yes / No

**OXYGEN REQUESTED (please select)**

Long Term Oxygen Therapy

- Resting SpO<sub>2</sub> ≤ 92% on 2 occasions or
- ≤ 94% Polycythaemia/Pulmonary HTN

Ambulatory Oxygen Therapy

- Evidence of exercise desaturation ( SpO<sub>2</sub> <90% or SpO<sub>2</sub> drop >4% )
- Require oxygen outside of the home

Palliative Oxygen Therapy

- Symptomatic patient with SpO<sub>2</sub> 92%<

Exclusion Criteria:

- Current smokers (*Please refer to smoking cessation, reconsideration for oxygen when 3/12 smoke free*)
- Patients condition not fully optimised (*please consider appropriate referral to Pulmonary Rehabilitation*)

Other relevant clinical / patient information (**including lone worker safety considerations**):

## **APPENDIX 2 – INCREMENTAL SHUTTLE WALKING TEST**

### **Scope and Purpose**

The purpose of the ISWT was to develop a standardised, externally paced, incremental field walking test to assess the functional capacity in patients with chronic airways obstruction. The ISWT is a valid symptom limited maximal test of functional capacity that relates strongly to VO<sub>2</sub>max during cardio-pulmonary exercise testing on a treadmill. The test is companioned with the endurance shuttle walking test (ESWT). This is a validated field test that has proven sensitive to changes in pulmonary rehabilitation and bronchodilator therapy.

### **Equipment**

- Two small cones to mark the turnaround points 9 meters apart with a 0.5 inset for turning.
- Two chairs, one at each end of the walking course
- BORG Scale
- Clipboard with pulmonary rehabilitation assessment sheet and a pen
- Blood pressure cuff and stethoscope
- Pulse oximeter
- Pre-measured marks along the track/corridor
- Access to oxygen and telephone in case of an emergency
- Supplemental oxygen if required to perform exercise test by patient

### **Precautions**

Absolute contraindications for the ISWT include:

- unstable angina
- myocardial infarction during the previous month

Relative contraindications for the ISWT include:

- resting heart rate of more than 120
- a systolic blood pressure of more than 180 mm Hg
- diastolic blood pressure of more than 100 mm Hg

The ISWT should not be completed on patients with any of these findings. The patient should be referred back to the referring clinician / GP. The results from a resting electrocardiogram done during the previous 6 months should also be reviewed before testing. Stable exertional angina is not an absolute contraindication for an ISWT, but patients with these symptoms should perform the test after using their anti-angina medication, and rescue nitrate medication should be readily available.

### **Safety Issues**

Testing should only be performed in a location where a rapid, appropriate response to an emergency is possible. Any member of staff completing the ISWT should know where the nearest crash trolley is situated.

1. A telephone or other means should be in place to enable a call for help.
2. Any member of the pulmonary team completing the ISWT should be certified in cardiopulmonary resuscitation with a minimum of Basic Life Support and should have received this training within the last 12 months. Physicians are not required to be

present during all tests. The physician ordering the test or a supervising laboratory physician may decide whether physician attendance at a specific test is required.

3. If a patient is on long term or ambulatory oxygen therapy, oxygen should be given at their standard rate or as directed by a physician or a protocol.

Stop the Test in the Event of Any of the Following

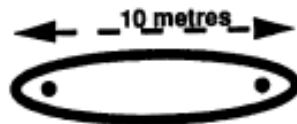
- Chest pain suspicious for angina.
- Evolving mental confusion or lack of coordination/staggering.
- Evolving light-headedness.
- Intolerable dyspnoea.
- Leg cramps or extreme leg muscle fatigue.
- Excessive sweating
- Persistent SpO<sub>2</sub> < 85% (if this is unusual for the patient)
- SpO<sub>2</sub> 80%
- Pale or ashen appearance that occurs during the test
- Any other clinically warranted reason

4. The member of the pulmonary rehabilitation team should be competent in recognising these symptoms. If a test is stopped for any of these reasons, the patient should sit or lie supine as appropriate depending on the severity of the event and the member of PR team's assessment of the severity of the event and the risk of syncope. The following should be obtained based on the judgment of the member of PR team: blood pressure, pulse rate, oxygen saturation, and a physician evaluation. Oxygen should be administered as appropriate.

## Preparation

### Establishment of a Walking Track

The course should be identified by 2 cones with an inset of 0.5m from either end, thus avoiding abrupt changes in direction.



The track should be flat, with minimal blind turns or obstacles.

The walking track should be in an area with a maintained comfortable ambient temperature and humidity.

### Patient Preparation

- Take into account any precautions or contraindications prior to performing the walk test.
- Ensure that the patient is dressed comfortably and wearing appropriate footwear.
- Complete all relevant baseline measurements ( resting heart rate and SpO<sub>2</sub>, resting Borg Breathlessness scale) with the patient
- Play the FULL instructions (track one of the ISWT) to the patient.

**Encouragement:** Only the standardised phrases for encouragement (as specified in the procedure below) must be used during the test. Encouragement significantly increases the distance walked.

**Supplemental Oxygen:** If oxygen supplementation is needed during the walks and serial tests are planned, then during all walks by that patient oxygen should be delivered in the same way with the same flow. If the flow must be increased during subsequent visits due to any change in oxygen prescription, this should be noted on the worksheet and considered during interpretation of the change. Measurements of pulse and SpO<sub>2</sub> should be made after waiting at least 10 minutes after any change in oxygen delivery.

The type of oxygen delivery device should also be noted on the report: for instance, the patient carried liquid oxygen or pushed or pulled an oxygen tank, the delivery was pulsed or continuous. It should be clearly documented how (if at all) the member of PR team has assisted with the transport of the oxygen, so any subsequent walk tests with the patient can be performed in the same manner.

### Procedure

- The ISWT must initially be performed on two occasions to account for a learning effect. The best distance walked in metres is recorded, to the nearest 10 as completed lengths.
- If the two tests are performed on the same day, then ensure that the patient has had adequate rest and all observations have returned to resting levels.
- Set the CD to the start and play the standardised instructions to the individual.
- Ask the patient if they understand the instructions and are happy to begin the test.
- Direct the patient to the 'starting cone' of the walking track.
- Tell the patient that you will walk with him/her for the first level of the test.
- The speed at which the patient should walk is directed by an audio signal played on a CD player.
- Once the first triple bleep plays the test has started.
- Leave the patient to complete the test after completion of the first shuttle on level 2.
- Monitor the patient for any untoward signs and symptoms throughout the duration of the test.
- Watch the patient. Do not get distracted and lose count of the laps. Ensure you keep count of the number of lengths as the patient completes them, throughout the duration of the test. It is advisable to time the performance as an additional measure to confirm manual recording of the number of shuttles completed.
- At every increase in speed, at the end of every minute, indicated by a triple bleep advise the patient 'you now need to increase your speed of walking'
- During the test only one verbal cue can be used to encourage the patient to pick up their speed 'you need to increase their speed to keep up with the test' (see below).
- The test is terminated when either 1) the patient indicates that they are unable to continue, 2) if the operator determines that the patient is not fit to continue, or, 3) the operator assess that the patient was unable to sustain the speed and

cover the distance to the cone prior to the beep sounding (see below for more details)

- Allow the patient to sit down or, if the patient prefers, allow them to stand.
- Immediately record oxygen saturation, heart rate, Borg dyspnoea and reason for ISWT termination on the PR assessment sheet.
- Congratulate the patient on good effort and offer a drink of water.
- Total up the number of lengths walked in meters (to the last 10 completed), and record on the PR assessment sheet.
- The patient should remain in a clinical area for at least 15 minutes following an uncomplicated test, or be allowed to rest for at least 30 minutes if performing the second walk test on the same day.

### **Operator termination of the test**

The PR team member will be required to terminate the test if:

- The patient fails to reach the cone/marker in the time allowed. This is defined as the patient being more than 0.5m away from the cone when the bleep sounds on a second successive 10 length. The test is terminated when the patient is just outside the 0.5m marker.
- SpO2 falls below 80% as per ATS guidelines for cardiopulmonary exercise testing (ATS 2003).

### **Participant termination of the test**

The patient may indicate to terminate the test if they indicate they are unable to do so. In respiratory disease the common reason for terminating the test is due to excessive dyspnoea, however other non-respiratory reasons may cause termination of the test, these include fatigue (commonly leg fatigue) or pain (knee/hip/low back pain).

### **Quality assurance**

It is important that all operators are familiar with the test procedures, as the test requires clear processes to be followed. It is important the operator can walk exactly at the first speed of walking to pace the patient, this is particularly important for patients with a higher functional capacity who's natural speed of walking is faster than the first very slow speed of walking. It is recommended that anyone unfamiliar with test procedures completes 10 observed ISWTs, which are performed to the standards identified above. A competent operator will be responsible for signing off satisfactory completion of the tests. Ideally quality assurance testing should require the operator to conduct the test on participants with a range of functional exercise capacity.

## APPENDIX 3 – SIX MINUTE WALK TEST

### Scope and Purpose

The original purpose of the six minute walk test was to assess exercise tolerance in patients with chronic respiratory disease and heart failure. The test has since been used as a performance-based measure of functional exercise capacity in other populations.

As with other measurements used for clinical and research purposes, it is important to standardise procedures, describe required preparation, and outline safety measures. This document is based on the ATS and the Australian Lung Foundation/Australian Physiotherapy Association guidelines.

### Equipment

- Stopwatch or countdown timer
- Lap counter
- Two small cones to mark the turnaround points
- A chair that can be easily moved along the walking course
- Clipboard with a 6MWT proforma and a pen
- BORG Scale
- Automated blood pressure machine
- Pulse oximeter
- Trundle wheel, or pre-measured marks along the track/corridor
- Access to oxygen and telephone in case of an emergency

### Precautions

*Absolute contraindications for the 6MWT include:*

- unstable angina
- myocardial infarction during the previous month.

*Relative contraindications for the 6MWT include:*

- resting heart rate of more than 120
- a systolic blood pressure of more than 180 mm Hg
- diastolic blood pressure of more than 100 mm Hg

Subjects with any of these findings should be referred to the physician ordering or supervising the test for individual clinical assessment and a decision about the conduct of the test. The results from a resting electrocardiogram done during the previous 6 months should also be reviewed before testing. Stable exertional angina is not an absolute contraindication for a 6MWT, but subjects with these symptoms should perform the test after using their anti-angina medication, and rescue nitrate medication should be readily available (ATS, 2002).



## Safety Issues

1. Testing should be performed in a location where a rapid, appropriate response to an emergency is possible. The appropriate location of a crash cart should be determined by the physician supervising the facility.
2. Supplies that must be available include oxygen, sublingual nitroglycerine, aspirin, and Salbutamol (metered dose inhaler or nebuliser). A telephone or other means should be in place to enable a call for help.
3. The technician should be certified in cardiopulmonary resuscitation with a minimum of Basic Life Support by Resuscitation Council (UK)–approved cardiopulmonary resuscitation course. Advanced cardiac life support certification is desirable. Training, experience, and certification in related health care fields (e.g. registered nurse, registered respiratory therapist, or certified pulmonary function technician) are also desirable. A certified individual should be readily available to respond if needed.
4. Physicians are not required to be present during all tests. The physician ordering the test or a supervising laboratory physician may decide whether physician attendance at a specific test is required.
5. If a patient is on chronic oxygen therapy, oxygen should be given at their standard rate or as directed by a physician or a protocol.

### Stop the Test in the Event of Any of the Following

- Chest pain suspicious for angina.
- Evolving mental confusion or lack of coordination/staggering.
- Evolving light-headedness.
- Intolerable dyspnoea.
- Leg cramps or extreme leg muscle fatigue.
- Excessive sweating
- Persistent SpO<sub>2</sub> < 85% (if this is unusual for the subject)
- Pale or ashen appearance that occurs during the test
- Any other clinically warranted reason

Technicians must be trained to recognise these problems and the appropriate responses. If a test is stopped for any of these reasons, the patient should sit or lie supine as appropriate depending on the severity of the event and the technician's assessment of the severity of the event and the risk of syncope. The following should be obtained based on the judgment of the technician: blood pressure, pulse rate, oxygen saturation, and a physician evaluation. Oxygen should be administered as appropriate.

## Preparation

### *Establishment of a Walking Track*

- The track may be a continuous track (oval or rectangular) or a point-to-point track.
- In the case of a point-to-point track, the walking course must be 30m in length, with the turnaround points marked with a cone. A starting line, which marks the beginning and end of each lap, should be marked on the floor using brightly coloured tape, unless one of the cones marks the start.
- The track should be flat, with minimal blind turns or obstacles.

- The minimum recommended length for a centre-based walking track is 25m, though 30m is preferred. The track could be marked in 1-metre or 3-metre increments to assist in calculation of partial lap completion at the end of the test.

Note: If you do not have access to at least a 25m track, make sure you use the same track for all tests and be aware that the distance walked may be less due to the patient having to slow down and turn more often in the six minutes.

The walking track should be in an area with a maintained comfortable ambient temperature and humidity.

### **Patient Preparation**

- Take into account any precautions or contraindications prior to performing the walk test
- Instruct the subject to dress comfortably and wear appropriate footwear
- Where possible/appropriate, the subject should be advised to avoid eating a heavy meal for two hours before the test
- Any prescribed inhaled bronchodilator medication should be taken within one hour of testing
- The subject should rest for at least 15 minutes before beginning the 6MWT
- A 'warm up' should not be performed

### **Quality Assurance**

**Technician Training and Experience:** Technicians who perform 6MWTs should be trained using the standard protocol and then supervised for several tests before performing them alone. They should also have completed cardiopulmonary resuscitation training.

**Encouragement:** Only the standardised phrases for encouragement (as specified in the procedure below) must be used during the test. Encouragement significantly increases the distance walked.

**Supplemental Oxygen:** If oxygen supplementation is needed during the walks and serial tests are planned, then during all walks by that subject oxygen should be delivered in the same way with the same flow. If the flow must be increased during subsequent visits due to worsening gas exchange, this should be noted on the worksheet and considered during interpretation of the change noted in 6MWD. Measurements of pulse and SpO<sub>2</sub> should be made after waiting at least 10 minutes after any change in oxygen delivery.

The type of oxygen delivery device should also be noted on the report: for instance, the subject carried liquid oxygen or pushed or pulled an oxygen tank, the delivery was pulsed or continuous. Technicians should avoid walking behind the subject with the oxygen source, however if the subject is not able to control/carry/manage their own oxygen cylinder, the technician should try to walk slightly behind the subject to avoid setting the walking pace. It should be clearly documented how the technician has assisted with the transport of the oxygen, so any subsequent walk tests with the same subject can be performed in the same manner.

**Medications:** The type of medication, dose, and number of hours taken before the test should be noted. Significant improvement in the distance walked, or the dyspnoea scale, after administration of bronchodilators has been demonstrated in patients with COPD.

### Procedure

- The 6MWT must initially be performed on two occasions to account for a learning effect. The best distance walked in metres is recorded.
  - If the two tests are performed on the same day, at least 30 minutes rest should be allowed between tests. Some individuals may require tests to be performed on separate days, preferably less than one week apart.
1. Set the lap counter to zero, and the timer to 6 minutes (or stopwatch to zero)
  2. After the subject has been at rest for 15 minutes, obtain and record measurements of blood pressure, heart rate, oxygen saturation and Borg dyspnoea and fatigue scores.
  3. Direct the subject to the 'start line' of the walking track.
  4. Describe the walking track to the subject, and then demonstrate by walking one lap yourself. Walk and pivot around a cone briskly (if applicable).
  5. Give the patient the following instructions: "The object of this test is to walk as far as possible for 6 minutes. You will walk back and forth in this hallway. Six minutes is a long time to walk, so you will be exerting yourself. You will probably get out of breath or become exhausted. You are permitted to slow down, to stop, and to rest as necessary. You may lean against the wall while resting, but resume walking as soon as you are able. You will be walking back and forth around the cones. You should pivot briskly around the cones and continue back the other way without hesitation. Now I'm going to show you. Please watch the way I turn without hesitation." Demonstrate by walking one lap yourself. Walk and pivot around a cone briskly. "Are you ready to do that? I am going to use this counter to keep track of the number of laps you complete. I will click it each time you turn around at this starting line. Remember that the object is to walk AS FAR AS POSSIBLE for 6 minutes, but don't run or jog. Start now, or whenever you are ready."
  6. Start the timer when the patient begins to walk
  7. Monitor the subject for any untoward signs and symptoms throughout the duration of the test
  8. Do not talk to anyone during the walk. Use an even tone of voice when using the standard phrases of encouragement. Watch the patient. Do not get distracted and lose count of the laps. Ensure you keep count of the number of lengths or laps as the subject completes them, throughout the duration of the test. Each time the participant returns to the starting line, click the lap counter once (or mark the lap on the worksheet). Let the participant see you do it – exaggerate the motion if necessary.
  9. Use the following standard encouragements during the test, using an even tone of voice:
    - At minute one: "You are doing well. You have five minutes to go."
    - At minute two: "Keep up the good work. You have four minutes to go."
    - At minute three: "You are doing well. You are halfway done."
    - At minute four: "Keep up the good work. You have only two minutes left"
    - At minute five: "You are doing well. You have only one minute to go."

10. If the subject stops during the six minutes:
  - Do NOT stop the timer
  - Allow the subject to sit in a chair if they wish.
  - Measure and record the oxygen saturations and heart rate.
  - Ask patient why they stopped, and record the reason.
  - Record the time the subject stopped (but keep the stop watch running).
  - If the patient stops, give the following instruction "You can lean against the wall if you would like; then continue walking whenever you feel able."
  - If the patient refuses to continue (or you decide that they should not continue), discontinue the walk, and note on the worksheet the distance, the time stopped, and the reason for stopping prematurely.
11. When the timer is 15 seconds from completion, say: "In a moment I'm going to tell you to stop. When I do, just stop right where you are and I will come to you".
12. When the time reaches exactly 6 minutes, say: "Stop!". Consider taking a chair over to the subject if they look exhausted. Mark the spot where they stopped by placing a marker on the floor.
13. Allow the subject to sit down or, if the subject prefers, allow to them to stand. Note: The measurements taken before and after the test should be taken with the subject in the same position.
14. Immediately record oxygen saturation, heart rate, Borg dyspnoea and fatigue rating on the proforma. Measure and record the subject's blood pressure.
15. Total up the number of lengths/laps walked, and measure the excess distance with a trundle wheel /tape measure /marks along track or corridor. Tally up the total distance walked by the subject, rounded to the nearest metre, and record on the proforma.
16. Congratulate the patient on good effort and offer a drink of water.
17. The subject should remain in a clinical area for at least 15 minutes following an uncomplicated test, or be allowed to rest for at least 30 minutes if performing the second walk test on the same day.

## APPENDIX 4 – EXERCISE RECORD SHEET & BORG SCALE

NAME: .....

SESSION NUMBER:	1	2	3	4	5	6	7	8	9	10	11	12
DATE:												
1. STEP UP												
2. FORWARD PUNCH												
3. HEEL RAISE												
4. LEG CURL												
5. CEILING PUNCH												
6. KNEE DIP / SQUAT												
7. SIDE TAPS / STAR JACKS												
8. BICEP CURLS												
9. KNEE EXTENSION												
10. REPEAT STEP UP												
11. HIP ABDUCTION												
12. LATERAL SHOULDER RAISE												
13. MARCHING												
14. WALL PUSH												
15. SIT TO STAND												

## THE BORG SCALE

<b>Scale</b>	<b>Severity</b>
<b>0</b>	Nothing at all
<b>0.5</b>	Very, very slight (just noticeable)
<b>1</b>	Very slight
<b>2</b>	Slight (light)
<b>3</b>	Moderate
<b>4</b>	Somewhat severe
<b>5</b>	Severe (heavy)
<b>6</b>	
<b>7</b>	Very severe
<b>8</b>	
<b>9</b>	
<b>10</b>	Very, very severe (maximal)

## **APPENDIX 5 – MEDICAL EMERGENCY DURING PULMONARY REHABILITATION**

- Before each class, Pulmonary Rehabilitation staff will have a patient safety huddle. Patients with active DNACPR will be identified confidentially.
- At each class, individual patient information will be readily available as well as location details (e.g. address of venue)
- The Pulmonary Rehab staff will:
  - Recognise the situation
  - Start appropriate treatment as per ILS guidelines
  - Get the grab bag
  - Call for help (eg MSK, SRC staff, hospital staff)
  - Call 999 as appropriate
- If available, a member of staff will escort the other patients away from the situation to an appropriate, alternative area.
  - They will offer reassurance and support to these patients
  - If the exercise session has not already started, the other patients may leave
  - If the exercise session (inc. cool down), have been completed, the other patients may leave
  - If the situation occurs at any point during the exercise session, including the cool down, the patients must complete the cool down and are then free to leave afterwards.

# APPENDIX 6 – PATIENT EXPERIENCE SURVEY

## Patient and Carer Experience Forum

### Would you like to improve our services?

If so, join our Patient and Carer Experience forum or find out how you can get involved in various Trust activities.



### WE WANT YOU!

If you or someone you care for accesses our services and you would like to have your say about the care provided to you we would like to hear from you.

We are striving to have a representative mix of patients, carers and staff of all ages, gender identities, backgrounds and nationalities to join our Patient and Carer Experience Forum.

#### The group will have the opportunity to:

- Help raise the profile of patient and carer experience in our services.
- Give our members and other patients the opportunity to make positive and constructive suggestions about our services.
- Participate in improving and developing services within the Trust.

If you would like to get involved, please call our team on  
**01482 389167**

or email [hnf-tr.patientandcarerexperience@nhs.net](mailto:hnf-tr.patientandcarerexperience@nhs.net)

### How are we doing?

#### Are you a

Patient  Other \_\_\_\_\_   
(Please specify)

#### What is your age?

0 to 11 months  12 to 17 years  18 to 39 years  40 to 59 years   
60 to 79 years  80 years plus

#### 1. Thinking about the service we provide, overall, how was your experience of our service?

Very Good | Good | Neither good nor poor | Poor | Very Poor | Don't know

#### 2. Please can you tell us why you gave your answer?

#### 3. Did you feel that we were friendly and helpful?

Yes  Sometimes  No

#### 4. Did you feel that you received the correct level of information?

Yes  Sometimes  No

#### 5. Did you feel safe and confident in our service?

Yes  Sometimes  No



## Friends and Family Test Survey

### How are we doing?



You can complete this survey online at [humber.nhs.uk/friendsandfamilytestonline.htm](http://humber.nhs.uk/friendsandfamilytestonline.htm) or please ask a member of staff how to return this form.

Team Code:

#### 6. Did we see you in a place that worked well for you?

Yes  Sometimes  No

#### 7. Did you feel that we showed you privacy, dignity and respect?

Yes  Sometimes  No

#### 8. Did you feel that you were involved in making decisions about the care being offered?

Yes  Sometimes  No

#### 9. Did you feel that we listened to you and that you were understood?

Yes  Sometimes  No

#### 10. Did you feel that we gave you enough time?

Yes  Sometimes  No

#### 11. Please tell us what we did well.

#### 12. Please tell us what we can do better.

#### Thank you for completing the survey.

For questions about the NHS Friends & Family Test, please email us at [hnf-tr.friendsandfamily@nhs.net](mailto:hnf-tr.friendsandfamily@nhs.net).

Please tick here if you do not wish for your comments to be made public



## APPENDIX 7 – PATIENT EVALUATION FORM

### Pulmonary rehabilitation Patient Evaluation Feedback

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I am satisfied with the waiting time to start the programme					
All the communication (verbal and written) I received was clear and easy to understand					
I received a thorough assessment before commencing the programme					
After my assessment, I had a good understanding what the course was about					
The team was approachable					
The exercise programme was tailored to my individual needs					
The education sessions were informative and useful					
The education booklets provided are informative and useful					
The exercise booklet provided are informative and useful					
I was treated with dignity, respect, and where appropriate compassion					
I felt all aspects of my care were delivered safely					
My overall health and wellbeing have benefited from attending the course					

#### Comments

## APPENDIX 8 – EQUALITY IMPACT ASSESSMENT

For strategies, policies, procedures, processes, guidelines, protocols, tenders, services

1. Document or Process or Service Name: Pulmonary Rehabilitation
2. EIA Reviewer (name, job title, base and contact details): Bev Quarton, Pulmonary Rehabilitation Lead, Malton Hospital.
3. Is it a Policy, Strategy, Procedure, Process, Tender, Service or Other? Procedure

### Main Aims of the Document, Process or Service

1. Pulmonary rehabilitation is designed to provide individually tailored exercise and education to patients with chronic respiratory disease.
2. The National Institute of Clinical Excellence (NICE) Quality Standard for Chronic Obstructive Pulmonary Disease (2018) and NICE COPD in Adults Quality Standard (2023) highlight those patients with COPD should be offered pulmonary rehabilitation when appropriate.
3. Pulmonary Rehabilitation is a key outcome of the COPD commissioning guidelines (2018) to reduce health care utilisation and improve self-management strategies.
4. This Standard Operating Procedure has been produced in line with recommendations from the British Thoracic Society Guidelines for Pulmonary Rehabilitation, the British Thoracic Society Quality Standards for Pulmonary Rehabilitation in Adults, the Global Initiative for COPD (GOLD), and the NICE quality standard for COPD.

Please indicate in the table that follows whether the document or process has the potential to impact adversely, intentionally or unwittingly on the equality target groups contained in the pro forma

<p>Equality Target Group</p> <ol style="list-style-type: none"> <li>1. Age</li> <li>2. Disability</li> <li>3. Sex</li> <li>4. Marriage/Civil Partnership</li> <li>5. Pregnancy/Maternity</li> <li>6. Race</li> <li>7. Religion/Belief</li> <li>8. Sexual Orientation</li> <li>9. Gender re-assignment</li> </ol>	<p>Is the document or process likely to have a potential or actual differential impact with regards to the equality target groups listed?</p> <p>Equality Impact Score  <b>Low = Little or No evidence or concern (Green)</b>  <b>Medium = some evidence or concern (Amber)</b>  <b>High = significant evidence or concern (Red)</b></p>	<p>How have you arrived at the equality impact score?</p> <ol style="list-style-type: none"> <li>a) who have you consulted with</li> <li>b) what have they said</li> <li>c) what information or data have you used</li> <li>d) where are the gaps in your analysis</li> <li>e) how will your document/process or service promote equality and diversity good practice</li> </ol>
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Equality Target Group	Definitions	Equality Impact Score	Evidence to support Equality Impact Score
<b>Age</b>	<p>Including specific ages and age groups:</p> <p>Older people                      Young people                      Children                      Early years</p>	Low	PR inclusion criteria >18yrs old Commissioning contracts
<b>Disability</b>	<p>Where the impairment has a substantial and long term adverse effect on the ability of the person to carry out their day to day activities:</p> <p>Sensory, Physical, Learning, Mental Health. (including cancer, HIV, multiple sclerosis)</p>	Low	Incorporate adaptations to support patients needs
<b>Sex</b>	<p>Men/Male                      Women/Female</p>	Low	No bearing on treatment

Equality Target Group	Definitions	Equality Impact Score	Evidence to support Equality Impact Score
<b>Marriage/Civil Partnership</b>		Low	No bearing on treatment
<b>Pregnancy/Maternity</b>		Low	Unlikely to be referred
<b>Race</b>	Colour Nationality Ethnic/national origins	Low	Interpreters available as per Trust guidelines (see section 13)
<b>Religion or Belief</b>	All religions Including lack of religion or belief and where belief includes any religious or philosophical belief	Low	Adaptions made as per patient cultural preferences / religious observations eg Ramadan, and hydration when exercises
<b>Sexual Orientation</b>	Lesbian Gay men Bisexual	Low	No bearing on treatment
<b>Gender Reassignment</b>	Where people are proposing to undergo, or have undergone a process (or part of a process) for the purpose of reassigning the person's sex by changing physiological or other attribute of sex	Low	No bearing on treatment

### Summary

Please describe the main points/actions arising from your assessment that supports your decision.

Equality & Diversity and access to services underpins the standards of Pulmonary Rehabilitation as per Trust policy and BTS guidelines.

EIA Reviewer: Bev Quarton

Date completed: 17/11/23

Signature: B. Quarton