

National Respiratory Audit Programme (NRAP)


Pulmonary rehabilitation (PR) secondary care audit - clinical audit dataset


Version v3.0: April 2023


Contents


(you can navigate this data set using the interactive menu below)


Generic data	2
Programme referral	6
Key clinical information at time of assessment	8
Assessment tests and questionnaires	10
Key information relating to the programme	13
Key information at discharge	16
Discharge tests	17


Generic Data				
Item No.	Question	Text under question	 Pop-up help note	Validation
	Patient data	<p>Include patients:</p> <ul style="list-style-type: none"> • who are 35 years or over on the date of assessment • with a primary diagnosis of COPD • who have read the patient information sheet and provided consent (written or verbal) on the audit consent form or via the require verbal consent process. 		
1.1	NHS number	<p>The field will accept valid NHS Numbers which are ten digits long.</p> <p>Optionally, you can enter spaces or dashes or 3-3-4 format.</p> <p>Please use 'OVERSEAS' for patients that reside permanently outside the UK.</p>	<p>Patients should have given express consent for the NHS number to be used as a patient identifier.</p> <p><i>No data should be entered into this audit unless the patient read the patient information sheet and signed the patient consent form.</i></p> <p>This will be used to determine:</p> <ul style="list-style-type: none"> • case-mix • admission rate • mortality. <p>The NHS number is essential to create a Patient Record. It should only consist of digits.</p> <ul style="list-style-type: none"> • It may be formatted as 000 000 0000 (spaces) or 000-000-0000 (dashes) • It should contain exactly 10 digits. 	<p>Look of answer option: ____-____-____ or ____-____-____</p> <p>Must be a 10-digit number. Allows 'OVERSEAS'</p>

Generic Data				
Item No.	Question	Text under question	 Pop-up help note	Validation
			<ul style="list-style-type: none"> NHS Numbers start with a 4, 6 or 7 A warning will be given if the number appears invalid. <p>Use '[NONNHS]' for patients that reside in the UK, but do not have an NHS number.</p>	
1.2	Date of birth	dd/mm/yyyy	<p>Patients must be at least 35 years old. Date of birth may be entered numerically e.g. 01/03/1957 can be inputted as 1 3 57.</p> <p><i>No data should be entered into this audit unless the patient read the patient information sheet and signed the patient consent form.</i></p>	<p>Date required.</p> <p>The web tool only allows patients that are:</p> <ul style="list-style-type: none"> aged 35 years and over aged under 115 years old at the date of assessment. <p>Cannot be a future date.</p>
1.3	Gender	Please enter the patient's gender as it appeared in the notes/referral information.	<p>The 'Other' should be used for patients who do not recognise themselves as either male, female, or transgender.</p> <p>If the gender for the patient cannot be determined 'Not recorded/Preferred not to say' should be selected.</p>	<p>Radio buttons five options:</p> <ul style="list-style-type: none"> Male Female Transgender Other Not recorded/Preferred not to say <p>Can select one option only.</p>


Generic Data				
Item No.	Question	Text under question	 Pop-up help note	Validation
1.4	Home postcode	Please enter the full postcode. For patients with no fixed abode use '[NFA]' and for patients visiting from abroad please use 'OVERSEAS'. Square brackets must be used where specified.	<p>Permission has been given to facilitate case-mix adjustment and understand local referral trends.</p> <p>No data should be entered into this audit unless the patient read the patient information sheet and signed the patient consent form.</p>	<p>Allows '[NFA]' for patients with no fixed abode.</p> <p>If OVERSEAS entered at question 2.1, home postcode is greyed out.</p> <p>Square brackets must be used where specified.</p>
1.5	Ethnicity		<p>Patients should have given express consent for this information to be collected to facilitate case-mix adjustments and understand variances in clinical outcomes for different groups.</p> <p>No data should be entered into this audit unless the patient read the patient information sheet and signed the patient consent form.</p>	<p>Drop down list options:</p> <ul style="list-style-type: none"> • White British • White Irish • Any other White background • White and Black Caribbean • White and Black African • White and Asian • Any other mixed background • Indian • Pakistani • Bangladeshi • Any other Asian background • Caribbean • African • Any other Black background • Chinese • Any other ethnic group • Not known • Not stated

Generic Data				
Item No.	Question	Text under question	 Pop-up help note	Validation
				Can select one option only
1.6	Does this patient have a current mental illness or cognitive impairment recorded?		It is not expected that services ask patients about their current mental health. Please answer this question based on the information recorded in the patient notes.	Radio button options <ul style="list-style-type: none"> • Yes • No Can select one option only
1.6a	If yes to question 1.6, select all mental health illness/cognitive impairment recorded.		It is not expected that services ask patients about their current mental health. Please answer this question based on the information recorded in the patient notes. 'Other' should be used where the patients is considered to have a mental health illness or cognitive impairment but this does not appear in the options given.	Radio button options <ul style="list-style-type: none"> • Anxiety • Depression • Severe mental illness, • Dementia/mild cognitive impairment • Other Select all that apply Greyed out if 'no' for Q1.6


Programme referral				
Item No.	Question	Text under question	 Pop-up help note	Validation
2.1	Date of receipt of referral	dd/mm/yyyy If this is not known, please leave the date box blank and select 'Not known'.	For this question, please enter the date the referral letter was received by your programme, not the date of the letter. <i>This maps to the British Thoracic Society's 'Quality Standards for Pulmonary Rehabilitation in Adults' quality statements 1b and 3b (all subsequent references to these quality standards will solely list the relevant quality statement).</i>	Look of answer options: __/__/____ <input type="checkbox"/> Not known Can enter date value <u>OR</u> select 'Not known' only. Date options: <ul style="list-style-type: none"> • Enable entry of: Date OR 'Not known' • Date should not be in the future Date should not be before 01/01/18
2.2	Where was the patient referred from?		'Primary/Community – stable COPD' – includes referrals for all non-AECOPD patients from primary or community care. 'Secondary Care – stable COPD' – includes referrals for all non-AECOPD patients from secondary care. 'Primary/Community - post treatment for AECOPD' – includes referrals for patients treated at home or in a community location for AECOPD, this includes referrals from primary care post AECOPD. 'Secondary Care – post admission for AECOPD' - includes referrals for patients treated in hospital for AECOPD.	Radio buttons five options: <ul style="list-style-type: none"> • Primary/Community – stable COPD • Secondary Care – stable COPD • Primary/Community – post treatment for AECOPD • Secondary Care – post admission for AECOPD • Self-referral Can select one option only.

Programme referral				
Item No.	Question	Text under question	 Pop-up help note	Validation
			<i>This maps to BTS quality statement 3.</i>	
2.3	Date of initial Pulmonary Rehabilitation (PR) assessment appointment	<p>dd/mm/yyyy</p> <p>Please enter the first date the patient was assessed with the view of enrolling them onto a PR programme.</p> <p>Does not include telephone contact to book assessment. Does not include date offered, if patient DNAs or rearranges assessment.</p>	<i>This maps to BTS quality statements 1b and 3b.</i>	<p>Date required.</p> <p>Date options:</p> <ul style="list-style-type: none"> • Cannot be before date in 2.1, if date is entered. • Cannot be in the future. <p>Cannot be before 01/03/19</p>


Key clinical information at time of assessment

Item No.	Question	Text under question	 Pop-up help note	Validation
What were the most recent available values for the following:				
3.1	FEV1% predicted	Please enter a percentage between 10% and 125%.	Can be values provided by the referrer. <i>This maps to BTS quality statement 8.</i>	Look of answer options: _ _ _ % <input type="checkbox"/> Not recorded Can enter numeric value <u>OR</u> select 'Not recorded' only. Numeric option must be a: <ul style="list-style-type: none"> • percentage • maximum of 3 digits • whole numbers only (values with 1 decimal place or more will be rounded up or down) • number between 10 and 125.
3.2	FEV1/FVC ratio	Please enter a value between 0.20 and 0.95.	Can be values provided by the referrer. <i>This maps to BTS quality statement 8.</i>	Look of answer option: - . - - <input type="checkbox"/> Not recorded Can enter numeric value <u>OR</u> select 'Not recorded' only. Numeric option must be a: maximum of 1-digit number to 2 decimal places, between 0.20 and 0.95 (values more than 2 decimal place will be rounded up or down)


Key clinical information at time of assessment

Item No.	Question	Text under question	 Pop-up help note	Validation
3.3	What was the patient reported MRC (Medical Research Council) score at assessment?	Give the score as reported by the patient at assessment or select 'Not recorded'.	<p>Grade 1 – Not troubled by breathlessness except on strenuous exercise.</p> <p>Grade 2 – Short of breath when hurrying or walking up a slight hill.</p> <p>Grade 3 – Walks slower than contemporaries on level ground because of breathlessness or has to stop for breath when walking at own pace.</p> <p>Grade 4 – Stops for breath after walking about 100 metres [109 yards] or after a few minutes on level ground.</p> <p>Grade 5 – Too breathless to leave the house or breathless when dressing or undressing.</p> <p><i>This maps to BTS quality statements 1a and 2.</i></p>	<p>Radio buttons six options:</p> <ul style="list-style-type: none"> • Grade 1 • Grade 2 • Grade 3 • Grade 4 • Grade 5 • Not recorded <p>Can select one option only.</p>


Assessment tests and questionnaires

Item No.	Question	Text under question	 Pop-up help note	Validation
What exercise tests were recorded at initial assessment?				
4.1	Which walking test did you record during initial assessment?	Pick one walking test or select 'No walking test conducted' OR 'No walking test conducted - assessment done remotely'.	<p><i>This maps to BTS quality statements 8 and 9.</i></p> <p><i>'No walking test conducted - assessment done remotely' should be selected for those patients whose walking test could not be completed due to the PR programme being conducted remotely.</i></p>	<p>Radio buttons three options:</p> <ul style="list-style-type: none"> Incremental shuttle walk test (ISWT) Six-minute walk test (6MWT) No walking test conducted No walking test conducted - assessment done remotely <p>Can select one option only.</p>
4.1a	What was the value in metres?	Record as a whole number between 0 and 1020.	Record the highest number of metres performed during test.	<p>Greyed out if 'No walking test conducted' OR 'no walking test conducted - assessment done remotely' selected for 4.1.</p> <p>If test selected, numeric value required.</p> <p>Numeric option must be:</p> <ul style="list-style-type: none"> a whole number only between 0 and 1020
4.1b	Was a practice walking test performed at the time of the initial assessment?		<i>This maps to BTS quality statements 8 and 9.</i>	<p>Greyed out if 'No walking test conducted' OR 'no walking test conducted - assessment done remotely' selected for 4.1.</p> <p>If test selected at 4.1, radio buttons two options:</p> <ul style="list-style-type: none"> Yes No <p>Can select one option only.</p>


Assessment tests and questionnaires


Item No.	Question	Text under question	 Pop-up help note	Validation
4.2	Did you also record the Endurance shuttle walk test (ESWT)?	Only answer if ESWT was performed.	<i>This maps to BTS quality statements 8 and 9.</i>	Radio buttons two options: <ul style="list-style-type: none"> • Yes • No Default is no but can be changed to yes. Can select one option only.
4.2a	If 'Yes', what was the value in seconds?	Record as a whole number between 0 and 1200.		Greyed out if 'No' selected for 4.2. If 'Yes' selected, numeric value required. Numeric option must be: <ul style="list-style-type: none"> • a whole numbers only between 0 and 1200
Please indicate any health status questionnaires completed at initial assessment and provide values if recorded:				
4.3	Chronic Respiratory Questionnaire (CRQ)		<i>This maps to BTS quality statements 8 and 9.</i>	Radio buttons two options: <ul style="list-style-type: none"> • Yes • No questionnaire conducted Can select one option only.
4.3a-d	If 'Yes', enter a value for each domain between 1.00 - 7.00		<i>The CRQ includes four areas: dyspnoea, fatigue, emotional function, and mastery. In each area, scores are obtained by adding the scores for the items that make up the area and dividing this by the number of items (the value can never therefore be greater than 7).</i>	Greyed out if 'No questionnaire conducted' selected for 4.3. If 'Yes' selected, numeric values required: <ul style="list-style-type: none"> - Dyspnoea score - Fatigue score - Emotion score - Mastery score Must enter a value for all options.

Assessment tests and questionnaires


Item No.	Question	Text under question	 Pop-up help note	Validation
				Numeric options must be a: maximum of 1-digit number to 2 decimal places, between 1.00 and 7.00
4.4	COPD Assessment Test (CAT)		<i>This maps to BTS quality statements 8 and 9.</i>	Radio buttons two options: <ul style="list-style-type: none"> • Yes • No questionnaire conducted Can select one option only.
4.4a	If 'Yes', enter a value between 0 - 40.			Greyed out if 'No questionnaire conducted' selected for 4.4. If 'Yes' selected, numeric value required: <ul style="list-style-type: none"> - Total score Numeric option must be a: <ul style="list-style-type: none"> • whole number only maximum of 2-digit number between 0 and 40

Key information relating to the programme


Item No.	Question	Text under question	 Pop-up help note	Validation
5.1	Post assessment, was the patient enrolled onto a PR programme?	If a patient was not enrolled onto a PR programme, then you will not need to answer any further questions.	<p>If the patient was not enrolled onto PR after assessment on clinical grounds (e.g. co-morbidities, psycho-social problems, hospitalisation, death etc.) please record 'No - Clinically unsuitable'.</p> <p>If the patient declined an offer of PR (e.g. for personal, social, transport reasons) please record 'No - Patient choice'.</p> <p><i>This maps to BTS quality statements 1b and 3b.</i></p>	<p>Radio buttons three options:</p> <ul style="list-style-type: none"> • Yes • No – Clinically unsuitable • No – Patient choice <p>Can select one option only.</p>
5.1a	If 'Yes', enter start date	dd/mm/yyyy	If the patient was enrolled onto a PR programme, please enter the start date of the course.	<p>If 'Yes' selected for 5.1, date required.</p> <p>Date options:</p> <ul style="list-style-type: none"> • Cannot be before date entered in 2.1, if date is entered • Cannot be before date entered in 2.3 <p>Cannot be in the future</p>
5.2	Was the patient enrolled on a centre-based or home-based PR programme?		<p>A centre-based PR programme is a PR programme which is actively supervised in a venue provided by the service, by an appropriate healthcare professional.</p> <p>Home-based includes any PR programme that is delivered in the patient's home. This includes any home-based PR delivered:</p>	<p>'Check box' type two options:</p> <ul style="list-style-type: none"> • Centre-based • Home-based <p>Can select all that apply.</p>

Key information relating to the programme				
Item No.	Question	Text under question	 Pop-up help note	Validation
			<ul style="list-style-type: none"> • In person • Video-conferencing • Phone calls (including the manual programmes such as SPACE) • Other digital communication (structured email contact, app-based programmes etc) 	
5.2a	If home-based, what was the method of delivery?		<p>If an appropriate healthcare professional liaised with the patient via structured email contact, then please select 'Other digital communication'.</p> <p>If the patient was given an app-based programme to follow at home, and no further structured contact was received, please select 'Other digital communication'.</p> <p>If the patient undertook a manual PR programme e.g. SPACE, select 'Phone calls'.</p>	<p>Grey out if 'Centre-based' is selected at 5.2.</p> <p>'Check box' type if 'Home-based' selected for 5.2, four options:</p> <ul style="list-style-type: none"> • In person • Video-conferencing • Phone calls • Other digital communication <p>Can select all that apply.</p>
5.3	Total number of supervised PR sessions scheduled	Please enter the total number of supervised sessions (centre or home-based) that were planned for this patient <u>at initial assessment</u> , as a whole number.	<p>A supervised PR session is a PR session which is actively supervised by the service, by an appropriate healthcare professional.</p> <p>The supervision must be structured and relate directly to the exercise</p>	<p>Numeric value required.</p> <ul style="list-style-type: none"> • Whole numbers only <p>Must be between 1 – 50</p>


Key information relating to the programme


Item No.	Question	Text under question	 Pop-up help note	Validation
			completed by the patient as part of their prescribed PR programme. <i>This maps to BTS quality statement 4.</i>	
5.4	Total number of supervised PR sessions received		If the patient did not receive any supervised sessions in either category, please enter 0 (zero). If the patient dropped out before beginning PR or during the programme, then please record 0 or the relevant number of sessions and record the drop-out reason in section 6. Do not include initial or discharge assessment. <i>This maps to BTS quality statement 4.</i>	Look of answer options: a) Group sessions = __ b) 1:1 sessions = __ Numeric options: <ul style="list-style-type: none"> • Must be whole numbers only • Options must be between 0 – 50


Key information at discharge

Item No.	Question	Text under question	 Pop-up help note	Validation
6.1	Was a discharge assessment performed?	<p>If you answer 'No' to this question, you will be able to save the record as complete and will not need to complete the rest of the dataset.</p> <p>If the patient dropped out part way through the programme, select the drop-out reason.</p> <p>If the patient completed the PR programme but did not attend the discharge assessment, select 'No - DNA'</p>	<i>This maps to BTS quality statement 4.</i>	<p>Radio buttons four options:</p> <ul style="list-style-type: none"> • Yes • No – drop-out – health reasons • No – drop-out – patient choice • No - DNA <p>Can select one option only.</p>
6.1a	If 'Yes', what was the date of the discharge assessment?	dd/mm/yyyy		<p>If 'Yes' selected for 6.1, date required.</p> <p>Date options:</p> <ul style="list-style-type: none"> • Cannot be before date in 5.1a <p>Cannot be in the future</p>
6.1b	If 'Yes', was an individualised written discharge exercise plan provided for the patient?		<i>This maps to BTS quality statement 7.</i>	<p>Radio buttons two options:</p> <ul style="list-style-type: none"> • Yes • No <p>Can select one option only.</p>


Discharge tests

Item No.	Question	Text under question	 Pop-up help note	Validation
7.1	What was the patient reported MRC score at discharge?	Give the score as reported by the patient at assessment or select 'Not recorded'.	<p>Grade 1 – Not troubled by breathlessness except on strenuous exercise.</p> <p>Grade 2 – Short of breath when hurrying or walking up a slight hill.</p> <p>Grade 3 – Walks slower than contemporaries on level ground because of breathlessness, or has to stop for breath when walking at own pace.</p> <p>Grade 4 – Stops for breath after walking about 100 metres [109 yards] or after a few minutes on level ground.</p> <p>Grade 5 – Too breathless to leave the house or breathless when dressing or undressing.</p> <p><i>This maps to BTS quality statements 1a and 2.</i></p>	<p>Radio buttons six options:</p> <ul style="list-style-type: none"> • Grade 1 • Grade 2 • Grade 3 • Grade 4 • Grade 5 • Not recorded <p>Can select one option only.</p>
7.2	Which walking test did you record during the discharge assessment?	<p>Pick one walking test or select 'No walking test conducted' OR 'No walking test conducted – assessment done remotely'.</p> <p>Can only choose the same option as recorded in 4.1.</p>	<p><i>This maps to BTS quality statements 8 and 9.</i></p> <p><i>'No walking test conducted - assessment done remotely' should be selected for those patients whose walking test could not be completed due to the PR programme being conducted remotely.</i></p>	<p>Greyed out if 'No walking test conducted' OR 'no walking test conducted - assessment done remotely' is selected at 4.1.</p> <p>Radio buttons three options:</p> <ul style="list-style-type: none"> • Incremental shuttle walk test (ISWT) • Six-minute walk test (6MWT) • No walking test conducted • No walking test conducted - assessment done remotely <p>Can select one option only.</p>

Discharge tests				
Item No.	Question	Text under question	 Pop-up help note	Validation
				Can only choose same test as recorded in 4.1 or 'No walking test conducted' OR 'no walking test conducted - assessment done remotely'
7.2a	What was the value in metres?	Record as a whole number between 0 and 1020.		<p>Greyed out if 'No walking test conducted' OR 'no walking test conducted - assessment done remotely' selected for 7.2.</p> <p>If 'ISWT' or '6MWT' selected, numeric value required.</p> <p>Numeric option must be:</p> <ul style="list-style-type: none"> a whole number only between 0 and 1020
7.3	Did you also record the ESWT at discharge?	Can only record as yes if yes recorded in 4.2.	<i>This maps to BTS quality statements 8 and 9.</i>	<p>Radio buttons two options:</p> <ul style="list-style-type: none"> Yes No <p>Default is no but can be changed to yes.</p> <p>Can select one option only.</p> <p>Can only record as yes if yes recorded in 4.2.</p>
7.3a	If 'Yes', what was the value in seconds?	Record as a whole number between 0 and 1200.		<p>Greyed out if 'No' selected for 7.3.</p> <p>If 'Yes' selected for 7.3, numeric value required.</p> <p>Numeric option must be:</p> <ul style="list-style-type: none"> a whole numbers only between 0 and 1200

Discharge tests				
Item No.	Question	Text under question	 Pop-up help note	Validation
Please indicate any health status questionnaires completed at discharge and provide values if recorded:				
7.4	Chronic Respiratory Questionnaire (CRQ)		<p>Scoring guidelines: In each domain, add the scores for those questions and divide by the number of questions in that domain.</p> <p><i>This maps to BTS quality statements 8 and 9.</i></p>	<p>Greyed out if 'No questionnaire conducted' is selected at 4.3.</p> <p>Radio buttons two options:</p> <ul style="list-style-type: none"> • Yes • No questionnaire conducted <p>Can select one option only.</p>
7.4a	If 'Yes', enter a value for each domain between 1.00 - 7.00			<p>Greyed out if 'No questionnaire conducted' selected for 7.4.</p> <p>If 'Yes' selected, numeric values required:</p> <ul style="list-style-type: none"> - Dyspnoea score - Fatigue score - Emotion score - Mastery score <p>Must enter a value for all options.</p> <p>Numeric options must be a: maximum of 1-digit number to 2 decimal places, between 1.00 and 7.00</p>
7.5	COPD Assessment Test (CAT)		<i>This maps to BTS quality statements 8 and 9.</i>	<p>Greyed out if 'No questionnaire conducted' is selected at 4.4.</p> <p>Radio buttons two options:</p> <ul style="list-style-type: none"> • Yes • No questionnaire conducted <p>Can select one option only.</p>

Discharge tests

Item No.	Question	Text under question	 Pop-up help note	Validation
7.5a	If 'Yes', enter a value between 0 - 40.			<p>Greyed out if 'No questionnaire conducted' selected for 7.5.</p> <p>If 'Yes' selected, numeric value required:</p> <ul style="list-style-type: none">- Total score <p>Numeric option must be a:</p> <ul style="list-style-type: none">• whole number only <p>maximum of 2-digit number between 0 and 40</p>