

National Asthma and COPD Audit Programme (NACAP)

Pulmonary rehabilitation (PR) audit pilot services feedback: actions and responses

Version 2.7: January 2019

This document outlines feedback received from participating services during the NACAP PR audit pilot, and the actions and responses made as a result of that feedback. Feedback is divided into sections as per the sections of the dataset. You can find the finalised dataset used for the PR audit available at: www.rcplondon.ac.uk/nacap-pr

Contents

Dataset section: Generic Data	2
Dataset section: Programme referral	2
Dataset section: Key clinical information at time of assessment	4
Dataset section: Assessment tests and questionnaires	6
Dataset section: Key information relating to the programme	8
Dataset section: Key information at discharge	10
Dataset section: Discharge tests	12
General dataset questions.....	12

Dataset section: Generic Data

Questions in pilot dataset	<ul style="list-style-type: none"> • NHS number/CHI number (<i>exempt from pilot for information governance purposes</i>) • Date of birth (<i>exempt from pilot for information governance purposes</i>) • Gender • Home postcode (<i>exempt from pilot for information governance purposes</i>) • Ethnicity (<i>exempt from pilot for information governance purposes</i>)
Did you find all the questions in this section easy to understand and respond to?	<ul style="list-style-type: none"> • 100% of respondents found the questions in this section easy to understand and respond to.
If no, for what reasons did you find them challenging?	n/a
Please give us more information about what you found challenging.	n/a
NACAP team response to pilot feedback	n/a
Questions in final, public dataset	No changes to dataset items for this section.

Dataset section: Programme referral

Questions in pilot dataset	<ul style="list-style-type: none"> • Date of receipt of referral • Where was the patient referred from? • Date of initial Pulmonary Rehabilitation (PR) assessment appointment
Did you find all the questions in this section easy to understand?	<ul style="list-style-type: none"> • 79% of respondents found the questions in this section easy to understand and respond to. • 21% of respondents did not find the questions in this section easy to understand and respond to.

Pulmonary rehabilitation pilot dataset – public version | version 2.8: 25 February 2019

National Asthma and COPD Audit Programme
pulmrehab@rcplondon.ac.uk | 020 3075 1526
www.rcplondon.ac.uk/nacap

NACAP: Pulmonary rehabilitation

<p>If no, for what reasons did you find them challenging?</p>	<ul style="list-style-type: none"> • ‘Where was the patient referred from?’ was reported by: <ul style="list-style-type: none"> ○ two respondents as hard to understand ○ one respondent as difficult to obtain the information for ○ one respondent as difficult to answer correctly and consistently using the help notes and rationale. • ‘Date of initial PR assessment appointment’ was reported by one respondent as difficult to answer using the options available.
<p>Please give us more information about what you found challenging.</p>	<p>Location of referral</p> <p>Pilot feedback: ‘Clarification on community vs primary care; self-referral, post treatment AE community’</p> <p>Pilot feedback: ‘Can you clarify Community? Does post admission need to be within a set number of weeks and just for an exacerbation of COPD? Primary care - stable, there is no primary care post AECOPD (or would that then be classed as Community?)’</p> <p>NACAP response: Following pilot feedback, the response options have been amended for clarity as we are looking at the number of services that enrol post-AECOPD patients within 4 weeks as per the BTS quality standards. The help notes for question 2.2 ‘Where was the patient referred from?’ have also been updated to provide more information about the options available for place of referral. Options now include:</p> <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 <p>The help notes are as follows:</p> <ul style="list-style-type: none"> • ‘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. • ‘Secondary Care – post admission for AECOPD’ - includes referrals for patients treated in hospital for AECOPD. • ‘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. <p>Pilot feedback: ‘What if it is not clear that the patient has been treated for an exacerbation do we just assume stable?’</p> <p>NACAP response: If it is not clear whether the patient has been treated for an exacerbation then we would recommend that services review their referral or assessment paperwork to allow them to distinguish between stable and post AECOPD patients. This will help services to meet the BTS quality standards around enrolment within one month for patients post hospitalisation for AECOPD. If this information is not available and cannot be sourced, then services should choose most appropriate ‘stable COPD’ answer option or self-referral.</p>

	<p>Pilot feedback: 'Secondary care - stable is duplicated on the data collection sheet'</p> <p>NACAP response: Noted and updated on the data collection sheet.</p> <p>Date of initial PR assessment appointment</p> <p>Pilot feedback: 'The date of initial assessment – I am not clear if they DNA/cancel their first appointment, do you put the first appointment offered, or the first they attended? For the audit I had all patients who attended their first offered, but if the option is the first attended, it will look like we have longer waiting lists than we do.'</p> <p>NACAP response: Question 2.3 'Date of initial PR assessment appointment' is the date the patient attended their first appointment, a note has been added to the dataset to clarify. This will allow services to see and manage regular DNAs or deferrals that take their waiting times over the recommended 90 days. Services are able to add their own fields onto the web tool if they wish, which can be used for local reporting and as supplementary evidence for nationally reported data.</p>
NACAP team response to pilot feedback	See above responses provided in teal.
Questions in final, public dataset	No changes to dataset items for this section.

Dataset section: Key clinical information at time of assessment

Questions in pilot dataset	<ul style="list-style-type: none"> • Smoking status • FEV1 % predicted • FEV1/FVC ratio • Patient's body mass index (BMI) • What was the patient reported MRC (Medical Research Council) score at assessment? • Presence of comorbidities <ul style="list-style-type: none"> ○ Was a history of cardiovascular disease recorded for this patient? ○ Was a history of a lower limb musculoskeletal disorder recorded for this patient? ○ Was a history of history of mental illness recorded for this patient? <ul style="list-style-type: none"> ▪ If 'Yes', select all mental health illnesses recorded
Did you find all the questions in this section easy to understand?	<ul style="list-style-type: none"> • 77.78% of respondents found the questions in this section easy to understand and respond to. • 22.22% of respondents did not find the questions in this section easy to understand and respond to.

<p>If no, for what reasons did you find them challenging?</p>	<ul style="list-style-type: none"> • ‘FEV1% predicted’ was reported by: <ul style="list-style-type: none"> ○ one respondent as difficult to obtain information for ○ one respondent as difficult to answer using the options available. • ‘FEV1/FVC ratio’ was reported by one respondent as difficult to obtain information for. • ‘Was a history of cardiovascular disease recorded for this patient?’ was reported by: <ul style="list-style-type: none"> ○ one respondent as difficult to answer using the options available. ○ one respondent as difficult to answer correctly using the help notes and rationale. • ‘Was a history of a lower limb musculoskeletal disorder recorded for this patient?’ was reported by one respondent as difficult to answer correctly using the help notes and rationale. • ‘Was a history of history of mental illness recorded for this patient?’ was reported by: <ul style="list-style-type: none"> ○ one respondent as difficult to answer using the options available ○ one respondent as difficult to answer correctly using the help notes and rationale ○ one respondent as difficult to answer correctly using the help notes and rationale.
<p>Please give us more information about what you found challenging.</p>	<p><u>Spirometry</u> Pilot feedback: ‘FEV1% predicted - not able to input absolute value.’ NACAP response: This question is looking to collect the % of the predicted FEV1, not the actual FEV1 value in litres. This can be calculated by dividing the measured value in litres by the predicted value in litres and multiplying by 100.</p> <p>Pilot feedback: ‘Can the FEV1 and ratio be that provided by the referrer, not that we have had to complete this in the assessment.’ NACAP response: Both FEV1% predicted and FEV1/FVC ratio can be provided by the referrer (i.e. spirometry does not need to be re-done as part of the assessment appointment), help notes have been updated to reflect this.</p> <p><u>Comorbidities</u> Pilot feedback: ‘Qu3.6 – History of Cardiovascular disease. The icon to click for more information seems to make this quite specific. Does not include hypercholesterolaemia, doesn’t give a timeframe (A pt is coded IHD since 2009, no specific meds except a statin since then, so not sure what to put?)’ Pilot feedback: ‘It was unclear if Hypertension should be included from the help text.’ NACAP response: This question pertains to serious/acute cardiovascular comorbidities that may increase the risk of a patient being admitted to hospital and/or prevent them from completing a PR programme. We would not expect well managed hypertension or hypercholesterolaemia to be included in this. The help notes for this question have been updated to increase clarity.</p>

	<p>Pilot feedback: ‘Does the ‘lower limb disorders’ include back pain and problems?’</p> <p>NACAP response: Lower-limb disorder can include back problems. The wording and help notes of question 3.7 ‘Was a history of a lower limb or lower back musculoskeletal disorder recorded for this patient?’ have been updated to make this clear.</p> <p>Pilot feedback: ‘Qu 3.8 - mental illness - not clear if this includes anxiety and depression, and these may also get diagnosed at assessment from other health questionnaires not listed in audit.’</p> <p>Pilot feedback: ‘Does the history of mental illness have to be a clinically diagnosed illness, not a high psychological score at assessment?’</p> <p>NACAP response: For a patient to be recorded as having a history of mental illness, the patient would have to have a pre-existing clinically diagnosed illness (i.e. which predates the PR assessment). Mild to moderate anxiety and depression diagnosed via health questionnaires during assessment would not meet this criteria.</p>
NACAP team response to pilot feedback	See above responses provided in teal.
Questions in final, public dataset	No changes to dataset items for this section.

Dataset section: Assessment tests and questionnaires	
Questions in pilot dataset	<p>Which test did you record during initial assessment?</p> <ul style="list-style-type: none"> • What was the value in metres? • Was a practice test performed at the time of the initial assessment? • Did you also record the Endurance shuttle walk test (ESWT)? • If ‘Yes’, what was the value in seconds? <p>Please indicate any health status questionnaires completed at initial assessment and provide values if recorded:</p> <ul style="list-style-type: none"> • Chronic Respiratory Questionnaire (CRQ) • If ‘Yes’, enter a value for each domain between 1.0 - 7.0 • COPD Assessment Test (CAT) • If ‘Yes’, enter a value between 0 - 40.
Did you find all of the questions in this section easy to understand?	<ul style="list-style-type: none"> • 83.33% of respondents found the questions in this section easy to understand and respond to. • 16.67% of respondents did not find the questions in this section easy to understand and respond to.

Pulmonary rehabilitation pilot feedback | version 2.8: 25 February 2019

National Asthma and COPD Audit Programme

pulmrehab@rcplondon.ac.uk | 020 3075 1526

www.rcplondon.ac.uk/nacap

Page 6 of 15

NACAP: Pulmonary rehabilitation

<p>If no, for what reasons did you find them challenging?</p>	<ul style="list-style-type: none"> • ‘Which test did you use during initial assessment?’ reported by: <ul style="list-style-type: none"> ○ two respondents as difficult to answer using the options available ○ one respondent as difficult to answer correctly and consistently using the help notes and rationale. • ‘Value in metres’ was reported by one respondent as difficult to answer correctly and consistently using the help notes and rationale. • ‘Was a practice test performed at the time of the initial assessment?’ was reported by one patient as difficult to answer correctly and consistently using the help notes and rationale. • ‘Chronic Respiratory Questionnaire (CRQ)’ was reported by one respondent as difficult to answer correctly and consistently using the help notes and rationale.
<p>Please give us more information about what you found challenging.</p>	<p>Exercise tests</p> <p>Pilot feedback: ‘4.1 if yes, shouldn't let you go to 4.2 without adding the value for the 6MWT or ISWT’</p> <p>NACAP feedback: 4.1a ‘What was the value in metres’ has been updated to be mandatory if a test is selected at 4.1 ‘Which walking test did you record during initial assessment?’</p> <p>Pilot feedback: ‘4.1a and 4.1b should be swapped around.’</p> <p>NACAP response: 4.1b ‘Was a practice walking test performed at the time of initial assessment’ will remain after 4.1a as 4.1a is asking for the value of the walking test recorded at 4.1. If this question was to follow 4.1b ‘Was a practice walking test performed at the time of the initial assessment?’ it may cause confusion as to which test value should be recorded (and services may record the value of the practice test).</p> <p>Pilot feedback: ‘4.1a should read highest no. of metres or best score.’</p> <p>NACAP response: Help notes updated to provide more information on which value should be recorded at 4.1a ‘What was the value in metres’</p> <p>Pilot feedback: ‘If a patient attends an assessment, but is too unwell or inappropriate, and therefore does not complete a walk test, I am not clear if they should be discounted from the audit, or included but then write walk test not completed.’</p> <p>Pilot feedback: Qu4.1 – There is no option to say no walking test performed. A patient attended assessment and was not enrolled to PR for clinical reasons. But she could not complete any of the outcomes, including walking test. So this record is incomplete as I cannot put a score.</p> <p>NACAP response: All patients who have been assessed and consent to be part of the audit should be included. If a patient is too unwell or inappropriate for PR then services can input this data in question 5.1 ‘Post assessment, was the patient enrolled onto a PR programme?’ A ‘No test recorded’ response option has been added to question 4.1. ‘Which test did you record during initial assessment?’ This will allow records to be completed in full rather than remaining in draft if exercise tests were not performed at initial assessment.</p>

	<p>Pilot feedback: ‘Timed sit to stand is sometimes used at the pre-assessments, especially for home PR.’</p> <p>NACAP response: To reduce the burden on PR services and streamline the dataset, only exercise tests recommended by the BTS quality standards are included in the dataset. Services are able to record alternative test results via the ‘Custom fields’ facility on the web tool to facilitate local reporting.</p> <p>Health status questionnaires</p> <p>Pilot feedback: ‘4.3 values are to 1 decimal point so rounding it up could influence results, should be to 2 decimal places.’</p> <p>NACAP response: Question 4.3 ‘If ‘Yes’ (CRQ), enter a value for each domain between 1.00 - 7.00’ has been updated to allow values to two decimal points.</p> <p>Pilot feedback: ‘Can the CRQ/CAT have a pre-filled no, therefore you only need to enter yes if one of the test was done to save time.’</p> <p>NACAP response: PROMs such as CRQ and CAT will be reported on in the 2020 PR report, therefore it is important for the audit to encourage services to collect this information. Furthermore pre-populating core items on the web tool goes against best practice in audit data collection that says that audit data should be user originated.</p>
NACAP team response to pilot feedback	See above responses provided in teal.
Questions in final, public dataset	No changes to dataset items for this section.

Dataset section: Key information relating to the programme	
Questions in pilot dataset	<ul style="list-style-type: none"> • Post assessment, was the patient enrolled onto a PR programme? <ul style="list-style-type: none"> ○ If ‘Yes’, enter start date • Where is the PR programme located? • If ‘Centre-based’, select type of programme • Number of supervised PR sessions received • Total number of sessions • Total number of supervised PR sessions scheduled

Pulmonary rehabilitation pilot feedback | version 2.8: 25 February 2019

National Asthma and COPD Audit Programme

pulmrehab@rcplondon.ac.uk | 020 3075 1526

www.rcplondon.ac.uk/nacap

Page 8 of 15

NACAP: Pulmonary rehabilitation

<p>Did you find all the questions in this section easy to understand?</p>	<ul style="list-style-type: none"> • 72.22% of respondents found the questions in this section easy to understand and respond to. • 27.78% of respondents did not find the questions in this section easy to understand and respond to.
<p>If no, for what reasons did you find them challenging?</p>	<ul style="list-style-type: none"> • ‘Post assessment, was the patient enrolled onto a PR programme?’ was reported by two respondents as difficult to answer using the options available. • ‘Total number of supervised PR sessions received’ was reported by: <ul style="list-style-type: none"> ○ one respondent as hard to understand ○ one respondent as difficult to answer using the options available. • ‘Total number of supervised PR sessions scheduled’ was reported by: <ul style="list-style-type: none"> ○ one respondent as difficult to answer using the options available ○ one respondent as difficult to answer correctly using the help notes and rationale.
<p>Please give us more information about what you found challenging.</p>	<p><u>Enrolment onto PR programme</u> Pilot feedback: ‘This question (5.1 Post assessment, was the patient enrolled onto a PR programme?) should come before the assessment because if the patient declined or was unsuitable the assessment wouldn’t be performed and none of the outcome measures would have taken place.’ NACAP response: Patients will only be included in the audit if they give consent, usually at initial assessment. If patients are deemed as unsuitable for assessment then the service can report on these patients in the organisational report. No patient data will be collected for these patients. If patients are well enough to complete an initial assessment but are deemed as clinically unsuitable to start PR, then services are able to record this in question 5.1 ‘Post assessment, was the patient enrolled onto a PR programme?’ by choosing the response option ‘No – Clinically unsuitable’. Each question in section 3 ‘Key clinical information at time of assessment’ and section 4 ‘Assessment tests and questionnaires’ has a ‘No walking test conducted’ or ‘No’ option, as appropriate, to allow services to record information for patients who partially complete initial assessments.</p> <p><u>Number of PR session received</u> Pilot feedback: ‘It was unclear if the initial assessment and final assessment should have been included as they are face to face.’ Pilot feedback: ‘Does 5.3b) include the individuals pre and post assessment 1:1’ NACAP response: Help notes have been updated to clarify that initial and discharge assessments should not be reported as supervised PR sessions.</p>

	<p>Pilot feedback: ‘Can the answers to 5.3 be pre-filled with 0 so you don't have to enter them all just change the number that is appropriate to that person (this would save time).’</p> <p>NACAP response: Unfortunately we are not able to pre-populate core items on the web tool as this goes against best practice in audit data collection that says that audit data should be user originated. We have, however, endeavoured to reduce burden in other areas of the dataset (such as pre-populating non-core items, such as ESWT test completion at initial assessment).</p> <p>Number of scheduled PR sessions</p> <p>Pilot feedback: ‘Does this include rescheduled sessions if patient DNA (5.4 Total number of supervised PR sessions scheduled).’</p> <p>NACAP feedback: Help notes have been updated to clarify that the total number of sessions scheduled (question 5.2b & 5.3a) is the number of sessions scheduled at initial assessment.</p> <p>General feedback</p> <p>Pilot feedback: ‘Some patients may attend the pre-assessment and start on an exercise group with us rather than the whole PR course (step up/step down and whilst waiting for a cohort course), these answers don't allow us to capture the difference between those patients and patients who do not take up anything.’</p> <p>NACAP response: If services provide bespoke options before or after PR, these can be captured via the ‘Custom fields’ facility on the web tool to facilitate local reporting. Unfortunately, data inputted in ‘Custom fields’ will not be reported in regional or national reports.</p>
NACAP team response to pilot feedback	See above responses provided in teal.
Questions in final, public dataset	No changes to dataset questions for this section.

Dataset section: Key information at discharge	
Questions in pilot dataset	<ul style="list-style-type: none"> • Was a discharge assessment performed? • If ‘Yes’, what was the date of the discharge assessment? • If ‘Yes’, was an individualised written discharge exercise plan provided for the patient? • What was the patient reported MRC score at discharge?

Pulmonary rehabilitation pilot feedback | version 2.8: 25 February 2019

National Asthma and COPD Audit Programme

pulmrehab@rcplondon.ac.uk | 020 3075 1526

www.rcplondon.ac.uk/nacap

Page 10 of 15

NACAP: Pulmonary rehabilitation

<p>Did you find all the questions in this section easy to understand?</p>	<ul style="list-style-type: none"> • 82.35% of respondents found the questions in this section easy to understand and respond to. • 17.65% of respondents did not find the questions in this section easy to understand and respond to.
<p>If no, for what reasons did you find them challenging?</p>	<ul style="list-style-type: none"> • ‘Was a discharge assessment performed?’ was reported by: <ul style="list-style-type: none"> ○ one respondent as hard to understand. ○ one respondent as difficult to answer using the options available. • ‘If yes, was an individualised written discharge exercise plan provided for the patient?’ was reported by one respondent as difficult to answer correctly and consistently using the help notes and rationale.
<ul style="list-style-type: none"> • Please give us more information about what you found challenging. 	<p>Completion of PR</p> <p>Pilot feedback: ‘There is no option to choose completer with no outcomes.’</p> <p>NACAP response: <i>If a patient attends a discharge assessment but does not complete any outcome assessments, then services can record this by choosing the ‘Yes’ response option for question 6.1 ‘Was a discharge assessment performed?’, and then choosing the ‘No walking test conducted’ or ‘No’ response options, as appropriate, for each question in section 7 ‘Discharge tests’. If a patient did not attend the discharge assessment but did complete all their PR sessions, then services should choose ‘No – DNA’ for question 6.1. The help notes for question 6.1 ‘Was a discharge assessment performed?’ have been updated to make this clearer. In the annual report we will be reporting on the percentage of patients that attended a discharge assessment (national quality improvement aim).</i></p> <p>Pilot feedback: ‘No-drop out patient choice should be included.’</p> <p>NACAP response: ‘No-drop-out-patient choice’ is included as a response option in 6.1 ‘Was a discharge assessment performed?’</p> <p>General feedback</p> <p>Pilot feedback: ‘No option given to say patient referred on to further exercise scheme, or if they are referred to a respiratory specific exercise programme such as a maintenance programme or open age.’</p> <p>NACAP response: <i>In an effort to streamline the dataset and reduce the burden on services, we have retained only items that are part of the BTS quality standards, and if improved, could have the greatest impact on quality of care for patients with COPD. Services can, however, record onward referrals via the ‘Custom fields’ facility on the web tool.</i></p>
<p>NACAP team response to pilot feedback</p>	<p>See above responses provided in teal.</p>
<p>Questions in final, public dataset</p>	<p>No changes to dataset questions for this section.</p>

Dataset section: Discharge tests

Questions in pilot dataset	<p>What exercise tests recorded at discharge?</p> <ul style="list-style-type: none"> • Which test did you record during the discharge assessment? • What was the value in metres? • Did you also record the ESWT at discharge? • If 'Yes', what was the value in seconds? <p>Please indicate any health status questionnaires completed at discharge and provide values if recorded:</p> <ul style="list-style-type: none"> • Chronic Respiratory Questionnaire (CRQ) • If 'Yes', enter a value for each domain between 1.0 - 7.0 • COPD Assessment Test (CAT) • If 'Yes', enter a value between 0 – 40
Did you find all the questions in this section easy to understand?	<ul style="list-style-type: none"> • 94.12% of respondents found the questions in this section easy to understand and respond to. • 5.88% of respondents did not find the questions in this section easy to understand and respond to.
If no, for what reasons did you find them challenging?	<ul style="list-style-type: none"> • 'Which test did you record during the discharge assessment?' was reported by one respondent to be difficult to answer using the options available.
Please give us more information about what you found challenging.	<p>Pilot feedback: 'Did not include sit to stand test.'</p> <p>NACAP response: <i>To reduce the burden on PR services and streamline the dataset, only exercise tests recommended by the BTS quality standards are included in the dataset. Service are able to record alternative test results via the 'Custom fields' facility on the web tool.</i></p>
NACAP team response to pilot feedback	See above responses provided in teal.
Questions in final, public dataset	No changes to dataset items for this section.

General dataset questions

How long on average did this dataset take you to	<ul style="list-style-type: none"> • Less than 5 minutes - 11.76% - 2 responses • Less than 10 minutes - 47.06% - 8 responses • Less than 15 minutes - 29.41% - 5 responses 	<p>NACAP response: <i>As the audit becomes embedded in service practice we expect that the time</i></p>
--	--	--

Pulmonary rehabilitation pilot feedback | version 2.8: 25 February 2019

National Asthma and COPD Audit Programme

pulmrehab@rcplondon.ac.uk | 020 3075 1526

www.rcplondon.ac.uk/nacap

Page 12 of 15

NACAP: Pulmonary rehabilitation

complete per patient (in minutes)?	<ul style="list-style-type: none"> • 15 minutes or more - 11.76% - 2 responses 	taken to enter each patient record will reduce.
What were the time consuming elements (i.e. getting notes, finding information on a particular element of the dataset etc)?	<ul style="list-style-type: none"> • ‘Familiarity of the audit - I got quicker.’ • ‘Finding information from notes/ can sometimes have different referral paperwork.’ • ‘Finding the information needed on a particular dataset.’ • ‘Locating specific information eg MRC score, dates of starting and counting sessions attended.’ • ‘Seeking the relevant info from electronic notes.’ • ‘Finding some information on database.’ • ‘Finding the information amongst the notes.’ • ‘Accessing electronic notes.’ • ‘I was keying in the data.’ • ‘Finding info on spirometry and BMI as we don't have that immediately to hand.’ • ‘Having to go between the form and electronic database. Information required is stored in different parts of our system so takes time to get to.’ • ‘Collecting data from patient notes.’ • ‘Finding the medical details information (eg MSK, mental illness and more detailed smoking status). Filling in boxes with 0 when they could be presumed 0 unless a number is entered.’ • ‘Drawing relevant info from patient notes.’ • ‘Finding the relevant information and inputting into the web tool.’ • ‘I used the data collection sheet as I went through which made entering the information very quick. Working out the domain scores for the CRQ’ 	<p>NACAP response: We expect that on commencement of the audit, services will put in place systems to make data collection quicker and that over time it will be easier to collate the audit information. Templates and other helpful information can be found on the BTS Respiratory Futures website.</p> <p>Best practice for audit data collection recommends that all data should be user originated and default data should not be provided. We have therefore endeavoured to reduce burden in other areas of the dataset by only including items that are subject to the greatest variation and, if improved, could have the greatest impact on quality of care for patients with COPD.</p>
Did you have any other feedback on this dataset?	<p>Question clarity</p> <p>Pilot feedback: ‘I am not sure I have answered this accurately - I would have counted all PR sessions as face to face including videoconferencing rather than separating these. Telephone calls/emails wouldn't normally count as face to face interventions.’</p> <p>NACAP response: We have amended the wording of the answer options in question 5.3 ‘Number of supervised PR sessions received’ to make to more clear what data the question is asking for. It is now:</p> <ul style="list-style-type: none"> ○ In person - group sessions = __ ○ In person – 1:1 in person = __ 	

Questionnaire responses

Pilot feedback: 'I was unable to reflect that I did not assess walk test for a patient at assessment or following due to being unwell and was discharged as a result.'

NACAP response: 'No test recorded' added to question 4.1. 'Which test did you record during initial assessment?'

Pilot feedback: 'The Gender and Ethnicity is not a question we want to ask our patients directly. If this could be on the consent form for them to complete if they wished to this would be better, if they leave it blank we can then put not recorded.'

NACAP response: Gender and ethnicity are included on the dataset for equality purposes and services are encouraged to collect data that would allow them to provide patient centred care. If services do not collect this information routinely then they can use any information that is provided in the referral or patient notes, or are able to select 'Not recorded/prefer not to say' for question 1.3 'Gender' or 'Not stated' for 1.5 'Ethnicity'.

Technical issues

Pilot feedback: 'Qu4.3 - It didn't save CRQ score for one patient and so will only save as a draft, but it won't let me go back in to edit the data to put it in. It worked fine for all the others, so I think I must have made an error somewhere, but it will neither let me edit it nor save it.'

Pilot feedback: 'When you click next to move on to the next section it would be helpful/more user friendly if it took you to the top of the next page. It is a little frustrating that you click next then have to scroll up.'

NACAP response: All technical feedback has been passed to the web team who will check the web tool prior to launch.

Pilot feedback: 'Is there a way that we can use this to enter all our PR patients as the information will only pull off COPD which means a duplication of our databases.'

NACAP response: NACAP is commissioned by the Healthcare Quality Improvement Partnership (HQIP) to collect information about COPD patients only, therefore we do not have any legal basis for collecting non-COPD patient data within the audit web tool. Consequently, data cannot be entered onto the web tool if the patient;

- a. Does not have COPD
- b. Has not consented for their data to be part of this audit.

Service will be able to bulk upload data into the web tool via csv. file (Microsoft Excel), therefore service could use a spreadsheet to enter all patient data but then only upload COPD patient data. For more information please contact the team at pulmrehab@rcplondon.ac.uk

Question inclusion

Pilot feedback: 'Recording of BMI post PR.'

NACAP response: We do not collect BMI at the end the PR as reduction in BMI is not a recommended outcome of PR. BMI is collected at the beginning, however, so we can see whether outcomes for patients vary depending on their initial BMI.

Pilot feedback: 'Do we need to include anything regarding patients with oxygen?'

NACAP response: The use of oxygen has been removed from the dataset for continuous audit as it did not align to the key quality improvement priorities of the audit. In order to reduce burden on services, we have tried to only retain items that are align to the key priorities and are likely to have the biggest impact on patient care. Services, however, are able to collect this information via the 'Custom fields' facility on the web tool for local reporting purposes.

Pilot feedback: 'It would be useful to have the opportunity to add case specific notes for individual patients. This would help on a local level to reflect if there was a delay to start for example, why that was. This helps us see if it was service or patient related issue so we can use this to apply any relevant adjustments to ways of working.'

NACAP response: Case specific notes can be added via the 'Custom fields' facility on the web tool.

Pilot feedback: 'In our service (and the neighbouring one to us) for our Health Status Questionnaire we use the Clinical Chronic Obstructive Pulmonary Disease Questionnaire (CCQ). That is validated in PR. At the moment you do not have that as an option in the assessment section of the audit. Could this be added please, otherwise it will look (wrongly) like we are not compliant with QS8 and 9.'

NACAP response: The CRQ and CAT have been included in the dataset following feedback that these are the most widely used patient reported outcomes (PROMs) in the PR community. We recommend the use of CAT for PR services as it is a quick and easy to complete measure, validated for COPD and PR, and widely used in the UK. This would also support with the benchmarking of services. If services use a different validated tool to collect PROMs then the data can be recorded using the 'Custom fields' facility on the web tool for local reporting purposes. Unfortunately, data inputted in 'Custom fields' will not be reported in regional or national reports.