National Audit of Cardiac Rehabilitation
USER GUIDE – Data Entry

Registering and Logging In

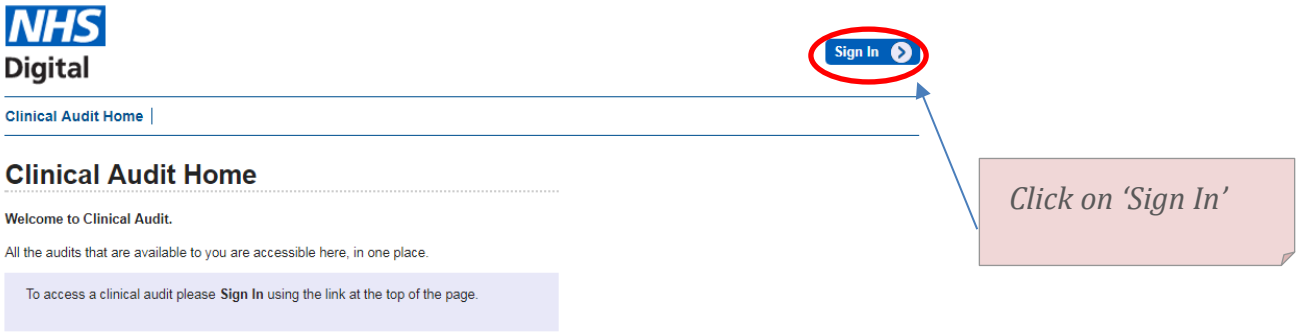
To register for access to the audit, you need to have completed the 'User Registration Form' and this needs to be authorised by your Caldicott Guardian. The form can be found here:

http://www.cardiacrehabilitation.org.uk/downloads.htm

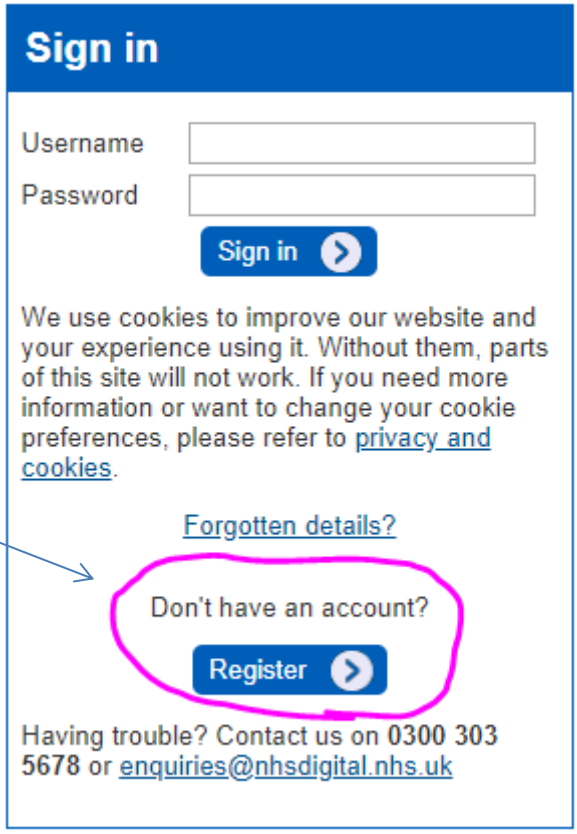
or you can email the team asking for a copy. The CG needs to email the form directly to enquiries@nhsdigital.nhs.uk who will confirm registration by email.

All new users need this form completed and authorised. It is possible to have a login to more than one programme if you work across more than one – please speak to the team for further information.

You also need to go to the web page https://clinicalaudit.hscic.gov.uk/ and create an SSO (Single Sign On) account, using the same email address registered on the form.



Register your SSO account here using the same email address that was authorised on the User Registration form.



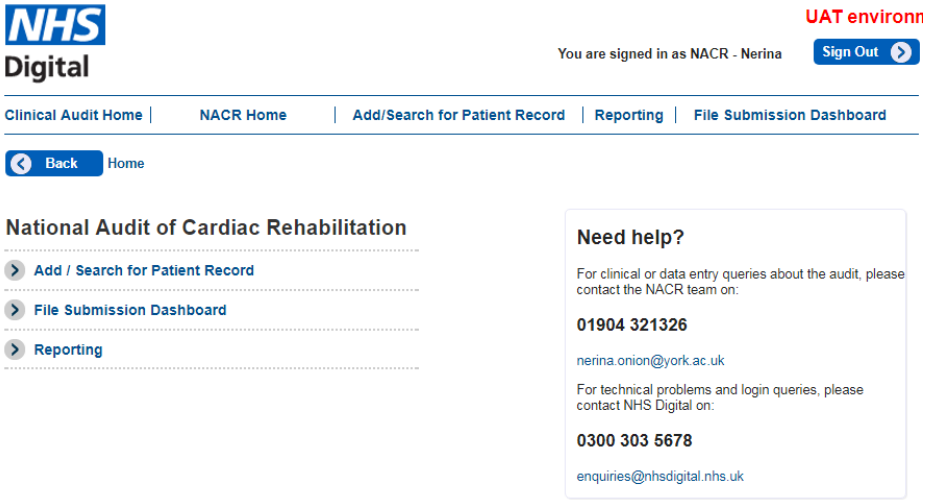
Using the email you've registered on the SSO as your Username, and the password you registered, sign in to the database.

NB: If you need to put data on for more than one programme/site, with different programme codes, you will need a unique login for each, using different emails.

The top menu – available at any time:

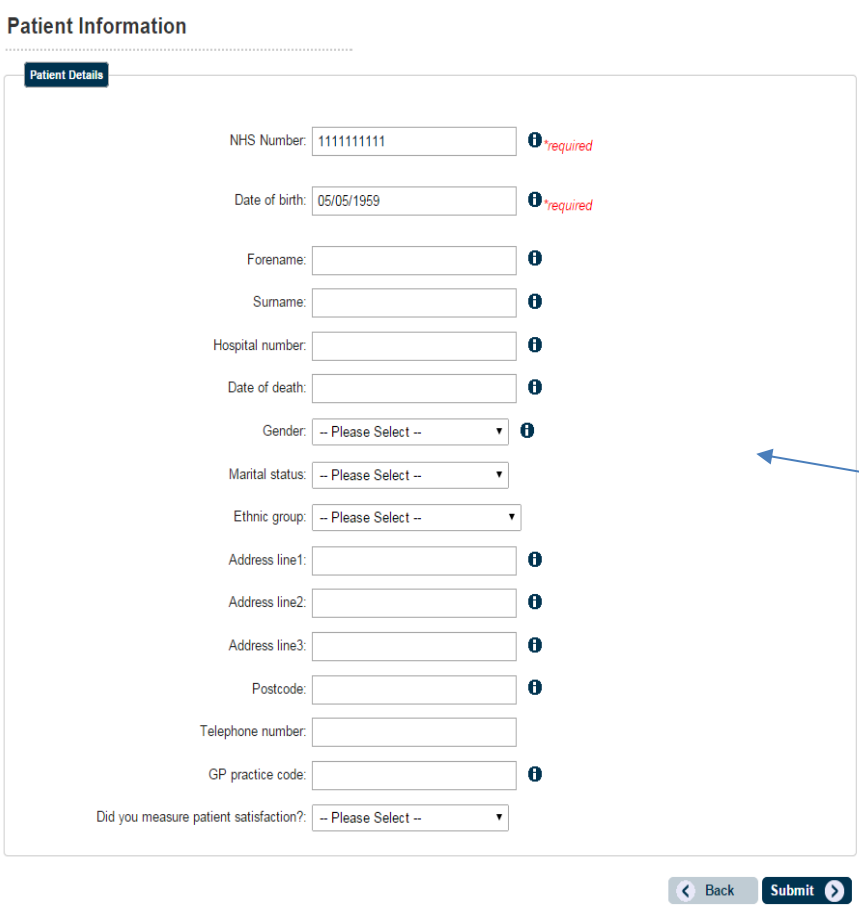
Clinical Audit Home: will take you to the list of available audits (usually just NACR)
NACR Home: will take you to the list of actions available for NACR
Add/Search for Patient Record: Add a new patient or find an existing one
Reporting: List of available reports that can be run for your NACR data
File Submission Dashboard: For programmes that import their data from another system.

The NACR Home page:
(including contact details for queries)



To add or search for a patient you must put in the patient's NHS number and DOB. ***You cannot enter a patient on the NACR database without a valid NHS number.*** *When you have done this, click on Submit.*

Adding a new Patient:



If the patient is already on the database you will be taken to the 'Record Tree' showing their existing NACR records.

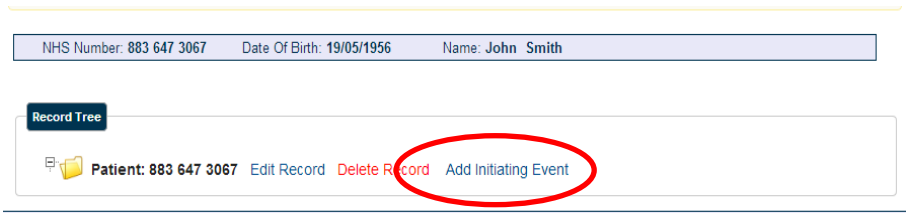
*If they are a new patient, you will be taken to the Patient Details screen. The first 2 fields are mandatory (*required*)*

The icons are online help and information – hover your mouse cursor over each one to read the content.

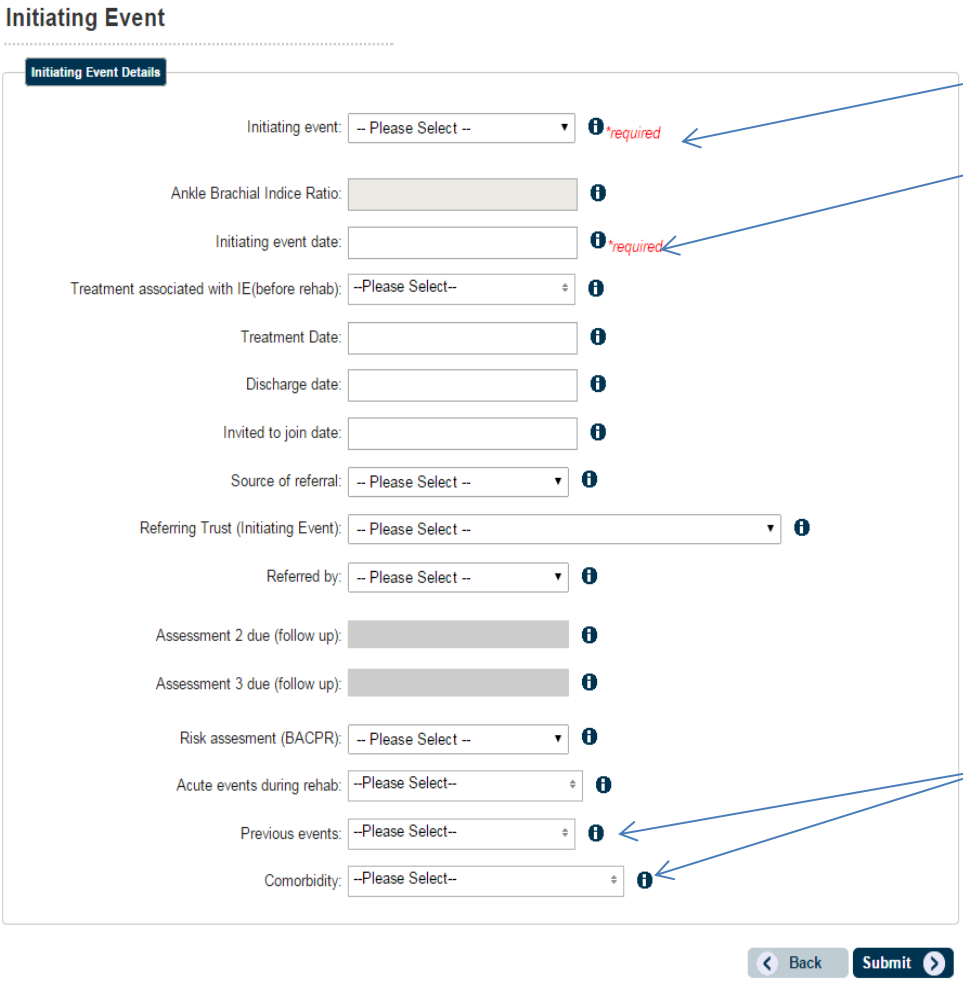
Once completed, click on Submit. This will create a new patient record.

NB: we don't receive any personal identifiable information at NACR.

- Gender, Marital Status and Ethnic Group, plus Postcode information (we don't receive the full postcode) and GP Code are all used as part of the audit reporting (other fields may be used for audit related research).



You will then be taken to the 'Record Tree'. All of a patient's records can be viewed/edited here.
To continue adding the patient details, click 'Add Initiating Event'



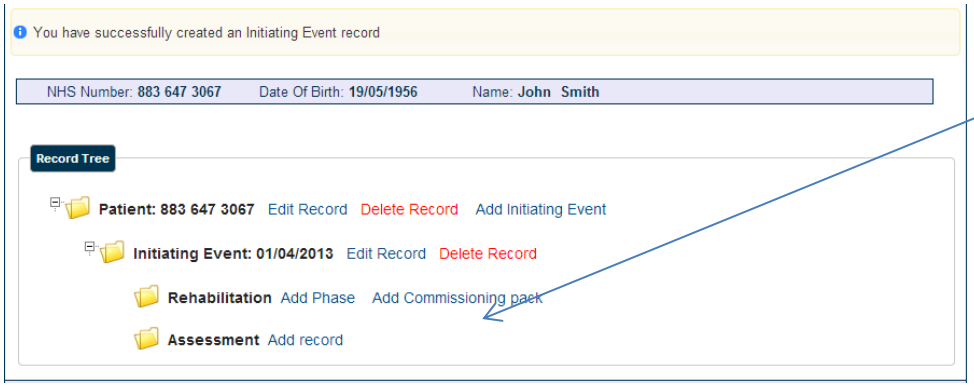
The Initiating Event and the Initiating Event Date are mandatory fields.
Once the record is completed, click on Submit.

*If a patient has **no** diagnosed Previous Events or Comorbidities please select No/None from the dropdown list.*

Initiating event: the reason the patient was referred to rehab
Ankle Brachial Indice Ratio: only used when patient has Peripheral Arterial Disease as an initiating event
Initiating event date: date of event that resulted in referral to rehab
Treatment associated with IE (before rehab): treatment had as a result of the IE. You can select more than one.

Treatment Date: if more than one, date of last treatment
Discharge date: date of last discharge from hospital
Invited to join date: date that the patient is given a formal start date for their structured rehab programme (Core/Phase 3) – e.g. Date of the letter / email / phone call giving them this start date
Source of referral: type of referral
Referring Trust (Initiating Event): which trust were they referred from if not your own
Referred by: staff member
[Assessment 2 due (follow up): *auto populates (from Ass 1 date)]*
[Assessment 3 due (follow up): *auto populates (from Ass 1 date)]*
Risk assessment (BACPR): As assessed using BACPR guidelines
Acute events during rehab: if patient has an event, but continues with their rehab (if the event is severe and they start the whole rehab process again, then this would be a new Initiating Event).
Previous events: Previous cardiac event(s) prior to this event. If none diagnosed, please select No/None.
Comorbidity: Other illnesses. If none diagnosed, please select No/None.

- IE / IE Date (both mandatory fields), Treatment, Previous Events and Comorbidity are primarily used in the annual report (other fields may be used for audit related research)



After clicking submit, you will go back to the Record Tree – and you now have a choice to add Rehabilitation records, and Assessment records.

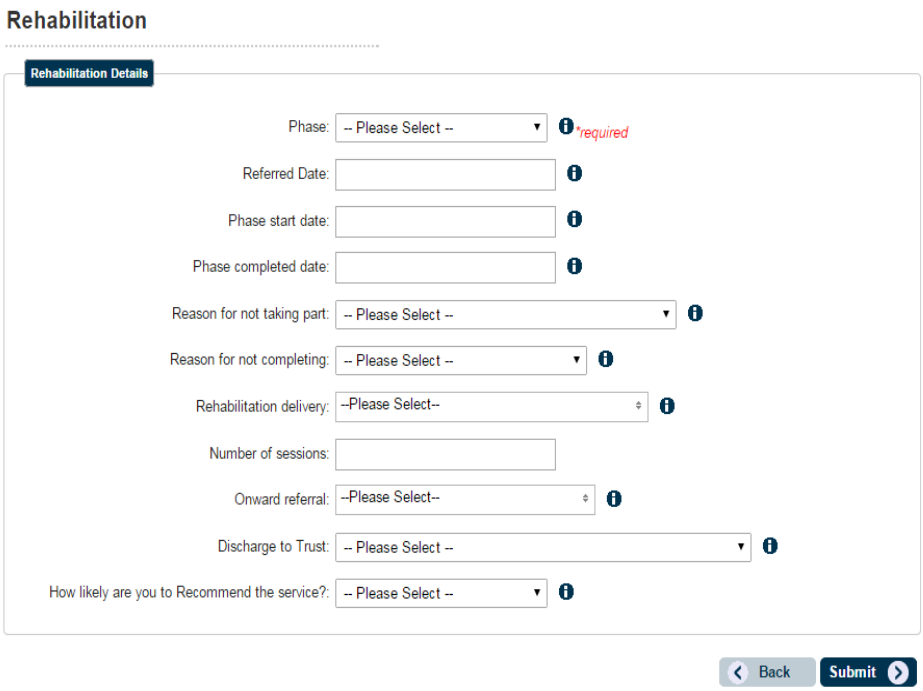
Rehabilitation Records

The Rehabilitation Record has 2 choices – either to 'Add Phase' or 'Add Commissioning Pack' depending on which fits better with how your programme runs. Many programmes now find the Commissioning Pack (Early/Core) is a better representation of their programme – if in doubt, please contact the NACR team for advice. The record content is virtually identical, whether you use Phases or Commissioning pack – they are different ways of measuring the same activity.

A patient can have multiple phases, or a combination of phases/commissioning pack records depending on where different parts of rehab have happened.

Only add a record for the part of rehab that your programme offers.
e.g. If another programme has already put a Phase 1 record on, but you've also provided Phase 1, create another Phase 1 record for your activity, don't amend the existing record (as this will affect your phase 'count')

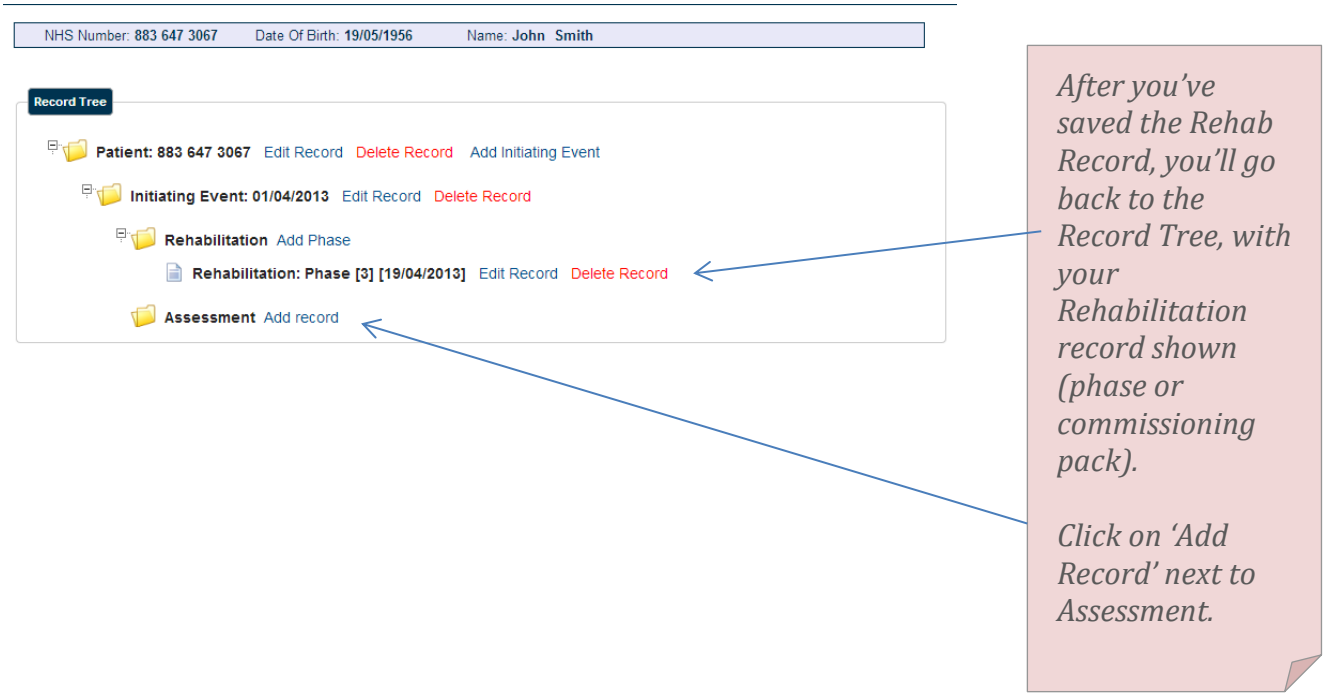
NB: We'd like rehab records for all patients referred to your service – including those who don't start (they would have a rehab record with a 'reason for not taking part') and those who start but don't complete (they would have a 'reason for not completing')



Phase: Phase (1-4) or Early/Core if using commissioning pack.
Phase 1 – in hospital
Phase 2 – immediately post discharge
Phase 3 – Structured programme of rehab that starts with comprehensive assessment, and is assessed again on completion
Phase 4 – long term rehab (usually in the community)
Early rehab – in hospital and immediately post discharge (anything prior to the start of the structured programme)
Core rehab - Structured programme of rehab that starts with comprehensive assessment, and is assessed again on completion
Referred Date: Phase 1 and Early – date in-hospital team becomes aware of the patient;
Phase 2/3 and Core – referral date after the patient has left hospital. If referral is from another trust, the date the referral is received; if patient remains within the same trust/team then date of discharge from hospital (as the date the patient comes into the outpatient team's care).
Phase start date - for Phase 1 or Early the date the patient is first seen on the ward; for Phase 2, first contact after discharge; for Phase 3 or Core, the start of the

structured rehab programme. We have a 'Start Definition' for Phase 3/Core, which can be found here: http://www.cardiacrehabilitation.org.uk/start-of-core.htm
Phase completed date - date the relevant phase is completed (if patient completes)
Reason for not taking part - if a patient does not start a phase, don't put a start date, put a reason for not taking part instead
Reason for not completing - if a patient starts but does not complete, don't put a completed date, use a reason for not completing instead
Rehabilitation delivery - what sort of programme the patient has had – this new list is primarily focussed on Core/Phase 3 delivery mode, not types of patient contact
Number of sessions - for the particular part of rehab being recorded. We have a sessions statement which can be found here: http://www.cardiacrehabilitation.org.uk/statement.htm
Onward Referral - where the patient is referred after that phase
Discharge to trust - if they are discharged/referred to another trust
How likely... - if you collect this

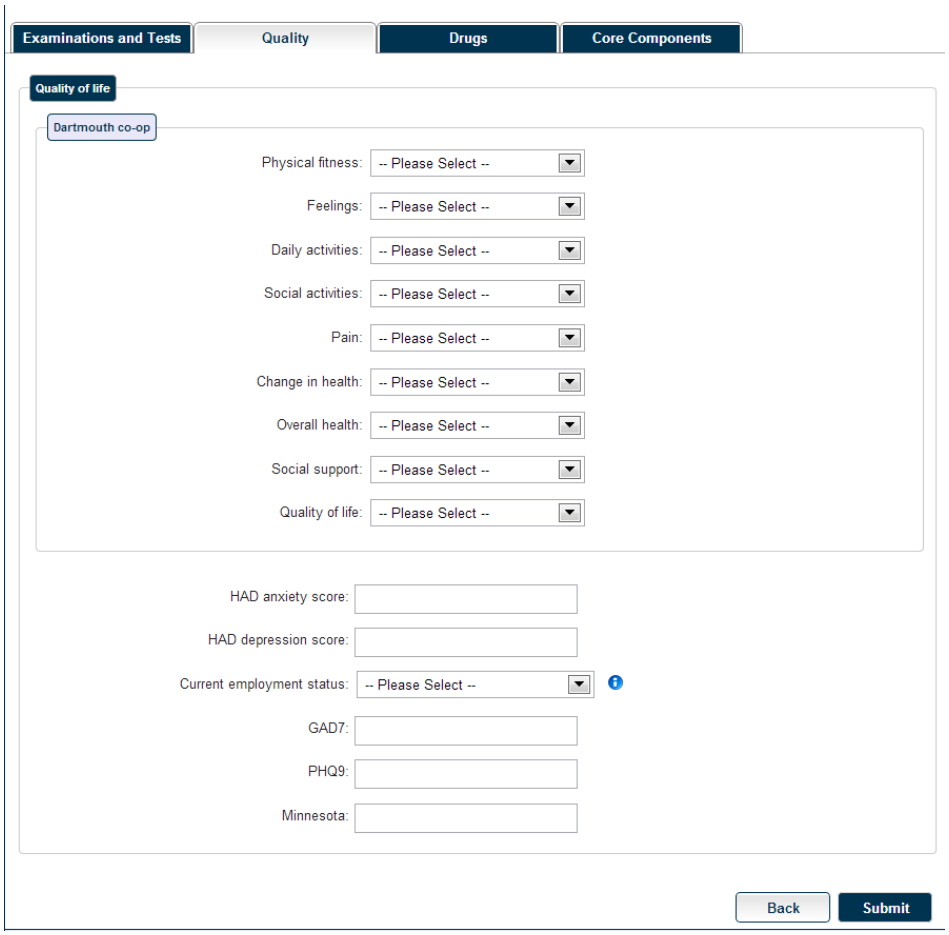
- We use all the rehab record fields in the audit, apart from the last two.



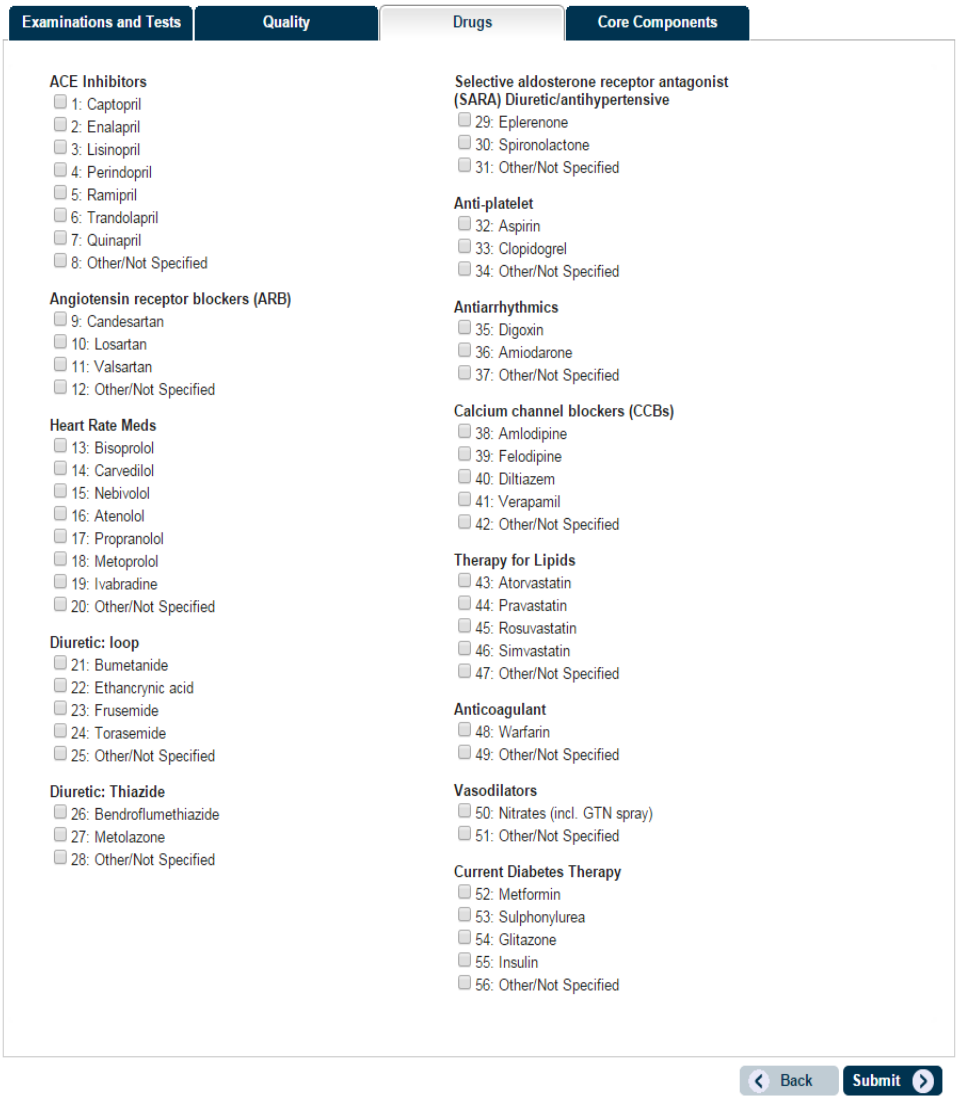
Each Assessment Record has 4 tabs – Examination and Tests / Quality / Drugs / Core Components.
We use Assessment 1 (before rehab); Assessment 2 (after rehab) and, if possible, Assessment 3 (at 12 months) for the audit. These are to be completed by the rehab team offering the Core/Phase 3 rehab programme. (There is an additional Assessment 1a for any extra assessment information, should you need it **but this data is not used in the audit).** The Assessments are a combination of the patient Questionnaires and clinical measurements – so even if a patient doesn't complete their questionnaire, they can still have measurements recorded in the Assessment Record.

Assessments should include, wherever possible, measures of psychosocial wellbeing (e.g. HADS / QOL); lifestyle risk factors (e.g. smoking, physical activity); body measurements (e.g. height, weight, BMI, blood pressure) with additional functional capacity measurement, as outlined in the BACPR Standards (2017). Whatever is recorded at Ass 1 should then be followed up at Ass 2 so that outcomes are available for the patient.

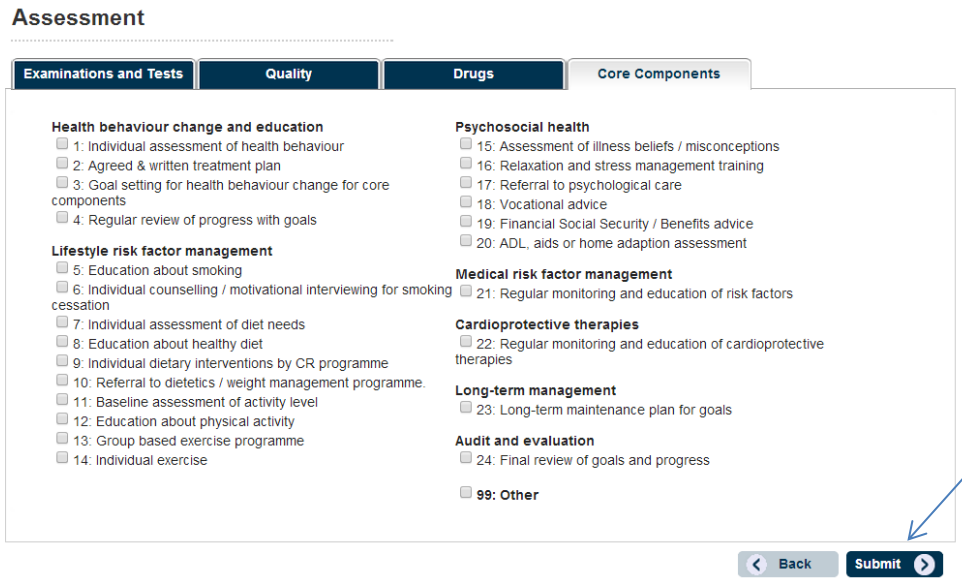
Examinations and Tests Tab:
Weight, height and waist measurements can be entered in metric or imperial (metric is saved on the database)
BMI calculates automatically (once you submit the record).
The TAM2 MET minutes automatically calculates using a pop-up box.
Record either Shuttle Walk Test or 6 Minute Walk Test, or use the 'Fitness Level (METS)' box if you do another MET related exercise test instead (e.g. Treadmill / exercise bike / Chester Step Test).



Quality Tab:
The Dartmouth Co-op and HADS are the measurements used in the NACR Annual Report, with the information coming from the Assessment Questionnaires. GAD7 / PHQ9 are additional measurements of anxiety and depression, recommended for referral of patients to IAPT. This is for programmes that already use this measure, and isn't included in the questionnaires. Minnesota is QOL specifically for heart failure patients.



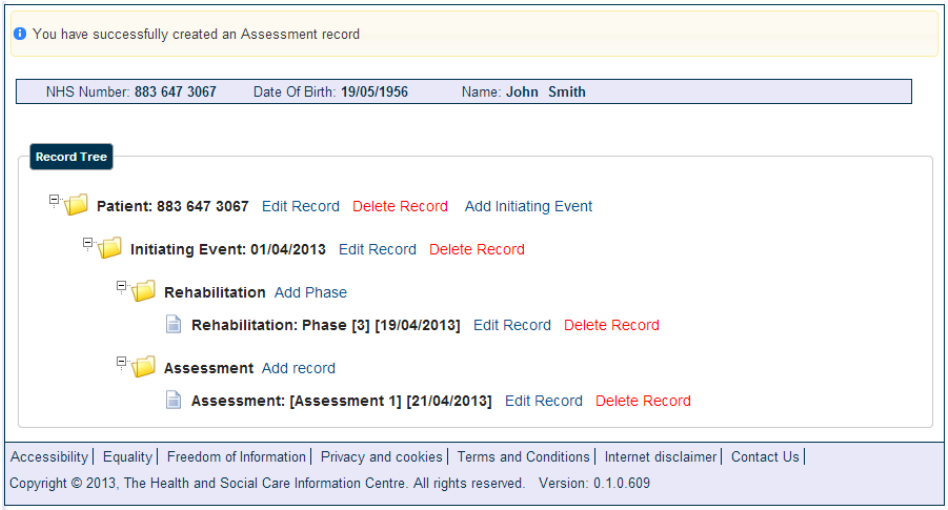
Drugs Tab:
This records the drugs that the patient is taking at the point of assessment – we are not currently recording dosage or frequency.



Core Components Tab:
Using the BACPR Core Components, in this section

Once you have completed the assessment data, click on Submit.

- We use as much as possible from the assessments - what is completed will depend on what is measured at the rehab assessment. Aim to measure the same at Ass 1 and Ass 2 to give outcomes measures. We currently report on Smoking / Physical Activity (150 mins week) / BMI / HADS / Cholesterol / Blood Pressure / Waist / Alcohol / Functional Capacity (i.e. ISWT, 6 min walk or other MET measure) but other measures may be used for audit related research. Please remember the assessment record is a combination of data collected at the clinical assessment with a member of the CR team, plus the NACR questionnaire. A patient can have an assessment record without completing the questionnaire.



You will again go back to the Record Tree, and all your new records will be shown under the Patient Record. You can collapse or expand these by using the boxes to the left of each folder icon.

Each record has an **Edit Record** and **Delete Record** option next to it. You can edit any record on the database (although you shouldn't edit other programmes' Rehab or Assessment records). You can only delete records that have been created by your programme.

TIMING OUT: For security, the database will lock you out after 10 minutes of inactivity, and you will need to log in again. If you were in the middle of an entry that you hadn't saved, any data entered will be lost.

If you answer the phone, or go to make a cup of tea (for example), SAVE YOUR RECORD BEFOREHAND. This way you won't lose your work.

Other Useful Information:

Error Messages: *If you miss something out that's required, or put in dates out of logical order, you'll get a red error message, and you will not be able to save/submit the record until you correct the information.*

This header menu is available at all times when you're logged into the database.

NB: *The File Submission Dashboard is for Importers (electronically uploading data from another system). See the 'Importing User Guide' for further information*

If you have any queries please contact us:

Tel: 01904 321326
Email: nerina.onion@york.ac.uk
Website: www.cardiacrehabilitation.org.uk/nacr

Appendix 1

STRATIFICATION OF RISK FOR DISEASE PROGRESSION
(ACPICR 2015)

LOW RISK

- Absence of complex ventricular dysrhythmias during exercise testing and recovery
- Absence of angina or other significant symptoms (for example unusual SOB, lightheadedness or dizziness, during exercise testing and recovery)
- Presence of normal haemodynamics during exercise testing and recovery (i.e. appropriate increases and decreases in HR and SBP with increasing workloads and recovery)
- Functional capacity ≥ 7 METS

Non-exercise Testing Findings:

- Resting EF ≥50%
- Uncomplicated MI or revascularisation procedure
- Absence of complicated ventricular dysrhythmias at rest
- Absence of CHF
- Absence of signs or symptoms of post-event/post-procedure ischaemia
- Absence of clinical depression

Lowest risk classification is assumed when each of the risk factors in the category is present

MODERATE RISK

- Presence of angina or other significant symptoms (for example unusual SOB, lightheadedness or dizziness, occurring only at high levels of exertion ≥ 7 METS)
- Mild to moderate level of silent ischaemia during exercise testing or recovery (ST-segment depression <2mm from baseline)
- Functional Capacity <5 METS

Non-exercise Testing Findings:

- Resting EF 40 – 49%

Any one, or combination of these findings places a patient at moderate risk

HIGH RISK

- Presence of complex ventricular dysrhythmias during exercise testing or recovery
- Presence of angina or other significant symptoms (for example unusual SOB, lightheadedness or dizziness at low levels of exertion (2mm from baseline) during exercise testing or recovery
- High level of silent ischaemia (ST-segment depression > 2mm from baseline) during exercise testing or recovery

- Presence of abnormal haemodynamics with exercise testing (i.e. chronotrophic incompetence or flat or decreasing SBP with increasing workloads) or recovery (severe post exercise hypotension)

Non-exercise Testing Findings:

- Resting EF
- History of cardiac arrest or sudden death
- Complex dysrhythmias at rest
- Complicated MI or revascularisation procedure
- Presence of CHF
- Presence of signs and symptoms of post-event/postprocedure ischaemia
- Presence of clinical depression

Any one, or combination of these findings places a patient at high risk

Appendix 2

CALCULATION FOR MET-MINUTES PER WEEK (TAM2)

MET Level x minutes of activity per session x number of sessions per week

MET levels:

Mild activity = 3.5 METs

Moderate activity = 5.0 METs

Vigorous activity = 8.5 METs

Calculation:

Mild activity MET-minutes/week = 3.5 x minutes per session x number of sessions per week

Moderate MET-minutes/week = 5.0 x minutes per session x number of sessions per week

Vigorous MET-minutes/week = 8.5 x minutes per session x number of sessions per week

Total physical activity MET-minutes/week = sum of MET minutes/week for all three categories (Mild + Moderate + Vigorous)

Appendix 3

CERTIFICATION (NCP_CR) KPIs
(Table from NACR 2018 Quality outcomes report)

NCP_CR KPIs	
Minimum standard 1: MDT	At least three health professions in the CR team who formally and regularly support the CR programme
Minimum standard 2: Patient group	Cardiovascular rehabilitation is offered to all these priority groups: MI, MI+PCI, PCI, CABG, HF
Minimum standard 3: Duration	Duration of core CR programme: ≥ national median of 56 days
Standard 4: National average for assessment 1	Percentage of patients with recorded assessment 1: ≥ England 80%; Northern Ireland 88%; Wales 68%
Standard 5: National average for CABG wait time	Time from post-discharge referral to start of core CR programme for CABG: ≤ national median of England 46 days, Northern Ireland 52 days, Wales 42 days
Standard 6: National average for MI/PCI wait time	Time from post-discharge referral to start of core CR programme for MI/PCI: ≤ national median of England 33 days, Northern Ireland 40 days, Wales 26 days
Standard 7: National average for assessment 2	Percentage of patients with recorded assessment 2 (end of CR): ≥ England 57%, Northern Ireland 61%, Wales 43%

* Information on staffing profile and MDT, which forms one of the NCP_CR KPIs, is taken from the NACR annual paper survey. This information is not available from the electronic NACR database. In order for certification to be validated each CR team must return the NACR annual paper survey form with staffing detail section completed.