NICOR

Best Practice Tariff Reporting Guidance: Using National Audit Data to Develop Validation Reports

(NHFA and MINAP)

Contents

1. Introduction: What is a Best Practice Tariff

Best Practice Tariffs (BPTs) are priced and structured to incentivise care that is high quality, cost effective with the aim to reduce unexplained variation in the quality of care.

The BPT model will be developed and tailored to the characteristics of clinical best practice each of the chosen clinical areas as well as the availability, quality and flow of data.

This guidance has been created for hospital trusts to produce their own summary reports to facilitate commissioner validation on the following BPTs; Heart Failure Best Practice Tariff and the NSTEMI Best Practice Tariff.

This guide will take you through step by step, enabling you to view data, export data and perform calculations required for the BPT reporting.

1.1 Technical details regrinding the BPTs can be found in the National Tariff, Annex B, which we would recommend is read in conjunction with this guide[1]. BPT for Cardiac Audits

The two cardiac national audits selected to be part of the BPT are the Heart Failure National Audit (NHFA) and the Myocardial Ischaemia National Audit Project (MINAP).

1.2 What is the heart failure BPT

The heart failure BPT was introduced in April 2015, to be an incentive to delivering specialist input in to the care of heart failure patients admitted to secondary care as an emergency as outlined in the NICE clinical guidelines 108 'Chronic heart failure: Management of chronic heart failure in adults in primary and secondary care' and the clinical guideline 187 'Acute heart failure: diagnosing and managing acute heart failure in adults' and the chronic heart failure quality standard (QS9).

The heart failure BPT requires providers to meet the following criteria:

  a. Hospitals are to submit at least 70% of all eligible records. The total number of eligible records need to be sourced either via HES, SUS or locally via your hospitals patient administration system (Please refer to 2.3.2.2 for ICD codes) .

  b. Specialist input with a target rate of 60%. This means that at least 60% of all patients with confirmed HF diagnosis recorded in the NHFA have received specialist input as defined by the NHFA.

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[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/509699/Annex_B_ Technical_guidance_for_services_with_national_currencies.pdf

1.3 What is the NSTEMI BPT

The Non-ST segment elevation myocardial infarction (NSTEMI) BPT was introduced in April 2016 and aims to incentivise timely angiography (with follow on PCI if required) for patients admitted to secondary care with NSTEMI.

Providers and commissioners that have chosen to introduce the NSTEMI BPT locally in 2016/17 and utilise the MINAP database are required to calculate the percentage of patients undergoing coronary angiography within 72 hours of admission to the hospital carrying out an angiogram. To do this, the parameters for the NSTEMI BPT to be measured are:

a. Number of direct admissions of people with NSTEMI, who receive angiography with 72 hours of direct admission.

b. Number of direct admissions of people with NSTEMI receiving coronary angiography by provider trust.

2 Heart Failure BPT

2.1 How to access NHFA audit data for your site

Getting started:

Before you start you will need the following:

- Access to version 4.2.1 of the National Heart Failure Audit dataset (http://www.ucl.ac.uk/nicor/audits/heartfailure/documents/datasets/NHFA-user-guide-v4.2.1.pdf)
- Access to the NHFA web application (see section 2.1)
- HF BPT commissioners template (see Appendix 5.1)

2.2 About the National Heart Failure Audit web application

The web application for the National Hear Failure Audit allows you to access the audit from any computer with a web browser, meaning you do not need the Lotus Notes software or a Lotus Notes licence to use it. You will require web portal access in order to export data for the HF BPT reports.

The web application currently only allows you to directly enter records, using the data entry form. You cannot batch import data via the web. Later iterations of the web application will allow you to import data. You will need to be a registered user to access the database. Please contact the NICOR helpdesk if you require web access to the database.

2.2.1 How to access the NICOR portal

The URL for the NICOR portal is: http://web.nicor.org.uk/

NICOR supports Internet Explorer 8 or later versions or Mozilla Firefox. If you currently run Internet Explorer 7 or earlier, we recommend that you upgrade your browser, as we cannot guarantee that the application will function as intended on earlier browser versions.

2.2.2 Logging in

Your user name for the web portal is the same as your Lotus Notes name and follows this format:

First name Surname/NICOR hospital code/NICOR. For example: **Jane Smith/ADD/NICOR**.

If you do not know your NICOR hospital code, you can find it in the National Heart Failure Audit dataset, which you can download from our website at www.ucl.ac.uk/nicor/audits/heartfailure/dataset.

Your existing Lotus Notes password should work on the web portal. However, it may need resetting before you can log in. If so, please follow the steps below.

2.2.3 Resetting your password

1. On the main page of the NICOR portal, select the 'Reset Password' button.

2. Provide the requested information and hit the 'Submit' button. It normally takes up to 10 - 20 minutes for the new password to be set.
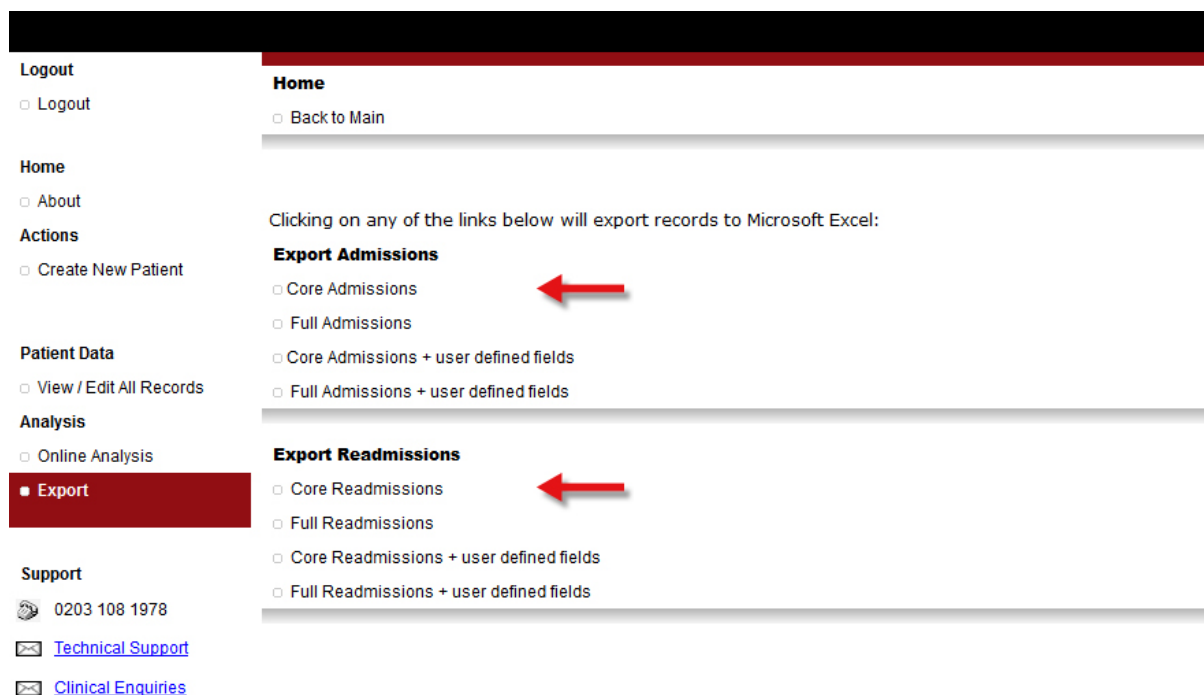
2.2.4 Exporting data

- On the main page of the HF web application, click on the 'Export' link in the left navigator.

- From the list of options select to export:
  - Admissions – core data only
  - Readmissions – core data only

- Choose your selected option and wait for the download. The export can take several minutes without anything appearing to happen, so be patient and don't click the 'back' button or any other link while the export is in progress.

- Once you have exported everything you need, to return to the main screen, click the 'View/Edit All Records' link in the left navigator.

2.3 Analysis and creating reports

For the export, you will need to include the following fields in your data extract.

- Field 1.10: Hospital identifier

- Field 1.03: NHS number

- Field 2.00: Date of admission

- Field 2.04a1: Specialist Input

- Field 14.00: Confirmed diagnosis of heart failure

- Field 15.10: Date of Discharge

- Field 15.01: Date of discharge

NB. Patient identifiable data is only for the purpose of identifying potential duplicate entries. Please do not send patient identifiable data: in this instance this refers to Hospital identifier and NHS number.

- You will now have 2 files. Save these files with relevant naming system for example:
    - 'HF data admissions Q1 extracted 24052016'
    - 'HF data readmissions Q1 extracted 24052016'

Quarter 1	1 April 2016 to 30 Jun 2016	Quarter 3	1 Oct 2016 to 31 Dec 2016
Quarter 2	1 Jul 2016 to 30 Sep 2016	Quarter 4	1 Jan 2017 to March 2017

- You will need to merge both files.
    - Use the ADMISSIONS file to create a copy and save as "BPT Q1 HF admission and readmission data extracted 24052016".
    - Open the READMISSIONS file. Copy and paste all records and associated data and paste into the 'BPT HF admission and readmission data extracted 24052016.
    - Sort the spreadsheet by FIELD 2.00 Date of admission. Delete any cases that do not fall within the required quarter. For example Q1 would not include before 1st April or after 30th June.
    - SAVE the "BPT HF Q1 admission and readmission data extracted 24052016". Close the original files and use this file for the next stage.

2.3.1 Data cleaning

Ensure your data extract does not include duplicates. The data entry system includes automatic checks to minimise the number of duplicate entries but some may remain. It is important these are removed.

- Open the 'BPT HF admission and readmission data extracted 24052016'

- To check for duplicate entries, filter by hospital identifier and check to make sure date of admission is different. Duplicates record are identified in instances where the NHS number, date of admission and date of discharge are identical. Please check the duplicates to confirm they are in fact duplicate entries. If you are uncertain you may need to review local records. REMOVE all duplicates.

- Once you have removed all duplicates, save the file as 'BPT HF admission and readmission data extracted 24052016 cleaned data'.

2.3.2 Analysis

Data submission to the NHFA with a target rate of 70%. This means that at least 70% of all eligible records need to have been submitted to the NHFA.

This calculation is based on audit data (numerator) and trust level data (denominator) e.g. HES, SUS or an agreed local data source.

2.3.2.1 Numerator

- Use the 'BPT HF admission and readmission data extracted 24052016 cleaned data' file.

- Filter by Field 15.10: Date of discharge AND Field 14.00: Confirmed diagnosis of heart failure

- Count the 'n' number of patients.

- This provides the numerator. Insert the numerator into your local BPT report (Appendix).

2.3.2.2 Denominator

The denominator for this calculation is the number of admissions discharged with a coded primary diagnosis of heart failure within the relevant quarter. Heart Failure is designated by the following ICD-10 codes:

- I11.0 Hypertensive heart disease with (congestive) heart failure

- I25.5 Ischaemic cardiomyopathy

- I42.0 Dilated cardiomyopathy

- I42.9 Cardiomyopathy, unspecified

- I50.0 Congestive heart failure

- I50.1 Left ventricular failure

- I50.9 Heart failure, unspecified

This needs to be sourced either via HES, SUS or locally via your hospitals patient administration system.

The codes used in the heart failure audit to identify heart failure patients are wider than the set of codes that map to the HRGs that are used as a basis of payment for the BPT, codes I50.0, I50.1 and I50.9. At a national level, these diagnostic codes account for over 90% of coded heart failure activity. This means that the quality of heart failure care is measured through a wider set of diagnostic codes while payment is based on the HRG codes that are used as the basis of payment.

Calculation:

% = (Numerator [from 2.3.2.1]/ Denominator [from 2.3.2.2] x 100

Insert the figure into column A (% of confirmed HF cases submitted to the audit)

- Specialist input with a target rate of 60%. This means that at least 60% of all patients recorded in the heart failure audit have received specialist input as defined by the NHFA.

- Use the 'BPT HF admission and readmission data extracted 24052016 cleaned data' file.

- Filter field 2.04ai, 'specialist input'. Deselect '4.Other' and '9.Unknown'. Then count the 'n' number of patients that had specialist input (A). This will give you the number of patients seen by a specialist for that quarter.

- Filter field 14.00 – select those with confirmed HF '1.yes'. – confirmed HF. This will provide you with the number of patients with confirmed HF. Count the 'n' number (B).

- Now divide the no. of patients that receive specialist input (A) by the total number of patients with confirmed diagnosis of HF (B), and then multiply by 100 to give you the % of patient that received specialist input.

$$A/B \times 100 = \frac{\text{Number of patients that received specialist input (A)}}{\text{*No. patients confirmed diagnosis of heart failure (B)}} \times 100$$

*Confirmed diagnosis of HF is defined as the diagnosis of heart failure that is confirmed by imaging or BNP testing either during admission or at a previous time. In some cases a clinician may justifiably diagnose heart failure in the absence of echocardiography.

If there is anything that is not currently included in this document that you think should be covered, please get in touch with the project manager.

Additional HF BPT reporting requirements

Local commissioners may request additional information but any additional requirements need to be negotiated locally. **Please be aware sharing patient identifiable data between hospitals and commissioners is not permissible under current information governance regulations**.

You will now have completed the report ready to send to the commissioners for validation of the heart failure BPT.

2.4 How to send data to commissioners

The quarterly reporting periods for the BPT are as follows:

| Quarter 1	1 April 2016 to 30 Jun 2016	Quarter 3	1 Oct 2016 to 31 Dec 2016
Quarter 2	1 Jul 2016 to 30 Sep 2016	Quarter 4	1 Jan 2017 to March 2017

- The BPT reports are prepared to be sent to the Commissioners quarterly with a 3 month lag. Here is a schedule of when reports should be send:
    - Q1 report to be sent by 30th September
    - Q2 report to be sent by 31st December
    - Q3 report to be sent by 31st March
    - Q4 report to be sent on by 30th June
- Insert data into the Heart Failure BPT Report template (Appendix 1)
- Send the completed report to local commissioner(s) who have been billed for the HF BPT payments.

3 NSTEMI BPT

3.1 Access requirements

The web-portal can be accessed via the following URL: http://web.nicor.org.uk/ (Figure 1). You will note that the URL changes to either NICOR 4 or NICOR 5 depending on the server's availability. It is essential that the web-portal is accessed from Internet Explorer version 6 (but no later version than 8). If you are having problems with viewing the portal please contact your IT department to check your PC settings.
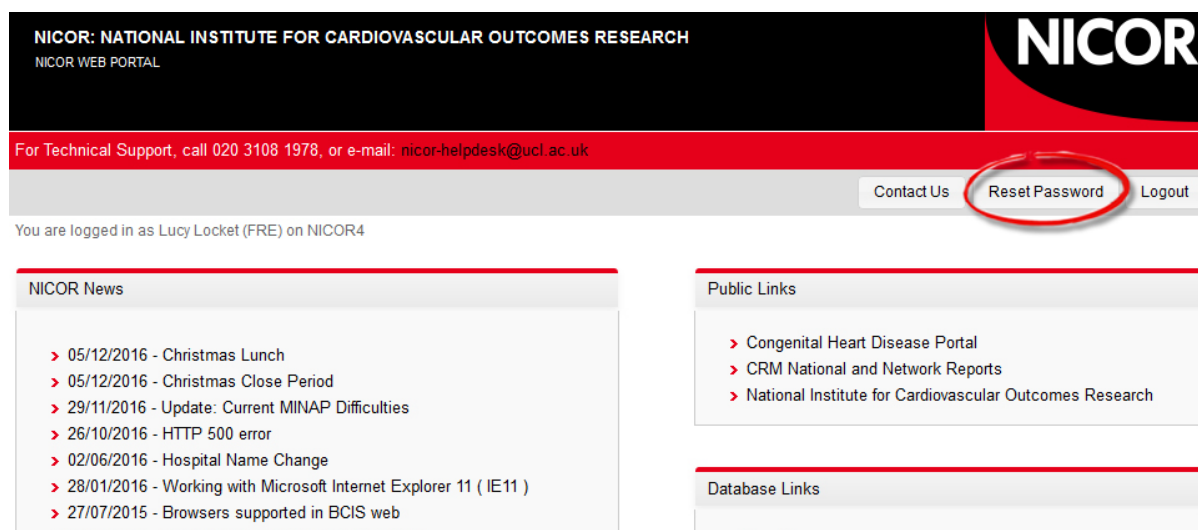
Figure 1
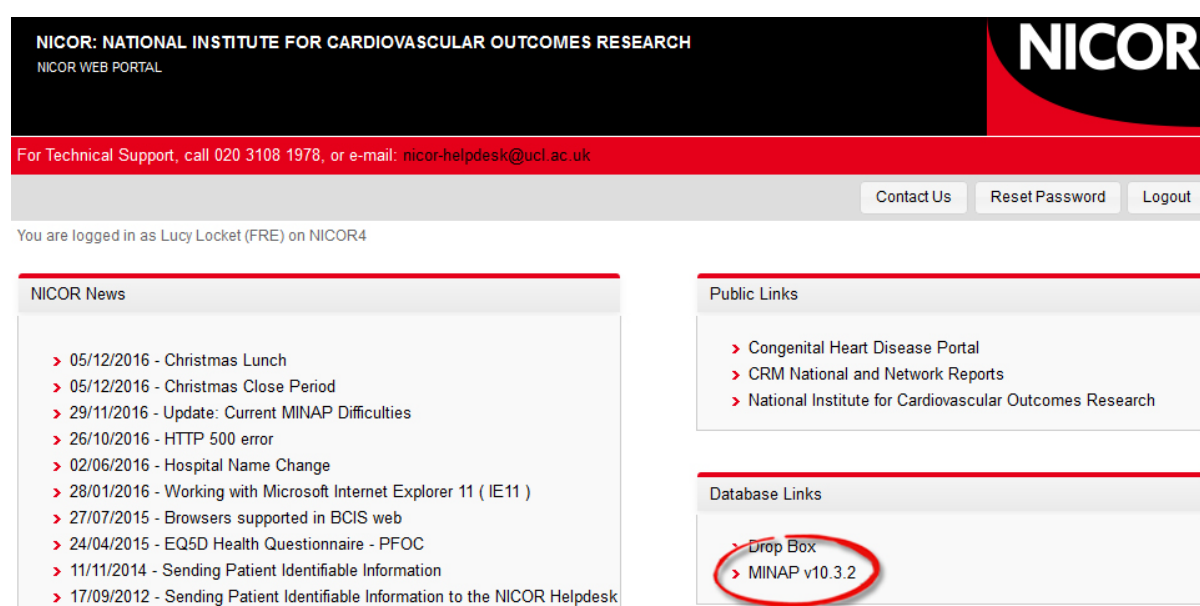
3.2 Requesting access

Access to the MINAP web-portal requires a user ID and a password. Depending on the existing status of the user the following steps should be taken:

New Users:

If you do not yet have access to the MINAP database, a request form for access to MINAP should be completed by the main MINAP contact at your hospital, submitted on your behalf and sent to the NICOR Technical Helpdesk. Your Trust's Caldicott Guardian will be contacted for authorisation. Once the request has been approved, the new user will be contacted by the technical helpdesk with user ID details and a password (sent separately).

When you log in for the first time you need to change the password to a new one immediately (Figure 2), as per NICOR Terms and Conditions relating to access to NICOR portals. The new password should be at least eight characters long, containing letters, numbers and symbols. Do not share your password with anyone or let other colleagues use your access to NICOR portals. If you suspect that your password has been used or seen by anyone, change it immediately. Your web password will expire after three months so make sure you change it at least once during this period. You should never use the details of another person to enter data or let someone else use your details.

Figure 2

By clicking on the 'Reset Password' button you will be taken to the Password Change Request page (Figure 3) – and follow the instructions. After pressing the send button you should receive an email confirming that your password was changed successfully within 30 minutes. If you don't receive this email within 30 minutes, you should contact our technical helpdesk. On receipt of the confirmation email you are ready to log in with your new password.

Figure 3
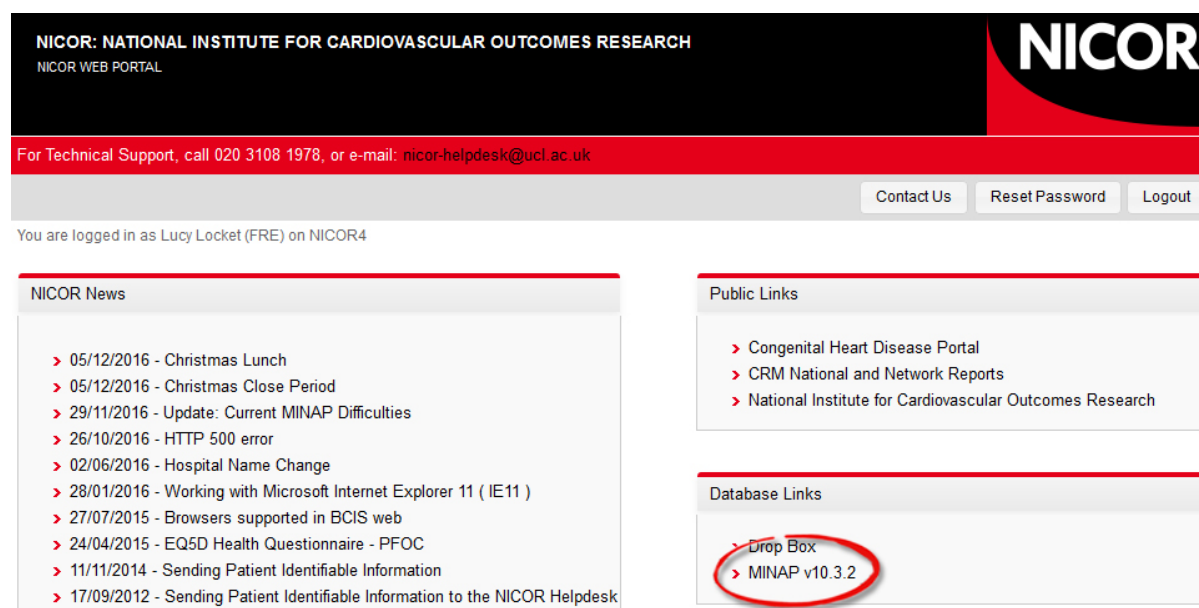

3.3 Accessing the MINAP web-portal

Click on Login to access the web portal and this will take you to the login page (Figure 4). Enter your user ID and the new password in the relevant fields. The user name is not case sensitive as long as the correct characters and spaces are used and should be in the following format: first name surname/three letter hospital code/nicor (example: joseph lee/yyy/nicor). NB: a password is case sensitive. Click on the 'Sign In' button.

Figure 4

Once you are logged in, MINAP can be accessed via the link highlighted in Figure 5 below. If you cannot see this link please contact our NICOR Technical Helpdesk at nicor-helpdesk@ucl.ac.uk or on 020 3108 1978 requesting access to the web-portal.

Figure 5

By clicking on the 'MINAP v10.3.2' link a warning message pops up (Figure 6) reminding a user about patient confidentiality, user's responsibilities and general advice on what to do when security breach is observed. Click 'OK' to proceed.

Figure 6
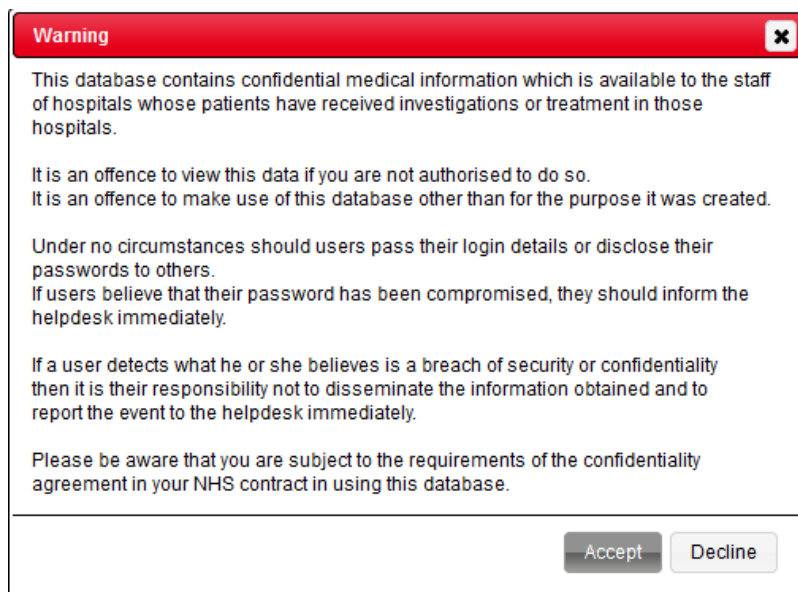
Click 'Accept' if all details shown are correct followed by clicking on Continue as shown in figure 7.

Figure 7
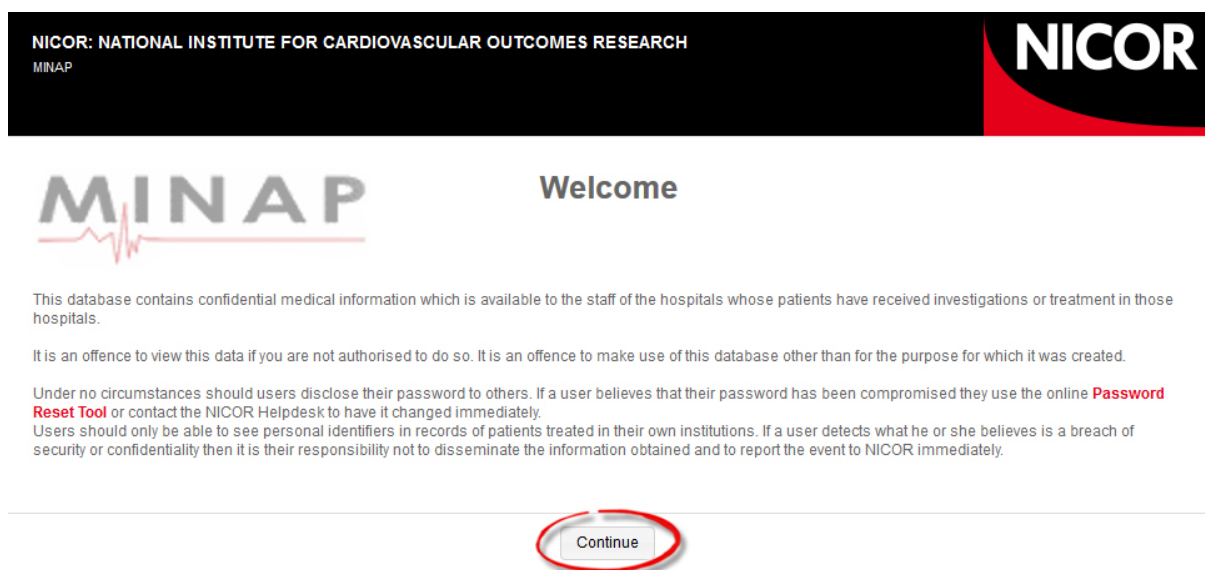
You have now reached the web-portal home page as shown in figure 7. Select 'Continue' which will now take you into the database.

3.4 Exporting your data

The MINAP web application enables you to extract data from the system for local analysis using a number of analysis tools e.g. SPSS, Excel etc.

To export your data, click on the Export link in the main menu:
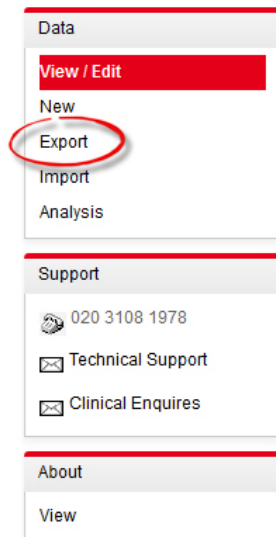
You will be presented with an extensive dialogue box where you can select the fields you want included in your data export.
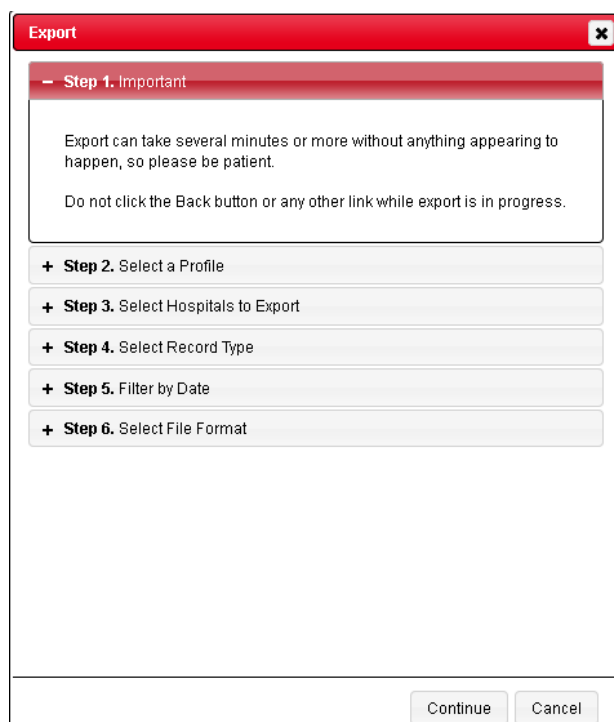
Step 2 contains the different profiles that can be used for exporting. Hospitals only have one profile.

Step 3 is not applicable to hospitals – your hospital will automatically be selected here.

Step 4 only has one record type – Patient – however, you can tick the box to have ONS data included in your export.

Step 5 allows you to export a specific date range. Not specifying a date range   will export all data for your hospital.

Step 6 allows you select the file format of your export.

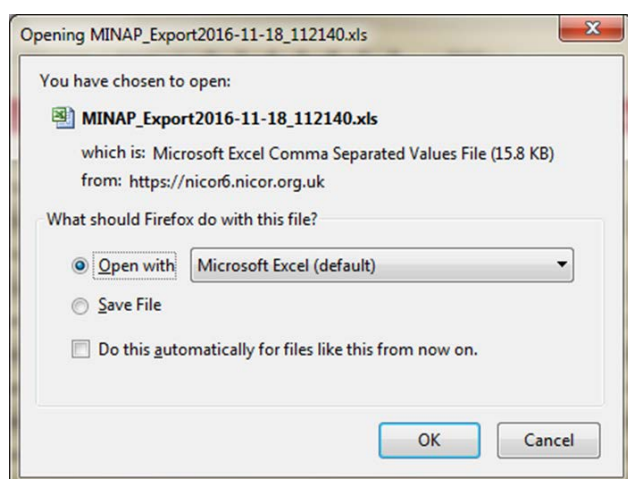Once you have entered your criteria, click the Continue button to begin the export. As it states at the top of the Export dialog, it can take a few minutes, sometimes more, to export your data. It is often quicker to choose a csv as the file format instead of Excel, but it will depend on your network connection and speeds.

Once the export is done, choose the software to open the file with – default will be Microsoft Excel, regardless of your choice of Excel or a csv (Excel opens both) – or choose to save the file, and click OK. If you choose to open the file, the selected software will do so. If you choose to save the file, you'll be prompted for a name and location.

3.5 The analysis

3.5.1 Part one

- Select the correct time period when creating the export or if a larger period has been selected you can filter for the required period

- The analysis is based on NSTEMI records so you need to filter for these by selecting option 4 ACS (trop+)/NSTEMI in Discharge diagnosis field (4.02)

- The NSTEMI BPT for 2016/17 includes direct admission for coronary angiography patients only and excludes transfers so for field 2.39 Admission method all patients with option 4. Inter-hospital transfer or 5. Repatriation after coronary intervention need to be removed as they are excluded.

- Filter field '4.13.Coronary.Angio' further by selection option '1. Protocol driven investigation performed in this hospital' or '2. Symptom driven investigation performed in this hospital'.

- For date and times select all four of the following fields:
    - o 3.06 date/time arrival at hospital
    - o 4.18 Angio date/time
    - o 3.01 Date/time of symptom onset

3.5.2 Part two

- Time to angiography can be calculated as follows for each admission type:

For direct admission via emergency services and self-presenters to this hospital:

The difference between field '4.18 Angio date/time' and '3.06 date/time arrival' at hospital. The latter variable is available for all procedures. Please ensure that when calculating the difference that the time is formatted in hh:mm (please see section 5.2).

For patients already in this hospital:

The difference between fields '4.18 Angio date/time' and '3.01 Date/time of symptom onset'. The latter variable is available for all procedures. To be calculated as above in hh:mm.

- The time to angiography can now be filtered to select those entries with a time difference of <= 72 hours and those >72 hours. The percentage of records with 72 hours is calculated as all =<72 divided by all records with a time for the angiography procedure. Please see section 5.2 for an example of report template for NSTEMI.

Additional NSTEMI BPT reporting requirements

Local commissioners may request additional information but any additional requirements need to be negotiated locally. **Please be aware sharing patient identifiable data between hospitals and commissioners is not permissible under current information governance regulations**.

You will now have completed the report ready to send to the commissioners for validation of the NSTEMI BPT. Please Note that if dates and or times for coronary angiography are missing this will be considered as having missed the 72hr target for the NSTEMI BPT.

4 Further Information

Technical enquiries should go to the NICOR helpdesk:

0203 108 1978

nicor-helpdesk@ucl.ac.uk

All other enquiries should go to the audit project manager:

Heart Failure Audit: hf-nicor@ucl.ac.uk

MINAP Audit: minap-nicor@ucl.ac.uk

5 Appendices

5.1 Heart Failure BPT Report template for report to be sent to commissioners

Reporting period	% of confirmed HF cases submitted to the audit	No. with confirmed HF	% of data submitted to NHFA
2014/15			
Q1			
Q2			
Q3			
Q4			
2015/16			
Q1			
Q2			
Q3			
Q4			

5.2 NSTEMI BPT report template for reports to be sent to commissioners

For direct admission via emergency services and self-presenters to this hospital:

	A	B	C	D	E
	Discharge diagnosis	Admission method	Date and time of arrival in hospital [field 3.06]	Date and time of coronary angiography [field 4.18]	Angiography delay (hh:mm)
1					=D1-C1
2					
3					

For patients already in this hospital:

	A	B	C	D	E
	Discharge diagnosis	Admission method	Date and time of arrival in hospital [field 3.06]	Date and time of coronary angiography [field 4.18]	Angiography delay (hh:mm)
1					=D1-C1
2					
3					