NOMAD Setup Guide

NOMAD is the National Otorhinolaryngology Morbidity Audit Database.

This guide is intended for those utilising NOMAD for morbidity and mortality meetings.

Case Submission

To submit a case for discussion at your next M&M meeting using NOMAD, go to https://entscotland.org/nomad and fill in the form. A link to this will also be made available on the ENT Scotland website for easy access.

Anybody can submit a case for discussion. The only requirement is that you need to be connected to an NHS-network connected device (usually under username and password protection). Eduroam / 3G / 4G etc. will not allow you access to the website, even if you are located on an NHS site.

When submitting cases, **ensure you select the correct regional health board**. If you select the wrong health board, it will **not** appear at your local M&M meeting. It will instead appear in another health board M&M meeting instead and will result in inappropriate data sharing!

Once submitted, your case will be saved to the REDCAP database. Data retention for 10 years has been approved in some regions. The REDCAP co-ordinator for SERN will be in charge of deleting data after expiry.

During case submission, there is the ability to save the form for later editing if the person submitting is only able to partly complete the form. If this is selected, the user can input an email address which will then send an email link so they can complete the survey at a later date. **Please only use your nhs email address for this function** for data security reasons

M&M Co-ordinator Pre-meeting Setup

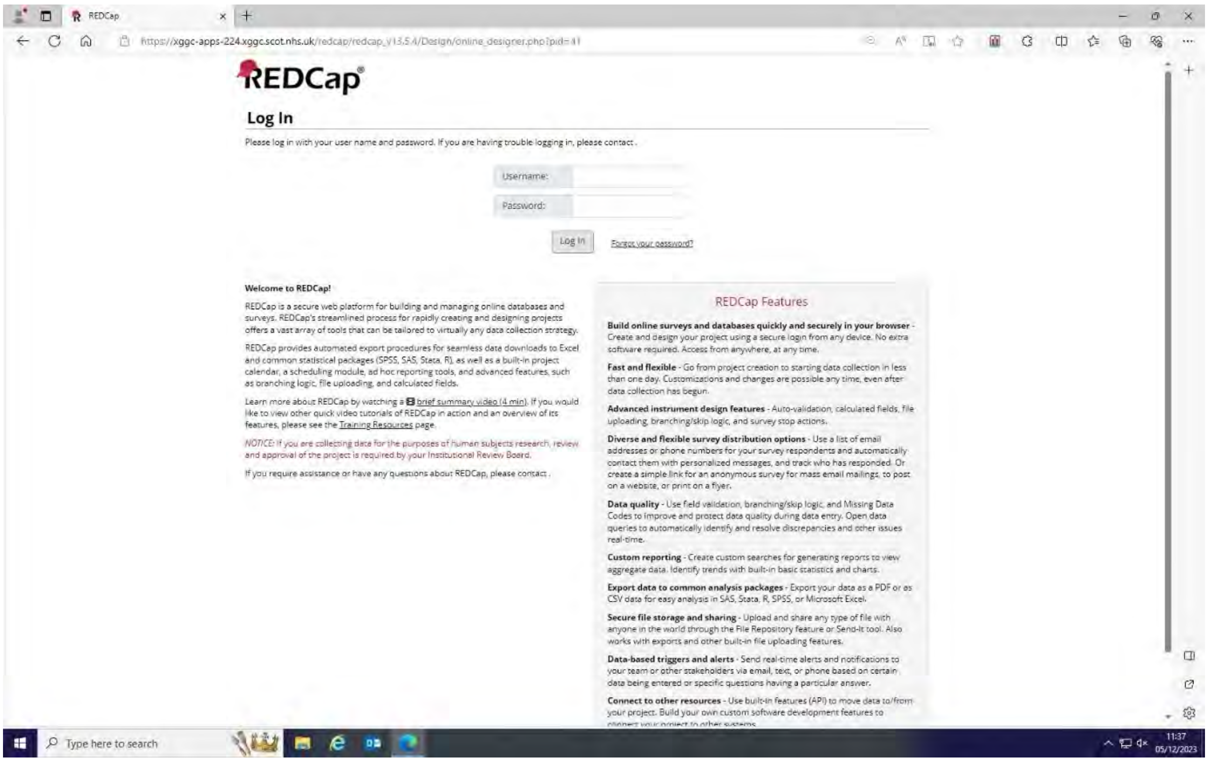
Prior to the first M&M meeting, there is some setup required on REDCAP that will help to make the meeting run more smoothly. At the end of this document, we provide a pre-meeting checklist for ease of reference. However, for your first M&M meeting with NOMAD we advise reading this document in full.

Firstly, we recommend ensuring that your local IT department have the following websites "Green-listed":

https://entscotland.org/nomad

https://entscotland.org/redcap

If either of these websites are blocked, you won't be able to submit cases, or complete the M&M meeting using NOMAD.

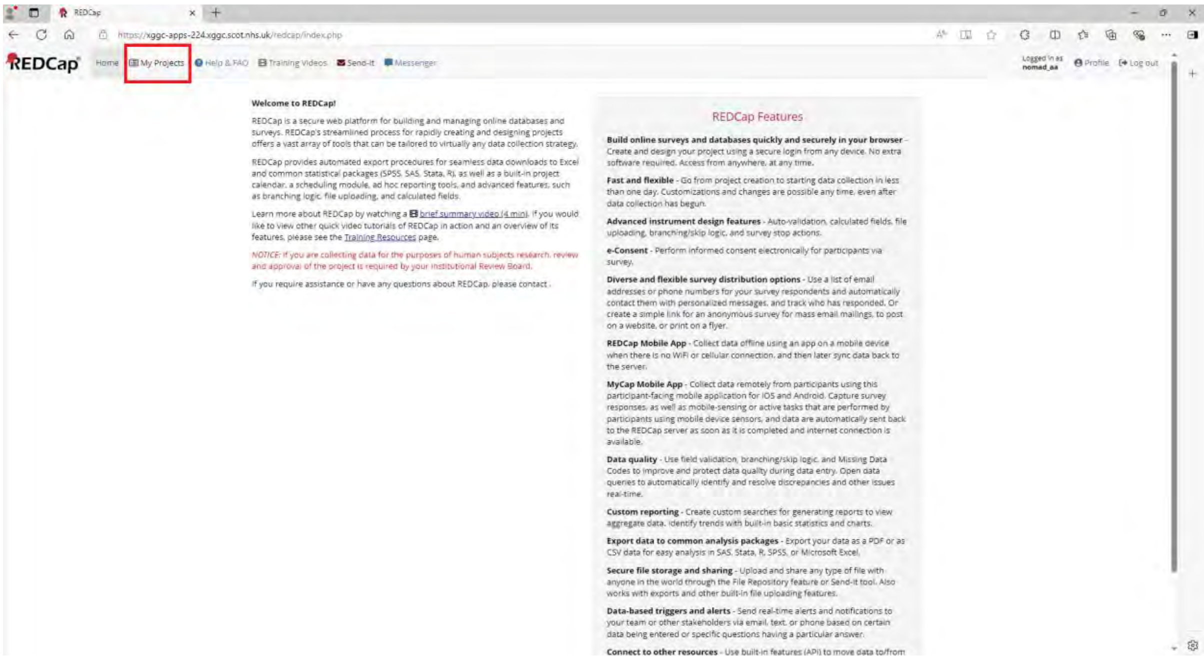


To start the setup, go to https://entscotland.org/redcap and login using your allocated username and password.

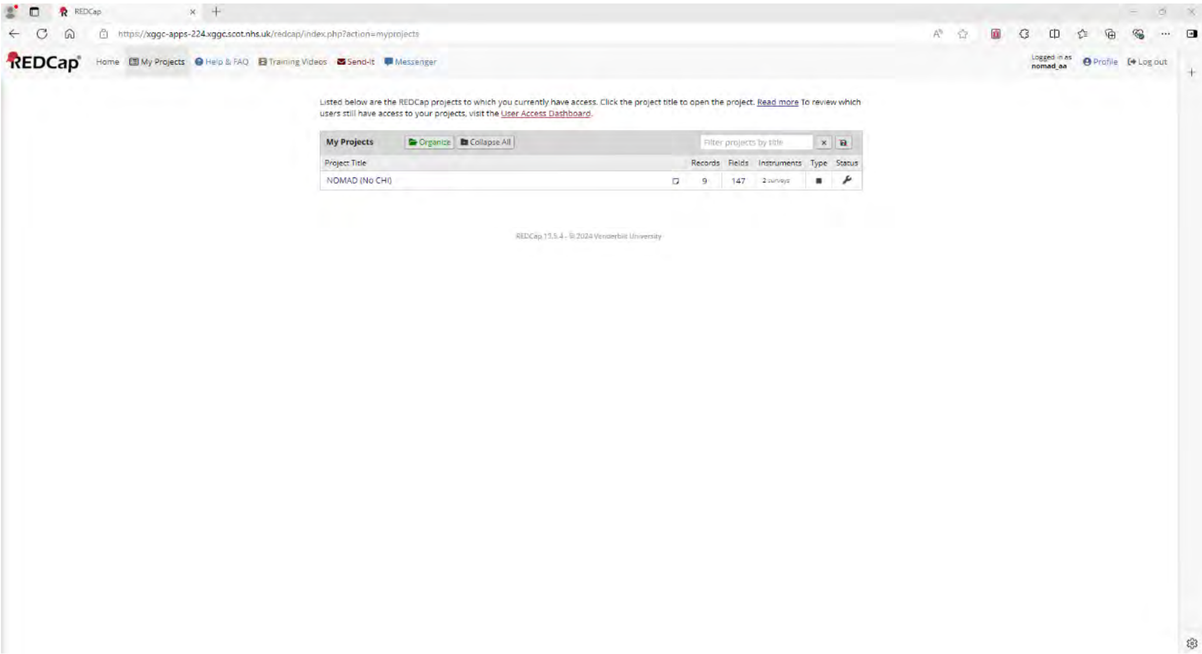
All regions will be allocated a generic login.

If you have difficulty accessing an account, please contact Hitesh Tailor (REDCap Lead for NHS Scotland) who will be able to assist.

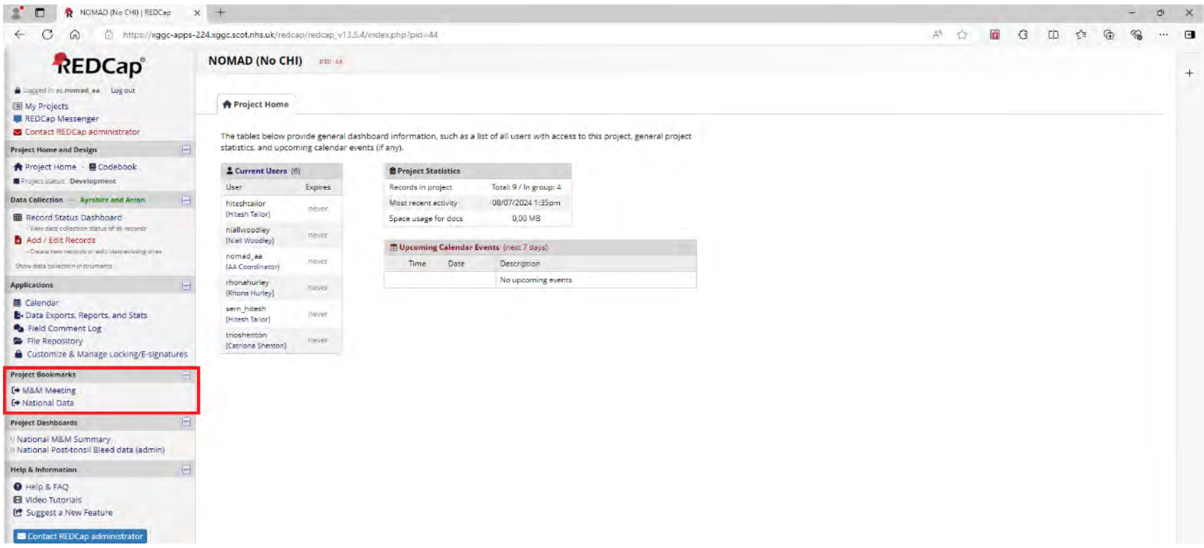
You will be automatically allocated to a specific “Domain Access Group” or “DAG”. This means you can only see the cases submitted in your own health board. However, we can also give access to specific national statistics that may be of interest.



Your homepage will look similar to this. Click on ”My projects” (red box)

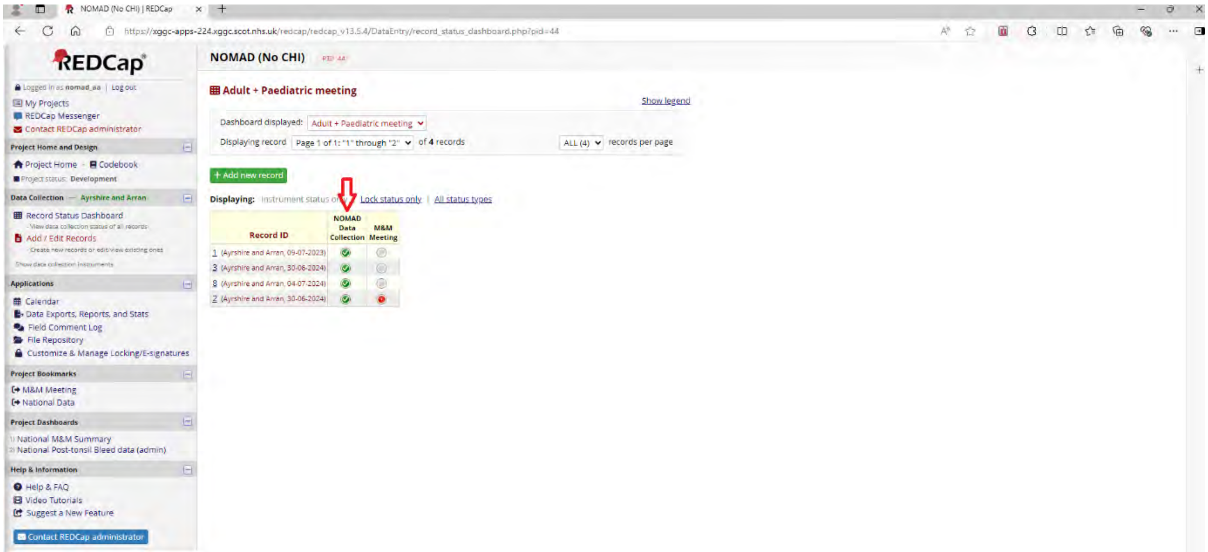


Click on “NOMAD (No CHI)”



This is the NOMAD home page. For the purposes of M&M meetings, we have created some "Project Bookmarks" on the left hand menu (red box) to help with ease of navigation. These bookmarks are available to you on all pages within NOMAD so if you get lost, you can use these to return to familiar ground.

Click the "M&M meeting" bookmark to see all the records submitted in your region for M&M meeting discussion.

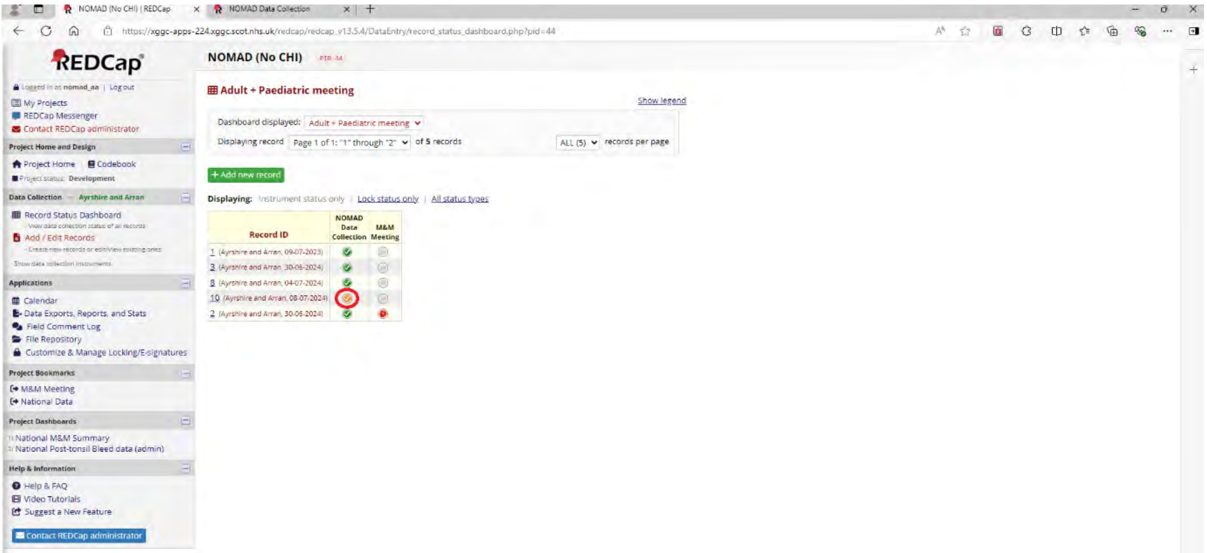


This is the M&M meeting bookmark. It contains all the cases submitted for discussion for M&M meetings in your region.

The column on the left (red arrow) indicates the completeness of information given during case submission. Occasionally this may not have been completed fully as some information may not have been available at the time of submission.

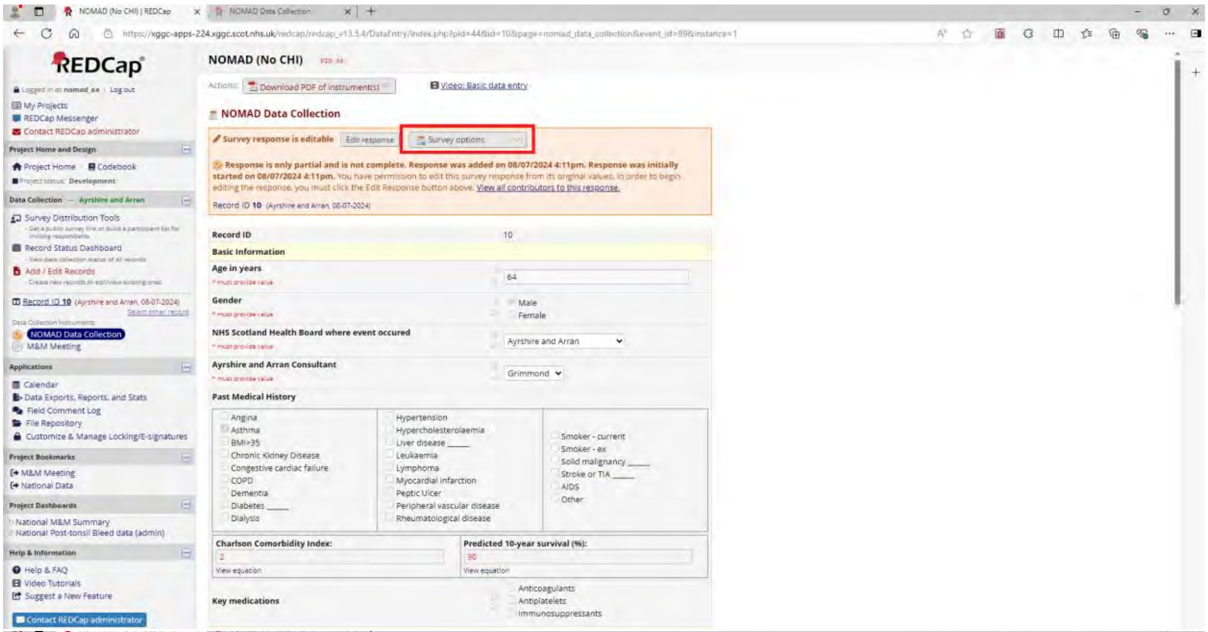
We suggest the M&M co-ordinator screens this column prior to the M&M meeting to ensure all the necessary information present prior to the meeting itself.

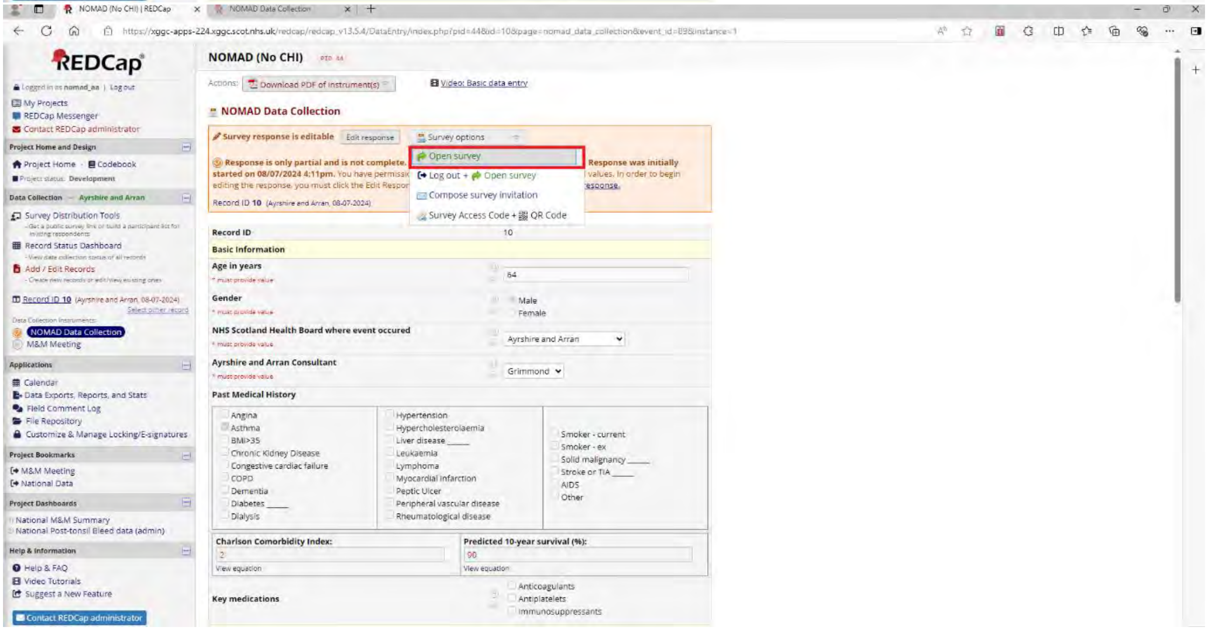
- A green box with a tick suggests all information has been included during case submission.
- A green box without a tick suggests all mandatory fields are completed but some non-mandatory fields may have been left blank. This may be entirely appropriate, but we suggest this is checked prior to the meeting
- Any with orange or red boxes in this column suggests incomplete information in the mandatory fields which should be completed prior to the M&M meeting



Here, you can see a new case has been added for discussion at the M&M meeting. However, there is incomplete information submitted, meaning the box in the left hand column is orange.

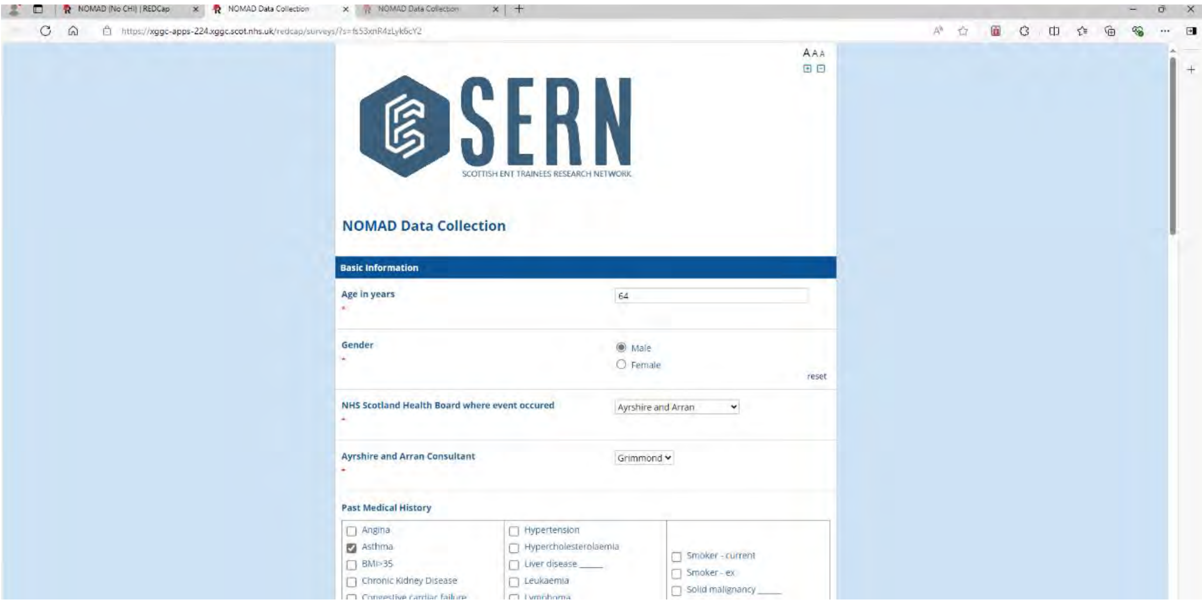
To check if the information in a survey is complete, click on the relevant green / yellow / red box.





This will bring up a new page with the response submitted, as it stands. Click “Survey options” then “Open survey”

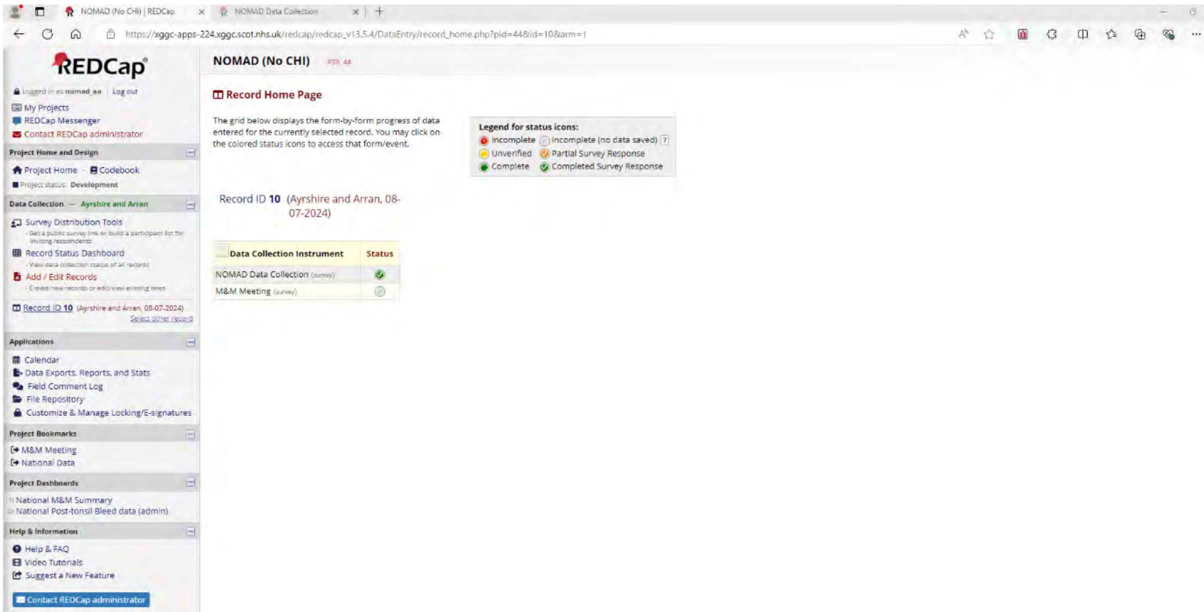
If you do not open the survey in this manner, and simply update the information on the current webpage, the box will still remain orange, adding to confusion during the M&M meeting.

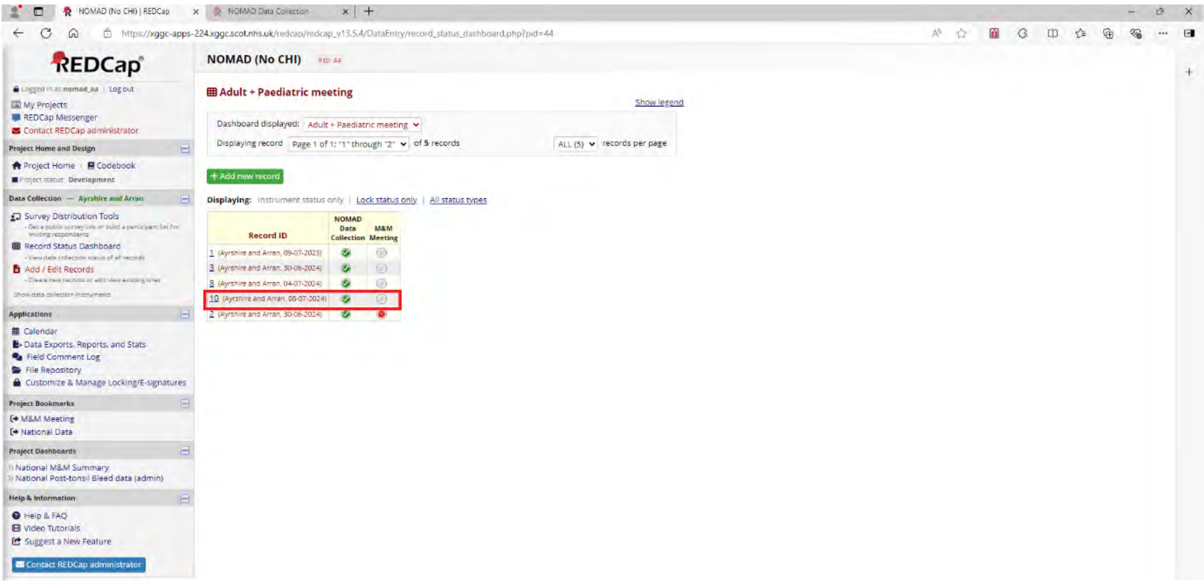


Opening the survey will bring up a new page. You are now editing the survey.

Complete the required outstanding information, then click “Save and Exit Form” at the bottom of the page.

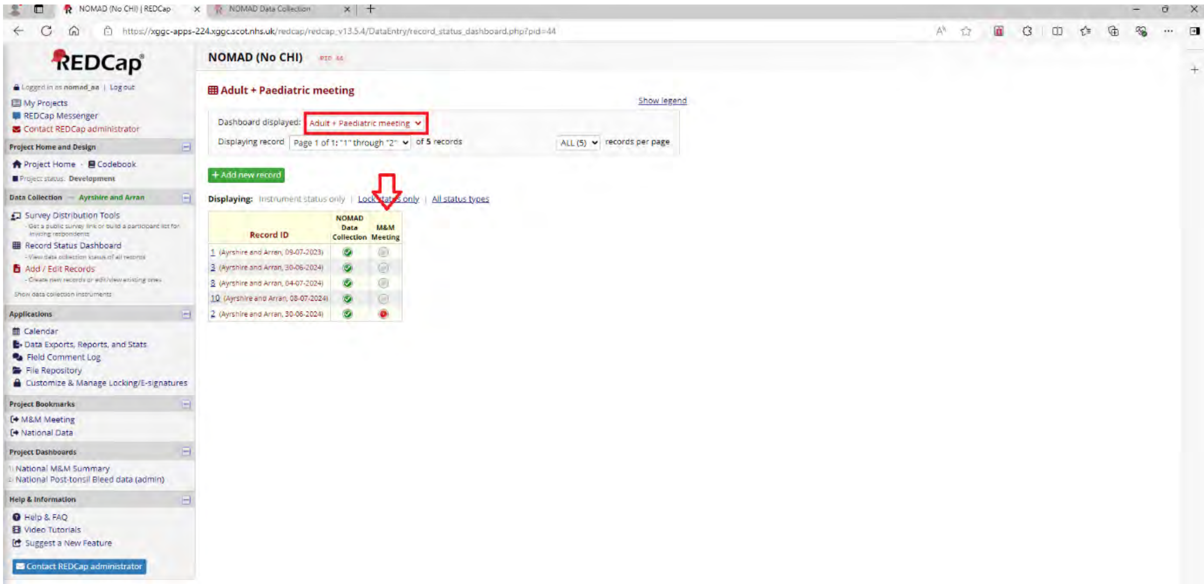
Then click “Leave page”. This will bring up another page indicating the ”NOMAD Data Collection” form has now changed from an orange box to a green box with a tick, as below





Now click to return to the M&M Meeting bookmark via the left hand menu. You will notice that the box that was previously orange should now be green with a tick.

We strongly suggest you repeat this for all records without a green tick. This will help you better organise the cases ahead of discussion at the M&M meeting itself.



Once the entire left hand column is green with ticks, you are ready to re-order the cases for easier processing at the M&M meeting itself.

Turn your attention to the right hand column (red arrow). This indicates the outcome of the M&M meeting discussion.

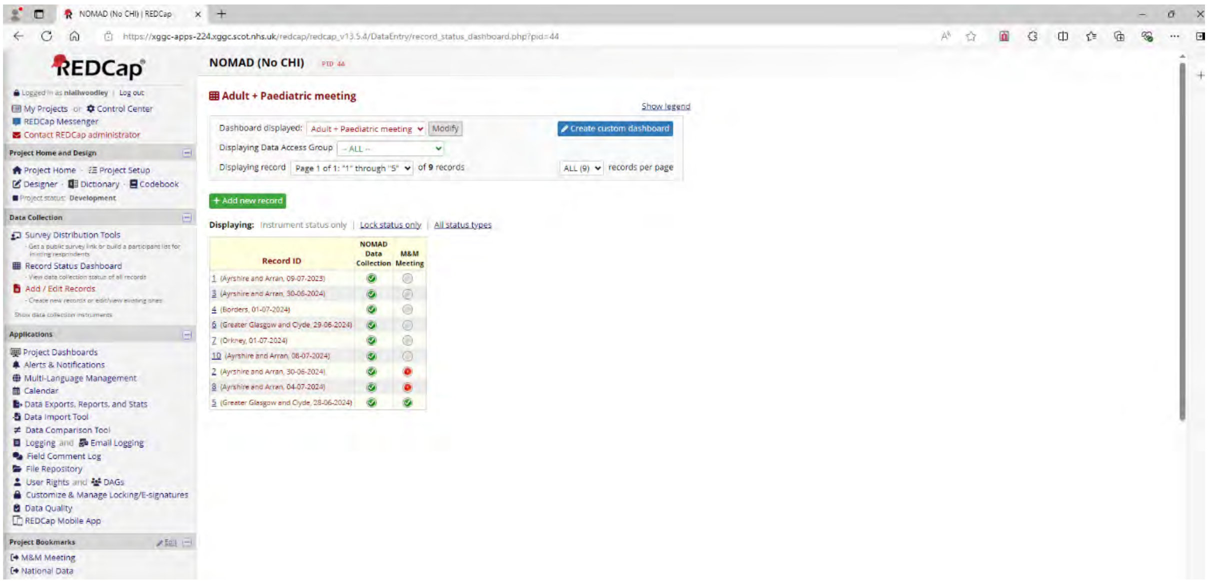
- Blank indicates no M&M meeting discussion has occurred yet
- Green with a tick suggests the case has been discussed at the M&M already and all information is submitted
- All other colours suggest that M&M discussion is yet to take place or was not fully completed.

By default, the records are shown in a haphazard order, which would increase the risk of accidentally missing cases that still require discussion. This is particularly problematic as more cases get added to the NOMAD database over time.

To improve this, you can re-order the cases by clicking the “Dashboard displayed” dropdown menu (red box). Here, there are several options to choose from:

- **“Duplicate check”** – this reorders cases based on date of complication. This makes it easier to identify potential duplicate records. NOMAD will allow multiple different users to submit exactly the same information, so duplicates may easily occur. You can delete a duplicate by clicking on the Record ID number (blue underlined) -> choose action for record -> delete record.
- **“Adult + Paediatric meeting”** – should be the default for most health boards, where both paediatric and adult patients and managed by the same clinical team
- **“Adult meeting” or “Paediatric meeting”** – should be used in health boards where the adult and paediatric ENT departments are separate i.e. NHS GG&C or NHS Lothian. If you select “Paediatric meeting” then any adult cases in that health board will be excluded from the list.

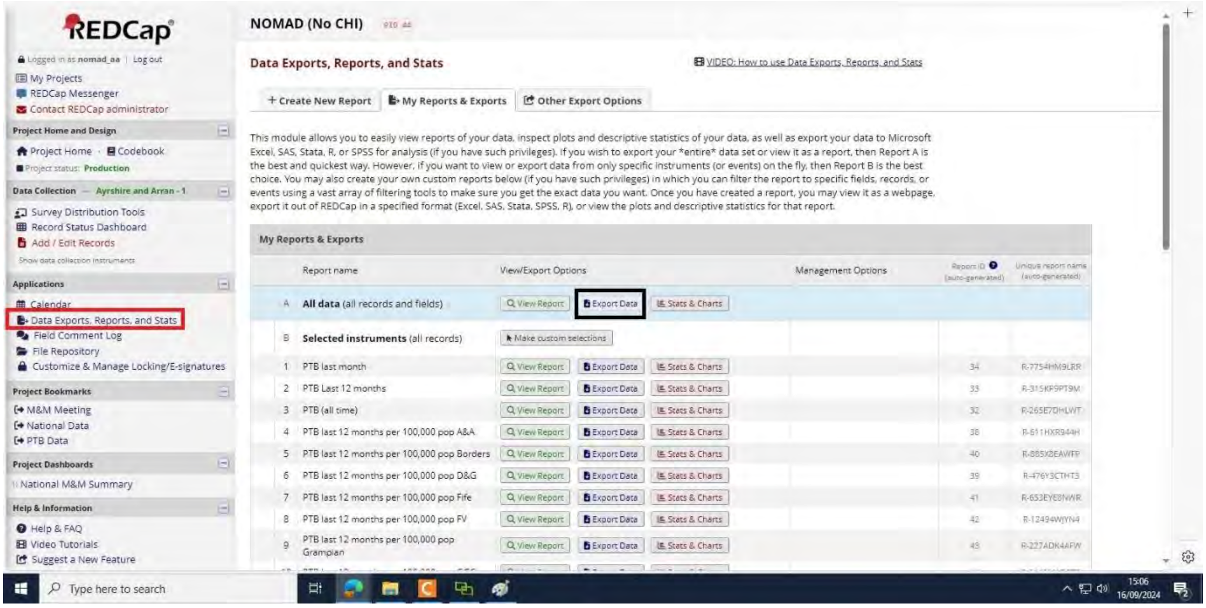
Re-ordering the meeting list ensures that all those requiring M&M meeting discussion will be at the top of the list. This allows easy navigation during the M&M meeting itself.



Here is another users M&M meeting page. You can see that they have changed the "Dashboard Displayed" to be "Adult and Paediatric meeting" and this has re-ordered the page as desired.

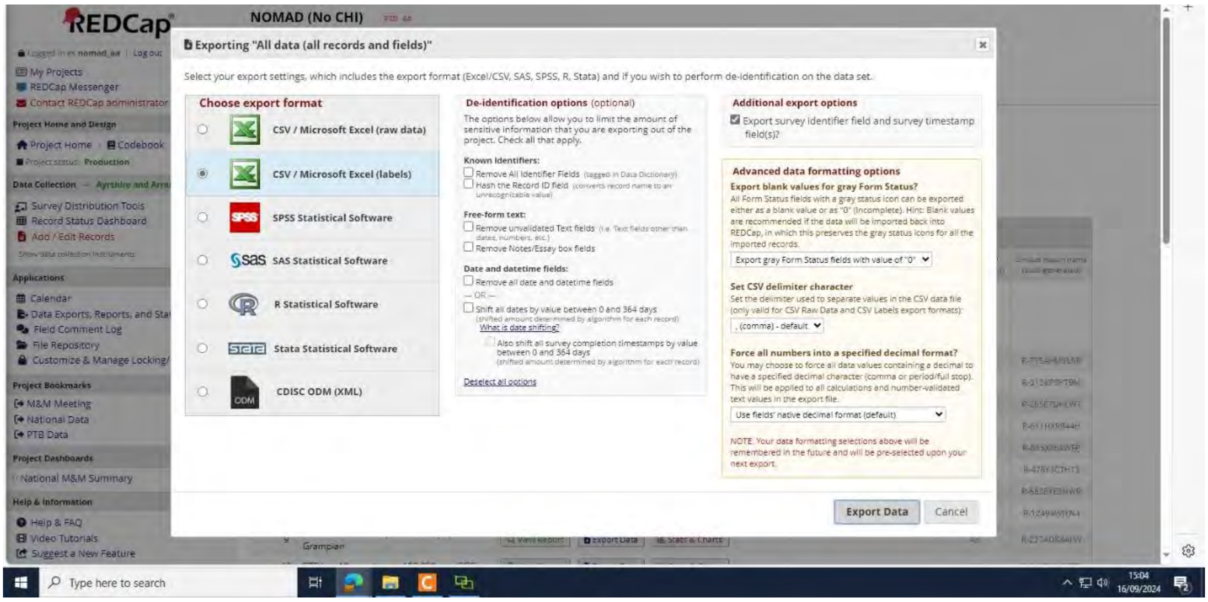
Note - Some cases e.g. secondary post tonsillectomy bleed may not merit full M&M meeting discussion. You can therefore complete their M&M meeting box before the meeting takes place. This will change their M&M meeting box to a green tick and move them to the bottom of the list, therefore saving time during the M&M meeting. Please see instructions below (During the M&M meeting) for how to do this.

Create a meeting list

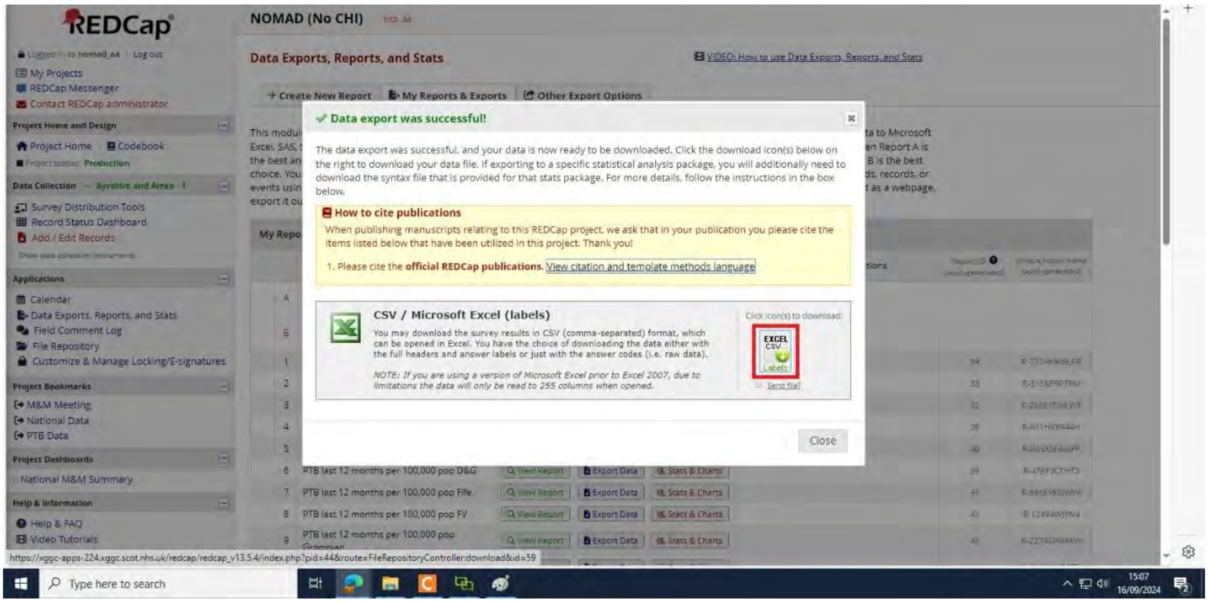


Given that anyone can submit a case for discussion at the M&M meeting, it is possible that consultants may be unaware of the cases submitted for discussion at the next M&M meeting. Therefore, we recommend sending a list of patients due for discussion, ahead of the M&M meeting itself.

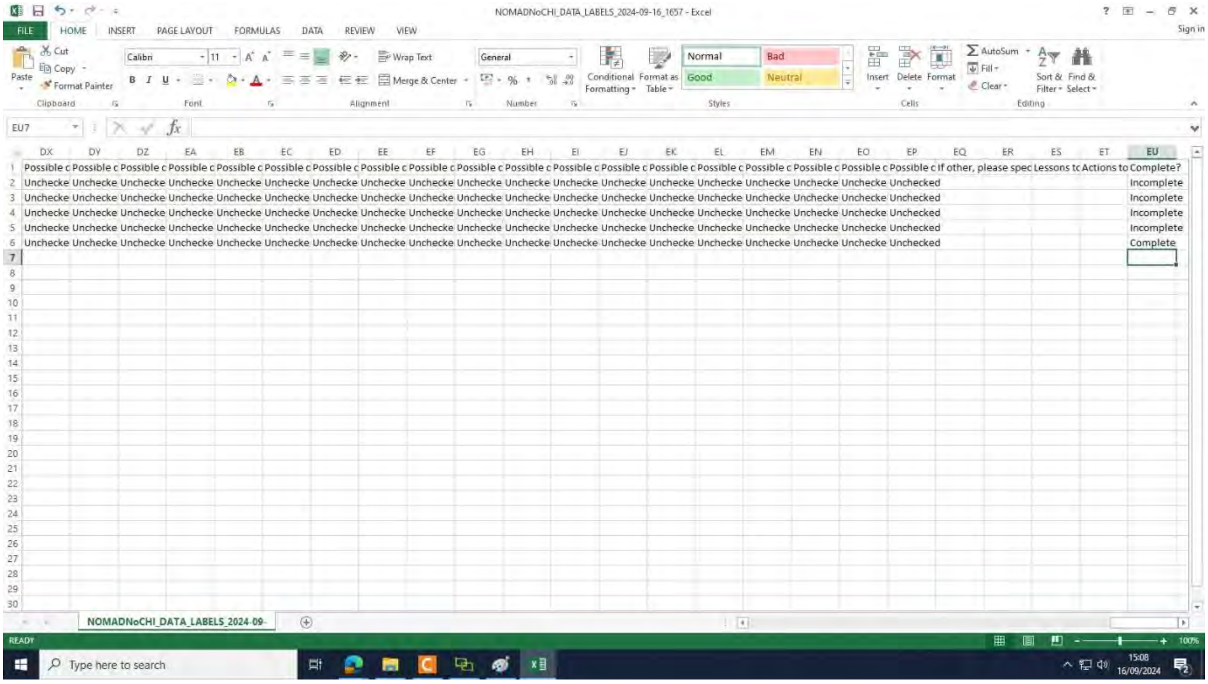
To do this, click “Data exports, reports and stats” on the left hand menu (red box). Then for “All data” click “Export Data” (black box)



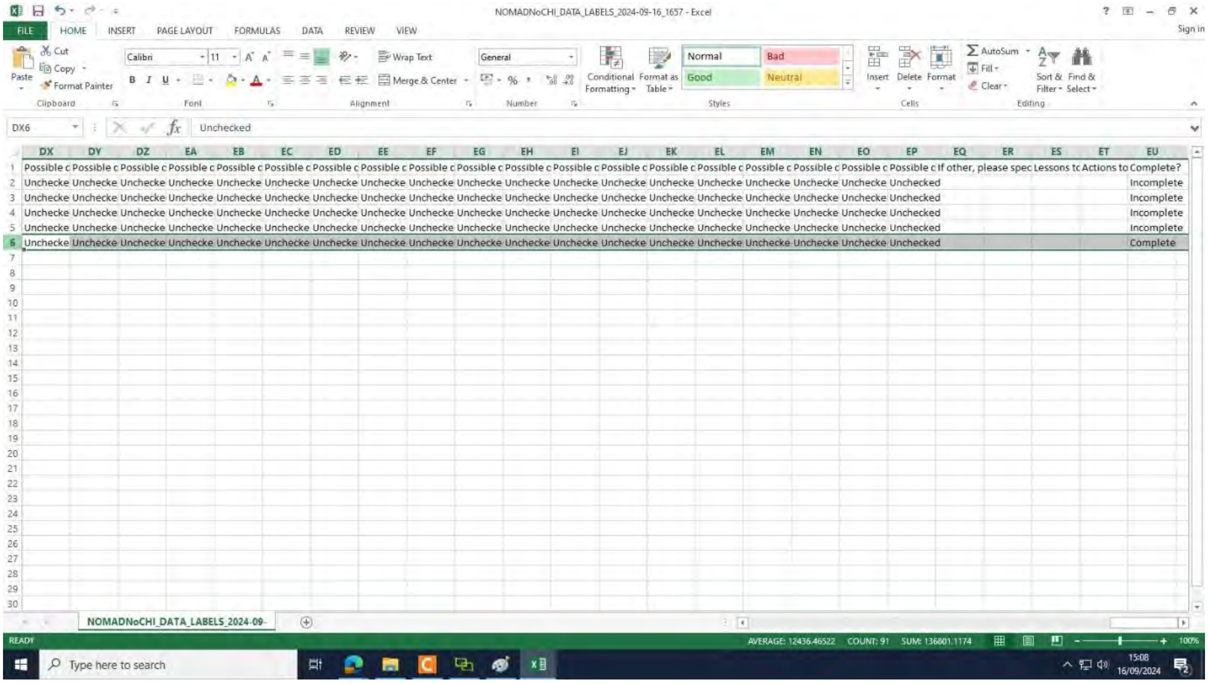
Then click the option for CSV file (labels). This will download all the information submitted to NOMAD in a format that is easier to understand, at a glance. Click “Export Data”.



Then click the excel button (red box) - this will download the excel file.

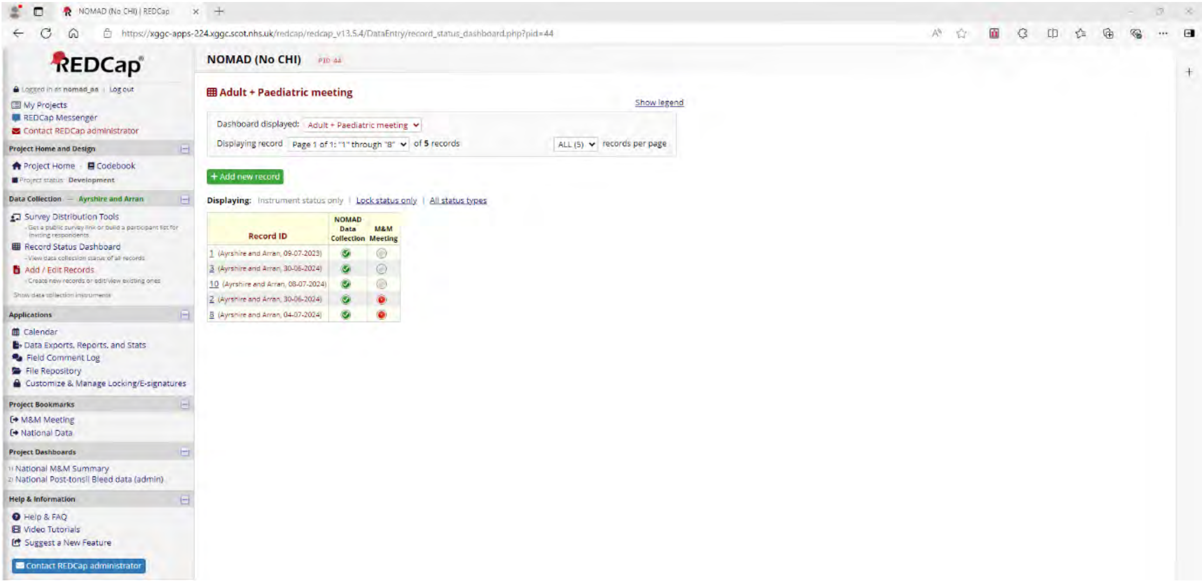


When you open the excel file, move the screen all the way to the right, until you see the final column which should have "Complete?" in the top row. In all other rows, it should say "Complete" or "Incomplete". This box indicated whether the M&M meeting has been completed for that case, or not.



To create a list of patients still due for discussion, simply select all rows which have “Complete” in them. You can do this by clicking the row number on the far left (green highlight). Then right click and then select, “Delete”. You can select multiple rows at a time by clicking and dragging from the row number to speed up the process. This will leave only the cases still pending discussion. You can perform further formatting to make this document tidier, if you so wish. You can then send this excel file to your department prior to the M&M meeting.

During the M&M Meeting



Having completed the preparatory steps above, you are ready for the M&M meeting itself. Login as normal and move to the M&M meeting bookmark using the left hand menu.

Remember to select the correct "Dashboard displayed" from the dropdown menu at the top of the page to ensure the cases are ordered in a useful format.

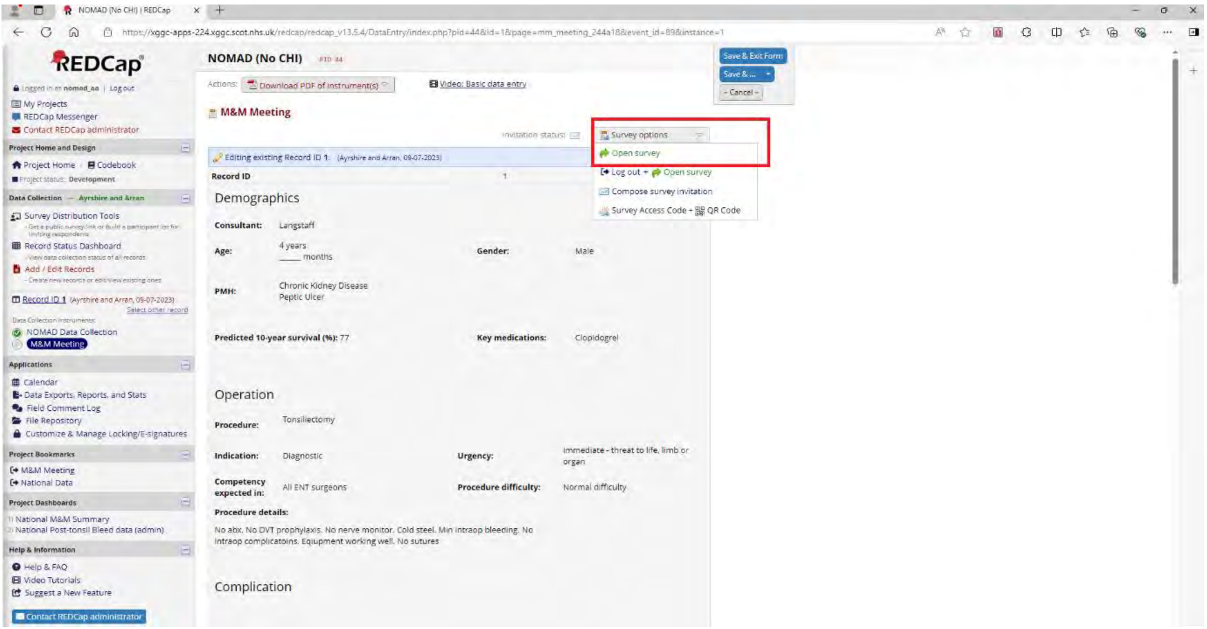
Given you have completed the previous setup steps, you now only have to focus on the column on the right hand side, "M&M meeting" during the meeting, which will update automatically as you progress.

The right hand column will usually have a blank box for any new patients requiring discussion.

The main exception to this would be a case that was partially discussed at a previous M&M meeting, but then deferred to a future meeting in which case the box may be red, amber or green without a tick.

If you follow the steps in this guide, cases that have been discussed will change from a blank box to a green box with a tick.

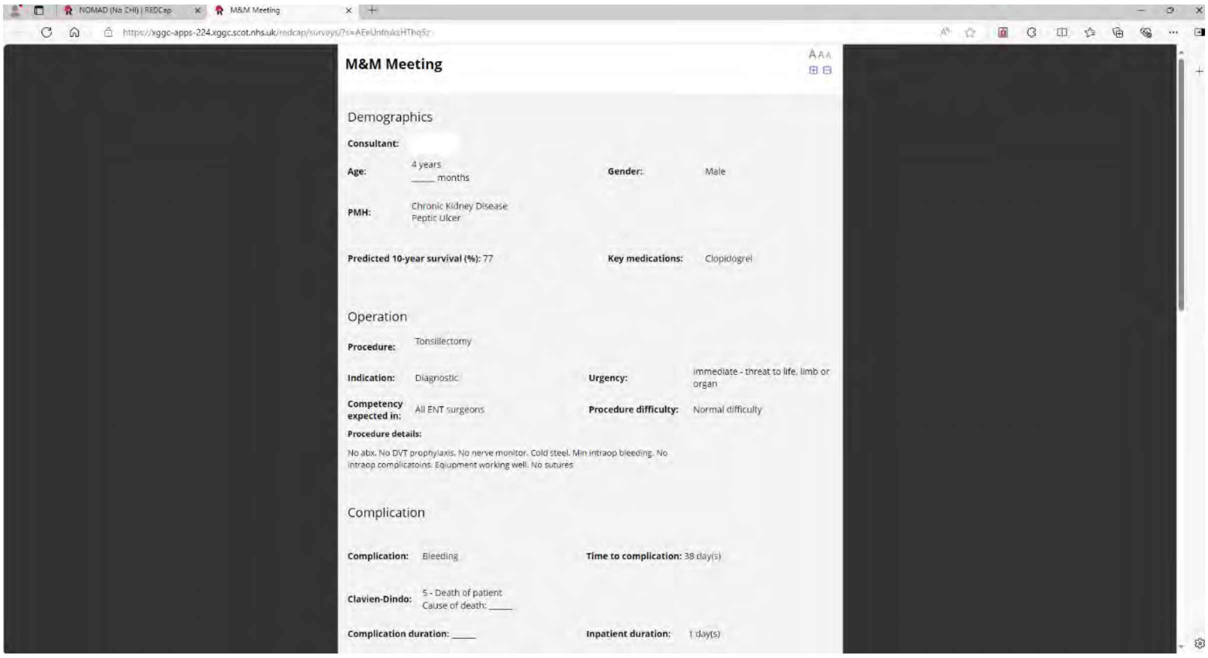
To bring up a case for discussion, click the blank M&M meeting box for the patient at the top of the list



Then, open the survey. Click “Survey Options” on the top right. Then click “Open survey”.

Doing this will create a green tick once you submit and save the form. This will automatically move the patient to the bottom of the M&M meeting dashboard.

If you do not open the survey as shown here, the box will turn green but will not be ticked and so will not automatically go to the bottom of your M&M meeting dashboard, as desired, and may increase the risk of missing cases that require discussion.

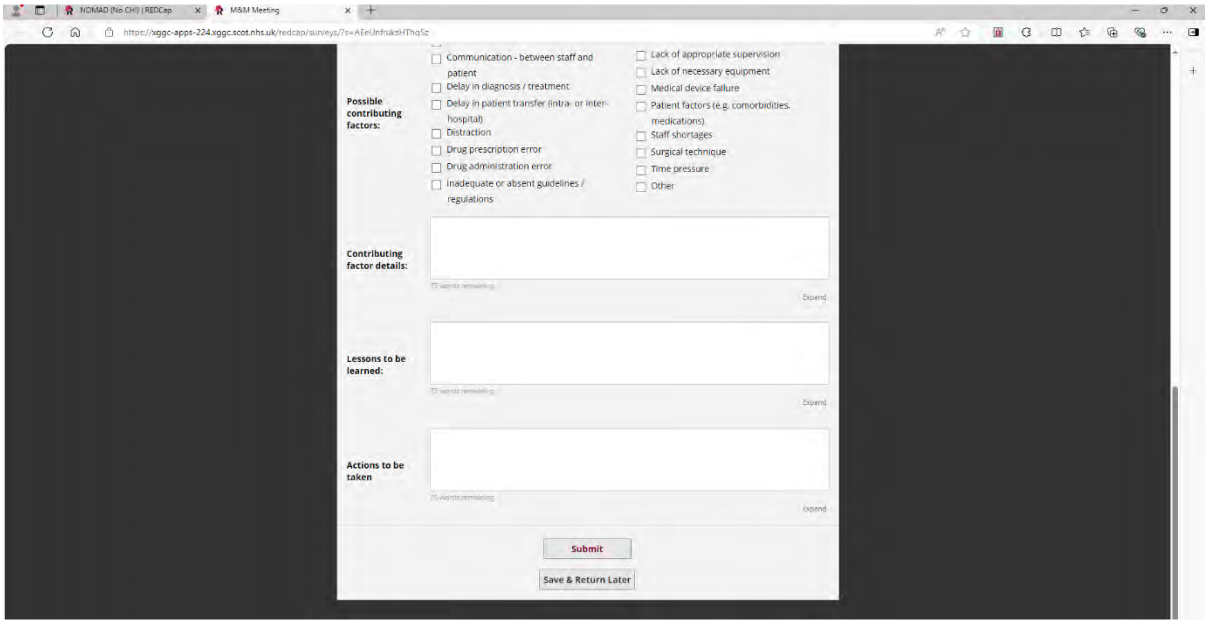


Once on the survey, this will bring up a page with a summary of the case. All information in the image above is dummy data for demonstration purposes and not real patient information.

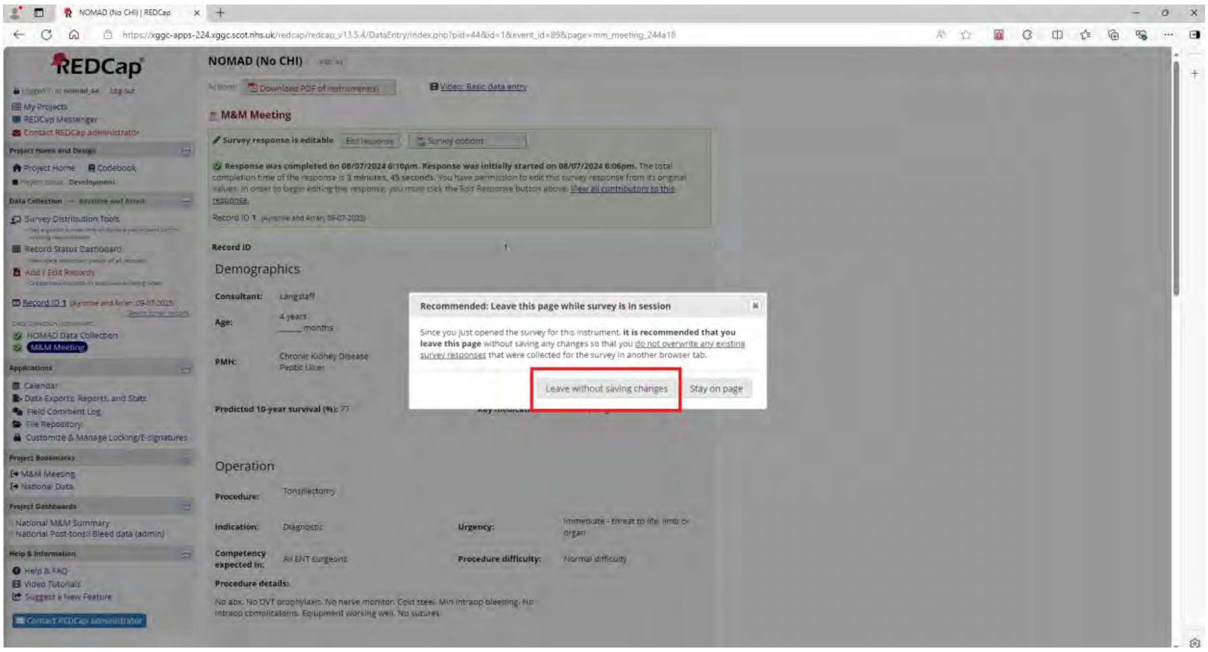
This information **<u>cannot be edited from this page</u>**. This is deliberate to minimise the risk of any loss of information from accidental clicks or button presses.

If you notice that information is incorrect or requires amendment, please see the troubleshooting section at the end of this document. We recommend minor amendments are noted by the M&M co-ordinator but are only made after the M&M meeting is complete in order to save time during the meeting. If a major amendment is needed this can be done during the meeting – please see the troubleshooting steps at the end of this document.

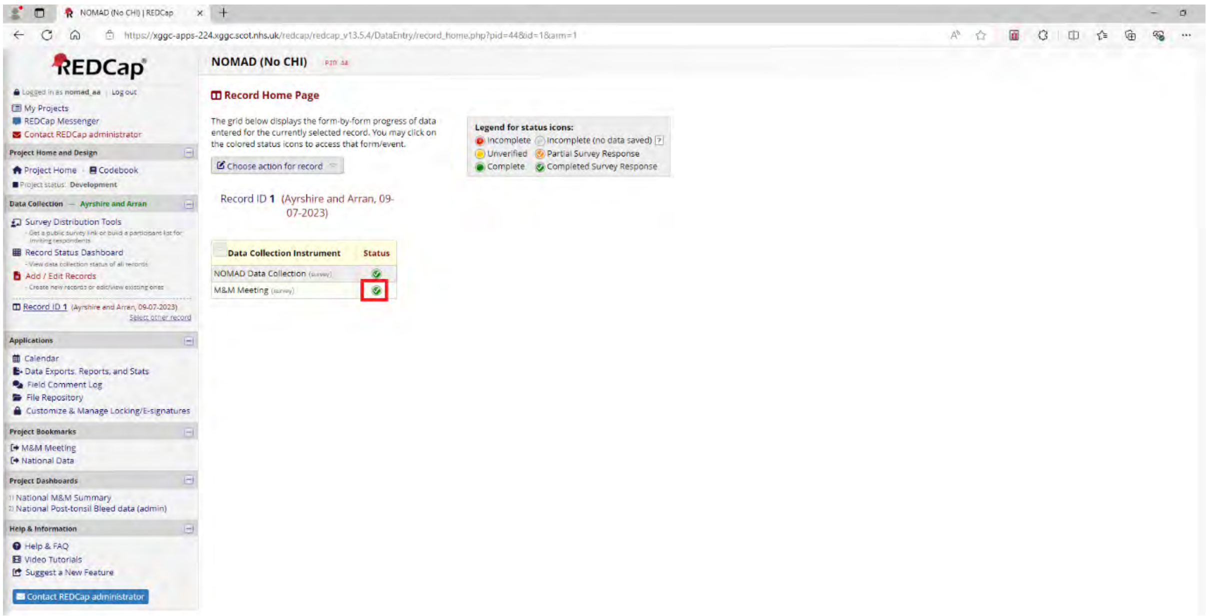
The case can be presented to the M&M meeting as normal.



As you scroll down, there will be prompts to record the outcome of the M&M discussion. These are not mandatory fields and so can be left blank if desired. Click “Submit” then on the next page, click “Close”.



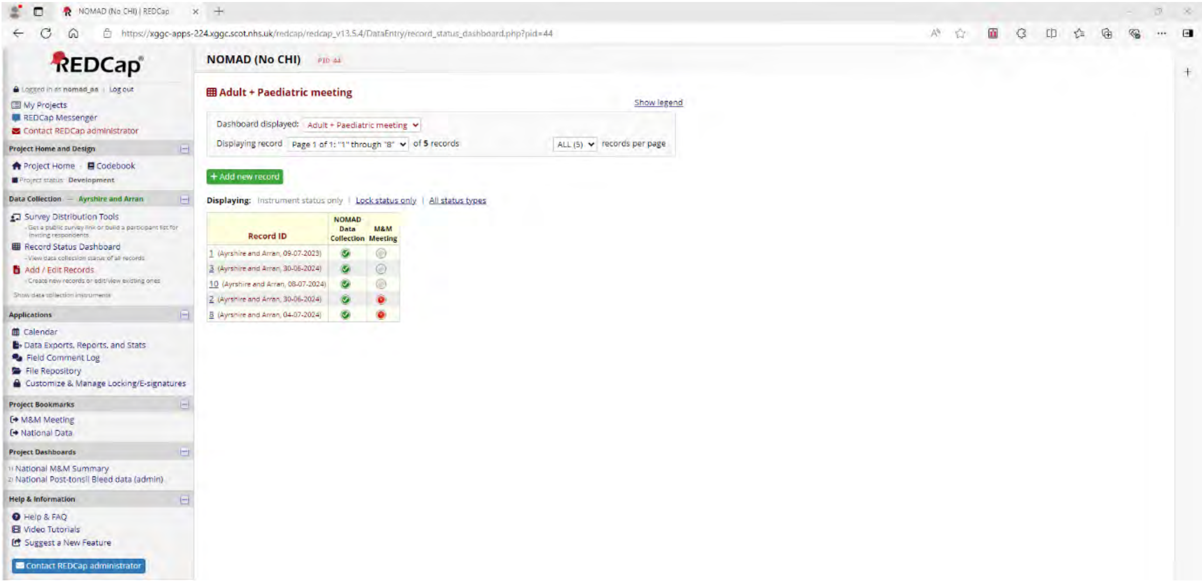
Click “Leave without saving changes”.



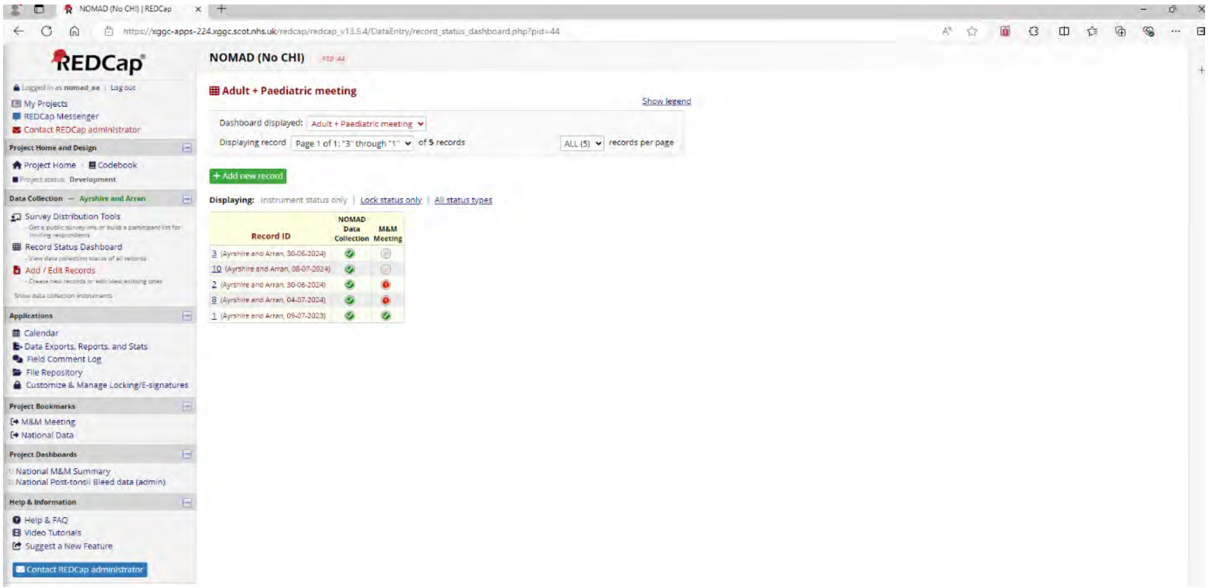
This will confirm a green box with a tick for the M&M meeting section.

You can then move back to the M&M meeting bookmark by clicking the option on the left hand menu again.

Before:



After:



The case you have discussed will be moved to the bottom of the list automatically, because of your ”Dashboard Displayed” option and a new case will be at the top of the list.

You can then click on the M&M meeting box for the next case to be discussed which will now be on the top row.

Continue this process until all cases have been discussed.

It may be that some cases do not warrant full M&M meeting discussion e.g. secondary post tonsillectomy bleeds. However, it remains important these cases are submitted on NOMAD for audit purposes.

We recommend screening for cases that do not warrant full M&M meeting discussion prior to the M&M meeting itself.

If you find a post-tonsillectomy bleed within your cases, you can complete the above steps using the "Open Survey" function, changing the M&M meeting box to green with a tick. This will move these cases to the bottom of the list, allowing optimal use of time during the M&M meeting whilst still allowing full data capture.

Departmental policies should be agreed on which cases do or do not warrant full discussion e.g. postop wound infection responded to oral antibiotics

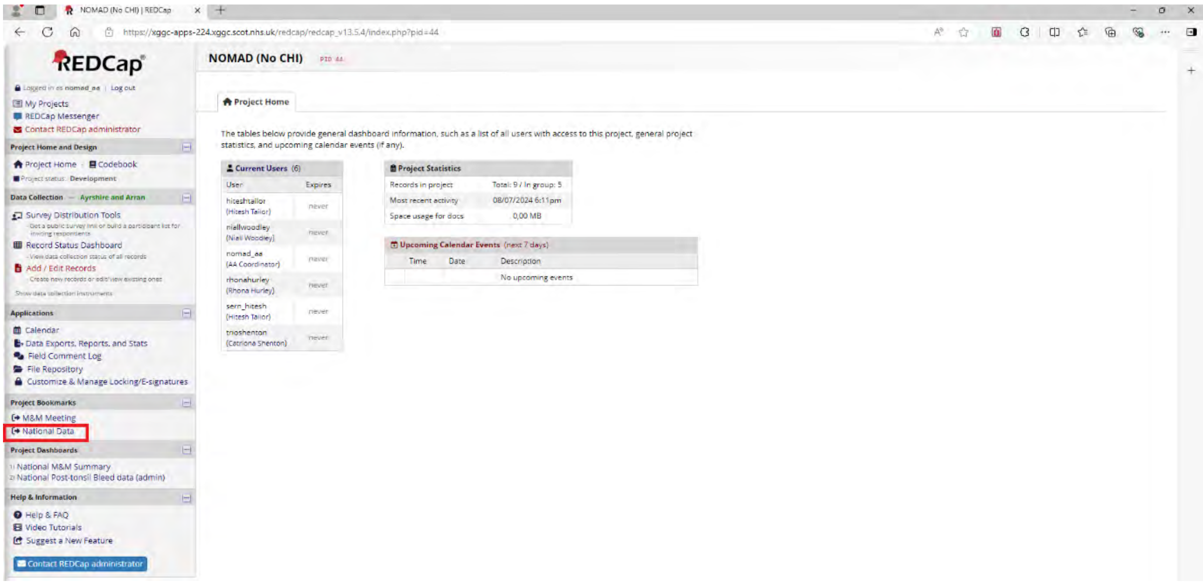
Additional tips for the M&M Meeting:

For smooth running of the meeting, we have found from initial trials that the "flow" of the meeting often works best if one nominated person acts as a "scribe" - negotiating the NOMAD website and typing to summarise the discussion being had while somebody else presents the case (usually a registrar or consultant involved in the case). Trying to both present the case and summarise the discussion is difficult and slows the meeting down.

If the text size is too small or large for your meeting, there is an option in the top right corner after opening the survey that allows you to increase or decrease the text size, as desited.

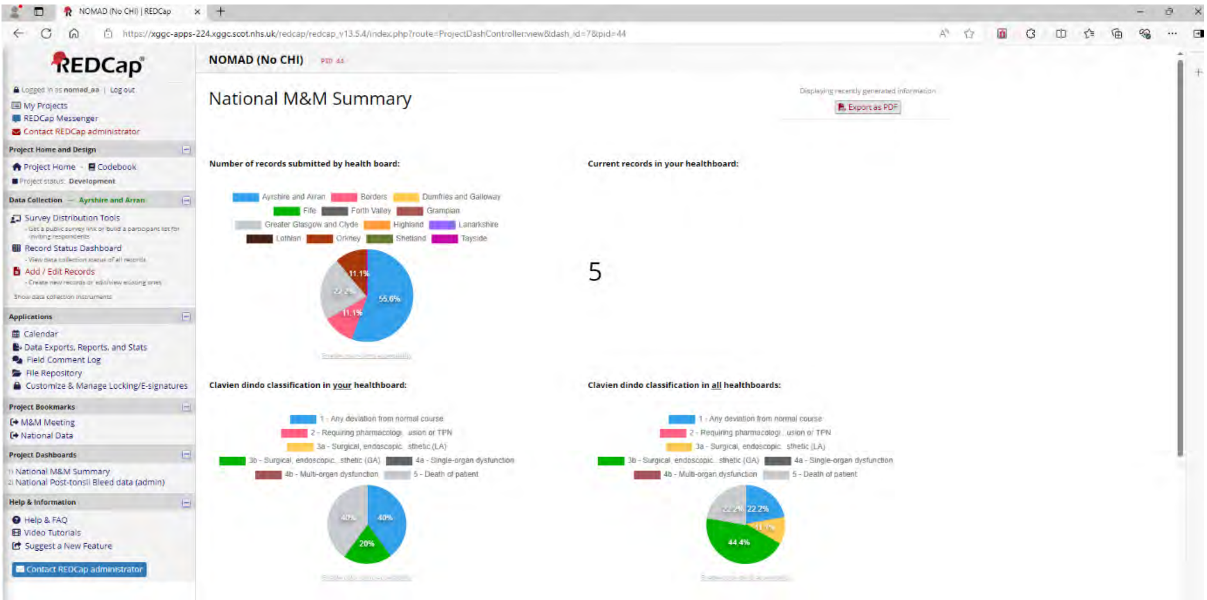
Finally, we would like to highlight that, although it has not been tested in the court, we believe that the information included in the M&M meeting could be admissible as evidence in court proceedings (even though patient CHI numbers are not included in the current version of NOMAD). NOMAD should therefore be viewed as a legal document with wording that reflects this.

Comparing national data



NOMAD allows you to compare your regions performance to that of national data. We suggest this is done routinely at the end of the each M&M meeting.

To do this, click the “National Data” bookmark on the left hand menu.

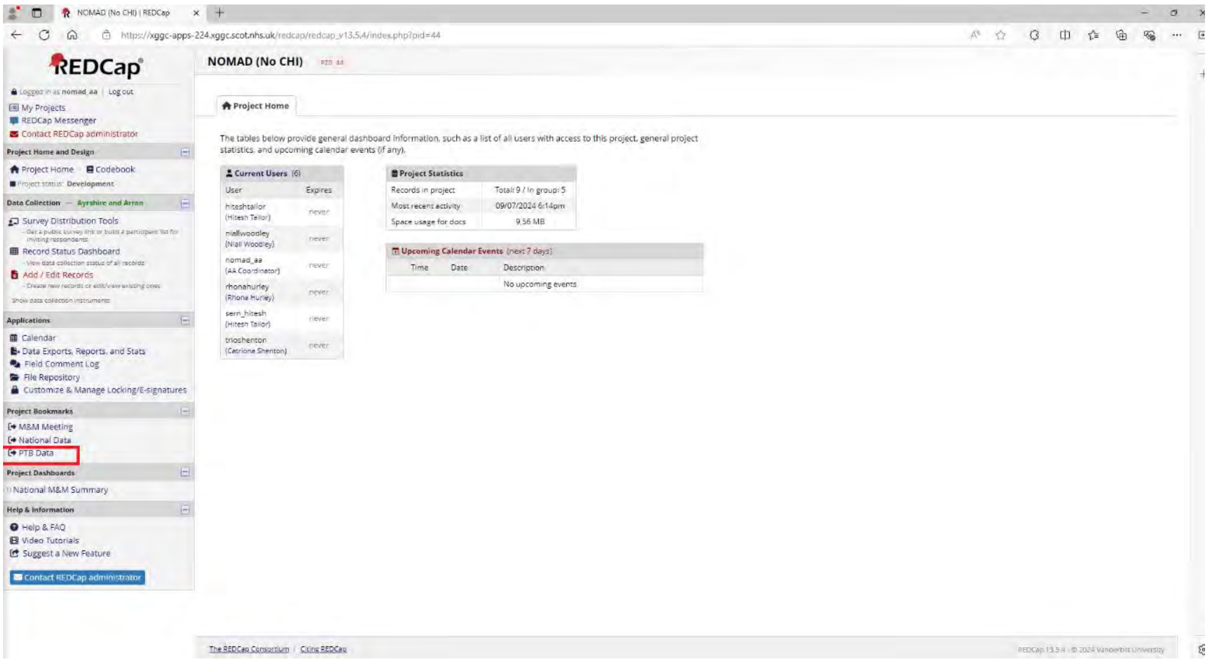


This will bring up a page that allows comparison between health boards of selected outcomes.

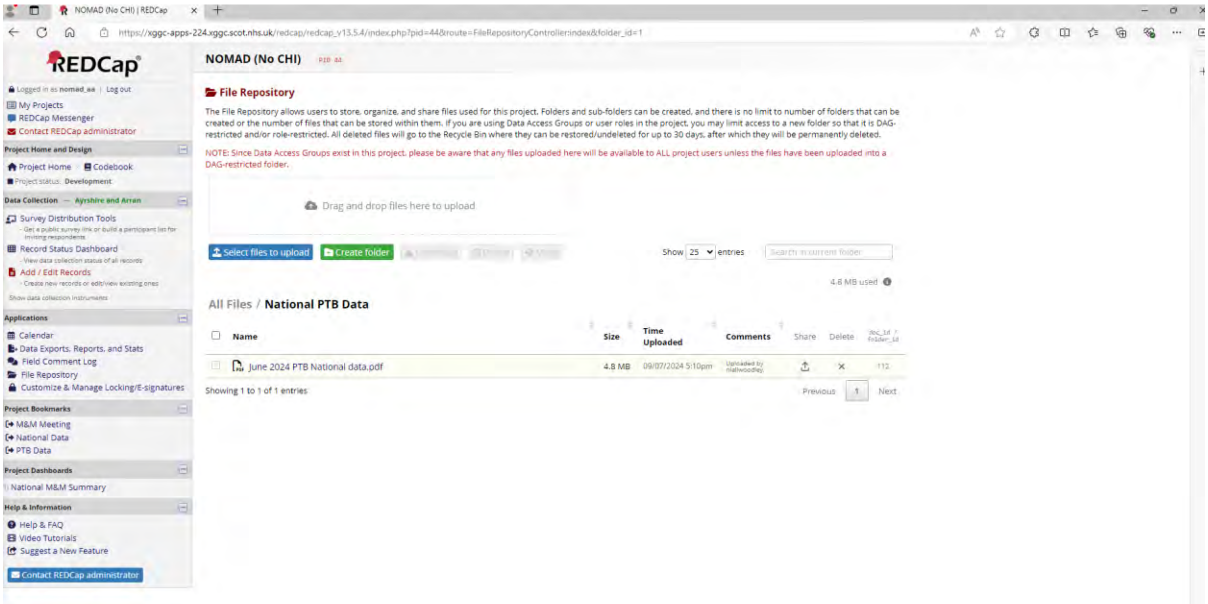
The outcomes shared here are determined by SERN. We are also slightly limited in what data can be shared for data security reasons and also technological limitations within REDCap.

Charts can be clicked to expand them, allowing them to be seen more clearly in the M&M meeting setting.

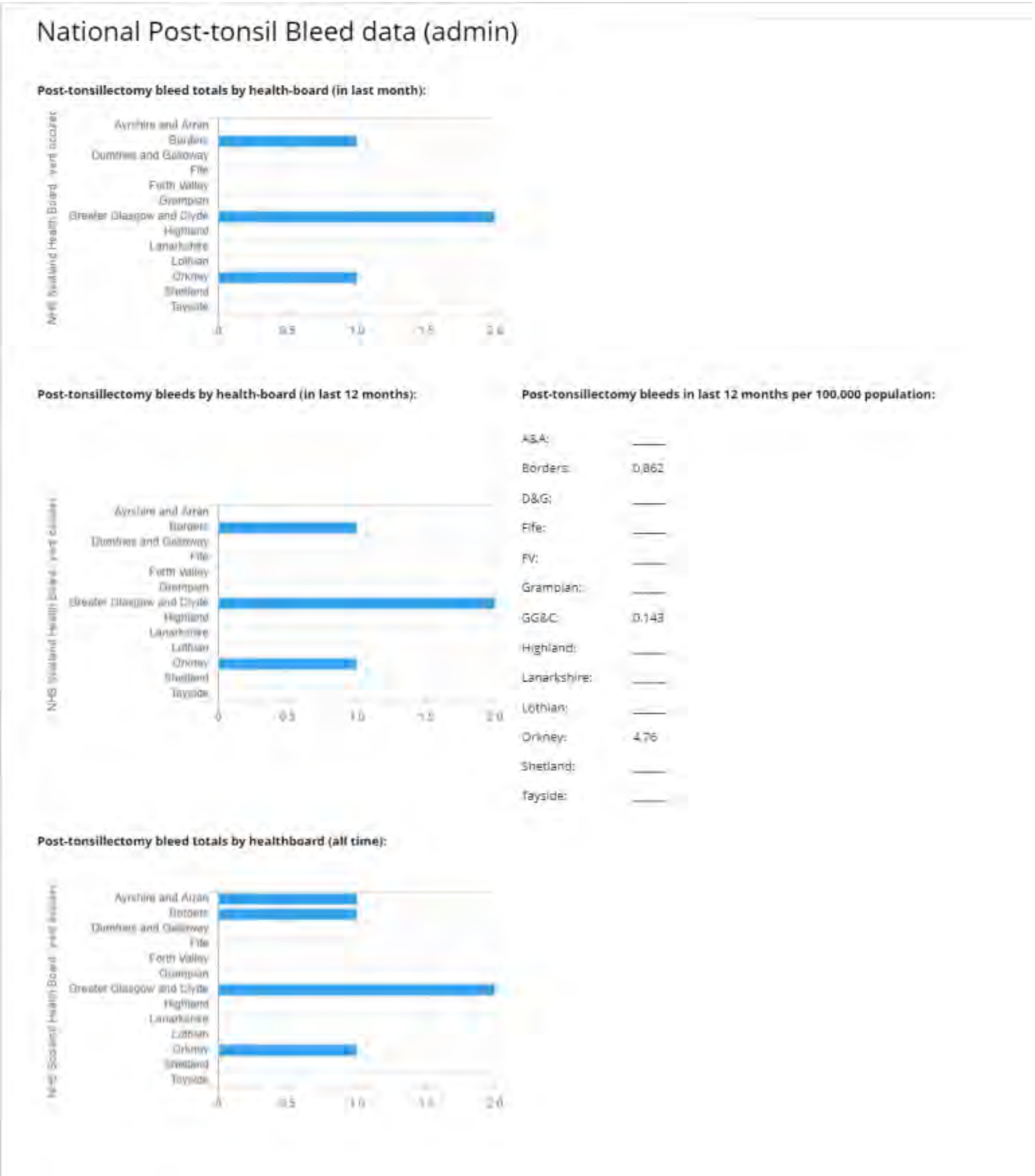
If you see any error messages, please contact Hitesh Tailor or Niall Woodley so that this can be remedied.



We can also give access to statistics regarding individual procedures. In its current form, there are some technical issues with the sharing of data nationally in real time. However, we have made a workaround which hopefully is adequate for the time being. Click the “PTB Data” bookmark.



Here, you will have access to a PDF file of some national procedural data – in this case, post-tonsillectomy bleeds. A new document will be uploaded each month.

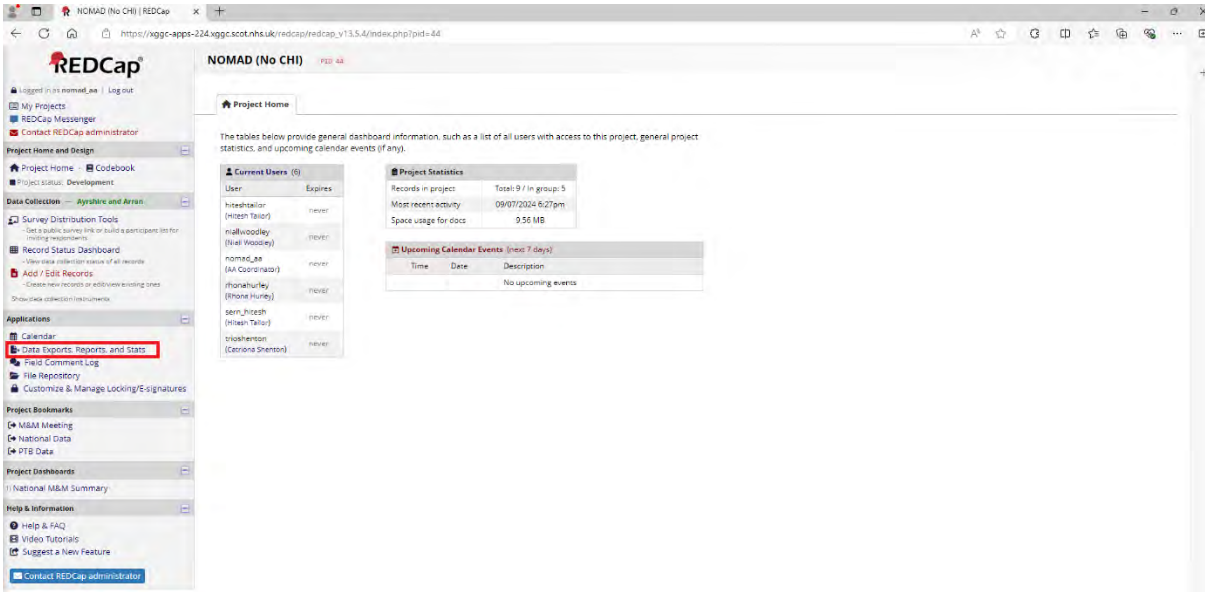


Here we have given information regarding post-tonsillectomy bleed numbers over different time frames.

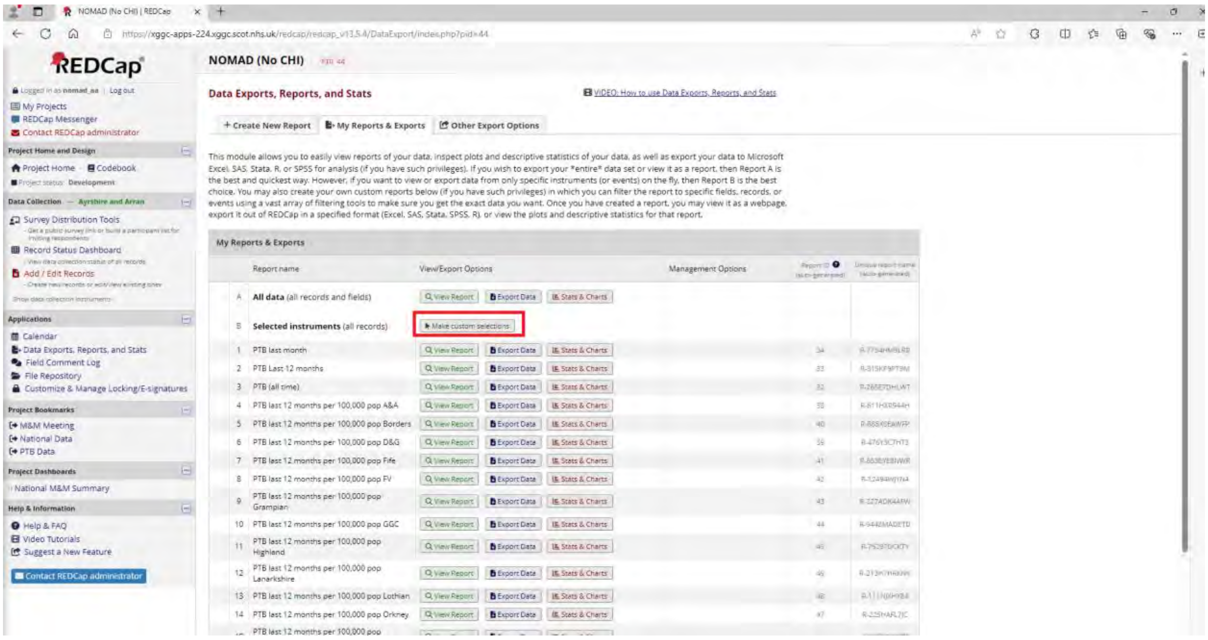
Due to the different health board sizes, this makes comparison difficult. We have therefore given corrected information based on population served for each health board also to allow easier comparison. However, it is worth noting this information is not a perfect comparison and does not take into account e.g. the total number tonsillectomy procedures completed. Regardless, this may be a useful comparative tool.

Exporting Data for Research / Audit purposes

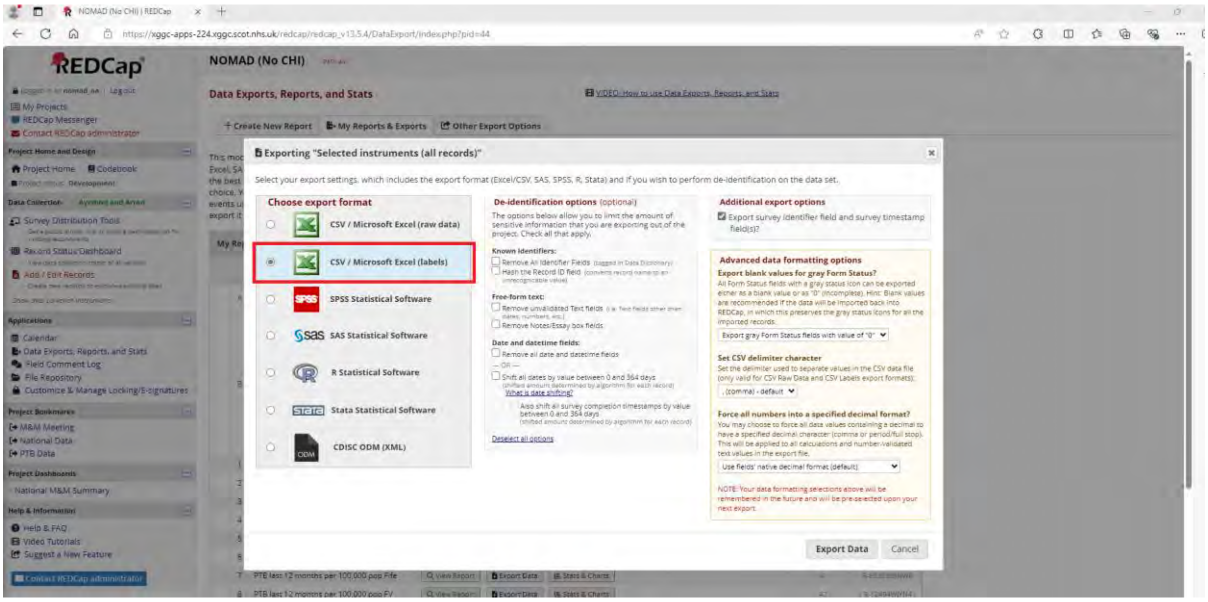
You may wish to download the data collated from your local health board for more detailed analysis. This can easily be completed by exporting the data to an excel document. You can only export the data for your health board. SERN members will have access to the data for all health boards.



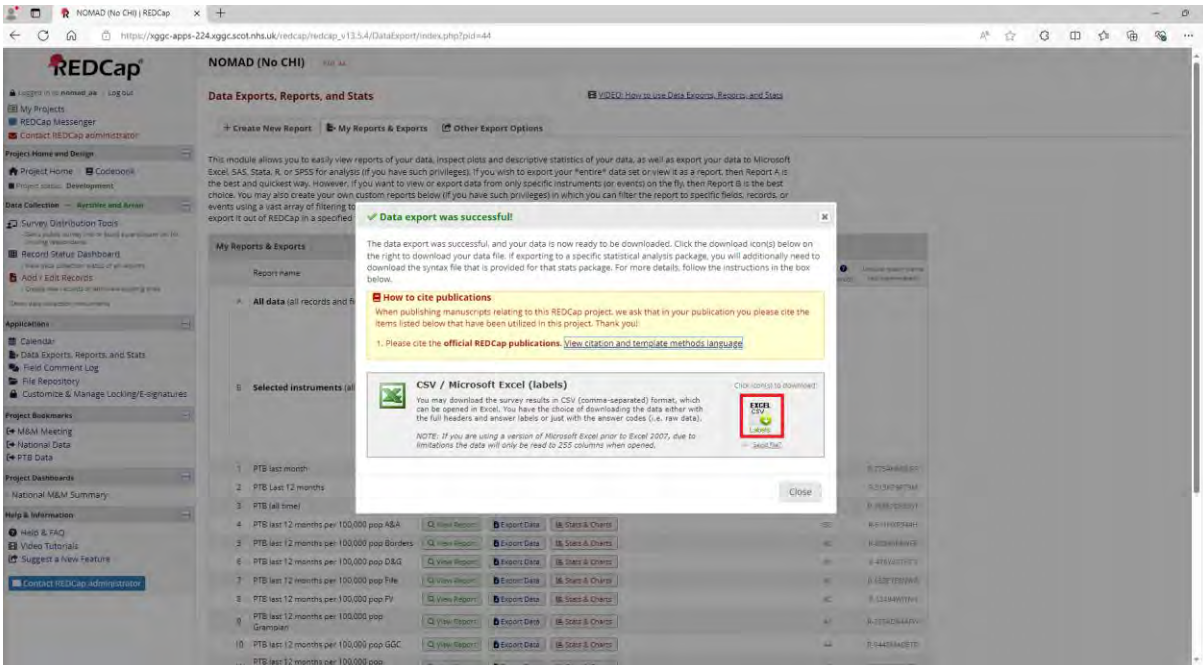
Click “Data exports, reports and stats” on the left hand menu (red box)



For “Selected instruments” select “Make custom selections”. Then select “NOMAD Data collection” then export data.



Click the ”CSV / Microsoft Excel (labels)” option. Then click ”export data” on the bottom right.



Click the excel button (red box). This will download an excel file with all of your health board region's M&M data.

This data may appear slightly "messy" at first glance and so may require tidying up. However, this should be easily remedied by those proficient in excel. We hope this will be a useful tool for ENT consultants coming up to revalidation etc. to quickly have access to all complications under their care.

Troubleshooting

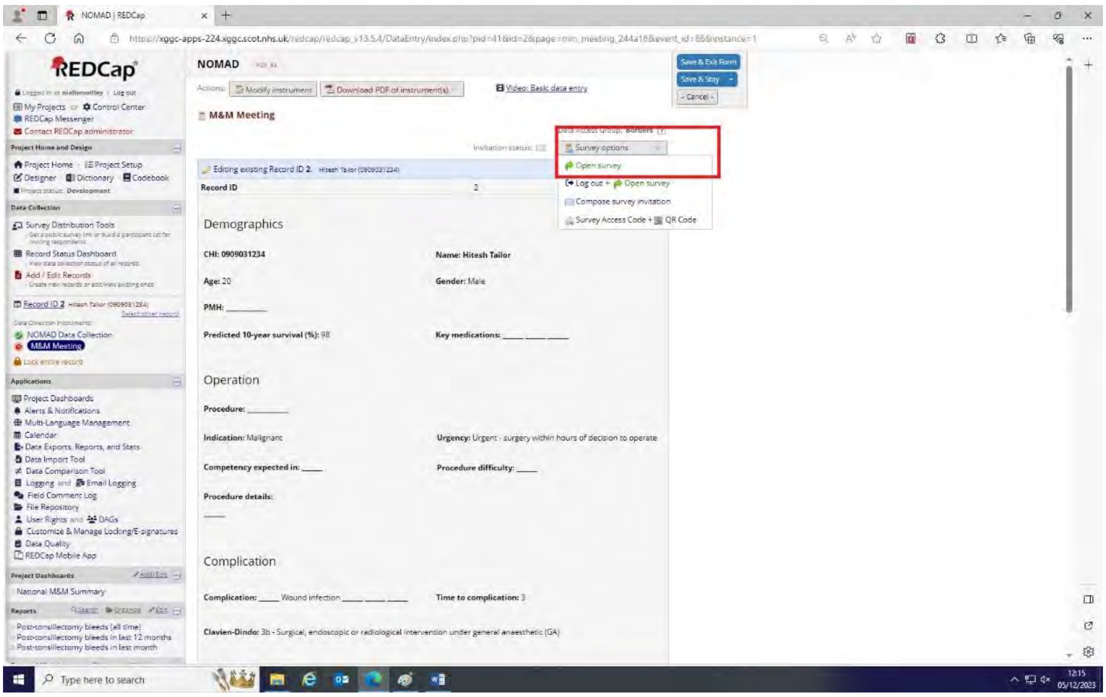
I want to amend information in the M&M report, but the M&M report is not editable. What do I do?

Go back to the M&M Meeting Dashboard using the bookmark. Find the record you wish to edit. Click on the button in the left hand column (NOMAD Data Collection), then open the survey using the top right menu. You can then edit the information here and save the changes. Click "Leave without saving changes". This should update the changed information and you can then open the M&M report as before.

We would recommend that minor amendments are not made "live" during the M&M meeting. Instead, we recommend the M&M co-ordinator keeps note of any suggested minor amendments to be made so that this can be done at after the meeting is over to avoid wasting time. However, for major amendments, the team may wish to ensure that the changes are made fully and correctly during the meeting.

I can't get the green box to become ticked!

Remember, you need to open the survey using the top right hand box. Click survey options in the top right, then open survey. You can then edit the form as needed then scroll to the bottom. Click "Submit". Then "Close". Then "Leave without saving changes". This should change your form to a green tick.



We are in the M&M meeting and decided to defer a case for a future meeting. What do I do?

Simply close the tab. Then click "Stay on page", then and negotiate back to the M&M Meeting Dashboard using the bookmarks. This will change the M&M meeting box from blank to another colour, but not green. Helpfully this will move the record further down the page so it is no longer in the top row, but above the green ticks, so it can easily be found during the next M&M meeting where it could be reviewed again. You can then continue with the M&M meeting.

Pre-Meeting Checklist for M&M Co-ordinator

☐ Ensure https://entscotland.org/nomad and https://entscotland.org/redcap are green-listed by your IT department and that you can access these sites

☐ Ensure you have appropriate log-in details and these are working correctly

☐ Check for duplicate cases and delete as appropriate

☐ Ensure complete information submitted for all cases using the left-hand column (NOMAD Data collection)

☐ Screen for post-tonsillectomy bleeds (or other locally agreed complications) using the right-hand column (M&M meeting) - open the survey and complete these.

☐ Send a list of all patients due for MDT discussion

☐ Ensure you are using the correct "Dashboard displayed" setting for your region