Exporting Data to other formats

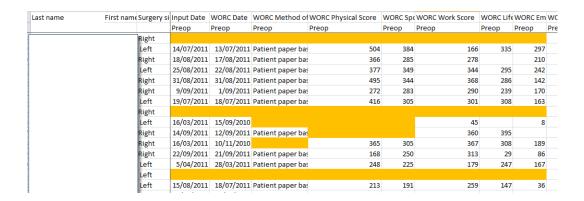
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EXPORTING DATA

Socrates has some built in descriptive statistics, details of which are in the Statistics chapter but these won't always be enough to get you the results and statistical tests that you need since these usually require the raw data. Thus it will be necessary to enlist the help of a statistician from time to time, especially if you want to publish and require statistical significance between sub groups of data. All the raw data and the scores can be exported from Socrates into a text file format for importing into Excel or a more sophisticated statistics package such as SPSS.

There are various combinations of exports possible but the important thing to know is that any combination of fields, and or scores can be exported into one (sometimes very long) row for each surgery or treatment record to enable statistics to be generated. If it's in Socrates, you can export it. You will need to spend time practicing this function to become familiar with the possible options.

Another reason to use the export function is that it makes it very easy to identify missing data fields and scores. You can use the customise function to select just the fields you want to check (rather than export them all) if they are surgical or history details. It's then very easy to run down and across the columns and see where the gaps are. See below, the missing scores, or fields are highlighted in orange. The totals at the bottom of the columns will also tell you how many of the total entries have had data entered for each field and the % of the total.



How follow up data is stored in Socrates

All follow up data for scores, or anything that has a date or a delay attached to it and is followed up over time (complications, clinical examination etc) is stored in Socrates in days to enable users to calculate mean and median follow up. The display on the score screen may be rounded up a day or 2 each side of the anniversary to account for leap years, and the different number of days in the month but it is all stored in the database in actual days. All the built in statistics generate data on the time points and delays by using the days stored and all the exports will export the follow up in days.

Note that the follow up period doesn't initiate until after the period has finished. For example, surgeries or records with a one year follow up would be 365 days or more post op, or in their second year of follow up. But they would be displayed as a 1y follow up, in that they have completed their first year of follow up.

The very early follow ups may be displayed as 0, 0w or 0m depending on whether you have selected the first year data to be displayed in weeks or months. Remember that you get to select that in the Set Up screen - see the screen print.



The 0 will show up on the F/U field if the follow up hasn't yet reached the end of that first time point, in other words, it is retrospective - you don't have a one year follow up until you have reached one year. An example, if the follow up date was 3 days post op, it's displayed on the score screen a 0w or 0m (see below) based on how you selected the delays to be displayed for the first year. This is because they haven't yet reached their one week, or one month follow up. If the data was exported or used in the statistics however, it would display and use 3 days as the follow up to calculate the mean, median etc. It's only on the score screens that it displays the follow up period as 0w or 0m.



How to export data

Go to the Home screen and click on the Export icon. But, before you start you need to have a clear idea of what you want to export. Do you want data for the whole database or just a sub group, do you want to include surgical details, complications, comorbidities etc. or just scores? It's a good idea to write down what you are planning to export and go through the list as you set up the parameters you want on the screen. It's also a really good idea to have a practice on a sub set while you are learning your way around this feature, you don't want to run an export of 5000 patients and find it's not want you want. Start off with a small group and once you've got it right select the entire group. See more about this later. There are a lot of options that you can include or exclude with the export function and it will take you a while to figure it all out.



There are 3 separate columns on the export screen.

The first is the demographic export, this will export ONLY the data from the demographics screen, name address, email etc. This can't be combined with data from the 2 other columns. It is not module specific.

The middle column exports all the data fields that are not attached to a time point. These are the surgical details, custom fields and data from the history screen (surgeon, assistant, study, diagnosis etc) and some of the patient history – details of injury date, workers comp etc. This is module specific.

The 3rd column will export anything that is attached to a time point. This includes all the scores, the patient work and history, surgeon examination and history, which includes complications, and radiology. This is module specific.

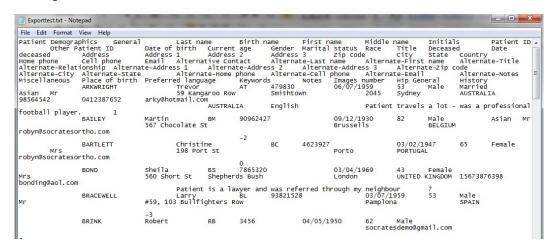
It's possible to combine fields from the 2^{nd} and 3^{rd} column in the export so you can have surgical fields combined with scores/evaluations in the one file.

The standard search function is an important part of the export as it allows you to select the fields you might want to export, as well as the sub groups. If you haven't used this you will need to know how to use it to be able to export data. Read the Search chapter of the manual for details.

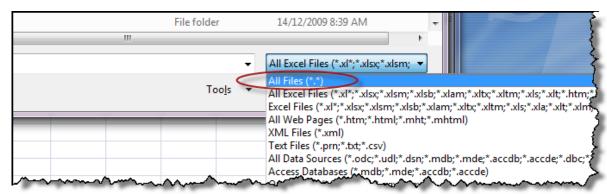


Converting/opening from a text file to an excel file

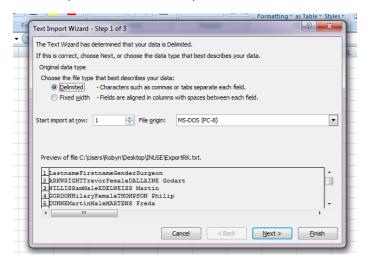
Once you have exported data using the export function the data will initially be exported into a .txt file format initially. It will look like the file below if you opened it directly. But... don't panic, it's very easy to convert it to a familiar looking excel file.



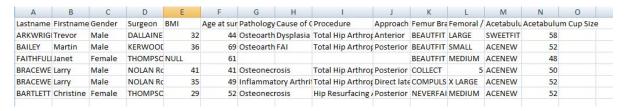
To open it into an Excel file, open excel but use the open **ALL files** function - it's not yet an excel file so if you use the default *Open All Excel* files setting you won't see it, as Excel is only looking for Excel files.



Below we have exported our list, opened excel and then open ALL files and this is what we see.

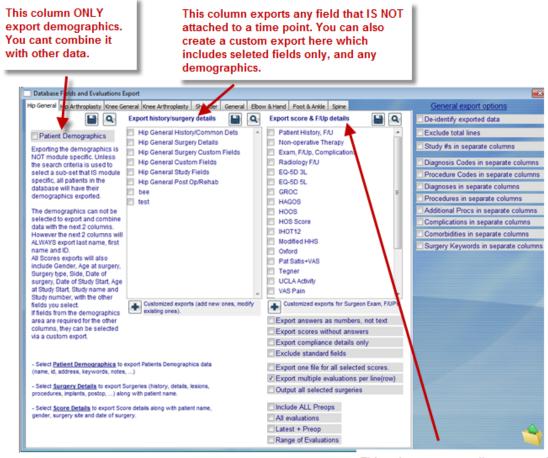


You can either click Next, Next or go direct to Finish and hey presto, it looks like a normal spread sheet.



If you want to save it as an Excel file select **save as** .xls otherwise it will be saved in its original format and you will need to open as *All files* again and go through this rigmarole again each time you open it.

Getting started



This column exports all scores, and screens that are attached to a time point, complications, examination etc.

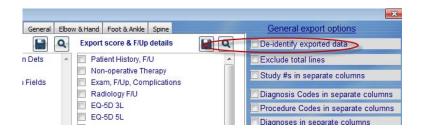
The window above will open up. The first step is to make sure that you are on the correct tab for the module you want to export your data from (except for demographics where it doesn't matter) There's a tab for each module.



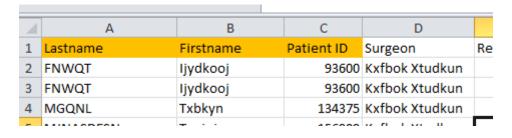
Deidentify Data

If you want to remove the patient identifiers check this box before you run the export. This will scramble the patient names etc.

It doesn't work for the demographics as it normally doesn't make sense to de-identify demographics. This check box is located on the far right under Genera export options.

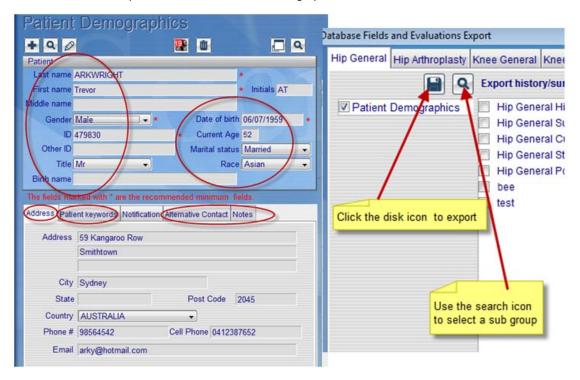


What the deidentified data looks like.

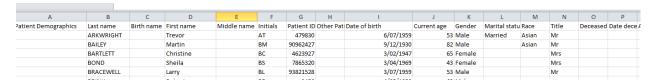


Exporting Demographics

The first column will export all the data from the demographics screen.



All the fields in the demographic window with the exception of the notification tab (the email address will be exported from the main address tab) including the alternative contact details, patient keywords, and anything in the notes section will be exported in one row for each patient.



If you want to export demographics for just a sub set, e.g. only patients belonging to Dr Bloggs, or patients in a specific study group, or those where a specific implant was used, use the search icon to select the data for just the group you want. It functions in the same way as it does for the normal search. See later in this chapter, *Selecting a sub set to export.*

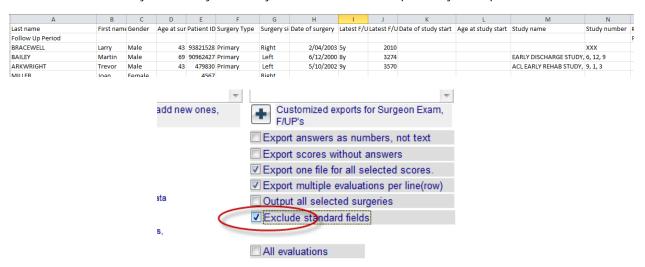
Once you have made your selection click on the disk icon, choose a name and location for your file and Save.

You can't combine the patient demographics with the scores or the surgical fields from this 1st column, only demographics can be exported from this 1st column. The necessary patient identifiers such as name, surgery date etc are automatically included in the exports form the other two columns. – see next chapter. If you want to export some or all of the demographics along with scores or surgery details you can select any of the demographics fields to be exported using the custom export option in the middle column ad adding only the demographic details that you want to include along with surgery details, scores etc.

Default or standard fields included in the export

If you select to export fields from the middle column, surgical details etc. the patient name, and ID will always be exported without the need to add it to the export. If you added these as a custom export, they will export twice.

When you select to export any data from the 3rd column, scores etc. the fields in columns A-N are the standard fields that are included by default. If you add any of these as a custom export, they will export twice.

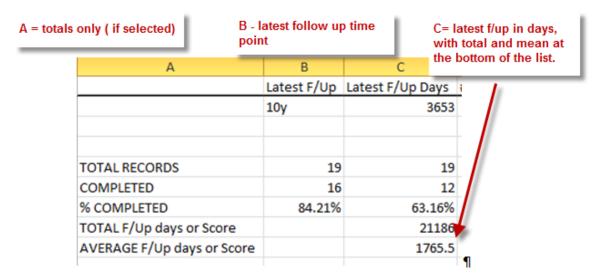


If you elect to *Exclude Standard fields* all these fields will be dropped. You can use the custom export from the middle column if you want to just have some of them included, and check the *Exclude Standard fields*.

If you do elect not to include the standard fields (patient names etc.) it will display as below. Column A is just for the Total headings, if you have elected to include the totals in the export. See General export options.

Column B and C displays the latest F/up time point and the F/up in days for whatever is the latest entry for any score in that record included on the export for that selection. The total includes the total number of days follow up for any record and the average is this number divided by the number of records that have a post op follow up. See more late on Totals.

If you have included the totals in the export the mean follow up in days is calculated on the last line.



The spread sheet will then progress display whatever the first score selected is.

Α	В	С	D	
# completed any score	# completed any score	HOOS Follow up	HOOS Foll	Inp
Preop	Latest	Preop	Preop	Pre
1		preop		###
	1			
	1			

Exporting surgical fields, history, custom fields, and post op and rehab.

The middle column will export all data fields that are not attached to a follow up delay or time point. This is anything entered which is only captured once, such as the surgery fields, the details on the history screen (surgeon, hospital, study, diagnosis etc.) and custom fields (not custom evaluations)

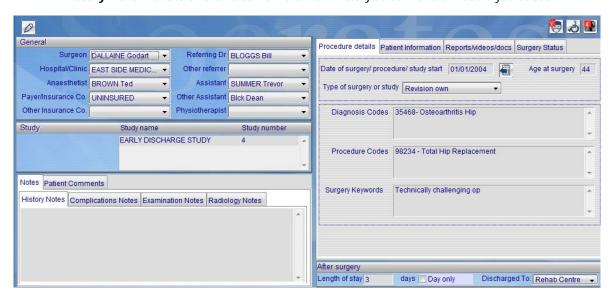
We have split them into default groups which differ slightly between modules based on how the surgery details in each module are set up. There will be a column in the export for every field. More than one of the default groups can be selected - you can export all of those in the default groups below in one export but there will be a lot of fields in your export.



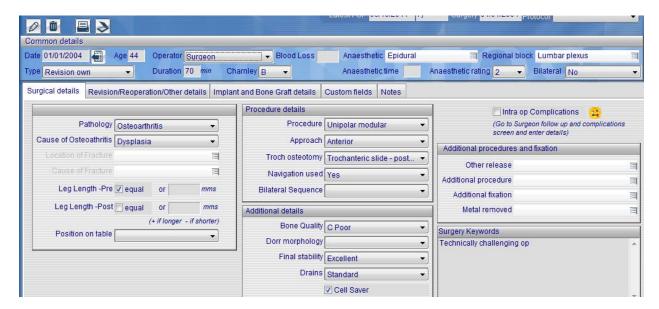
You can select to export all the data on the screens or use the customise option to select only the fields you want from each screen.

This is what is exported by default if you select any of these options.

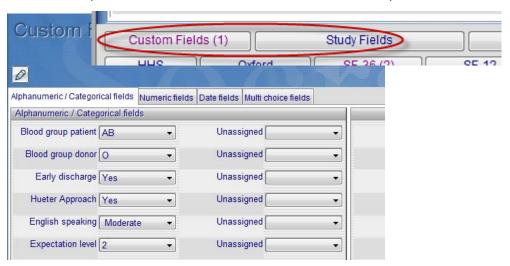
• **History** – this includes all the fields from the main history screen for the module you select.



• **Surgery details** – all fields in the surgery screen will be exported. For the General modules these may be split into sub groups, the knee general module for example is split into separate screens for meniscus, chondral etc.



• Study and custom fields – if you have set up your own fields in the Personalise section this is where you would export them from. Note this is for the custom fields only (onetime events) the custom evaluations which are attached to a time point would be exported from the next column where all the scores are exported.



Post Op and Rehab fields – data from this window will be exported by selecting Post Op/Rehab.



If you chose to select from the default export lists you will get **ALL** the fields in that section of the database regardless of whether any data has been entered. This may be more data than you actually want, e.g. the knee general surgery list alone has over 600 columns but you may only have entered data into a few of these fields. The export doesn't look to see if they have been populated or not, it just exports a column for each field on that

screen you selected from the default list regardless of whether there is data in it. So if you select to export the whole section you may end up with a lot of empty columns.

To export a group of selected fields only you can use the customise export function.



Customising the export

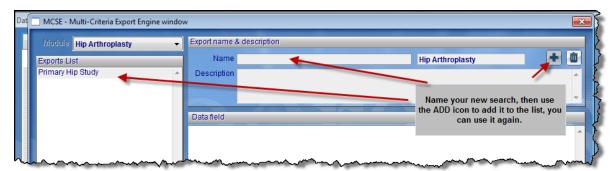
Customising the export allows you to choose exactly what fields you want to export from the middle column for any fields from the surgery, history, and post op and rehab screens. It's important to understand that at this point you are selecting WHAT FIELDS you want to export, not which subset or WHO you want to include. This comes later after you have selected the fields. It also allows you to export any of the demographics along with the surgical details and any scores.

Click on the Add icon – Customised Exports. This will open into a screen that has the same lists as the standard search. Remember that you are not using this function to select WHO or the sub group you are searching for, at this stage you are customising WHAT data points you want to export.

For example if you wanted only Dr Brown's surgeries, you wouldn't select the surgeon field to be included in the custom export here. You would use this custom search to select the fields you wanted in your export for Dr Browns records - maybe you only want the type of surgery, approach, gender, and age for all Dr Brown's records. You would set up these fields in the custom export using the search, then save the and select it, include whatever else you might want in the export (scores etc.) from the right hand column then use the search function on the top right of the export window to select to export those fields for ONLY Dr Browns records.

Here's how to set up a custom list of fields you might want to export.

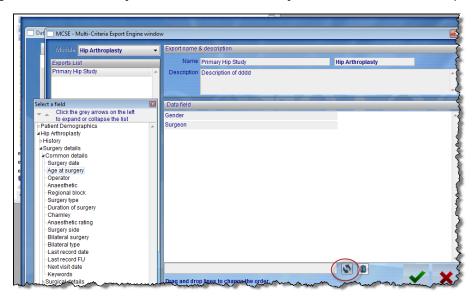
Click on the + Add icon and name your custom export. The names will be saved and displayed on the list on the left hand side so you can run this export again later without having to set it up again. You can add or remove fields to it later using the modify icon.



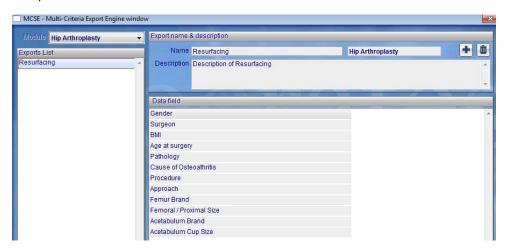
Once you have given your export a name, highlight it on the left then click on the little squiggly arrow icon which will bring up the search list on the left hand side. If you aren't familiar with using the search function, go to the chapter on Search for details on its use. In the next example, we have asked for the gender and surgeon lists/fields to be included in our export and we've named it Primary Hip Study. Keep selecting fields until you have chosen all the fields from the various screens that you want to export. Just like the normal search, all the fields from all the screens are there, buried in the search lists. It takes a while if you have a big list of fields to export, but remember that all these will be saved so next time all you have to do is click on the name of the

search, and add or remove anything that might be different. You can have as many customized exports set up as you want.

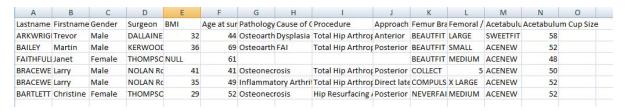
If you have quite a few to set up it's a good to take a screen print of the screen/s you want to export the fields from, highlight the individual fields you want and tick them off as you have added them to the export.



Next is an example of another custom list.



This is what would appear on your spread sheet for the custom list above.

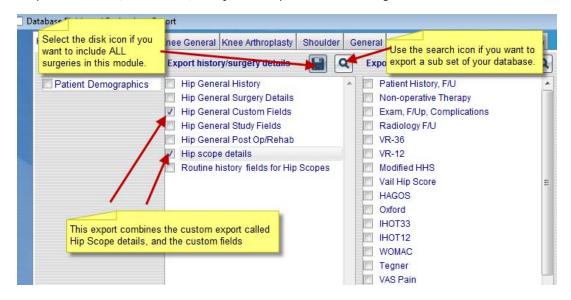


Once you have included all the fields you want to appear on the spread sheet use the **yellow folder** to return to the main part of the export screen.

To run the export, go to the tab for the module you are working on and you will see your custom selection added to the list. If you can't see it you have either forgotten to use the ADD selection on the previous screen, or you have set it up in the wrong module.



If this is all you want to export - i.e. just the custom and or default lists from this middle column (no scores or anything from the far right column) proceed to click on the Save/disk icon at the top right of the middle column that has list of Surgery History/Details/Custom Fields/Customised Exports showing. Note that at this stage you have selected *what fields* to export but not *which surgeries* you want to include in the export. If you clicked on the Export/Save icon (the blue disk) now you will export data on **all** surgeries in that module.



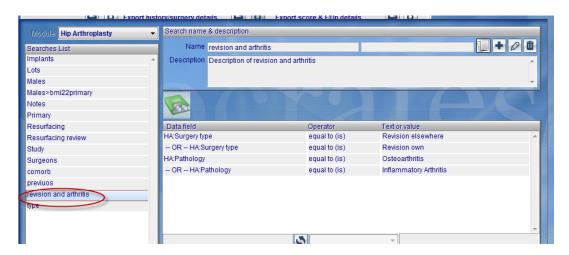
Exporting a sub group of the database

You will often only want to select a sub group to export—maybe a specific study group or those surgeries with primary total hips, for a specific surgeon or hospital for example. To do this you are going to use the search/select function again. In the main export window in the middle column once you have selected the fields you want, click on the search icon rather than the Export/Save icon, and the search window will appear again. Now use it to select **WHICH** surgeries you want included in your export.

In the example we have selected to only export the details for surgeries where diagnosis was a Labral Tear. So the details you have already selected in column two will be exported, but ONLY where the diagnosis was a Labral Tear.

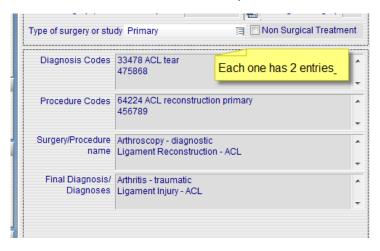


The next example will export all surgeries which were revisions, either own or elsewhere with either Osteoarthritis or Inflammatory arthritis.

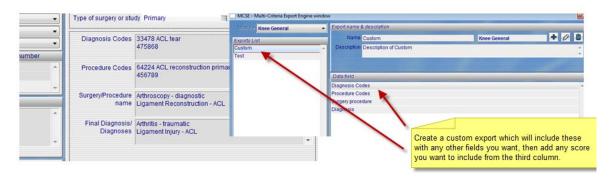


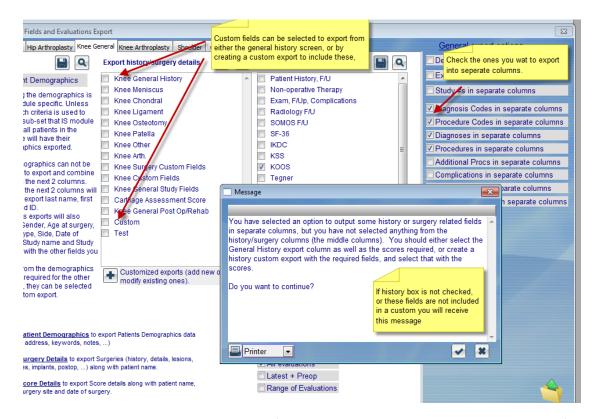
Exporting adaptable fields, Procedures/codes, Diagnosis/codes etc

It's not uncommon for a record to have more than one of the adaptable fields entered – see below.



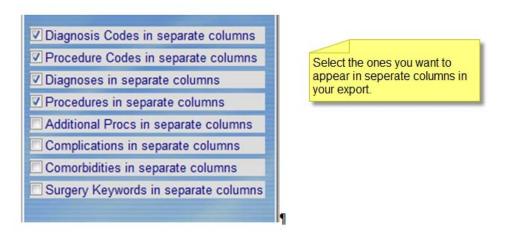
These fields will be included in the standard export of the History screen along with everything else from this screen. If you don't want all of the fields from the History screen, you can select to export just the adaptable fields (along with any other fields you want) using the custom export.





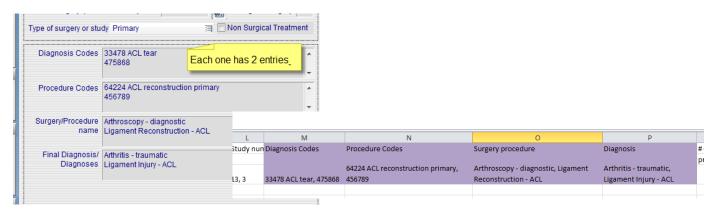
Whichever way you choose to have them exported (either using a custom export, or via the history export) you have 2 options as to how they are exported/displayed on the spreadsheet. By default they will be exported into one column for each field separated by a comma (i.e all Diagnosis codes for that record in one column) but you can also choose to have each one exported into a separate column.

On the right hand side of the export screen, the adaptable fields that allow option of how being exported in separate columns, are displayed.

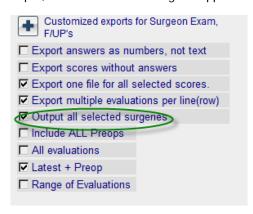


If you don't select the check boxes to export in separate columns, and a record has multiple fields entered for a single record (which is quite common) they will all appear in one column with the field title, and the values will be separated by a comma. So, for the patient below, who has two of each, the export shows all his entries in the same column, separated by a comma.

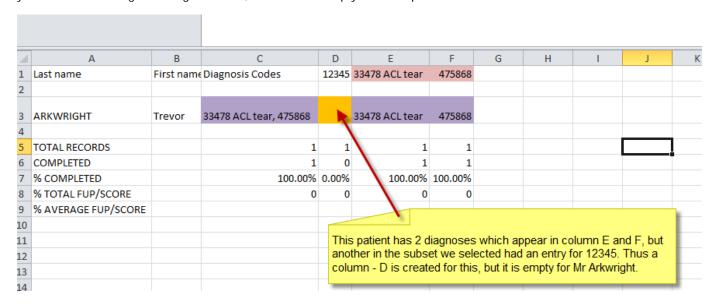
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If you want these to export into separate columns, check the options you want from the list displayed (see the top of the page). This will give you one column for each separate code used, for each of those options ticked. Note you will get a column for ALL the fields used by any surgery records for the subset you have selected to export. This will mean that for any record that did not use a particular code, the column for that code will be blank. If you are exporting scores with these fields expanded into separate columns, this may also mean that some of these columns have no data in them at all (other than the heading). This will happen if a surgery which used a particular code was included in the subset of data that you selected to export, but had no score data to output (and you had NOT selected the option to Output all selected surgeries). In this case, the record is not output, but the column heading still appears.

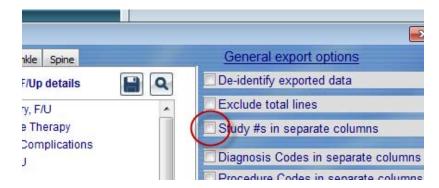


Here is an example. You select to export the diagnosis codes for a specific study group, and include their Kujala scores. All patients in the study group will be exported, and any diagnosis codes that have been used on any records in that study will have column headings. However, not all records had Kujala scores in that sub set so you will see a heading for a diagnosis code, which will be empty for some patients.

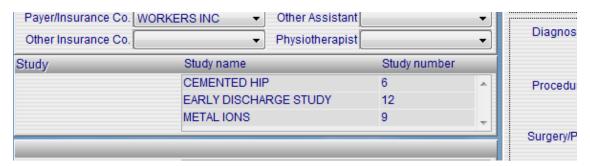


Exporting study, and study numbers

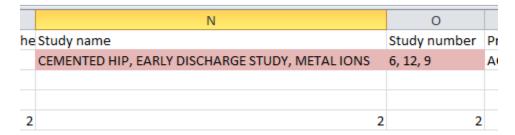
You can elect to have the study name and numbers exported in the same way as the adaptable fields, either grouped into one column, or separated out into individual columns, by checking the box below on the export screen.



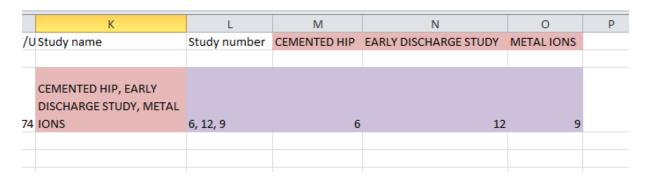
The record below is in 3 different studies.



This is how it will export if you don't select to have them exported in separate columns.



If you select to have them exported separately this is how they will be displayed. You will see both the combined and the separated data.

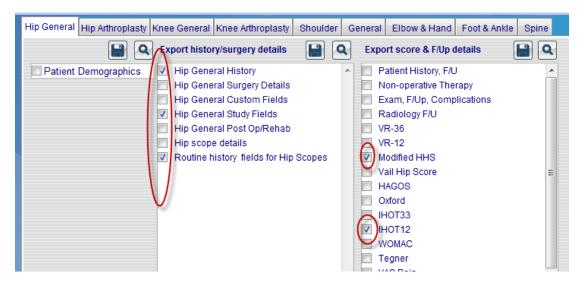


The same situation may occur as described above, with the various adaptable fields, where a column heading may be assigned to a particular study, as that study was used by at least one surgery in the subset of data selected, but none of the exported records have an entry in that column. Again, this will be because the

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surgery(s) assigned to that study had no score data to output, and therefore, no line was output to the spread sheet for it.

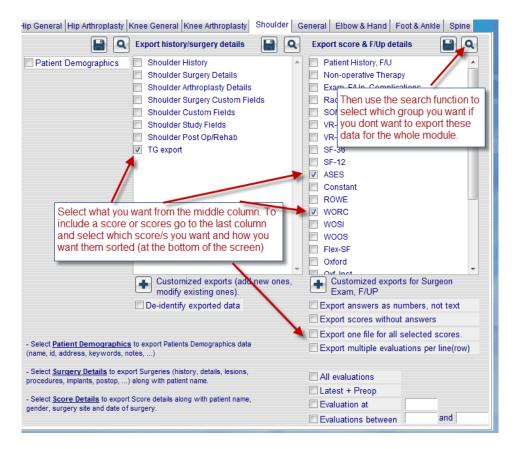
By this stage you may have selected either the standard default list and/or a custom list of fields that you want to export, but you **may want to include all or some of the scores** for these surgeries in the **same export** as well as these fields. In the next screen shot we have selected to export the history fields, the study fields from the main module and a custom export we have named "routine history fields for hip scores". The surgeries for the group we have selected in the example also have scores for the modified Harris Hip score and iHot 12 selected.



Exporting scores and evaluations

You can export whatever fields/lists you have selected in the middle column and also include any scores which might be relevant for that group. Or you can also just export the scores and or evaluations by themselves from column 3.

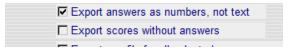
If you want to include one or more scores with the data from the middle section, after you have selected what you want from there, go directly to the column on the right hand side of the screen where all the scores for this module are listed. If you are going to select a sub group you would use the search icon on the 3rd column to do this *once you have selected* which scores and the way you want the time points to be exported.



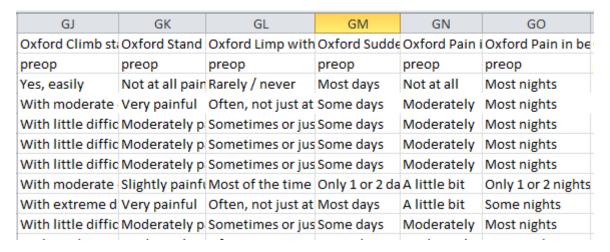
Tick the check box for the score/s you want to include.

Now you have to make further choices for how you want the scores exported ...

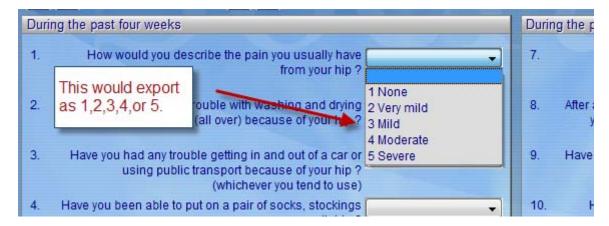
Export answers as numbers, not text; and Export scores without answers



You can choose how much data you want to include in your scores export. If you want everything, (the full responses/answers, Yes, No, Maybe, Mild, Moderate etc) as well as the sub totals and totals, don't check either of the two boxes above. Below is a spread sheet with the answers selected to export as text which would be how it appears if you didn't check "export answers as numbers, not text" and "export scores without answers" You get all the answers, and in the original text fields as they are on the screen for each score. The scores are at the end of the row after the answers.

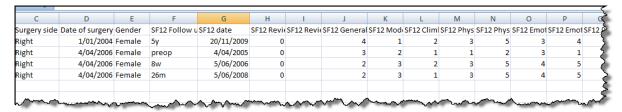


If you would like the answers exported as they are in order on the drop down lists – numeric format 1,2,3,4 instead of text (Moderate Mild) on the export, check the "Export answers as numbers not text" box and the corresponding number will be exported instead. If the list of answers for a question were Yes, No, Maybe, the answer would be exported as 1, 2 or 3 rather than as Yes, No or Maybe.



Note: These numbers are NOT the actual value assigned to the score, just the order they appear on the list in Socrates. If you wanted to recalculate them you would need to obtain the scoring algorithm from the author then assign that value to the number. i.e. Number 1 on the export list - None might have 5 points, number 2 Very Mild - 3 points etc.

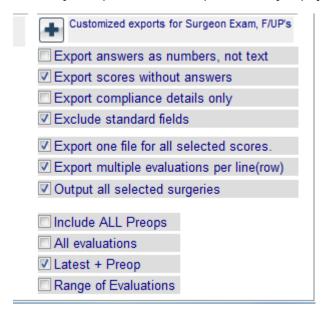
This is an example of an export with the numbers exported, rather than the text.



If you only want the subtotals and totals exported, without all the answers, check the "Export scores without answers" box.

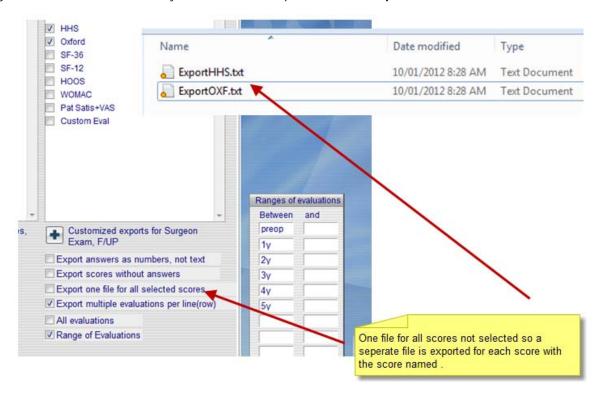
Selecting the format to export your data

There are now several other options you need to select from when exporting your data as to how you want them sorted in your exported file. Some options will only display when the first option chosen requires more input.

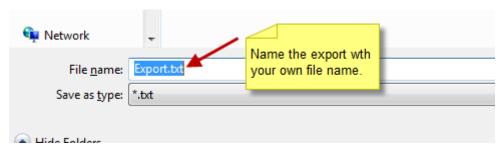


Export one file for all selected scores.

If you are selecting more than one score, you can choose to either create a **separate** exported file for **each** of the scores (with any fields you may have selected from column 2) or you can output all of the data/scores into **one single file/row** for each record, with one line per surgery (i.e. all the history etc details AND the score details, in one line/row). The one line per surgery option is normally the format that would be selected for statistical analysis as no cutting and pasting is required other than maybe removing columns which might not be populated. If this is the option you want you need to check the "export one file for all selected scores" otherwise if you select more than one score you will have a file exported for **each separate** score.

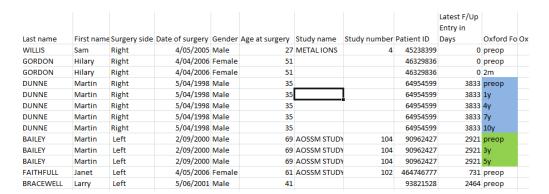


If you choose to output separate files per score, note that the name of the files created will be the name of the scores you select, with a 3 character suffix for each score. E.g. ExportOXF.txt, ExportHHS.txt, ExportKSS.txt. You can change the file name. If you chose one file for all selected scores, the file will be created as export.txt, you can rename it when you export or save it.



Export multiple evaluations per row

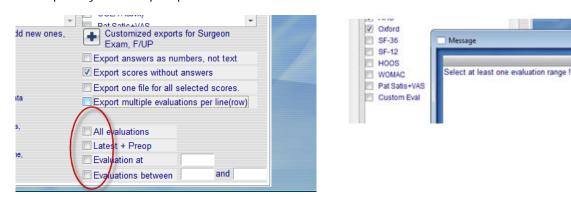
This option exports all the scores at the different time points into one line/row. If you don't select this the same surgery record may have several rows of data for the same surgery record. See the example below, where Mr Dunne has his data for 5 time points on 5 rows. You wouldn't normally do this unless you were looking for multiple evaluations at the **same time point** for a particular patient.



If you had selected to export multiple evaluations per row Mr Dunne above would only have a single entry for his 1998 surgery which would be on one line, and his preop,1,4,7 and 10 year scores would appear along that one row in columns, however you had chosen to group the (this is coming..)

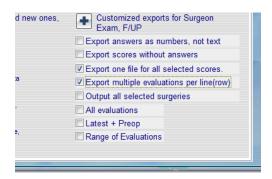
Selecting delays for evaluations

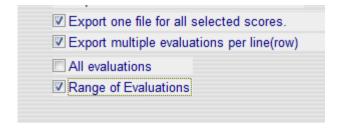
All of the options to export in column 3 require a choice of the time points to be exported. If you don't select one of the options you will be prompted to do so.



You now need to choose how you want the time points or follow up periods (preop, 3 months, 5 years etc.) grouped and whether to output one line/row per surgery record or have the follow up periods for each surgery record on different rows.

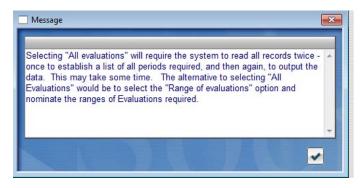
You will have different options for the time points you can select, depending on whether you selected *One File for all Selected Scores* or not.





If you select "All evaluations", you will get one column for each follow up time point. That means that each separate time point that ANY record has for each score will have a column of its own. For example if you have follow ups for the scores all at different time points, some preop, then you might have 1 week, 3 weeks, 6 weeks, 7 weeks, 8 weeks 10 weeks, 3 months, 5 months, 6 months, 1 year 3 years, 5 years etc. and you select the *All evaluations* each time point will have its own column. If you have thousands of records with the follows at all different time points you will end up with a very long row of data which may be hard to analyse.

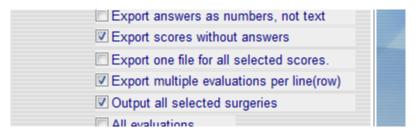
You will see this message if you do select All evaluations. If you change your mind, use the red x to exit.



The other option is to select a range of evaluations which gives you the option of grouping some together in the time points you want – see the next explanation.

Output all selected surgeries

This option will allow you to include all records for the group you have chosen to export, regardless of whether they have had scores entered. For example, you might be exporting a group in a study and want to calculate the mean scores and follow up, and how many have been compliant with follow up. If you don't select this option you will only get records which had a score at the time points selected. Thus if there are records in the group where scores are missing and you want to see or include those as well, you should check this option.



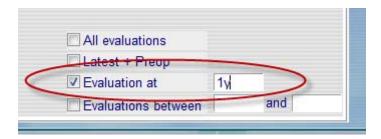
Choices of time points to export

Preop and latest evaluation

If you select *Preop and latest evaluation* you will get one column for the preop, and one for the latest follow up time point for each score. The latest time point/follow up and the actual days of the last follow up will be displayed in a separate column. In the next example, column DS shows the latest follow up period for each record, 6m, 2yr, 5yr etc. The next column, DT displays that follow up in days. Thus it is possible to calculate the mean and median latest/last follow up using the days from this column. If you selected to include the totals, this will be done for you at the bottom of the list.

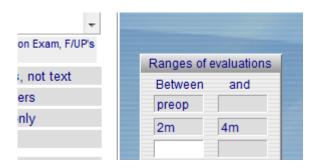
ormula Bar	DS	DT	DU	DV	Γ
ASES Gen	ASES Follow up	ASES Follow up Days	Input Date	ASES Date	Δ
Preop	Latest	Latest	Latest	Latest	L
	2 y	731	3/10/2011		٧
	2 y	731	3/10/2011		٧
	5 y	1826	4/10/2011		٧
	6m	183	3/10/2011		٧
					L
					Ļ
	2у	731	4/10/2011		٧
					ļ

Evaluation at



If you select "Evaluation at", you will get one entry, with the details for the exact follow up time point you nominate. If the surgery has no entry for that timepoint it will not show up on the export unless you also select Output all selected surgeries. If you didn't check this and you select 3 months, and a surgery has a 2 and 4 month entry for that score it won't show up on the report.

Evaluations between



If you wanted a range you could use *evaluations between*, and enter between 2m and 4m and you would see the results clumped into one column, in the example above a range of 2- 4 month would show the latest scores in 2,3 and 4 months range for each record.

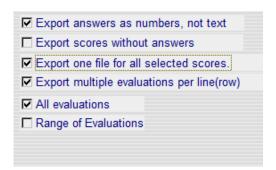
NOTE: If you are choosing a time point in the *evaluation at* field, when you enter it, do not use spaces. Type in either preinj, preop, and weeks as w, months m, and years y. e.g. 6w or 5m or 10y. If you want to select the latest results between 1 year and 3 years post op you would type in **1y** and **3y** in the range fields.

Normally preop would be a separate line, it doesn't usually make sense to have a column with preop and post op scores together.

If you select "Evaluations between", you will get the entry which is the LATEST follow up time point in the range you nominate for each record. For example if one record has a 2,3, and a 4 month entry and you asked for 2-4 month range you would only see the 4 month one for that record. If you wanted them all you should select all evaluations.

One file for all selected scores

This option will give you one excel file with all the details you select for each surgery record on one line. If you don't select this you will get a separate export file for **EACH** score you select. You do NOT have the option for ALL Evaluations if you select only the export one file option. You also need to select Multiple Evaluations per line to be able to select All Evaluations or choose how you want them to be sorted if there are multiple scores selected.

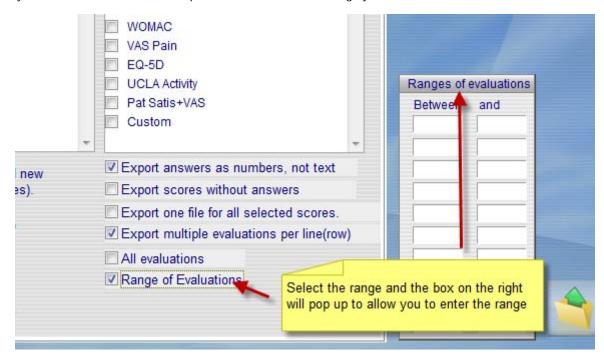


This option will give you one excel file with all the details for each surgery record on one line/row. You can then and select either all evaluations at any time point, or choose how you want the time points grouped.

If you select **All** evaluations, you will get one record per surgery, with the details for **every** follow up time point for each of the selected scores. Note that this will result in a spreadsheet with a separate column for EVERY time point for EVERY surgery record selected and may not be very user friendly to view if your follow up time points are not all standard.

If you select **Range of Evaluations** you will then be prompted to enter up to 10 ranges of time points. This enables you to group all your timepoints however you want them grouped into the columns. Even though you group them, the actual time points and days for each record will be displayed within that column, and the totals displayed in days.

An example. You have surgery records with follow ups for a score at preop, 9,10,11,12 14,18 and 20 months follow ups. If you selected *All evaluations* you would have 8 separate columns - one for each time point. If you wanted them grouped and selected to have a range which was preop, then between 6m and 12m then 13m and 24m you would have 3 columns. One for preop, the next for the 6-12 month scores, and the next for the 13-24 months. You would know which time points they were and be able to calculate the average follow up from the days listed for each record follow up in the columns for each range you selected.



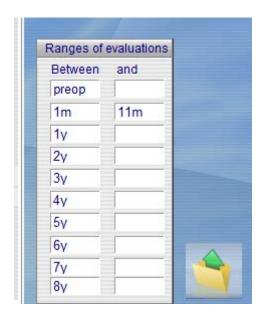
Selecting ranges of evaluations.

If you select this option, you will get one entry per surgery record in a row, with columns for each of the ranges input, for each of the scores. E.g. if you select Preop, 1y, 2y-5y, 6y-10y, and the Oxford, HHS and HOOS score, your spreadsheet would show the 4 sets of columns (see next what these 4 columns display) for the Oxford, then the HHA, and then the HOOS scores. If there was more than one score in the time point selected the latest time point for each score in your selected range would be shown. For example if you selected to group your two year scores and there was a 25 and a 30 month score the 30 month one would display. If you wanted both you would need to select All evaluations.

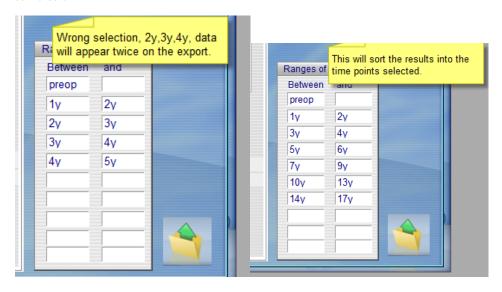
The 2nd line of column headings will show time point for the column and this will be the time point at the end of each range (e.g. Preop, 1y, 5y, 10y). The actual time point and # of follow up days will also be shown for each score/time point.

If you select a range option *you must not include the same time point more than once* or you will get the same result twice. If you select between 1 and 2 years you will get all results in the 1 and 2 year group up till the end of 2 years, if you then select 2 and 3 years the 2 years results will appear again.

Your choices could be similar to this next example. Year one data can be selected from whenever you want to start up to 11 months. In this case the latest score between 1 and 11 months would be exported for each surgery for the first post op year.



Do not include the same time point in 2 places or you will get the results twice. If you want to group them together, say 2 and 3 year together, you can select the time points in groups as below. On the export the time points will be labelled so you can see the different time points for each record even if they are grouped in the same column.



All the scores at the preop time point will be in one column, with the latest score for each time point selected that fall into year 1,2,3,4 etc. displayed in a separate column for that time period. Year one isn't calculated until the first year follow up has been completed, it doesn't start until the anniversary so 1 yr follow up is 12-23 months, year 2 from 23 months to 36 etc. See below, for how the time points are grouped. This is in the Set Up screen and can be changed by the user to display in weeks, months or years based on how would like them displayed.



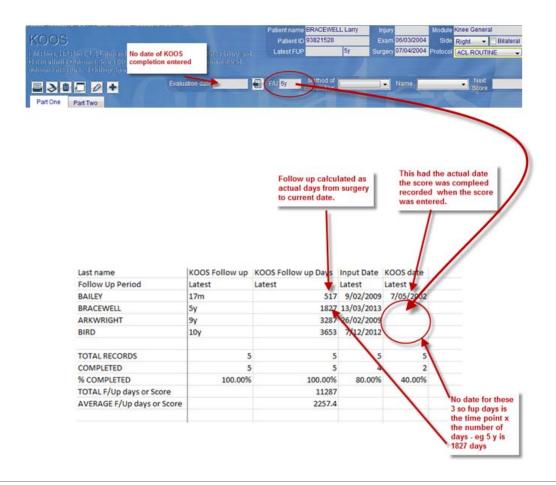
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Latest follow up

Each time you export any scores the first column labelled Latest F/up is the most recent or last follow for any of the scores that you have selected to export. You may have 3 scores exported in the one row, this the latest follow up taken from any of the 3 scores. In the example, as the export included the standard default fields they are found in column I and J.

Latest follow up Days

This is latest the follow up calculated in days since surgery. If the actual date the score was completed has been entered in to that score, the calculation will be the actual number of days since the date of surgery. However the follow up delay has been entered as just the time point, 6m, (months) 5y (5 years etc) the program can't calculate the follow up delay exactly. In this case it will multiply the number by 7, 30 or 365 depending on the time point - weeks, months or years



If you elected to include the totals you can go to the bottom of the spread sheet and the days will be totalled, and then averaged by the number of entries to calculate the mean follow up in days.

Column J and K – latest follow up, and in days by score. This is taken from the *most recent* evaluation of the score or evaluation that has been entered for each surgery record and is displayed in days. If there is hasn't been any post op follow up, either just preinjury or preop scores, or the day of surgery is the latest entry the field will be blank.

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	1	K	L	M	N	
	Latest F/Up	Latest F/Up Days	Oxford Follow up	Oxford Follow up Days	Input Date	Oxf
330	1y	465	preop			###
330	1y	465	0m	-21		###
330	1y	465	6m	196	26/02/2009	###
330	1y	465	1y	465	19/11/2009	###
389	Зу	1095	preop			###
989	Зу	1095	1y	365		###
989	Зу	1095	3у	1095		###
989	Зу	1126	preop			###
989	Зу	1126	2y	760		###
989	Зу	1126	Зу	1126		###
590	0m	19	preop			###
	1y	365	preop			###
	1y	365	1y	365		###
367	preop		preop		29/11/2011	###
	Зу	1096	preop		29/11/2011	
	Зу	1096	3у	1096	29/11/2011	
156	DOS		preop		11/01/2012	###

If you want additional fields to be exported from the surgery fields such as Type, Surgeon, Hospital, Diagnosis, along with the scores remember that you would go to the middle column and either select the defaults or set up a custom export for these fields and include this in the export.

All the score time points have two rows of headings, then the patient names for the surgeries which have been exported. Row one describes what is displayed in the columns, row 2 has the time point that the data is for. Then you will see column A to K as above. After that the score data for each time point selected starts. Each score has 6 columns, the same for each time point. They are:

• Follow Up - In the example below it's the 1 year data and is preceded by the score name. All fields which relate to that follow up will have the heading with that time point on them. If the field is blank it means that no data was entered for that record at that time point.

	_	_	_		_		
		Oxford			Oxford		
	Oxford Follow	Follow up			Method of	Oxford	
e	up	Days	Input Date	Oxford date	completion	Reviewer	C
	1y	1y	1y	1 y	1y	1y	1
	1y	365	10/01/2012		Research Asst	BRYANT Thomas	١
	1y	395		5/05/1999			N
	1y	637		4/03/2003	Other Dr		١
1	1y	365	10/01/2012				١

• Follow Up Days - As follow ups can be entered without dates this is calculated in one of 2 ways. If the actual date the score was completed has been entered (this is the column labelled Oxford date) the calculation will be the actual number of days since the date of surgery. However if the follow up delay has only been entered as the time point, 6m, (months) 5y (5 years etc) the program can't calculate the follow up delay exactly. In this case it will multiply the number by 7, 30 or 365 depending on the time point - weeks, months or years



In the example the first entry has 365 days and no date entered in Oxford date column. This is because the date of evaluation wasn't entered for this score on the screen, the user entered it as 1y. The next entry is also 1 year but is 395 days as the date of the evaluation was entered and the program calculated the days. If you want to be accurate down to days you must enter the date of the evaluation in the score screen.

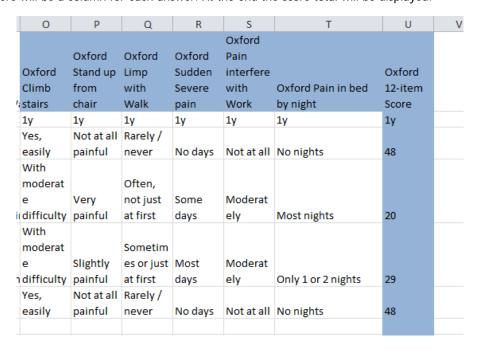
- Input date this is the date that the data was input into the program. This may be useful for the web scores as in this case it would normally be the same as the date of evaluation assuming that the user is sending and receiving the emails at least once a day or more frequently.
- Date preceded by the score name. This is the date of the evaluation or completion of the score; if it's blank it means it wasn't entered; only the delay has been entered.
- Method of completion this records how the data was entered. If it was a web completed score this field
 will automatically be populated with Web data entry. Web entries are calculated by delays only, not from the
 date of evaluation so they will always be approximate within the window of time that the score was valid for.



• Reviewer – if this was entered the name of the reviewer will be listed in this column.

	_	_	_		_		
		Oxford			Oxford		
	Oxford Follow	Follow up			Method of	Oxford	
e	up	Days	Input Date	Oxford date	completion	Reviewer	C
	1y	1y	1y	1 y	1y	1y	1
	1 y	365	10/01/2012		Research Asst	BRYANT Thomas	ľ
	1 y	395		5/05/1999			N
	1y	637		4/03/2003	Other Dr		ľ
1	1y	365	10/01/2012				١

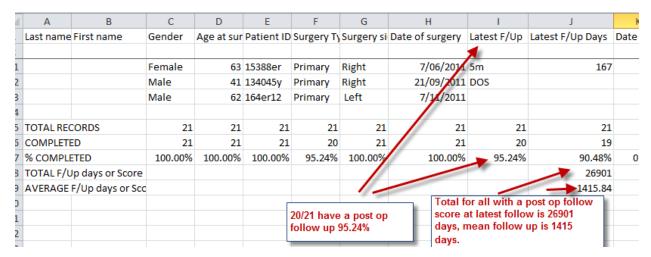
After the reviewer the score results will be listed. If you have selected to export the answers as either text or numbers there will be a column for each answer. At the end the score total will be displayed.



Exporting totals

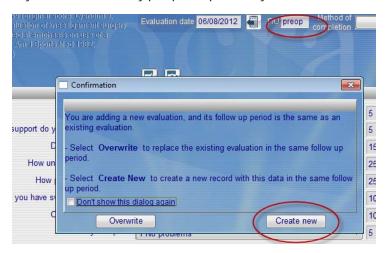
You can elect to have your columns totalled. Each column will summarise the total number of entries and the % of those that have data entered for each score. In the example below the latest follow up in Column I displays the total for all that have a follow up of either DOS, (day of surgery) or a score at any post op time point.

Column J totals the actual days of follow up, and the last line displays the mean. Records with only DOS as the latest follow up are not included in the calculation.



Exporting multiple preop scores

There are times when a record might have multiple preop follow ups. When you enter a score at the same time point you would have selected ADD NEW (not overwrite) to create another preop time point. You can do this as often as you need to, so you can have as many preop time points as you want.

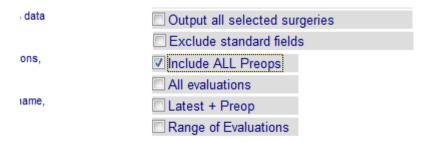


When entering multiple scores at the same time point it's best to enter the actual date rather than just the time point "preop" so that you can see the dates on the export, and then run an analysis of these dates against another date.

Two examples of when you might want this are:

- Patients who have not had surgery but are being followed regularly, and you want be able to follow their scores over time against a start date.
- A patient may be on a waiting list for a long time, or have had conservative treatment before the surgery and you want to see their progress over time, but before the date of surgery.

To export multiple preop scores for the same record, just select this option.



Compliance export

This report allows users to export a summary of all score/s in one row to be able to look at and compare compliance rates easily. There's the option to include, or exclude the standard patient details (names, date of surgery etc) To exclude, select the "exclude standard fields"

This report may be useful to see if some scores are completed more often than others.

In the example below we have selected all the scores for a specific protocol, and then used the search to just export records in that protocol. For the compliance report, it would usually make sense to select "output all surgeries" as you would usually want to see all records even if they had no scores completed. We



A	В	С	D	E	F	G	Н
1	Latest F/U	Latest F/L	# completed any score				
2			preop	0m to 11m	1y to 2y	3y to 4y	5y to 10y
3	9y	3330	1	1		1	1
4							
5	26w	183	1	1			
6	43w	304	1	1			
7	26w	183	1	1			
8	12m	365	1	1	1		
9	5y	1826	1		1		1
10	5y	1826	1				1
11	preop		1				
12	10y	3653	1				1
13	preop						
14	26w	183	1	. 1			
15	DOS						
16	preop		1				
17	DOS						
18							
19 TOTAL RECORDS	15			15	15	15	15
20 COMPLETED	14			6	-	1	4
21 % COMPLETED	93.33%			40.00%	13.33%	6.67%	26.67%
22 TOTAL F/Up days or Score		11853					
23 AVERAGE F/Up days or Score		1317					

The first column after the patients details (B in the above example) displays the latest follow up time point for ANY score that has been completed for that record. The next column f/up in days is the actual number of days of the follow up. If there is no post op follow up this will be blank. These are totalled at the bottom, and a mean follow up of those with scores calculated. In the example the mean follow up at the latest time point for any score is 1317 days. 9 have a post op record for any score, which is 60% of those selected in the export.

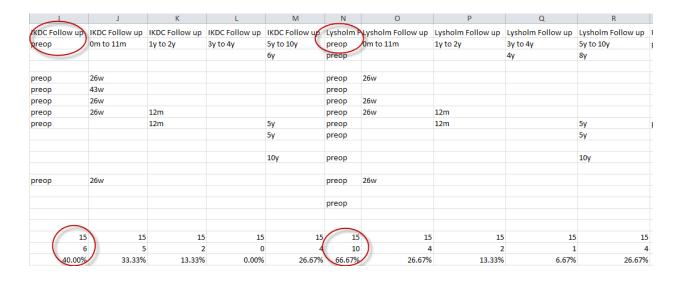
Columns D to H displays those records which have at least one of the scores selected in the protocol completed at each time point.

Note: Some are not scores as such but surveys. Examples are the patient satisfaction, the Global rating of change, the ACL intake etc. In this case as there is no score to find as being present it will show up on the export as long as a record has been created for that survey at the time point selected.

After that, the columns are listed for each score selected for the time points selected.

I-M shows the IKDC scores completed at each time point. N-R the Lysholm. The circled cells show that at the preop time point 40% had an IKDC score, and 66.67% had a Lysholm.

If you selected to export one file for all selected scores, the data will continue to be displayed along the row until there are no more scores. If you didn't, you will have a separate spread sheet for each score.

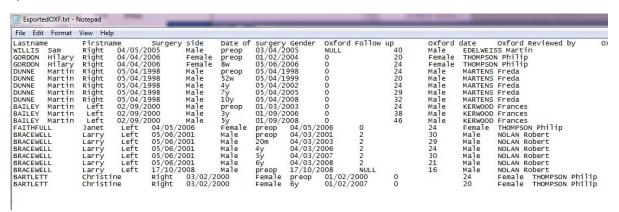


Saving to a file

After you have selected the fields and scores you want to export, and selected a sub group if you don't want all the surgeries in the module click on the Save/Export icon (**blue disk**). You will be prompted to save it to a location and name it. Note that it will first export as a *.txt file at this stage. D



If you go directly to the file location and open it, it will open in notepad and look like this. You can give this to a statistician in this format, they know what to do with it. To open into excel Use *Open all files* once you have opened excel.



Exporting data from the surgeon examination and follow up screen

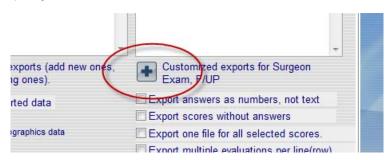
All the data on these screens can be exported from the Exam Follow up and Complications screens. If this is checked all the fields from the three screens will be exported.



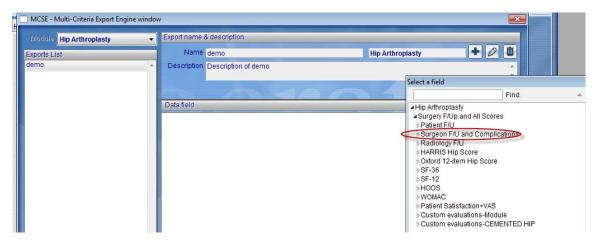


There is a lot of potential data on these screens as it includes all three tabs in the default export – there are several hundred fields especially in the Spine module. You can run the export then delete the columns you don't want but this is time consuming. A quicker way is to set up a custom export for the various sections of this screen that you might want to export, clinical examination, complications, comorbidities etc.

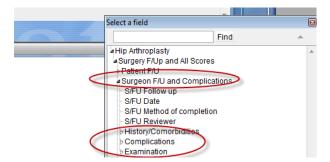
To set up a custom export go to the ADD icon below.



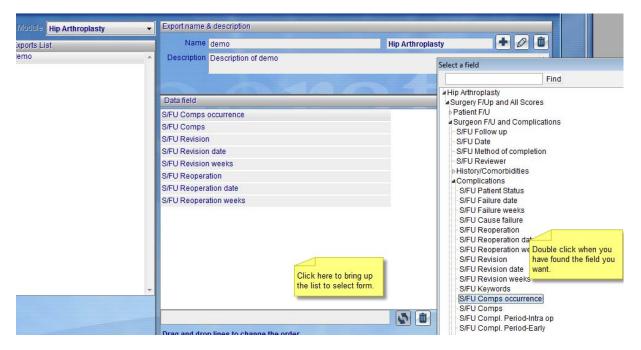
You will then see the search window displayed, select the module you want then select Surgeon follow up and complications. Add a new search and Name it.



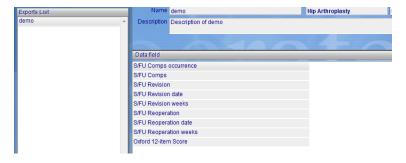
Next select which of the screens you want to export from – you can have a combination of fields from any of the lists available.



Locate the field you want by clicking on the squiggly arrow icon, then double click to add the field to the list. Keep doing this until you have selected all the fields you want to be exported.



You can include fields from the other evaluations/scores also. In the next example we have added the Oxford score total to the custom list with the complication data we wanted.



SUMMARY

Once you have done the export a couple of times you will find it quite easy. The other handy hint is that when you are starting off you do a few practice exports. And, to save time you can use the search icon to select a smaller sub group if you have a large database while you are trying the various options. Patients whose last name ends with Z, or whose age is over 90, or between 50 and 53 are some examples. Then review the files that are output so that you are aware of the different combinations that can be selected.

Here's a summary of the main things you need to know to get you started.

- Have a clear idea of what you want to export.
- Select the fields you want to export from column two, either the default ones or set up your own custom choices.
- Include any scores that you might want to be exported with the other data from column three, how much data you want to export scores only, answers and scores and whether you want it in separate files per score, or all together on one file/row, and what time points to include for those scores.
- Use the search/select function to choose which surgeries or sub sets of data that you want to export.
- Click on the export/save icon, select where you want the file to be saved.
- Open it into excel by selecting open all files, see the beginning of this chapter.

