Data Entry

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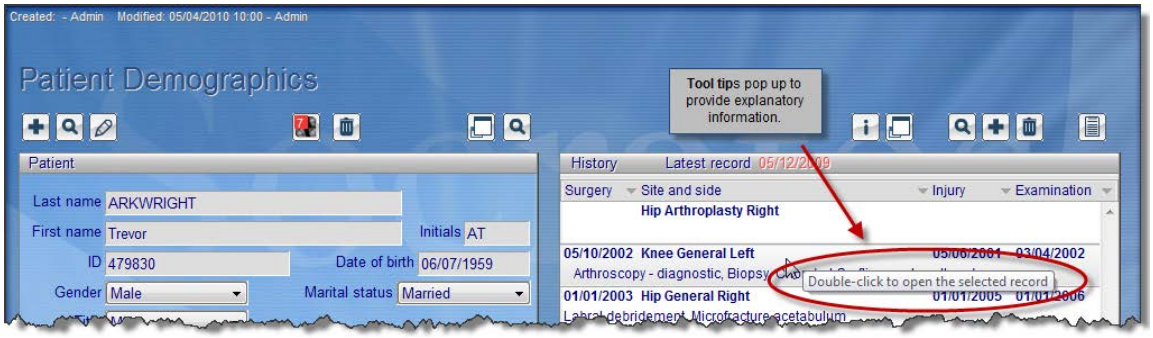
This chapter is one you will probably spend the most time with initially, as it explains how to enter your data, and describes all the features you will use regularly. Some of the sections included here may look familiar because they have been explained in the Tour or in previous chapters, but we purposely include them in the Data Entry chapter again. We understand most users don't read manuals from beginning to end: most people will pick and choose the topics they want to read about in a piece-meal fashion, and we want to make sure we've covered the information you need.
To that end, we'll first cover some all-purpose hints.

GENERAL DATA ENTRY INFORMATION AND ICON DESCRIPTION

Tool Tips

Most fields that are not self-explanatory have a tool tip associated with them. Hover your cursor over most fields on any screen, and a tool tip, an explanatory phrase or instruction, will be displayed.



Adding and Modifying Data

Many of the screens require the **Add icon (blue cross)** or **Modify icon (pencil)** to be clicked before any data can be entered, (except for the *first time* you enter data into a screen, where the program assumes if you are there, you want to enter something!). Most of the evaluations require the **Add icon (blue cross)** to add a new record, or to modify anything already entered from a previous evaluation.

> ***If the edit/modify icon (pencil) is visible, you must click it first to be able to modify data that has already been entered, to change scores, for example. If the pencil is not visible, just start entering the new data. Use the Add icon (blue cross) to add new scores, or other new data.***

Saving Data

In virtually all the screens, either clicking on the **green tick** or pressing the **Enter key** will save any data that you have entered. The only place in which this does *not* hold true is the window in which you type text for **Notes**, such as in the **Surgery details screens**. If you press the **Enter key** in this case, it will act as it does in any word processing software: as a Return key, moving your cursor to the next line. Therefore, you will need to use the **green tick** to exit from the Notes window. Clicking on the **red cross icon** will always clear the screen of all entries you have made since you opened the current screen. If you select the **red cross**, you will be asked if you are sure you want to do this, to prevent you from *accidentally* erasing details you have just entered.

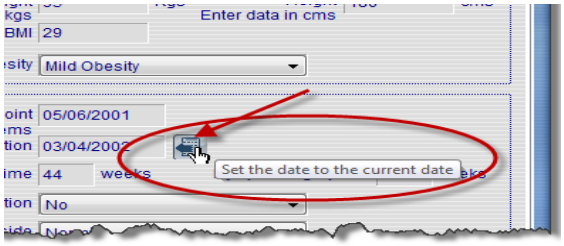
Moving Between Fields

In general, to **move from field to field** within a screen, you can use the mouse, the tab key, or directional arrows. If the field is a **drop-down menu**, you can either use your mouse *or the first letter of the option you want* to highlight the desired response. For fields that are **checkbox lists**, the boxes can be checked by either tabbing into the box and then hitting the space bar once to check (or twice to un-check), or by using your mouse to navigate through the check boxes.

Entering Dates

There are a couple of short-cuts you can use to enter dates into the program.

To enter **today's date** on any of the surgery screens or any of the score forms, click on the **Calendar icon** next to the date field.



Or, to enter **any date within the current month**, simply enter **the day's date**, and then hit the Tab key: the complete date will be entered automatically. (In this case, Socrates assumes you want the current month and the current year, and only needs to be told which day date to use.) For example, if today's date is the 18th of November, 2010, all you need to type into the date field is "18", and then type the **Tab key**. The program will fill in the month and year for you.

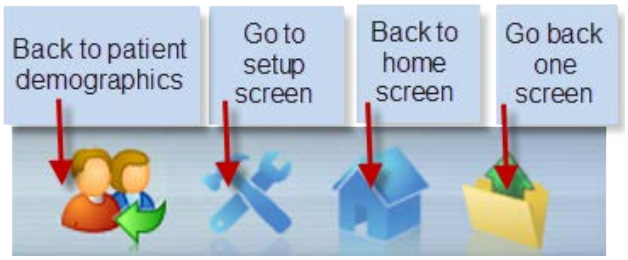
If the date you want to enter is **not within the current month**, you do need to enter the entire string: "8/8/10".

If you enter a **date in the future**, you will see a message asking you to verify that the date you entered is correct. Choose Yes or No to continue.

Changing Screens

To go back to the previous screen, click on the **yellow folder icon** at the bottom of any screen. The **blue house icon** takes you back to the **Home Screen**. The **tools icon** takes you back to the **Set-Up Screen** (where you add new implants, new surgeons' names, etc.). After making modifications in the Set-Up Screen, click on the **yellow folder** to return to the screen you were previously working in.

The **people icon** takes you back to the current patient demographic screen. A second click will take you to the very first patient in your database.

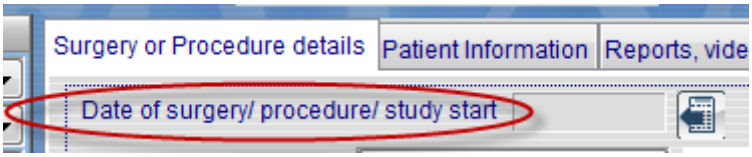


Surgery or treatment date

It's important to note that for most of the user manual we talk about date of surgery and preop and post op time points. In fact this date can be a date which indicates the start of a treatment, or study, and the time points are pre and post the start of the therapy or follow up, it doesn't need to be a surgery.

Non surgical procedures, or conservative treatment.

The program is set up in such a way that it needs a date to be able to have baseline to measure progress over time, and to then calculate when the post surgery or treatment visits are to take place. These are based on a time point after a starting date, i.e. 6 months post surgery, start of the study, injection of steroids, or just following the outcome of the natural history of an injury.

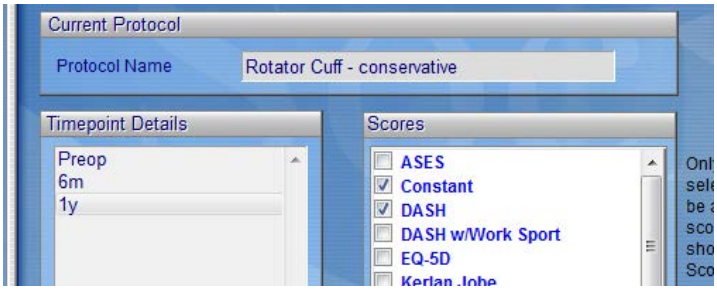


After the *pre* score has been entered a date needs to be entered in the field above to indicate the start of follow up. Thus if you are following a patient for an injury without surgery – say a rotator cuff tear with physio only you would need to enter a start date to initiate the next *post* time point which might be 3 months later.

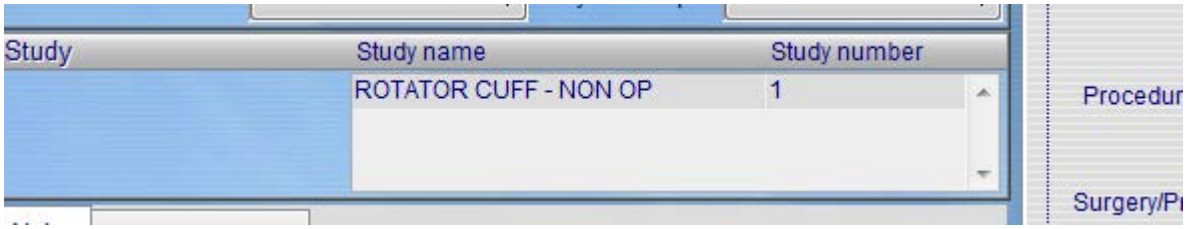
If there is a need to have more than one *pre* time point score this can be done by adding an additional pre time point and choosing the option of adding an additonal one at the same time point rather than overwriting the one existing one. This is sometimes useful if the patient has been on the waiting list for some time, or has been undergoing conservative therapy to find if they improved or not over the period.

We recommend using some method of categorising these patients so they can be easily identified for follow up. This can be done in several ways.

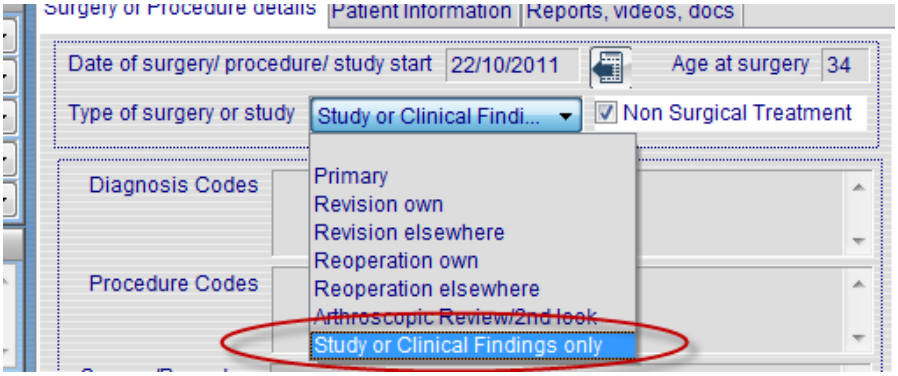
- Set up a separate protocol and allocate these patients to this group.



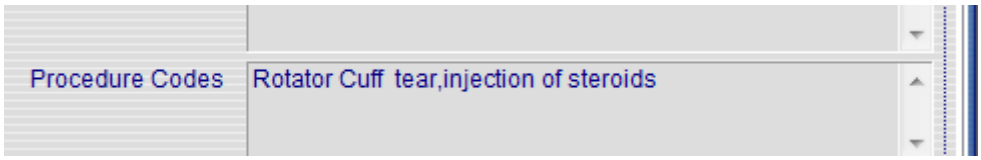
- Set up a study name to identify them and select this for each patient in this group. This way the patient might be in the same follow up protocol as the surgical group in that the are having the same scores at the same time points, but you can use the search criteria to search for the ones in this stuy group who didn't have surgery.



- Checking the the non surgical treatment check box and *study or clinical findings only* in the Type field.



- Use the procedure codes to classify what you have done for that patient.



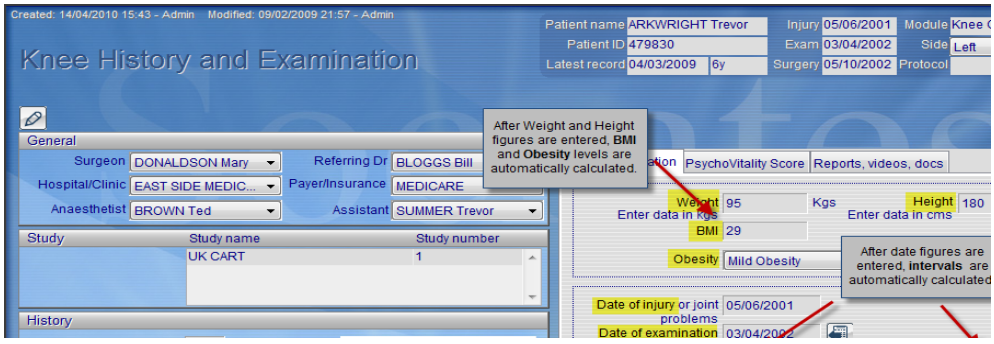
So, you can see there are several ways that you can follow and find your patients who are not having surgery. The main thing to keep in mind is that in order to have a pre, and sequential post treatment (or not) follow ups there needs to be a start date. If the patient then went on to have surgery for the same condition this would be a seperate entry as presumably the non surgical invention has failed. The outcome should be recorded in this record in the complication and outcomes screen as having failed and a new record created for the surgery.

The front screen of this patient would reflect the two seperate records for the different treatments. Note that DOS is day of surgery, this latest record was that date.

Calculated Fields

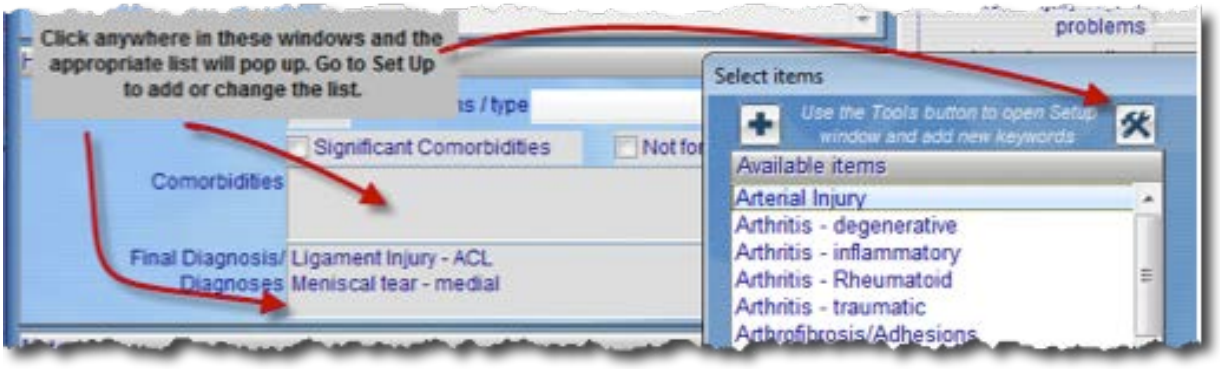
There are several places in the program where calculations are made based on data entered. Examples include weight and height; time from injury to examination; time from examination to surgery; time from biopsy to surgery; and for chondral defects, the total size of defects. If you use the **Tab** or **Enter key** after entering data into any of these fields, the program will do the appropriate calculations for you.

Note that after entering weight and height details, the patient's BMI and obesity level will be calculated automatically. If you don't know the weight and height, you can estimate the obesity level (mild, moderate, severe), and choose from the drop-down menu for that field.



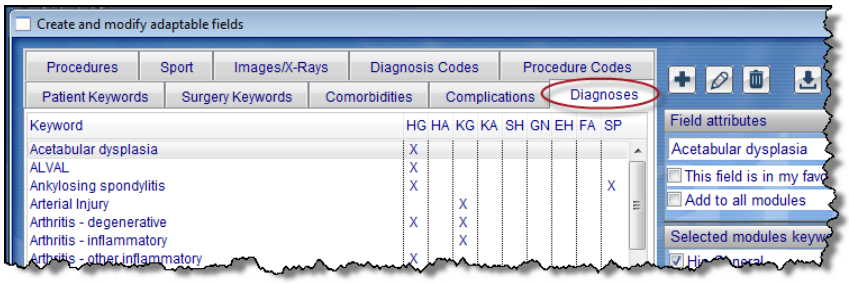
Adaptable Fields

These are windows in each of the various screens that contain drop-down lists that appear by clicking anywhere in the field itself when you are in modify mode. Examples of **Adaptable Fields** include fields labelled Diagnosis name or code, Complications, Keywords, Implants, Surgery/Procedure Name or Code, Sport, or Image Keyword.



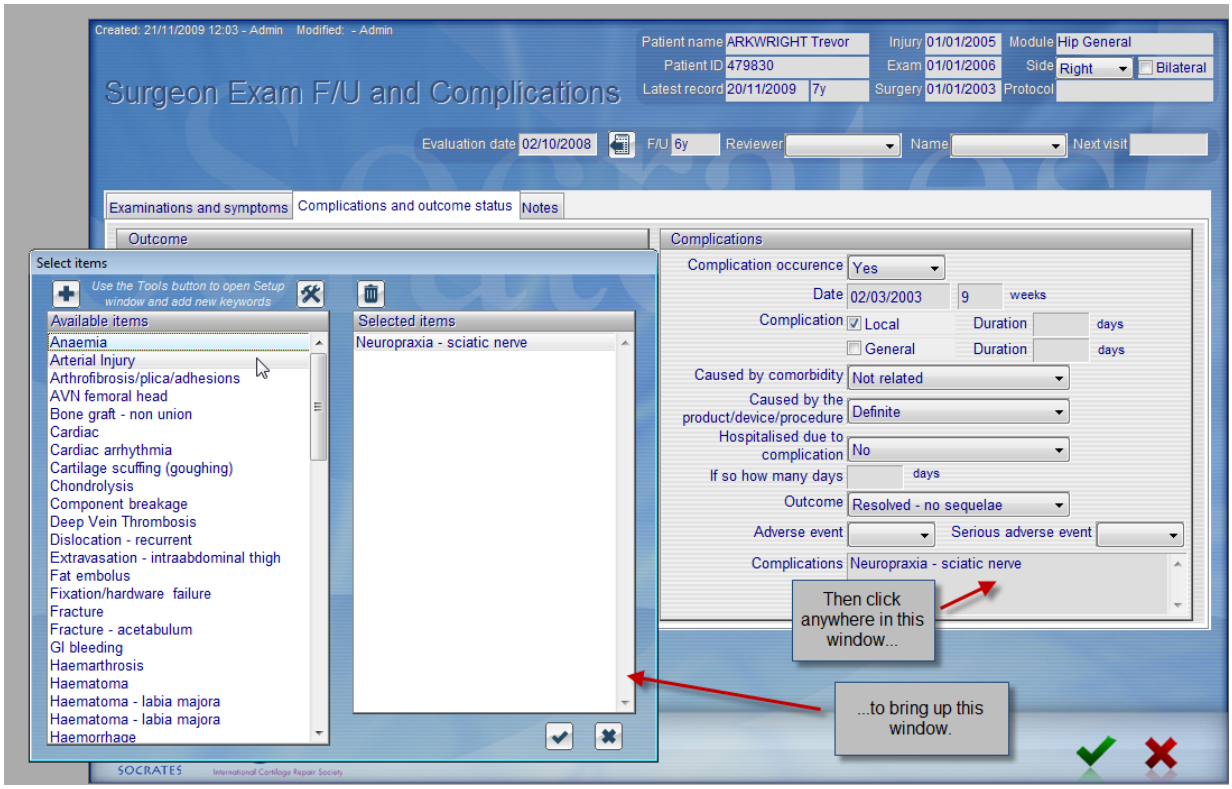
The lists of items available for selection can be added, deleted, or modified from the original **Set-Up Screen**. (Accessed by clicking on the **Tools icon** at the bottom of any screen, then **Adaptable Fields**.) Choosing this **Adaptable Fields** option lets you customise which items will be in the drop-down lists of all possible diagnoses, co-morbidities, surgery names, complications, etc. When you add a new patient or a new surgery, you will then simply click on the appropriate choices. No typing necessary! You can't add or modify anything on the list from the individual patient screen, you need to do this on the Set Up screen.

The next example shows the list of available diagnoses in the **Set-Up Screen**.

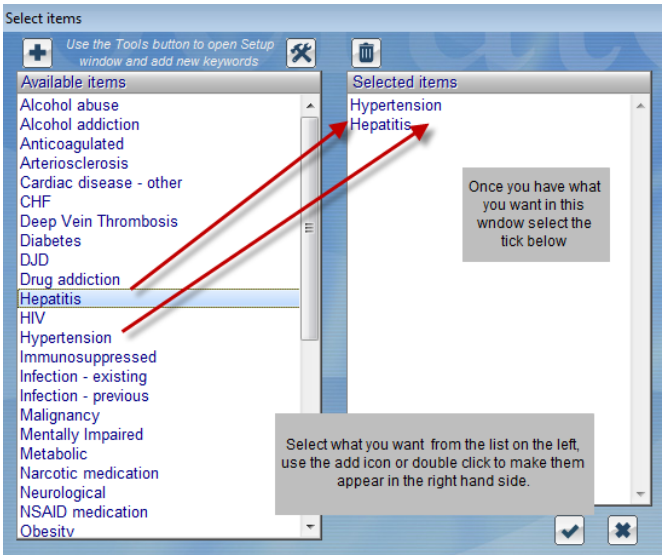


When you are in a screen in which these windows are visible, you can add diagnoses, complications, etc. by clicking the **Modify icon** and then clicking anywhere within the field itself to bring up the list.

> ***Remember, in order to add to anything on these lists to your surgery screen, you must be in Modify mode. The adaptable fields then become "live". Then just click anywhere in the little window and the list will pop up.***

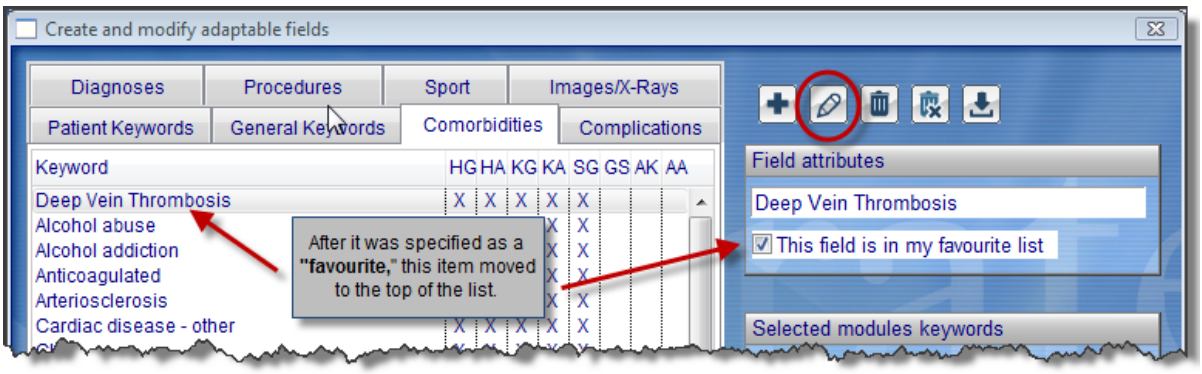


Select which of the drop-down options you want by either double-clicking on them, or by highlighting the one/s you want and then using the **Add icon (blue cross)**. The items you selected will be displayed in a window to the right. When you have added all the options you want, choose the green **tick icon**, and they will transfer over to the relevant field on the screen.

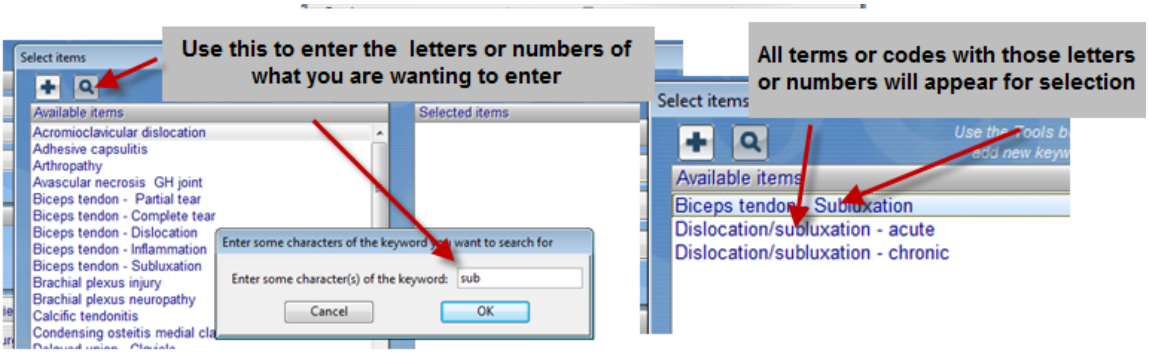


Your choices will then appear in the relevant window, as below.

Note that you can add those items you use most often to appear at the top of these otherwise alphabetised lists, by labelling them as **"Favourites**" by checking the box to the right. See chapter on Set-Up and Customisation for more details on Favourites.

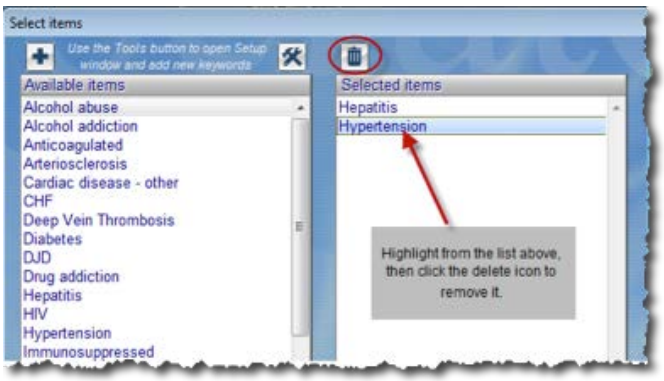


The search icon can be used to type in all or part of your word or code so you can locate them quickly.



NOTE: No validated, standardised, internationally accepted list of orthopaedic terminology yet exists for research. Therefore, although we have included some suggested terms in the default lists, you can add or change them as you see fit. You can also use your own numeric terms such as CPT or ICD codes in the procedure and diagnosis codes.

To **remove an item** after you have added it to a list on a patients screen, click on the window itself in order to display the fields entered, highlight the one you want to remove, and select the **Delete** icon.



Drop-Down Menus and Checkbox Lists

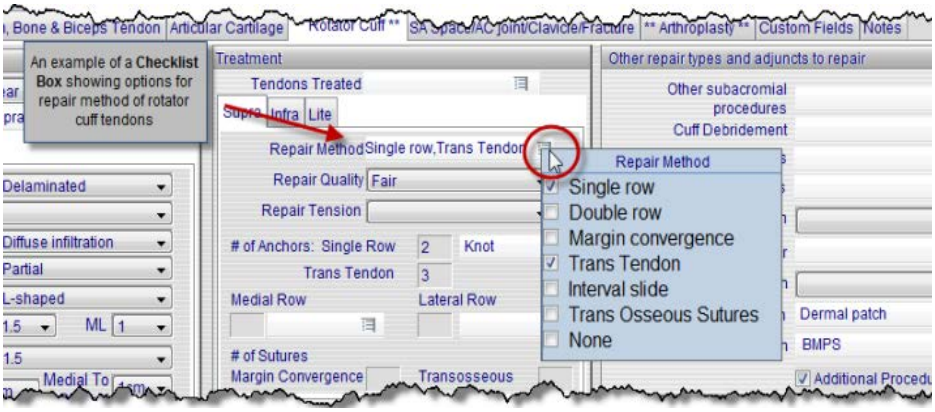
You will encounter two types of "active" boxes on the screens: Drop-Down Menus and Checklist Boxes.

Drop-Down Menus

These boxes are "exclusive" in that they will display a list in which only one item can be selected. In most cases there is an "other" choice, if the option you want is not among the choices displayed. In these instances, we recommend you either write more details in the Notes section of the screen, or set up a Keyword to describe what you want to be included. (Later, you can perform a search for "other" and then see in Notes or Keywords what you added that was different to the standard list. More on this in the Search section.)

Checkbox Lists

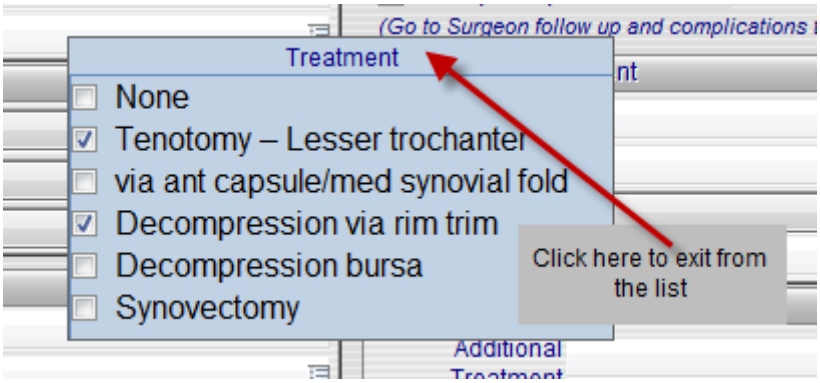
These vertical drop-down boxes are for multiple-choice options: you can choose any or all of the choices available to you. Click anywhere outside the box to exit the list.



In the example above, note that both of the items chosen are visible in the field after the list is collapsed again. If you have chosen more items than will fit in the field space, you will see a number after the first item, indicating there are that more items chosen, but they are hidden. The other items can be viewed by clicking on the field again.

If there is nothing checked from the list, the field remains blank with the **Checklist Box icon** visible.

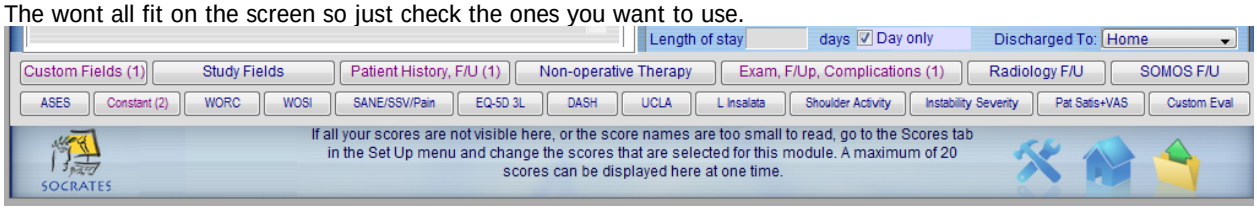
To exit the check box lists just click the line on the top where the heading is.

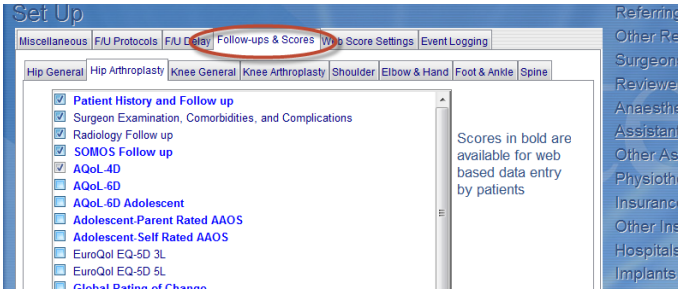


ENTERING SCORES AND EVALUATIONS

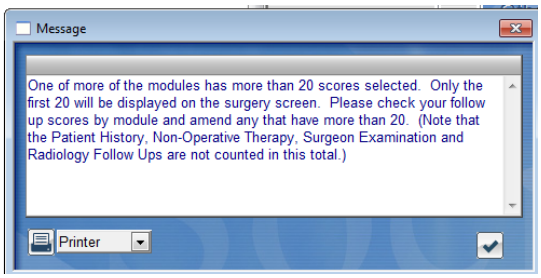
To access this important part of Socrates, first select the score you want from those displayed near the bottom of the relevant module's History Screen. If there have been entries for that surgery record the score name will be in magenta, with the number of scores in brackets.

If you can't see the score you want, it might not have been selected from the Scores list on the **Set-Up Screen**. The wont all fit on the screen so just check the ones you want to use.



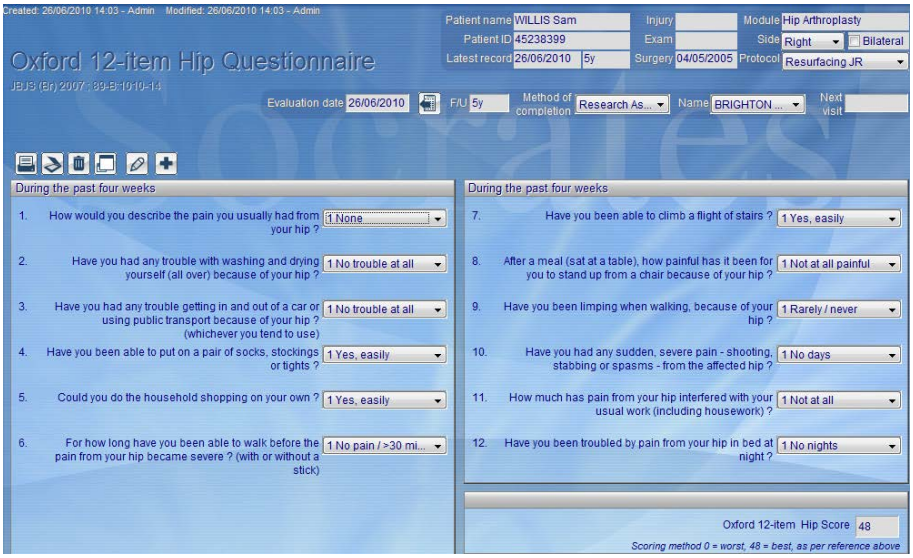


If too many are selected you will see this message.

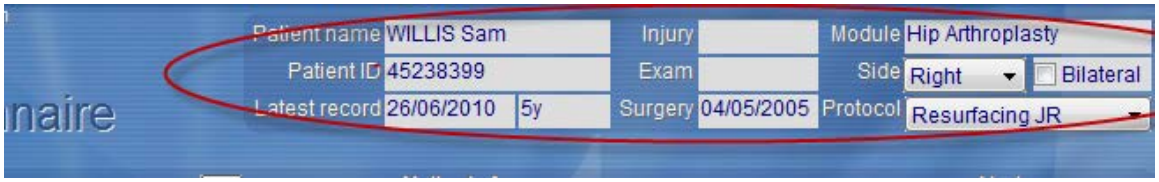


If you leave too many selected they will appear all squished up on the screen but they are still accessible.

Double click to enter the screen of the score you want to enter. It's important that you understand the options you have on these screens and some of the messages you will see.



Fields in the window on the far right of all screens



The data on the top right can't be entered or modifed with the exception of the side and protocol options. The other fields are automatically populated from fields you have entered elsewhere on the screen.

Latest Record

The **latest record field** shows up in a couple of places. On the score screen you'll see it in the general information group at the top of the screen. It displays the last date that an evaluation or follow-up has been entered. If there is no date it means that a score was entered but just the follow up, 5y for 5 years was entered.)In the example above, this is the score entered at the 5-year follow-up interval. If the patient's latest record is from a date prior to their surgery or treatment, the Latest Record field would indicate the date (if a date was entered) and the delay would be **Pre-Op**. Once the surgery date and other surgical details are entered, this field automatically updates to show **DOS** (date of surgery). And then, once the patient has a post-operative follow-up appointment, the latest record field changes again to reflect the follow-up interval of that visit since surgery or treatment.

Surgery Side

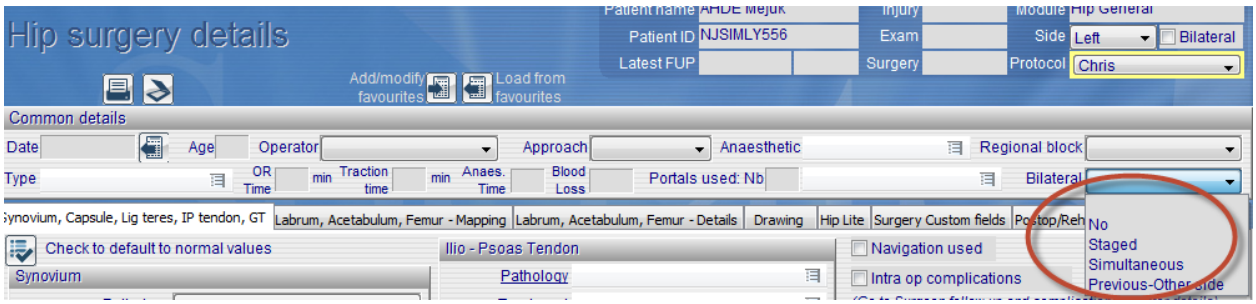
The **side** is automatically populated from when the surgery and side were originally selected, but if a mistake has been made, it is possible to change this.

Protocol

This may be populated from the information that was selected when the surgery was first created, but if not it can be added or changed on this screen.

Bilateral

If **Bilateral** was selected when the surgery record was first created, this box will be checked. This field can only be changed from the **Surgery details screen**. It's in a different place on some of the screens so you might have to hunt for it.

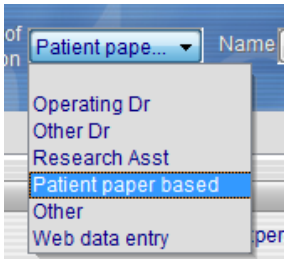


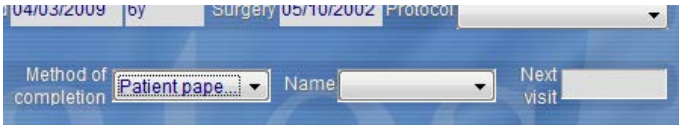
Scroll Arrows

At the bottom of the **Score Screen**, **scroll arrows** allow you to browse through (in order) the first scored evaluation of this type on record for this patient, the previous record, the next record, or the last record. The numbers next to the scrolling arrows indicate the number of evaluations available for this patient and which of those you are currently viewing (in this case, the last of two scores, or 2/2).

Method of Completion

The options for this field are illustrated here:

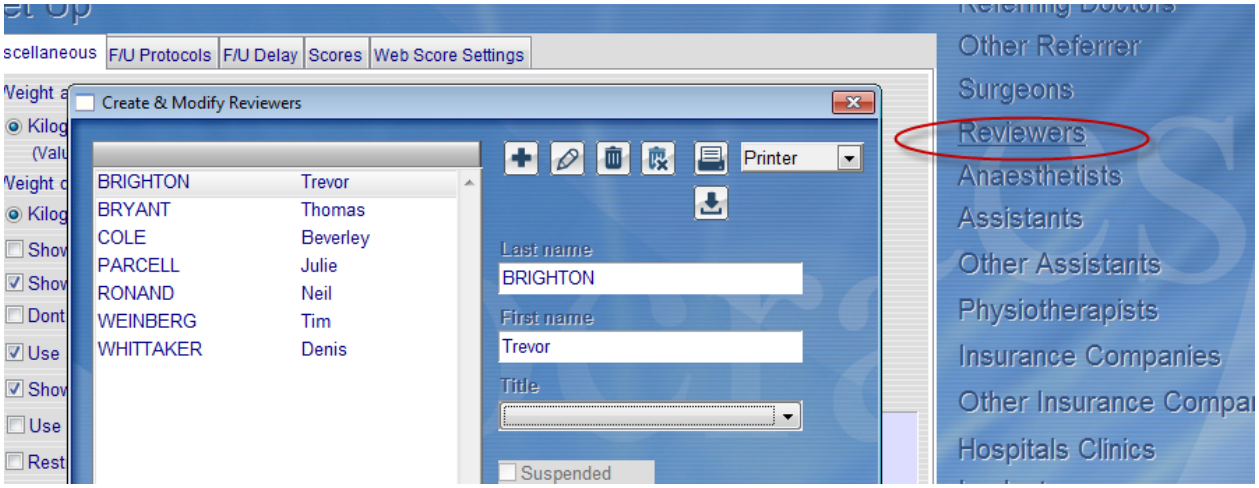




It's not mandatory to fill this field in, but some studies require you to state whether the patient completed the survey themselves, and how (paper or web), or whether the surgeon or research assistant asked the questions of the patient. There is published data to show that if the surgeon fills out the form for the patient, the results are better than if the patient completes it himself. This is also true with a research assistant filling out the form for the patient, but not to the same extent. If the score has come via the web service this field will automatically be populated.

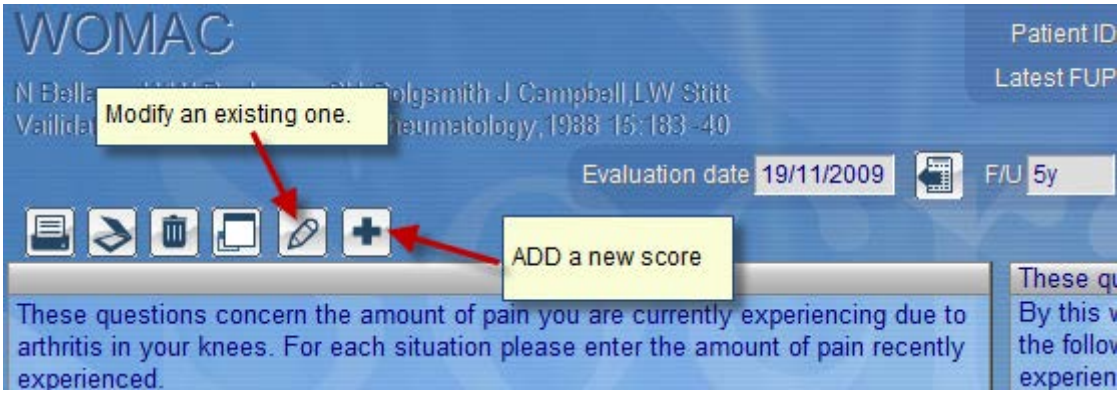
Reviewer Name

If you have a research assistant it is possible to enter their name, these details are added to the master list in the **Set-Up screen**.


scellaneous
F/U Protocols
F/U Delay
Scores
Web Score Settings
Create & Modify Reviewers
BRIGHTON Trevor
BRYANT Thomas
COLE Beverley
PARCELL Julie
RONAND Neil
WEINBERG Tim
WHITTAKER Denis
Printer
Last name
BRIGHTON
First name
Trevor
Title
Suspended
Other Referrer
Surgeons
Reviewers
Anaesthetists
Assistants
Other Assistants
Physiotherapists
Insurance Companies
Hospitals Clinics

ENTERING SCORES

Adding a new score



The first time you enter a score, you will already be in modify (or data entry) mode, and the responses will be empty. For subsequent new entries, you can use the **Add icon** or the **Modify icon**. Selecting the Add icon will *clear the screen of the data from the previous entry*, including the date or follow-up interval. If you select the Modify icon, the responses from the previous entry and the date will be retained, so you must remember to change the date or follow-up interval field to the new one unless you are modifying an existing record. You will then get a message asking if you want to create a new time point, or overwrite the old one if you do choose this option. See later in this chapter for more details about this message.

You have two choices when entering the follow-up date or interval: either enter the date the score was completed, or the follow-up delay or interval from the original date of surgery.

The Date Method

Enter the **Evaluation Date –** this is the date the form was filled in. Tab to the next field, and the **Follow-up interval/delay** (from the date of surgery) will be automatically calculated for you. If no date of surgery has yet been entered on the surgery screen, the program will assume that this score is a **Pre-Operative** score. Once the surgery date is entered, the follow-up delays will be automatically displayed as they were defined in the **Set-Up Screen**, **follow up delay** either in weeks, months, or years, once you tab past the Follow-up (F/U) field.

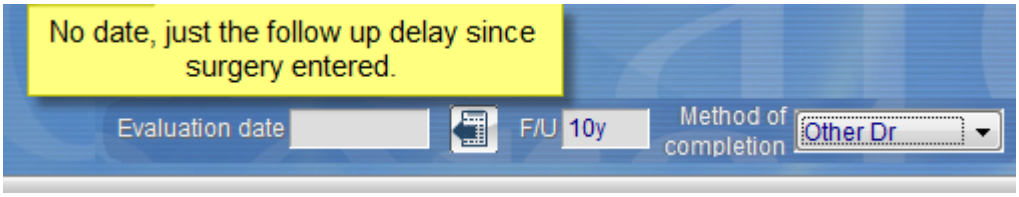
The Follow-Up Delay (or Interval) Method

Alternatively, you can *leave the Evaluation Date field blank*, and instead only enter the follow-up delay (the interval) in this field. The program will only accept intervals in the following format. (You will know you've got it wrong if what you typed isn't accepted; or you may hear a pinging noise.)

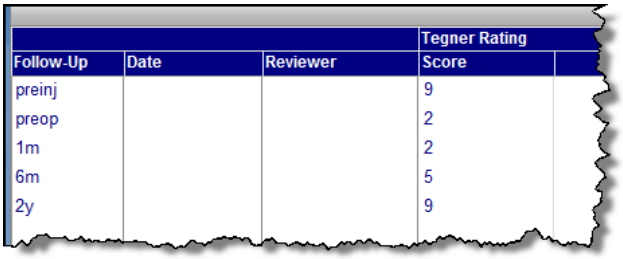
- **Preinj** (any time before the date of injury)
- **preop** (any time before surgery or treatment, or start of study, or on the day of surgery or treatment)
- **intraop** (same day, during surgery) This ins only relevant for radiology.
- **a numeric value** followed by either **w** (weeks), **m** (months), or **y** (years).

Do not include any spaces in any of terms: for example, type in preop, not pre op; 6w for 6 weeks; 3m for 3 months; 10y for 10 years. If you only enter the follow-up interval, then the date this score was entered obviously won't show up on the results list, just the delay interval since surgery. For surgeries where there might be very long follow up such arthroplasty surgery users often prefer to enter the follow up period, since this makes searching for stats easier. The patient may return for their 10 year follow up 6 months either side of the due date. If you enter the date the program will calculate the exact follow up, 9 years 6 months, 10 years 6 months if

you have your follow up set in months. To make searching easier they may choose to just enter the follow up delay as 10y.



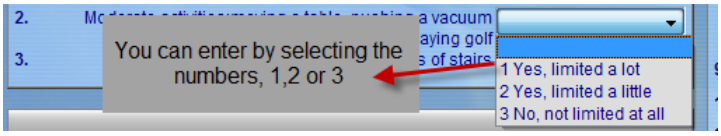
If you do this no date will be recorded in the date column on the summary, just the follow up period.



			Tegner Rating
Follow-Up	Date	Reviewer	Score
preinj			9
preop			2
1m			2
6m			5
2y			9

Entering the responses manually

To enter the **patient's responses** directly into the screen, use the **Tab key** to proceed through the items, and either use the mouse, the down arrows, or the first letter of the response you want to enter. For most scores, you can also enter the number corresponding to order of the response on the form, 1st, 2nd 3rd.



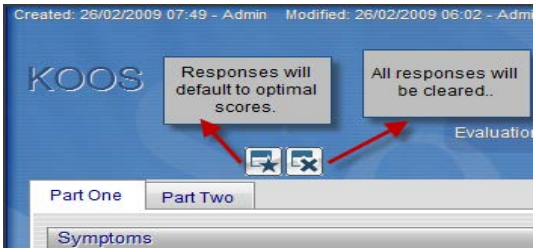
Once you have completed all the fields, click on the **green tick** or the **Enter key** to indicate you have finished data entry, and the score will be computed and scored.

Note: the numbers are just the order that the responses are in on the list they have nothing to do with the values that are allocated by the program behind the scenes to calculate the score.

The **total score** for the evaluation is displayed at the bottom of the screen.

Star and Cross Icons

You can populate the responses to each question individually, or take a short-cut, if you wish. If you suspect a patient will have a fairly normal score, simply choose the **Star icon**, which will automatically change all the fields to the *optimal score*. You can then change only those few responses that vary from normal, or optimal. This option obviously can save time for the person entering the data. The **Cross icon** will *clear* all the previous entries the next time you go to modify the score. If neither of these icons is chosen, the entries from the previous time the score was elicited from the patient will be displayed; new responses need to be entered for this occasion.

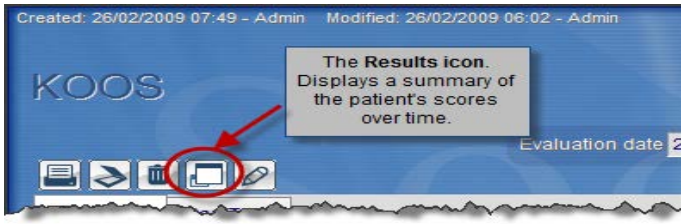


Scan and Print Form Icons

See the chapter on scannable forms for details on how to use the Scan Forms function. The print icon will print out a copy of the scannable forms for the relevant screen.

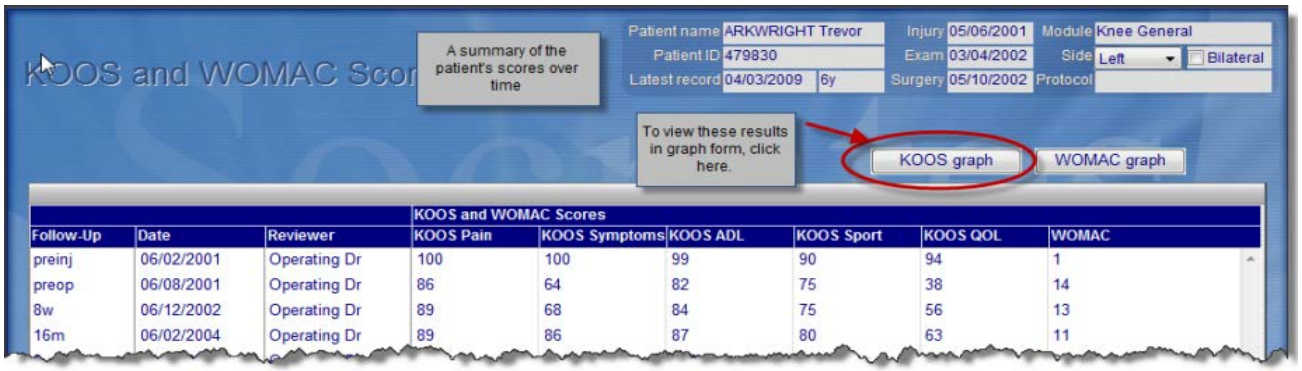
Score Results

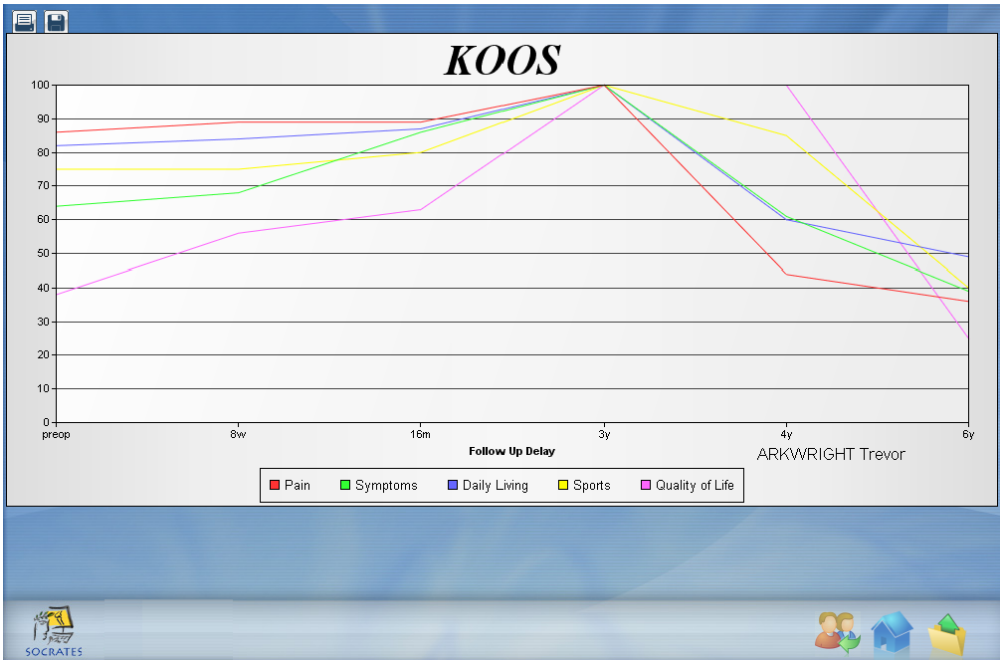
Results over time can be viewed by clicking on the **Results icon**.



Score Graphs

Once inside the results screen, you can click on the **Graph icon** to view a graph of the score.

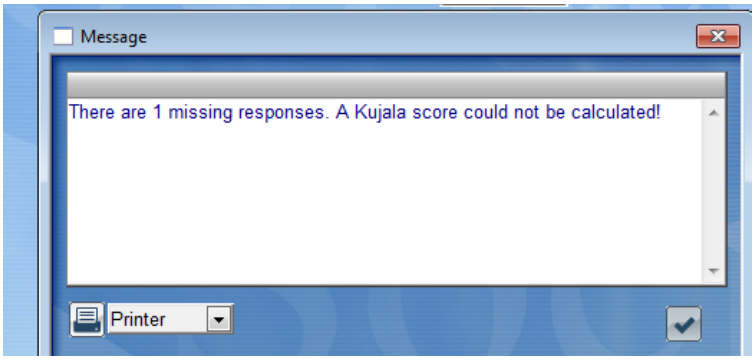




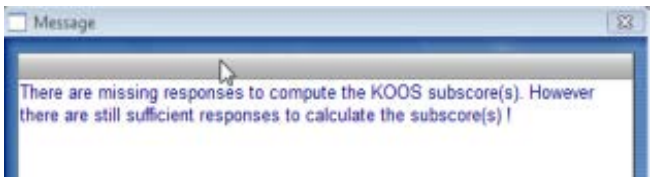
The graphs can be printed or exported as a .jpg file from the icons in the top left-hand corner.

Missing Responses in Scores

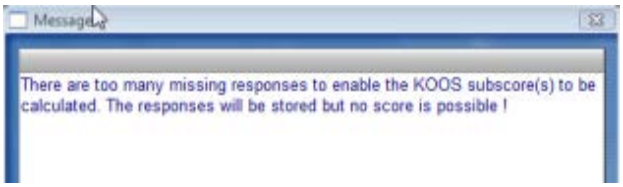
If questions are not answered or not entered, and it is therefore not possible to calculate a score, the program will give you an error message. If the responses really *are* missing (and not just a data-entry error), choose **OK (the tick)**, and the data you entered will be *stored*, but a total score may not be possible.



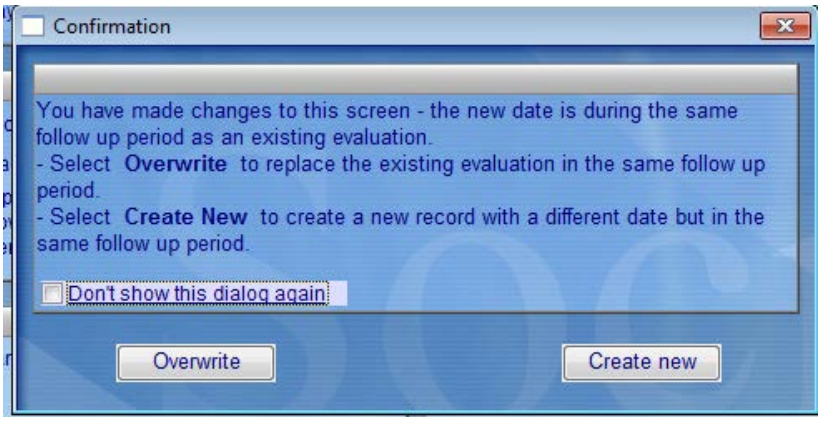
Some scores are validated by their authors to allow for missing responses. If there are missing answers, but there is still enough data to be within allowable limits, this message will be displayed.



If there are too many missing responses, and the score cannot be calculated, you will see the following error message.



If you subsequently enter a score using the same date of one already entered, (or make changes to a score that falls into the same follow-up period as a previous score), the following message will prompt you to decide whether you want to either **over-write** the previous one leaving just one score at that time point, or **create a new one** at the same time point (but with a different date).



There may be occasions when you want to have two records at the same time point. For example, you may have decided to follow up patients at 12-month intervals after three years. In Year 4, the patient returns twice in the same year, due to complications. This patient already has a 4-year follow-up entered, but when he returns six months later, you have him complete another score.

Another example is if the patient is on a waiting list for a long period, or you want to wait to see if they improve before deciding to operate. In this case, you will want to see their pre-op scores *over time*. When there are two scores at the same time point when you save the data, Socrates will ask you if you want to **over-write** the previous entry at this time point. If you choose "Over-write," only the latter, most recent follow-up and associated information will be saved. If you choose "Create New" on the other hand, an *additional follow-up* will be created at the same time point. If you are re-entering data due to an error in a previous entry at the same time point, choose "Overwrite" and the previous, incorrect entry will be replaced.

> ***NOTE: Only the most recent follow-up score of the two will be used when calculating statistics, but the data entered for both visits will be saved as two separate entries. Data can be exported to Excel if you want to do statistics on scores at the same time points.***

Entering follow up scores

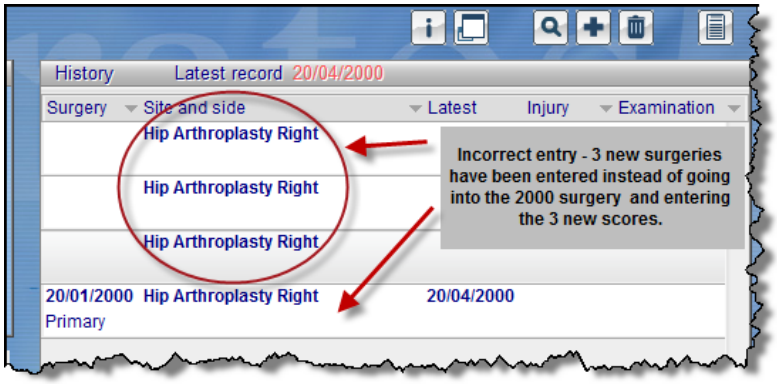
Once you have entered the first score (which is usually preop) the patient will have their surgery or treatment, and at a later stage they will come back for a follow up score, probably the first of many. So how do you enter the follow up scores? For the remainder of the follow ups for that surgery, locate the surgery on the history screen you are following. The date of surgery usually tells you the right one. Then double click on that entry to access all the scores, and any other follow ups - complications, ROM etc.

Inside the surgery record the score would show up on the bottom of the history screen, with the number of scores entered in brackets beside the score name. Inside the actual score you will see the two numbers, indicating which score you are looking at (the first number) and the total number of scores.

The follow up for the original surgery only ends in 2 ways. If the surgery fails and is revised, then a new surgery is added as a revision and the follow up scores then go into that surgery. Or when the Patient is discharged from follow up and no more scores for that surgery are needed. **EVER…**

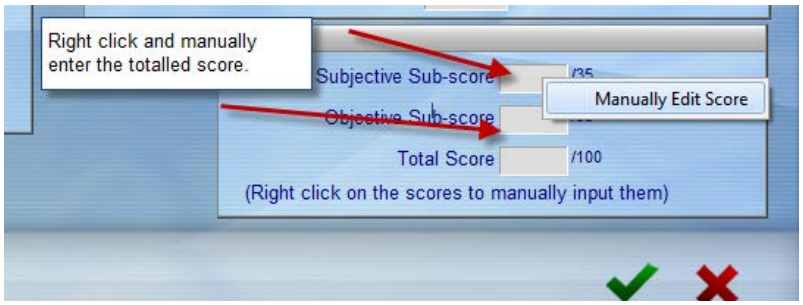
What not to do…..

This patient had one surgery in 2000. He has since had 3 follow up Hip scores. Instead of double clicking on the 2000 surgery and adding the new follow up scores here the data entry person has created 3 new surgery records each with a score. These scores will not be linked to the original surgery.

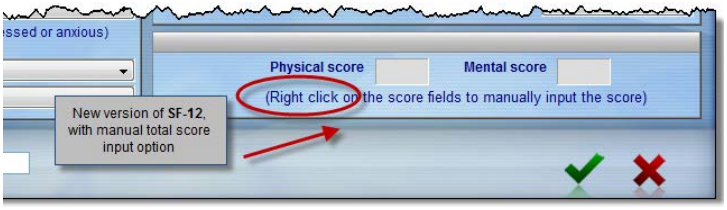


Entering Only the Score Totals

Some scores have been changed or updated by their original authors over the years. The questions and answers may be similar but different enough so it's not possible to enter them into Socrates but the score totals may be the same. If you have data from previous paper forms with different questions, or in some cases only the scores you can enter **total scores** manually. You will see an instruction in the Total Score section indicating you can *right-click* on the field in order to enter the score manually. Just type in the total number and save.

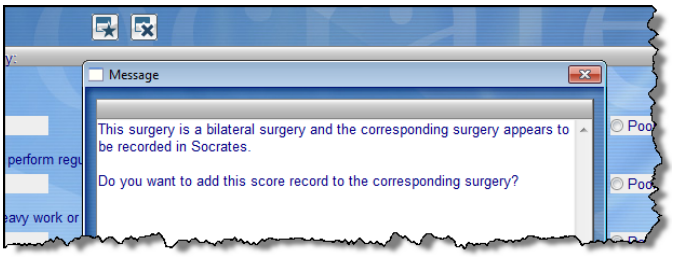


SF 12 and 36 scores: From the August 2011 update it is no longer possible to enter any responses into the SF 12 and 36 scores. Users who want to use these scores should contact www.qualitymetric.com to obtain a license and the scoring methods, the answers can then be entered into the score totals but there will be no access to the questions. The company who now owns these surveys withdrew their permission for us to include the full scores. There is a free equivalent called the VR 12 and 36 score available. Contact us for more details.

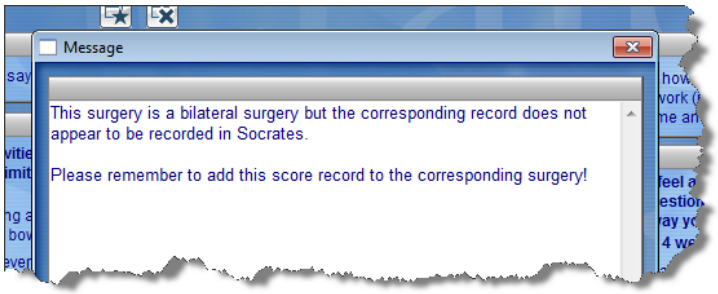


Bilateral Scores –

The SF12 and SF36. VR 12 and 36, EQ5D and Patient Satisfaction scores can be assigned to the opposite side for a bilateral surgery to save you entering the same data twice since these outcome scores are related general health and are not specific to one side or the other. If a bilateral surgery has been checked on both records, the right and left, you will see a message asking you if you want to assign these responses to the other side.



If you select yes, the score and the date will be assigned to the record on the other side. If you see the next message it means that the bilateral check box has been checked for this surgery but there is there is either no opposite record in Socrates, or it hasn't been set as bilateral. You would need to go to the record for the other side, and modify the bilateral record in the surgery screen so that in future the scores could be allocated to both sides.

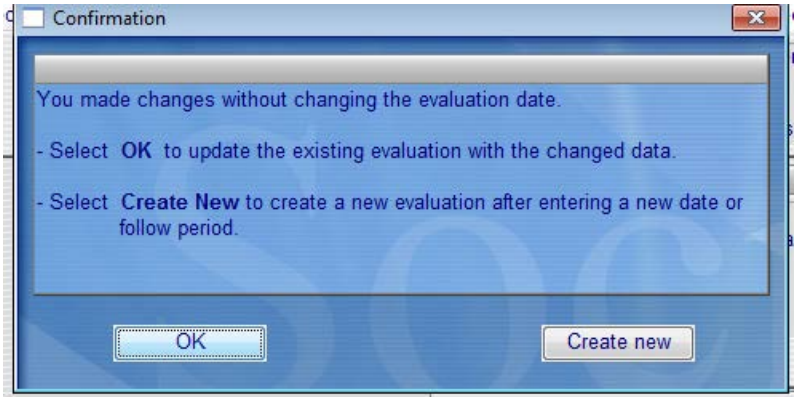


ADDING OR MODIFYING AN EXAMINATION/FOLLOWUP

Modifying a follow up

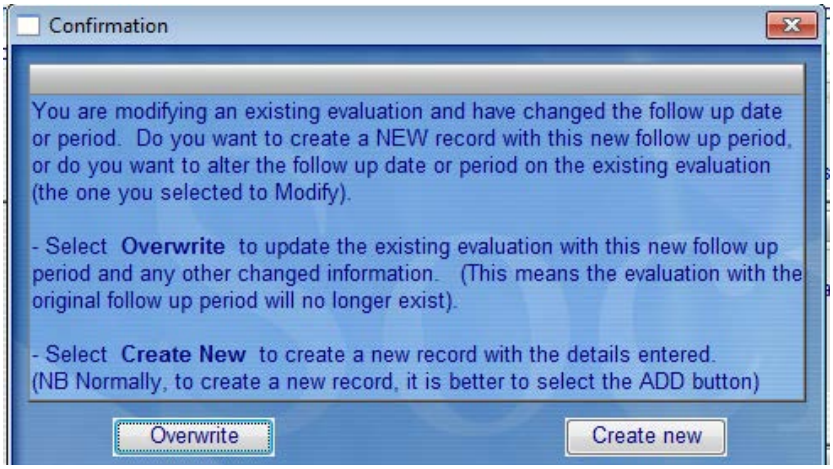
If you want to modify an examination or follow up screen at an existing time point without changing the time point, or you want to add a new one with all the same data, but at a different time point, you would to use the modify icon. This allows you to change any of the data that's on that screen you are in. If you change the time point after you have modified what's on the screen, when you go to save the entry, it will ask you whether you want to update the existing evaluation with the changes or create a new entry at a different time point.

If you select OK, this will result in the original entry being changed to reflect all the new data, including the time point.

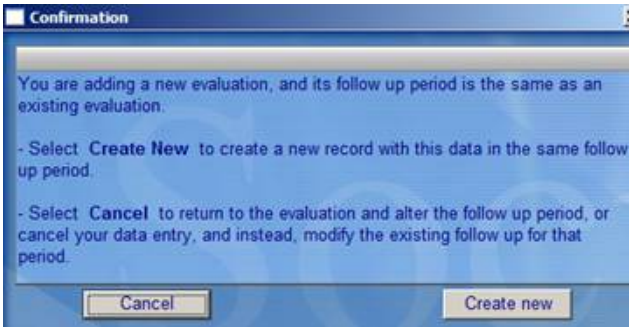


If you select Create New you MUST change the follow up period to be different to the one you are in. It will keep asking you to create a new one until you do this.

If you select Create New and then change the follow up period or the date you will then see this message – it's giving you the option of creating a completely new follow up with all the details you have changed, or overwriting the one that was there before, date, time point and everything. The 'overwrite' option would normally only be done if you found that you had data in the wrong time point. Instead of deleting it and starting all over you can just modify the data and the date/follow up then overwrite/replace the old one. If you want to create a completely new follow up click Create new. If you do want to overwrite/replace the screen you are in with the new one select Overwrite.



If you selected the Create New option at this point it will then check if there is already an evaluation for that time point, and if there is, it will warn you with this message below – but at this point, you will only have the choice of creating a new record for that time point, or cancelling the input. (You won't have the option of overwriting anything). And if you select Create New, you will still have the original entry that you were in when you clicked Modify (with all its data unchanged), plus a new entry with the altered data, and new time point.



Adding a new follow up

If you want to add a completely new entry, either at the same time point as an existing one, or a new completely new one, you should use the ADD icon. When you come to save the new data, if there is already one there at the same time point you will see that message shown above again just to make you aware that you are going to be adding a completely new entry at a time point where one already exists. It's not uncommon for there to be more than one entry/screen at the same time point/ follow up interval. A patient might be on the waiting list for a long period and you want to document their status at different time points. Preop assessments could be spread over 2-3 years, or a patient could return several times in a 5 year follow period if they are having problems and you may want to record each follow up separately. In this case it's always better to use the actual date (rather than just entering the delay, preop or 3y etc) as you can then see the progress at the different dates in the same follow up interval.

This all sounds a bit complicated but there are really just a few main points to remember.

1) If you want ***to add a new follow up*** at the same, or a new time point use the **ADD** icon.

2) If you want to make ***changes and overwrite*** an existing follow up use the Modify icon but you can't use this to add a completely new follow up at the same, or a new time point.

3) If you want to keep all the previous responses on the screen and just change the ones that are different use modify, but select "Create New" when you get the message after you try to save, and then enter the new time point.

DATES AND FOLLOW-UP PERIODS

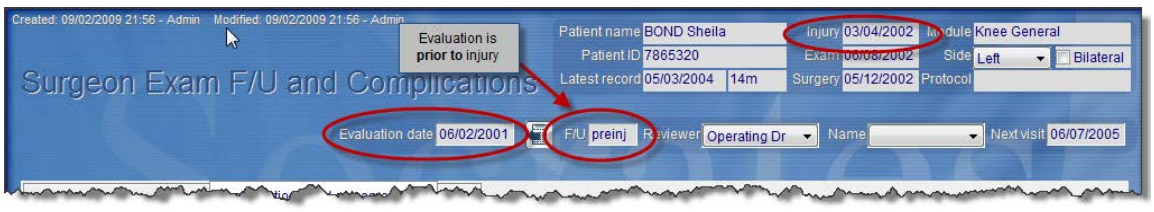
There are four time points possible for Patient and Surgeon Follow-ups and Scores/Evaluations.

- Pre-injury
- Pre-operative
- Intra-operative (usually only needed for scores which include ROM and examination, such as IKDC and X-rays or intra-operative complications.)
- Post-operative

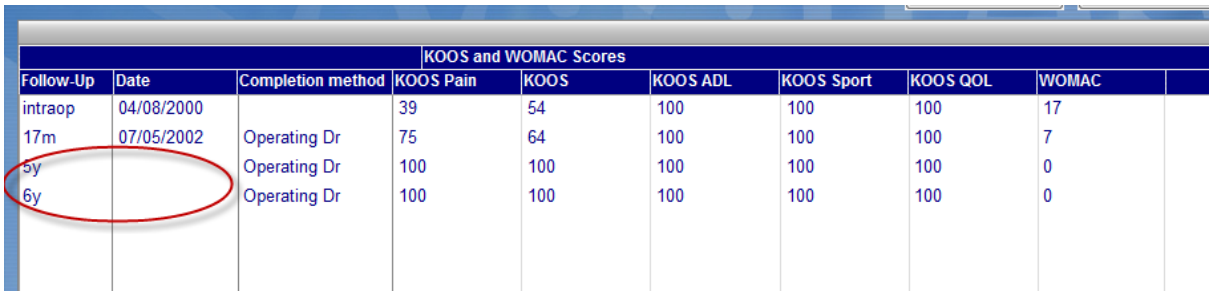
Pre-Injury (or pre-joint-problem)

In most cases, there will not be a need to use a pre-injury score, but it is possible that you may want this information for some scores or activity levels. It may be important to know what **level of activity** a patient was capable of prior to injury, in order to compare this level with their post-treatment score. It may also be important to collect this information about his or her pre-injury **work status**.

If a date of injury or joint problem is entered, and an evaluation is entered prior to that date, the program will assume that this is a **pre-injury evaluation**, and label it as such.



If no date of injury is entered or can be remembered, you can still report on the patient's "pre-injury" status by having them complete the questions based on what they could do before their injury. In this case, you would leave the Injury Date *blank*, enter an Evaluation Date, and *manually type* "**preinj**" in the F/U field.



KOOS and WOMAC Scores

Follow-Up	Date	Completion method	KOOS Pain	KOOS	KOOS ADL	KOOS Sport	KOOS QOL	WOMAC
intraop	04/08/2000		39	54	100	100	100	17
17m	07/05/2002	Operating Dr	75	64	100	100	100	7
5y		Operating Dr	100	100	100	100	100	0
6y		Operating Dr	100	100	100	100	100	0

This would then show up on the results list but without a date.

If you choose to enter the date and let the program calculate the follow up it may not exactly match the follow up period if you have the patient in a follow up protocol. For example the patient may be due for their 2 year follow up but may be reviewed a month or so before or after the 2 year date. If you choose the date method the program will calculate the exact follow up, maybe 23 or 25 months. So if you are running statistics or searches you would need to include the range in your search, between 23 and 25 months to capture these. Some users prefer to just enter the follow up as 2y to avoid this.

Pre-Operative (or pre-therapy, or pre-study)

It is, of course, important to gain a base line score before surgery. The following scenarios cover situations in which Socrates will categorise the evaluation as "Pre-Operative."

If an Evaluation Date is entered that is *before* the Date of Surgery or treatment or study start, and there is no date of injury (or joint problem) entered, the program allocates the follow-up evaluation to **pre-operative**.

If no Date of Surgery *or* Date of Injury is entered, the program allocates the follow-up evaluation to **pre-operative**.

If there is a Date of Surgery entered, and the Date of Evaluation is *before* that date, the program assumes the follow-up evaluation is **pre-operative**.

If there is a Date of Injury entered, and this Evaluation Date is *after* that date, but *before* the Date of Surgery, (or there is no date of Surgery yet entered), the program calls this evaluation **pre-operative**.

If the Evaluation Date is *the same as* the Surgery Date, the program will assume this is a *same-day procedure*, and call this evaluation **pre-operative**. It assumes the patient completes the evaluation on the morning of the surgery.

Post-Operative (or post-therapy, or post-study)

Data gathering at this time point measures work and functional status over time after surgery.

Any surveys, patient assessments or surgeon examinations completed and entered *after* the Date of Surgery will be allocated as a **post-operative** follow-up at the time points chosen, or based on the date they are entered and calculated by the program from the date of surgery or treatment. Anything in the first week after surgery shows up as just "0w".

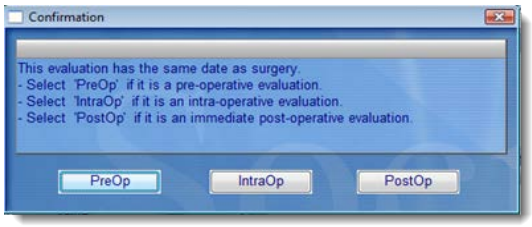
Radiology and examination Follow-Up Time Points

There are *additional* possibilities for these follow-ups, since it is possible to have all of the following time points:

- Pre-injury
- Pre-operative (can be any time prior to surgery date, or pre-op on the same day as surgery

- Intra-operative (X-rays to check alignment, for example)
- Immediate Post-op (checking post-op position on the same day as surgery)
- Post-operative (after the day of surgery)

The guidelines for Pre-injury, Pre-operative, and Post-operative are the same as those outlined in the previous sections. If the date entered on this screen is the date of surgery, the following window will appear. Choose the time point under which you want the image or score stored.

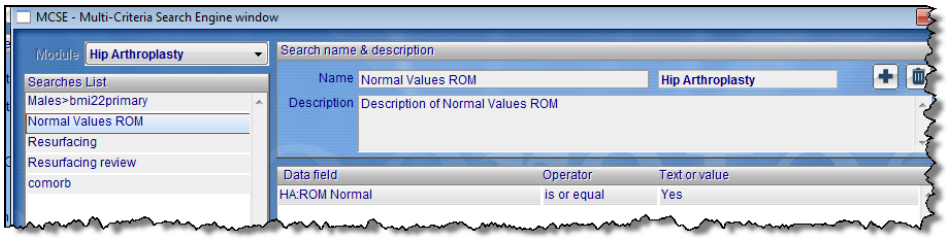


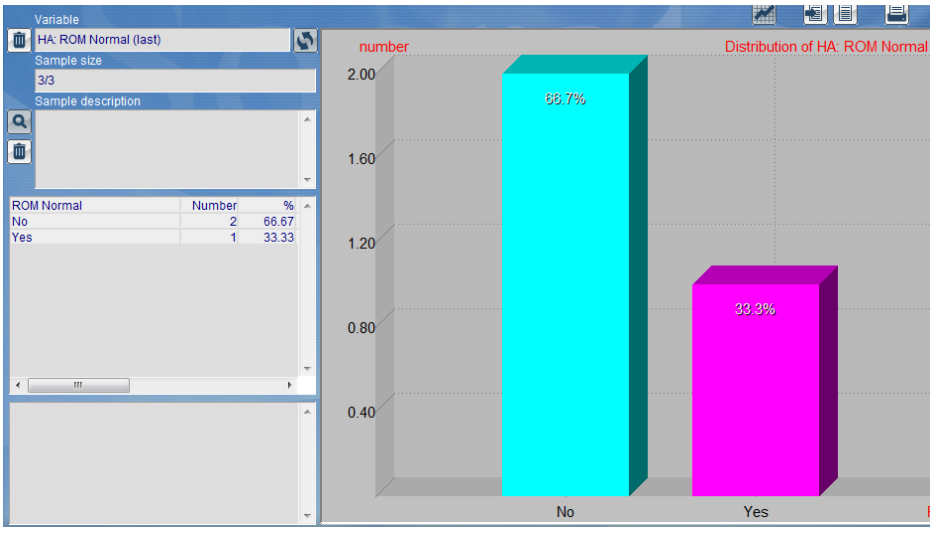
Default or Normal Values

Some screens allow default (or normal) values to be entered automatically. For example, navigate to the Shoulder Surgeon Exam and Follow-Up Screen. Select the **Normal icon**, and the fields in the Active Index column will be populated with "normal" values. Of course, these values can be modified if the patient's measurements vary from these baseline quantities.

It is difficult to assign actual "normal" values for range of motion to all patients since this varies with age and condition; the actual values may be less important for an older population, for example. It may be enough to know that for the patient's age and condition, their ROM is "normal". Thus, on some screens there is just an icon for Normal, which doesn't populate any values. If you want, you can select Normal, and then be able to search for all surgeries where ROM was "normal" based on your clinical judgment for that particular patient.

You can search and run statistics easily where ROM is normal. If not selected, the program assumes that it was No.



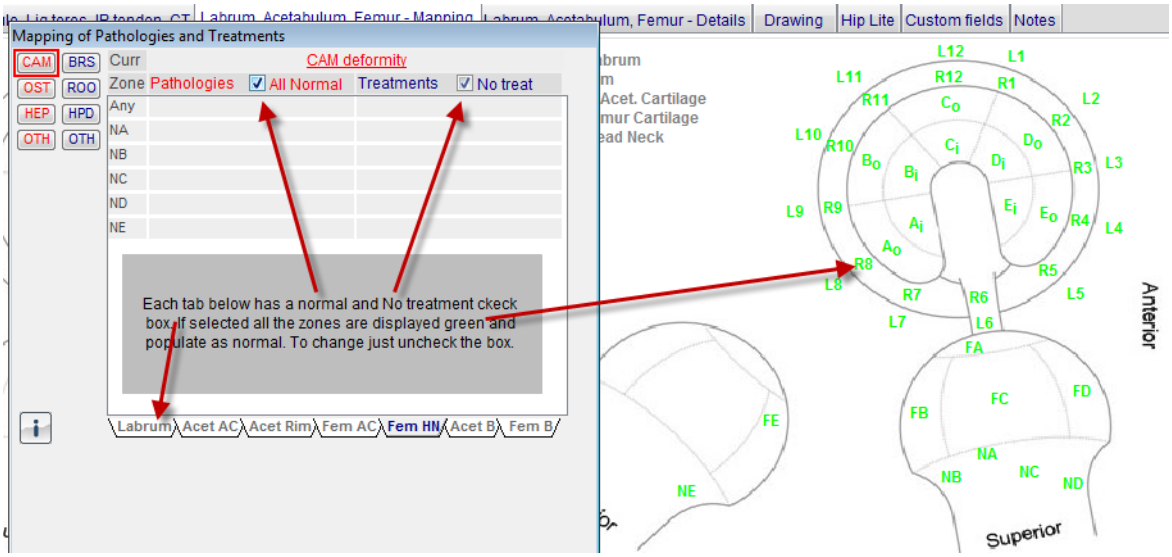


Note: you can also incorporate these Normal or Default values into your Favourites (coming up next), so that you can start off by selecting the normal values, change what you want and include the other parameters you might want into this Favourite.

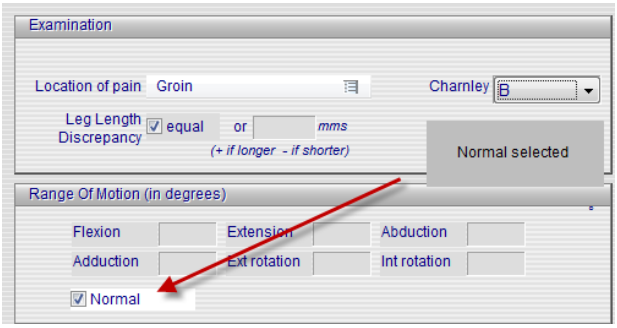
> ***Anywhere you see a Blue Star or a Tick icon enables you to select normal, or an optimal selection.***

Some scores and follow-up screens have normal values pre-set in their response fields. If the **tick icon** or the **blue star** is selected, normal values will be populated by default; you can change them as necessary.

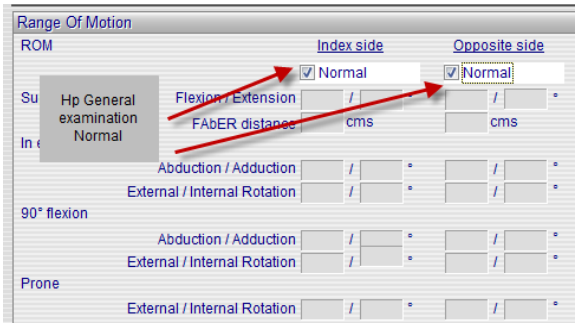
Hip Mapping Screen Normals



Hip Arthroplasty example

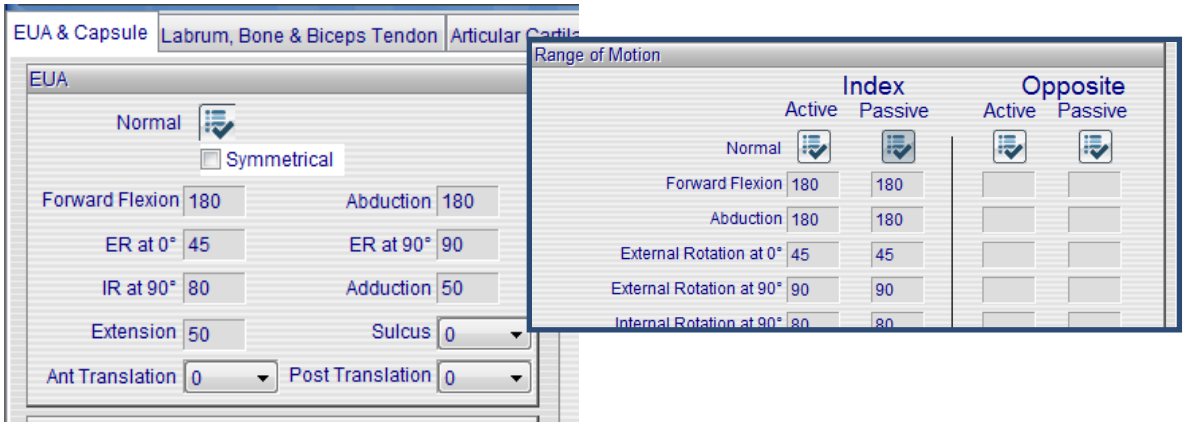


Hip General example



Shoulder Normals

There was a good deal of debate about whether we should assign real values to these measurements: we ended up doing this. These “normals” can, of course, be changed. Inside the program, if you select the normal tick and *then* make changes, normal is deselected for the search, so when you search for all normals, (even though you started off by selecting the normal tick as soon as one of the values was changed), this surgery would dropped from the normal list.



ADDING FAVOURITES

Because so many of the fields will be common among the surgeries you perform, it is possible to set up default or what we have called **Favourite** fields in the some screens where it makes sense. These are: the surgery screens, a few details on the history screen and the surgeon examination section of the Spine module. Some surgical procedures such as the treatment of chondral defects, or revision arthroplasty procedures differ so much between surgeries that it's not sensible to have a favourite. A typical ACL procedure, or TJR however, can be saved as a Favourite, as it's a more homogenous injury/operation and most surgeons have a usual technique or two that they prefer.

Once set up and saved, these fields will be populated by just clicking once on the chosen Favourite. Socrates has already been "told" which fields can be included as default fields, such as type of anaesthetic, fixation method for a certain implant, approach, brand of components, etc. You can set up as many Favourite lists as you like: there could be one for Standard Total Hip Replacement, Brand X; one for Standard Total Hip Replacement, Brand Y; one for Resurfacing; one for Cemented Total Hip Replacement, ACL allograft, ACL autograft etc.

If you choose a field that doesn't have this "favouriting" capacity, it won't be stored when you try to save it as a Favourite. For example, the Charnley category will change for each patient, so it isn't one of the fields that Socrates has been "told" to allow as a favourite. The same applies for implant sizes. You can select a *brand* to place on a favourites list, but not the sizes to go with it.

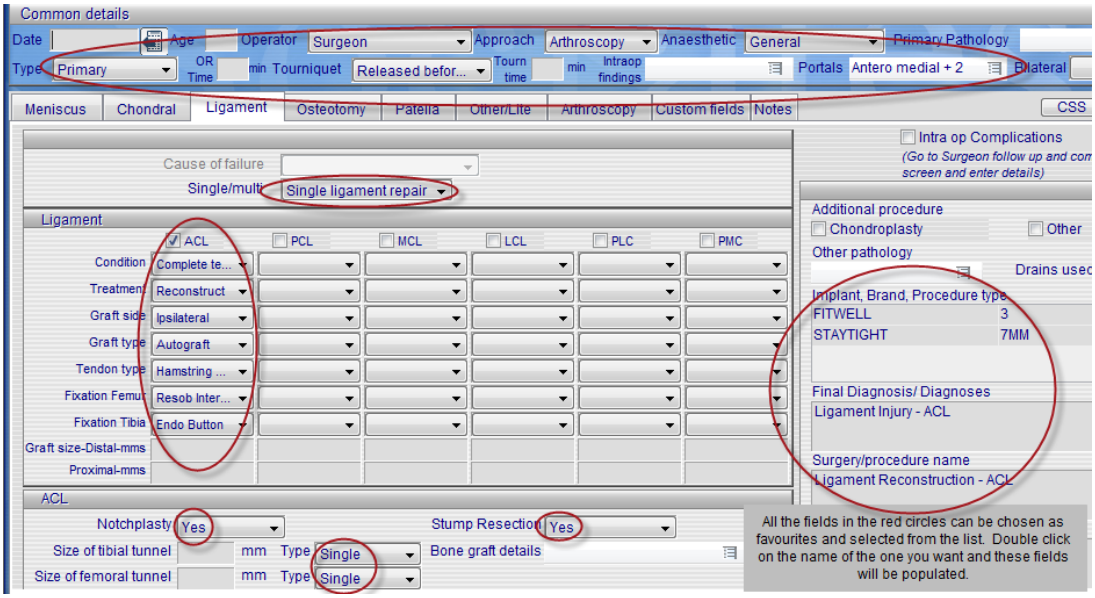
What You Can Select as a Favourite

Each of the modules allows some of the fields to be selected as Favourite fields, thereby pre-populating those fields that you use most often for certain procedures. This saves time on data entry, and as many favourites as you want can be set up.

The variation among modules stems from the clinical decision-making that goes on in the different areas. The screen below is an example of fields that can be selected as Favourites for an ACL procedure. Once set up, all the fields can be completed with one click, only requiring the graft and tunnel sizes to be added, (plus any changes specific to the current procedure). Some procedures such as Cartilage treatment are not set up to allow favourites as no two surgeries are usually alike, but typically a surgeon has one or two standard ACL procedures, thus a "favourite" set of fields can usually be set up to pre populate these to save time entering the data in the OR.

Favourites can be set up on the **surgical details screens for all modules**, the **history screen**, **the post op and rehab screen** and the **surgeon examination screen for Spine**.

The next example shows the fields that can be saved as favourites for an ACL.



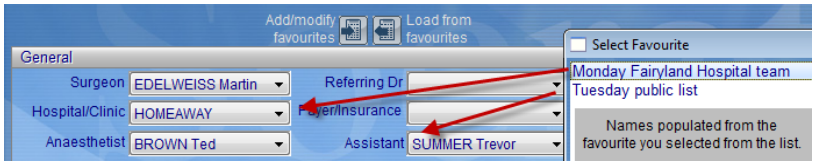
What's Allowed as Favourites

Each screen has different fields that can be selected, depending on what makes sense clinically. For example, a chondral lesion requiring a chondral grafting procedure is unlikely to be standard from one to the next, so in this case, there are no fields allowed as Favourites. If you include fields on your selected favourites and they don't populate, you'll know they haven't been "allowed".

History screen Favourites

It is also possible to set up Favourite options from the **History Screens on all modules**, so that the Surgeon, Assistant, Anaesthetist, and Hospital names fields etc are all automatically populated when you select the associated Favourites name. In this way, you can set up routine teams for the different types of surgery you do and the different days you operate, for example. Simply navigate to the History Screen, choose the **Modify icon**, enter the data you want saved, and click on the **Save to Favourites icon**.

The diagnosis and procedures names as well as the diagnosis and procedures codes on this screen can also be set up as a favourite.

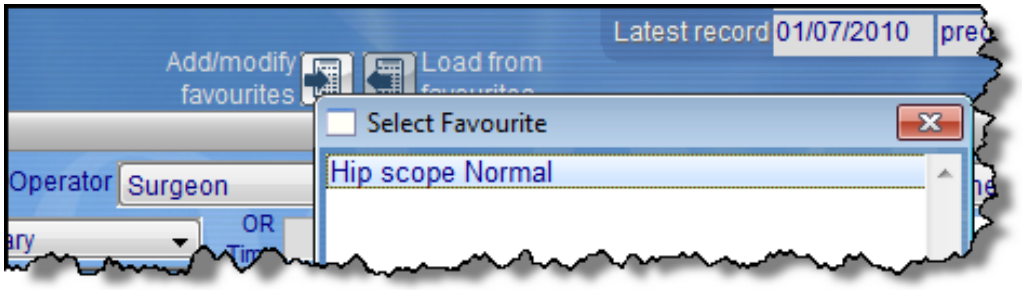


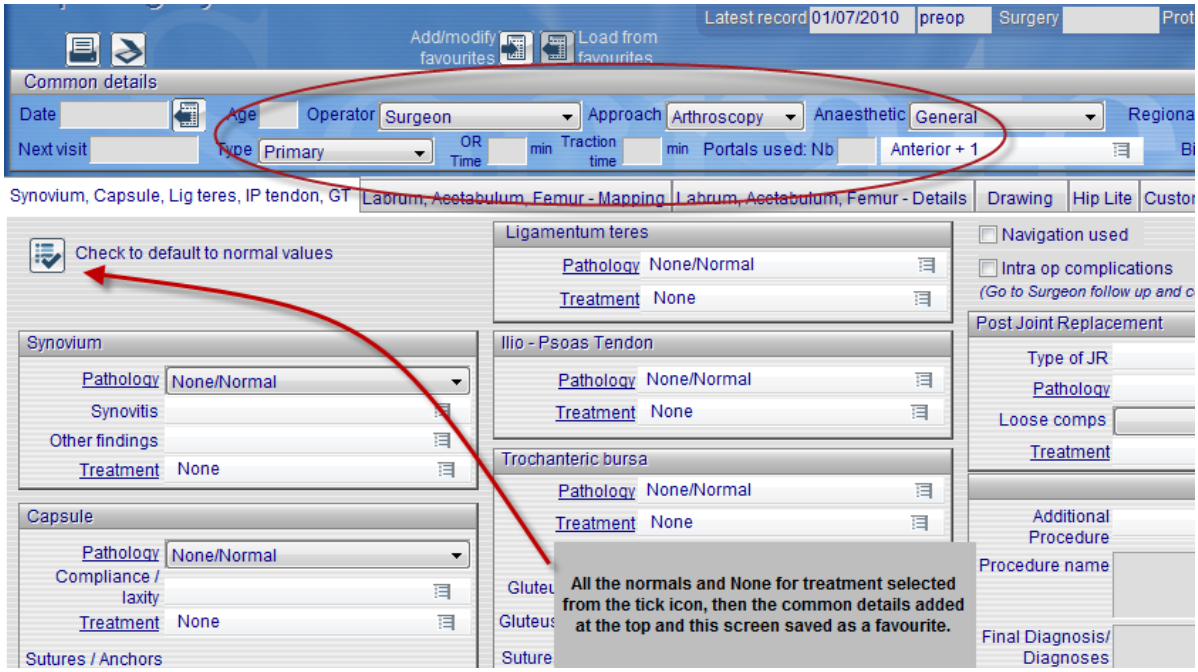
Surgical details screen Favourites

Hip General

The common details have been set up to allow you to choose the Operator, Approach, Anaesthetic, Number and Name of portals, and the Type of surgery. Additionally, the first two tabs contain elements that you can save as Favourites. On the "Synovium, Capsule, and Lig Teres..." and "...Mapping" tabs, you can select "Normal" for pathology and "None" for treatment. If you save this combination as a "Normal" template, and select it when you have a surgery that has mostly "normal pathology", the data entry becomes simplified: you only need to change those elements that are not normal.

The next examples show how your screen would look if you selected the Normal values tick, then selected the fields from the top section you wanted as favourite surgeon, anaesthetic, portals, etc., and saved these as a Favourite.

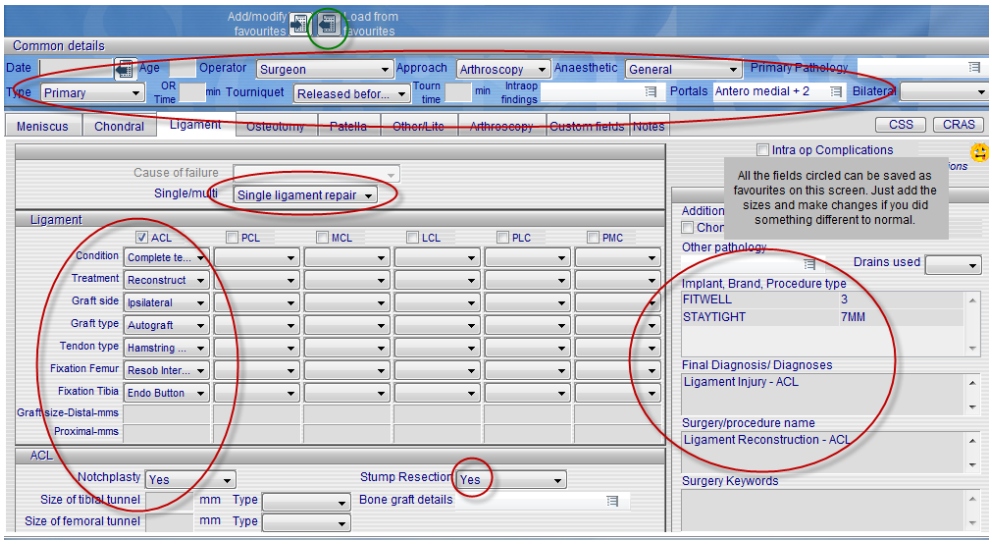




Knee General Favourites

You can set up Common details, Operator, Approach, Anaesthetic, Number and Name of portals, the Type of surgery, for all the tabs.

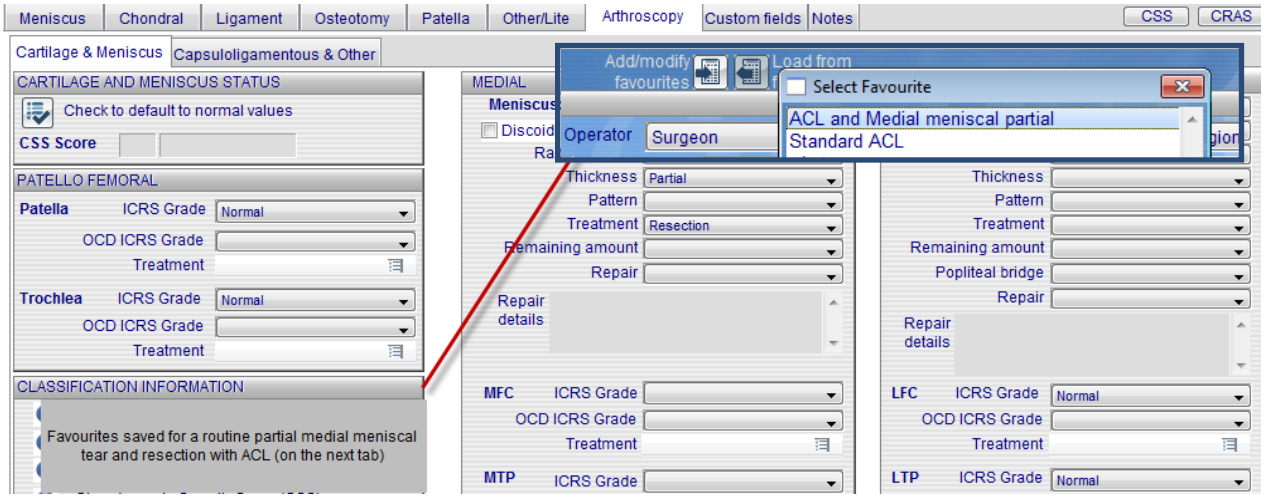
ACL screen – You can save the majority of fields for an ACL procedure, including the diagnosis and procedure name.

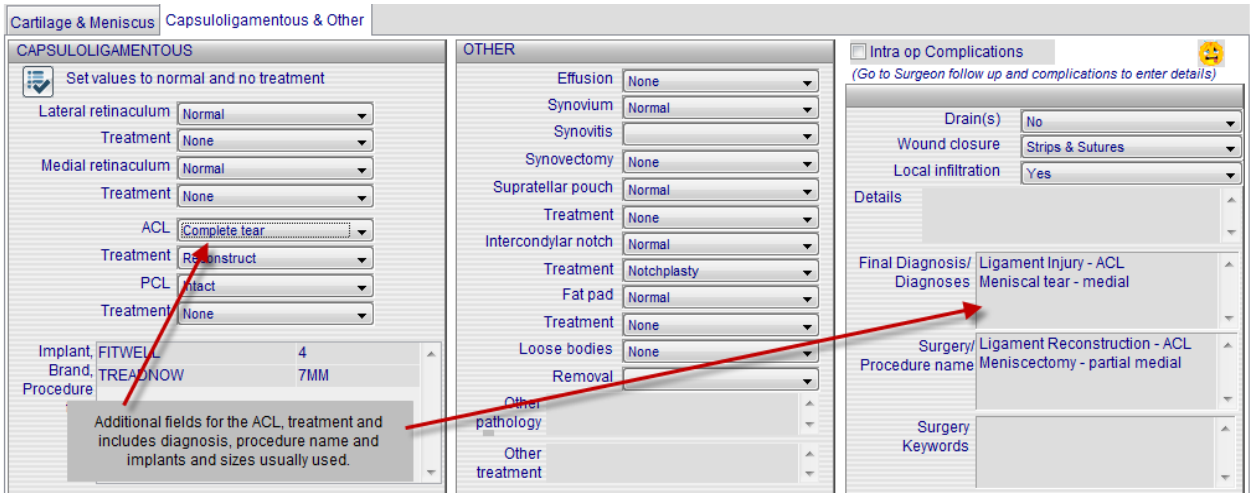


Arthroscopy Screen Favourites

Most of the fields on this screen can be saved as Favourites. This process can also be made faster by choosing the normal ticks first, changing what you want, then adding the other fields relevant to the surgery you are saving it for.

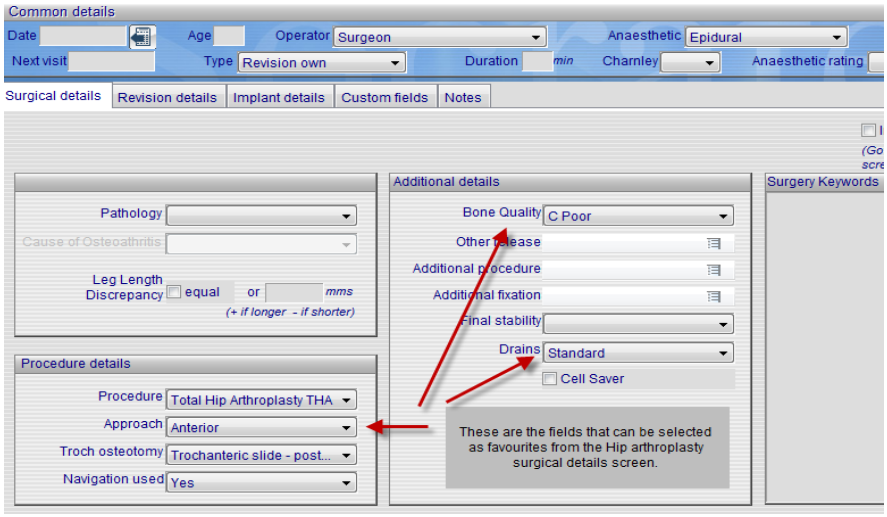
The example below was set up for a medial meniscectomy and ACL using only the Arthroscopy screen. You could have also chosen to select the full ACL screen if you wanted to record more detail than is on the arthroscopy screen, and added these in to the same Favourite. Note that if you used the main ALC screen, some of the detail will cross-populate into the Arthroscopy Screen, such as tear type (partial complete, etc.), and treatment (reconstruct, debride, etc). This enables you to search in either place for all your ACL partial tears, for example – it doesn't matter which screen you used; it will show up in both places in the search.

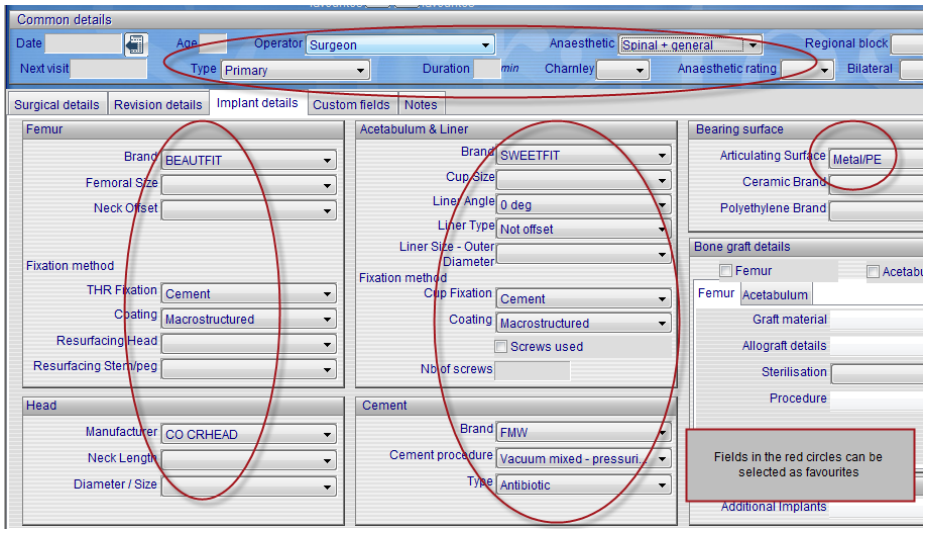




Hip and Knee Arthroplasty Favourites

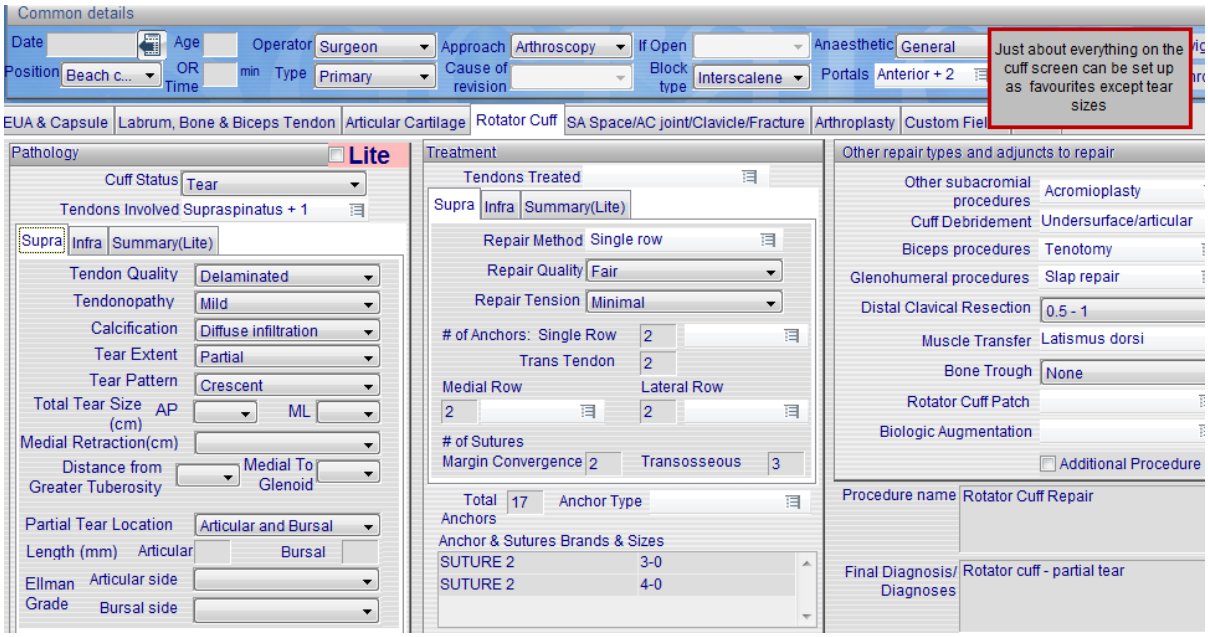
You can choose and save common details (Operator, Approach, Anaesthetic, Type of surgery); surgical details (Procedure and Approach); and implant details (Brand, Type, Bearing Surfaces, etc.).

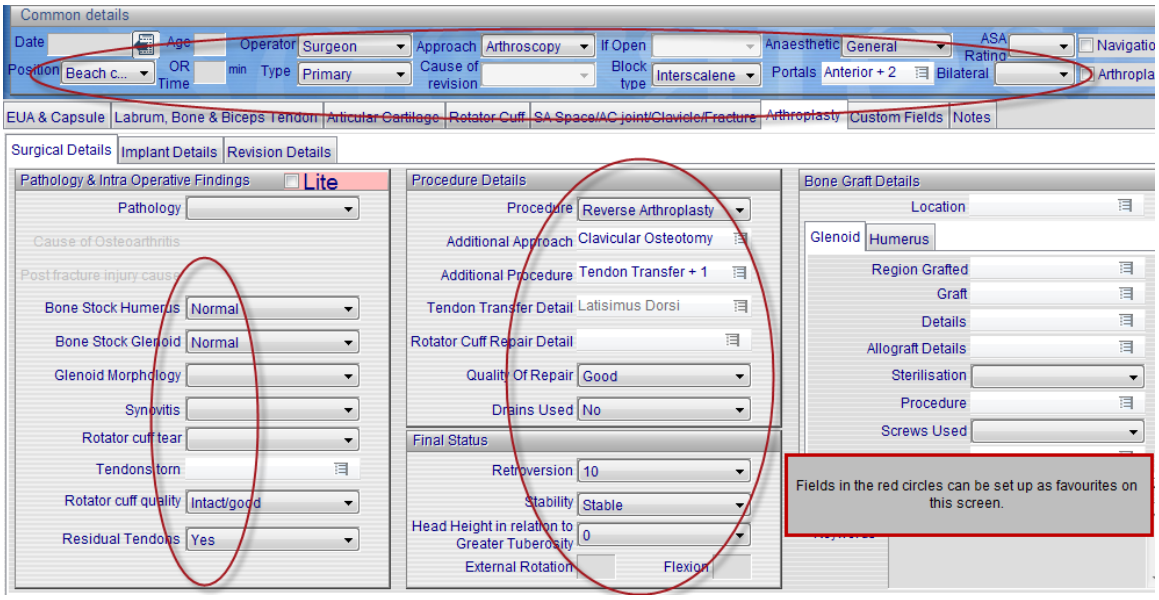




Shoulder Favourites

You can set-up almost all of the fields on the shoulder surgery screen that are not size dependant.

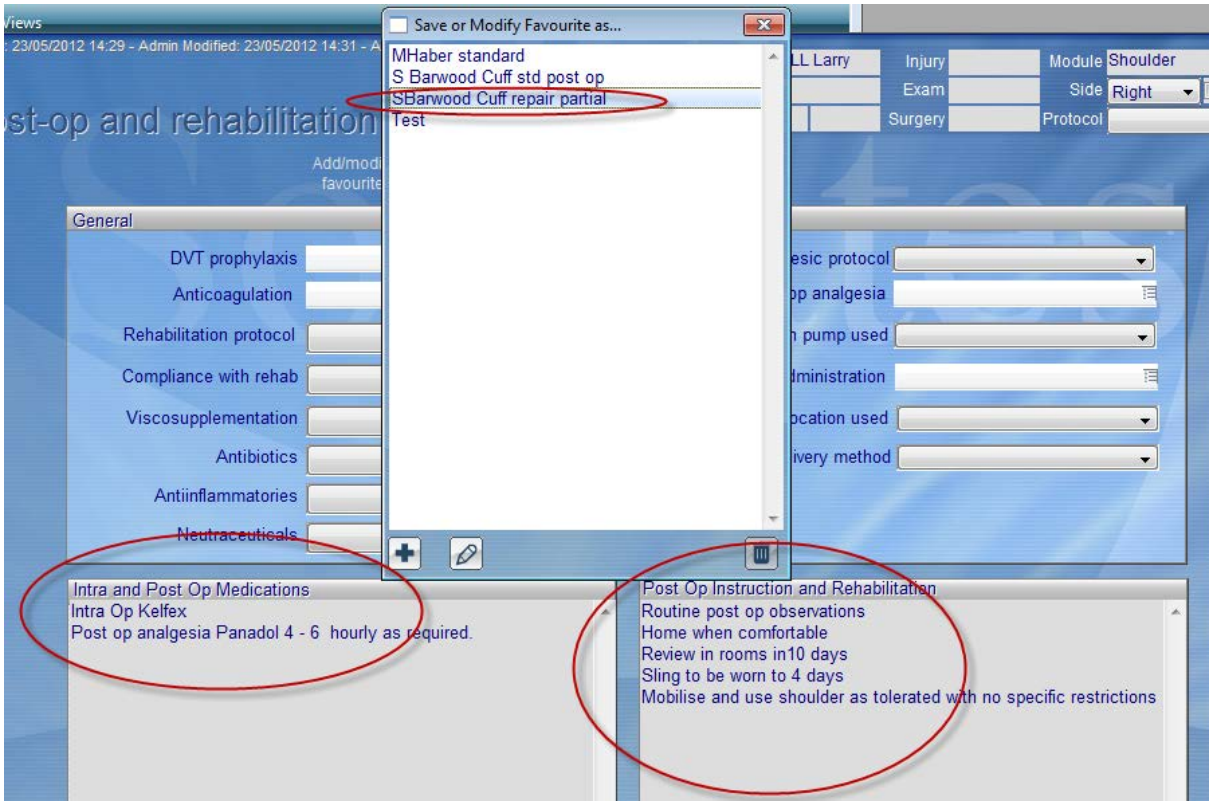




Post Op and Rehab screen Favourites

All the fields from this screen including the text boxes at the bottom can be saved as favourites.

Set up as many favourites as you want, both in the drop down fields if you want to use any of them, and the two text boxes for medications and post op orders at the bottom.



HERES A TIP: Once you have set up all your favourites, remember you can generate a surgery report from data that has been entered. This can also include the post op and rehab details. If you have set up favourites, these will populate into the surgery records, and then if you have included these fields to be in the report the text will

automatically be in the report. This takes only a few seconds. Go to the chapter on Report generating and word processing for how to do this.

Medications
Intra Op Kelfex
Post op analgesia Panadol 4 - 6 hourly as required.
Post Op Instructions
Routine post op observations
Home when comfortable
Review in rooms in10 days
Sling to be worn to 4 days
Mobilise and use shoulder as tolerated with no specific restrictions

How to Set Up a Favourite

As previously explained, setting up your own sets of Favourites will save you significant time in data entry, as the surgery fields for those procedures you do most often will be **pre-populated with just a click.**

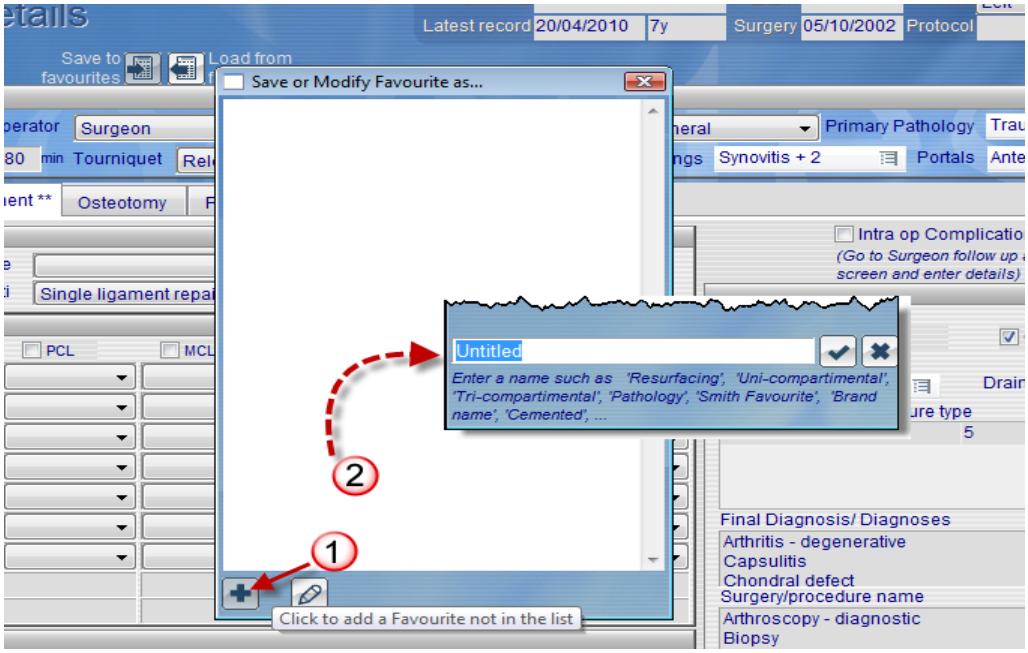
To create your own Favourites lists, first navigate to the Screen for the module and section that you want. It will either be the history, post op and rehab, or the surgery details screens as these are the only screens that allow favourites. You can either set up the Favourite using a real surgery, by entering all the details for the surgery, then before you save it for that patient, set it up as a Favourite, then save the data. Or you can create a dummy surgery, and after entering all the details you want, and naming and saving the surgery as a Favourite, use the **red cross icon** to clear the data. You can then set up your next Favourite on the same screen, clear the data again, etc.

> ***Remember, you need to be in Modify mode to be able to view the icons to set up and load the favourites.***

Once you are in modify mode, (having selected the **Modify icon**), start to select the various fields you want as favourites from the drop-down menus for each field. Specify options for the common details (Operator, Anaesthetic, etc.), for the Surgery tabs, and the Implants tabs. You can go across tabs without saving. For the arthroplasty module for example, you may only want to save fields from the top common details section, the surgical details, and the implants.

When you have selected all the fields you want to include in this Favourite surgery, click on the **Add/Modify Favourites icon** near the top of the screen. (Do *not* press the **Enter key** or the **Save tick**.)

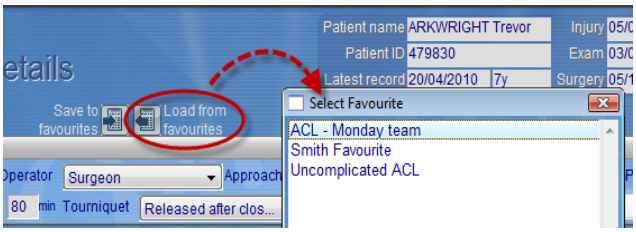
The next window asks you to assign a name to this Favourite. Click on the **Add icon**, then type in a name for this Favourite so you can easily recognise it. Only those fields that you pre-selected will be saved as Favourites fields for this surgery. If you include a field as a favourite that isn't allowed (such as the date of surgery), it will just not appear when you load it for a surgery.



Although you can then clear these choices after you have saved them as a Favourite, you can also set up a Favourite list after you have entered the details for a real surgery. Just complete the data entry as per usual, then save the choices as a Favourite and then click enter to save them to your real surgery.

Using a Favourite

The next time you navigate to this Surgery Screen, click on the **Modify icon** once again. This will bring up the Favourites icons as below. Click on the icon on the right, **Load from favourites** and your list of saved Favourites will appear.



Double-click on the Favourite name you want, and the fields will be populated with those you specified during set-up of the Favourite. Of course, you can make changes to any of the fields if there are exceptions that occur during this particular procedure.

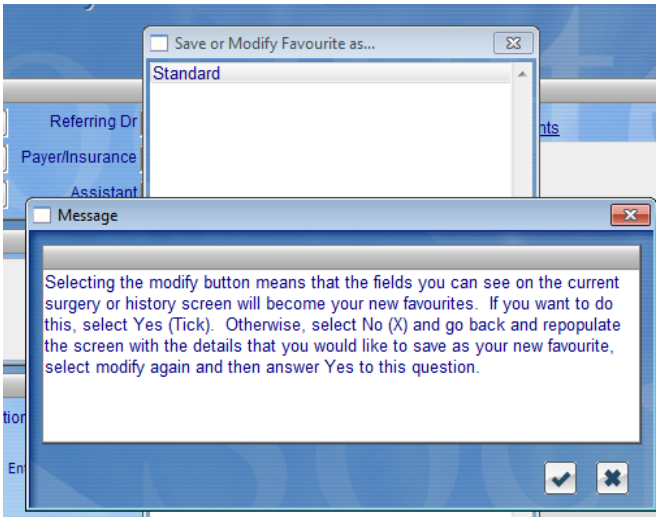
Modifying a Favourite

Once a Favourite is saved, if you change your technique or use a new brand of implant for a standard procedure, you can change the Favourite.

There are two ways to do this. You can start with a blank (new) surgery screen and enter all the details you want to be your modified Favourite. After you have populated the screen with what you want as your modified Favourite, click on the **Add/modify favourites icon** and select the name of the Favourite that you want to be modified, to update from what was there before to what you have just selected.

You will see a message asking you to confirm. This step is to make sure that what is on the screen is what you want to become your the modified favourite, since this is what will be saved. Note that if the screen was empty and you click on **Modify,** the Favourite will become the empty screen.

The alternate method is to go to a new screen and set up the fields for the new Favourite as you now want it to appear, instead of starting with the old one, then click on the **Add/modify icon**. Select the name of the Favourite you want to modify. Select Yes, you do want to change the Favourite to the new fields you have entered on the screen, and the favourite will now be updated.



Once you have modified the Favourite, if this is a "real surgery", you can then save the changes to the screen itself. If it's not, and you were just using the screen to change the Favourites, select the **red cross** at the bottom, and the changes you made to this screen won't be saved; only the Favourite will have saved.

LESION MAPPING

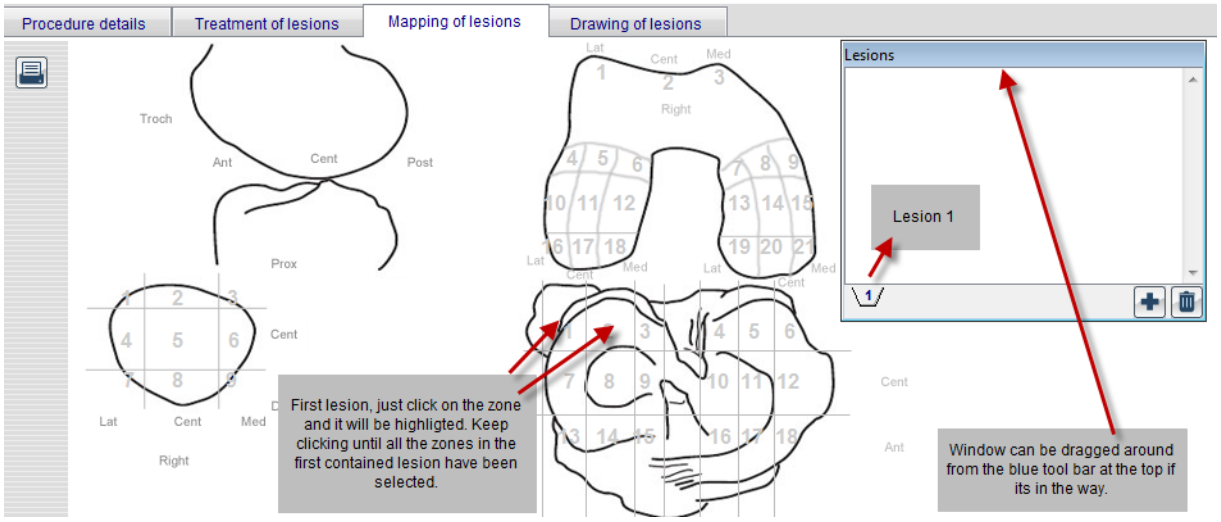
The **Hip and Knee General modules** both provide you with the ability to specifically chart the location of lesions within the joints. To access these screens, navigate to the **Surgery Screen** in either module. To get to this screen, select a surgery from the Patient Demographics Screen, and click on the **Surgeon icon**. From the **Surgery Screen**, choose the Chondral or Meniscal tab, depending on which mapping screen you want, then choose the **Mapping sub-tab**. We'll begin with description of the Mapping function for knee chondral lesions.

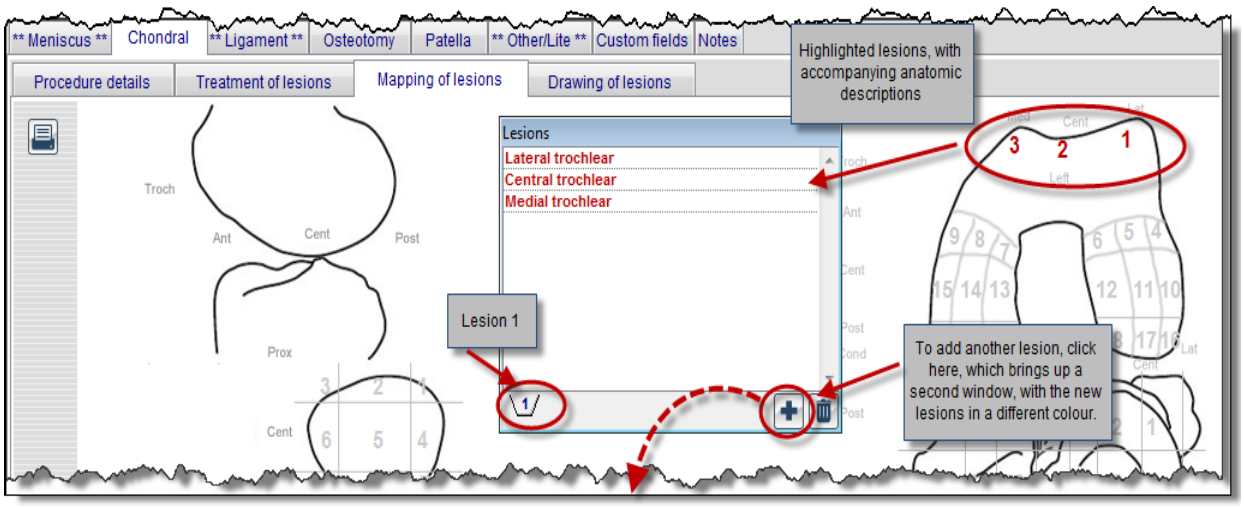
Knee Mapping

As always, you need to be in **Modify** mode, then click on this screen. It will display the blank knee map, ready to start entering zones for the first lesion, Lesion 1. A small "document" window, called the **Lesions window**, gives the specific anatomic location of each lesion, with each lesion given its own numbered tab.

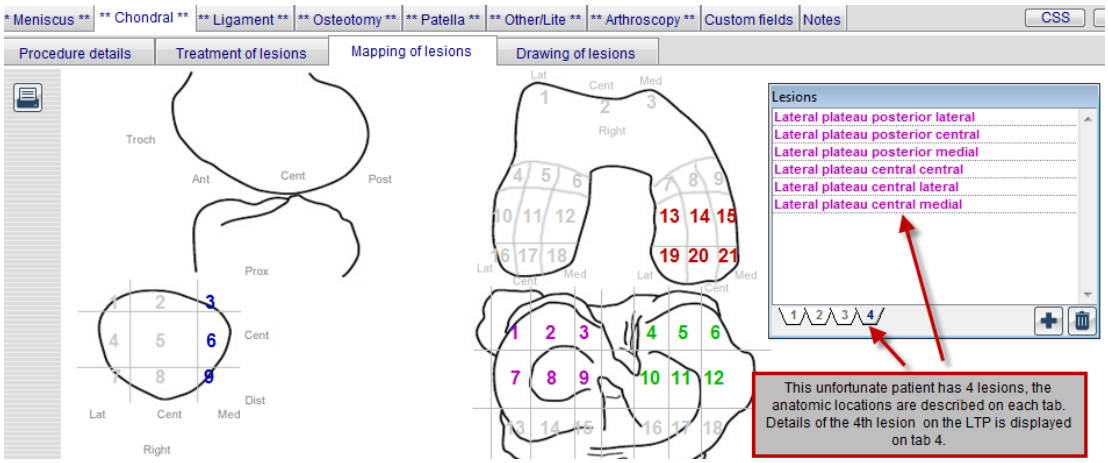
Note that the small Lesion Window can be clicked and dragged to another area of the screen so it doesn't obscure the illustrations.

Now, on the illustration itself, click on the affected regions. The anatomic names of these areas will appear in the Lesion window in Zone 1.



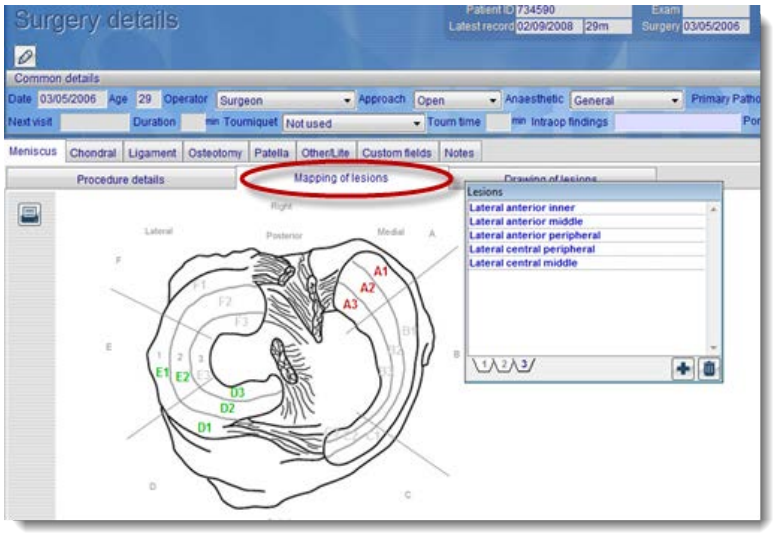


If the knee has more than one lesion, click on the **Add icon** in the Lesion Window; you can now record the site of Lesion 2, and a new tab will appear. The new zones will be highlighted with a different colour. You can add as many lesions as you want. If there was a lesion in the patella, MFC, MTP, and trochlea there should be 4 tabs selected. The second lesion will show up in a different colour; the third a different again, and so on.



(If you make an error, or change your mind, simply click on that (now coloured) number again, and the area will become inactive again.) Observe how the areas chosen to indicate anatomic placement of a lesion on the illustration are now listed in the Lesion Window, as well.

The **meniscus mapping** works in the same way.



Only the affected limb for this surgery entry will be displayed on the lesion maps.

An unlimited number of lesions and/or locations of tears can be recorded. ***Each lesion or tear should be recorded separately***. The anatomic description will automatically appear in the **Lesions Window**.

Up to nine grid zones per lesion are possible. So, if the whole medial meniscus is affected, you can click on all nine zones for the one lesion. If there is more than one lesion or a separate tear, click on the **Add icon** again, and another tab for the second lesion will be created. Continue this way with Lesion 2, Lesion 3, etc.

Note that if you use this method of mapping be aware that you will probably need the services of a statistician to analyse the data, since there are a lot of possible combinations. Data can be exported to Excel for this purpose.

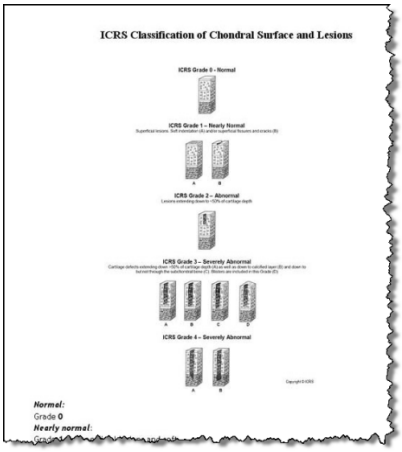
Adding Treatments on Chondral Lesions Surgery Screen

After you have finished with the mapping function, click on the **Treatment Details tab**, and click on the **Modify icon**. Click on the **Add icon**, which then prompts you to fill in the details of what you did for each lesion. Tab along the row, and fill in the appropriate fields.

> ***Be sure to scroll horizontally to the right to view all the options available to you. The classifications of the lesion (ICRS, Outerbridge, etc.) are located at the end of the row of the treatment options.***

For each contained lesion you should select a new **Add** each time -- as with the mapping screens, there is no limit to the number of lesions/treatments you can create; just select the **Add icon** to add more.

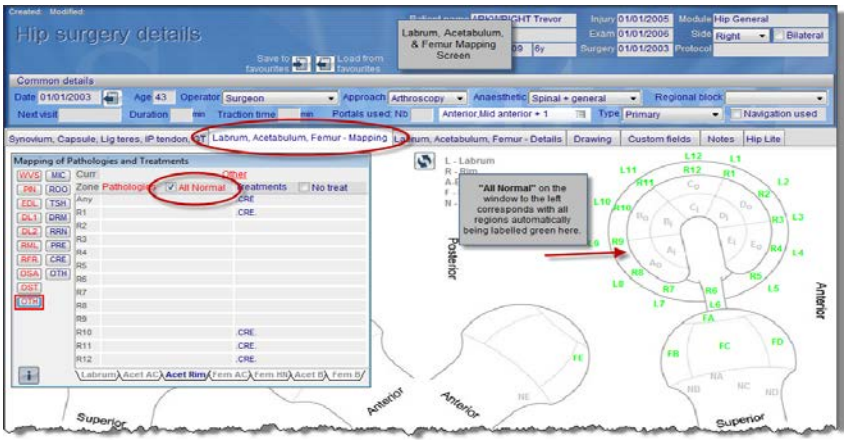
If you scroll all the way to the right, the end of the rows includes **Lesion Classifications**: ICRS, Outerbridge, and OCD. An explanation of these classifications can be displayed by clicking on the **Info icon**.



Hip Mapping

The **Hip General module** has a mapping screen that records both the pathology and the treatment of zones in the hip. We estimate it will take a few cases of entering data before you are comfortable with the layout and the functioning of this feature: five to ten cases should do it!

After navigating to the **Hip Surgery Details Screen**, click the **Modify icon**, and select the first mapping region, the **Labrum, Acetabulum, Femur Mapping tab**. If the hip structure is Normal, select the **All Normal box**, and all the zones in the corresponding illustration will be filled in and coloured green.



If there is pathology to be noted, select the **pathology** from the **list of abbreviations** on the list to the left shown in **red**. As you select each abbreviated option, the full name will be displayed in red as a list in the window, (as well as a **tool tip** when you pass the cursor over the abbreviation.) As an added aide, clicking on the **information icon** at the bottom left of the window will provide you with a **dictionary of terms** for each pathology.

Click down the column of **treatments**, shown in blue on the left, and view the list of treatment options available. As before, you will see the treatments automatically listed in their own column to the right. The **tool tips** and **information icon** remind you of the full names of treatments here, as well.

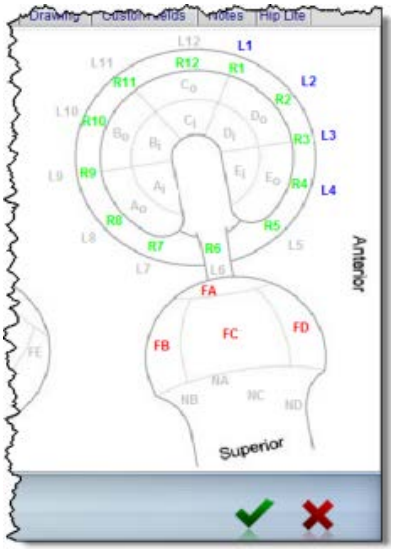
In order to chart the pathologies and their attendant treatments, choose the relevant pathology on the left, then move your cursor to the zone drawing and click on the affected zone or zones. In essence, you have "chosen" a pathology from the list on the left, and "placed" it into its correct position on the drawing. Observe that the number on the diagram turns red, indicating pathology in that area. Up to six pathologies can be selected for each numbered zone. Note how the red pathology numbers on the diagram are reflected in a summary list in the pathology window.

The next example shows multiple pathologies in some of the zones: previous resection, sulcus variant, degeneration, calcification/ossification, and acute calcinosis.

The same process is repeated to record the **treatment** of the pathology by zone. Choose the **treatment** you provided from the list of abbreviations **in blue** on the left, and "place" them onto the relevant zones in the drawing. Once the zone is clicked to indicate a treatment, the label on the drawing becomes blue. If the zone is selected as Normal, or No Treatment, it will be green.

Once any zone has been clicked on with either pathology or treatment, the label “ANY” at the top of the Current Zone List is also checked. This helps in searching: you can search for all tears in any zone of the labrum, as well as in more detail – Zones 1, 2 and 3, for example.

In the next example, the acetabular rim has been checked as “Normal” and “No Treatment”, and these zones are therefore coloured green. The labrum has blue numbers, indicating there has been some treatment, and the femur has red numbers, indicating pathology, but no treatment.

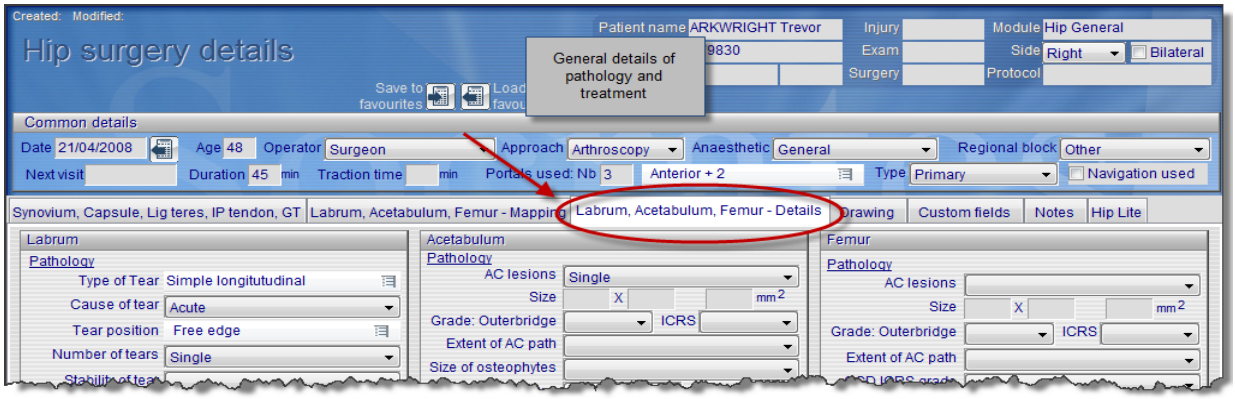


After completing the required fields, go to the next tab to record the next region, until you have completed all the pathology and treatment you want to record; then save the data.

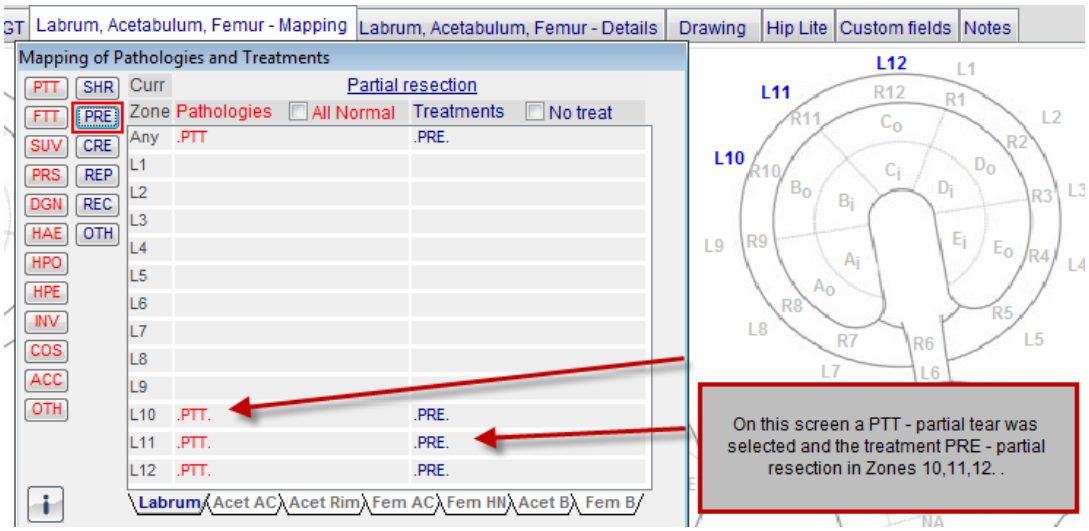
There are two different Mapping Zone methods for the articular cartilage of the femur and the acetabulum. See the chapter on Hip General for a detailed explanation of the two. In the meantime, if you want to switch between the two methods, click on the small **Switch icon**.

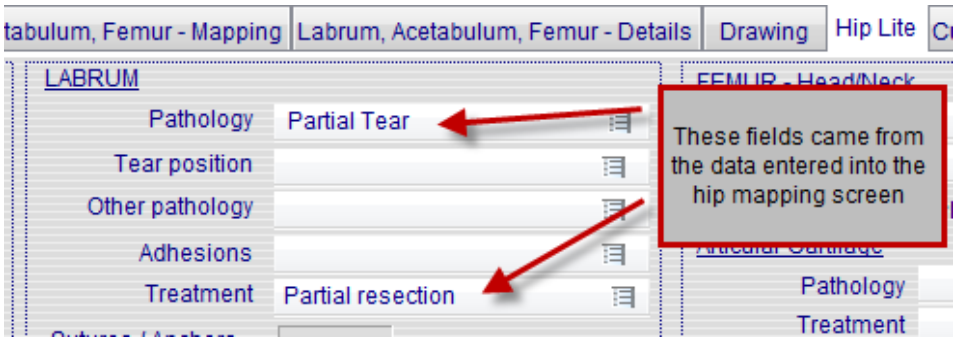
When you have completed mapping the pathology and treatments on the zone mapping diagrams, be sure to select the big **green tick** to confirm and store the data.

If you choose to, you can enter more details about both the pathology and the treatments back in the **Surgery Screen**. (Such details might include information such as description of tears, classification of OCD, sutures and numbers used, sizes of lesions, etc.) After you click on the **green tick** to confirm mapping details, you will move out of the Mapping Screen, and will be back into the Surgery Screen. Choose the **Labrum, Acetabulum, Femur – Details tab**, and fill in the details as necessary.

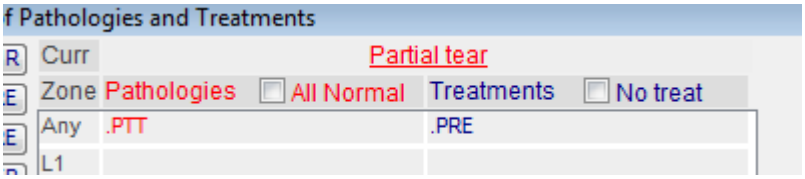


Some fields will cross-populate to the **Hip Lite screen** (and vice versa). Below, we see data entered about the labrum. You can easily search for all partial labral tears in any zone if you have entered this data into either the Full or Lite screen.





If you entered the data (partial tear and partial resection) into the Lite screen, it would show up on the map as below, (but in the **Any** field since no location is possible on the Lite screen).



The bottom line is that you can switch around between screens. Maybe you would normally use the Lite screen, but one case is quite complex and you decide to use the Mapping screen to record what you did by zone. **All the data will be stored in both places**.

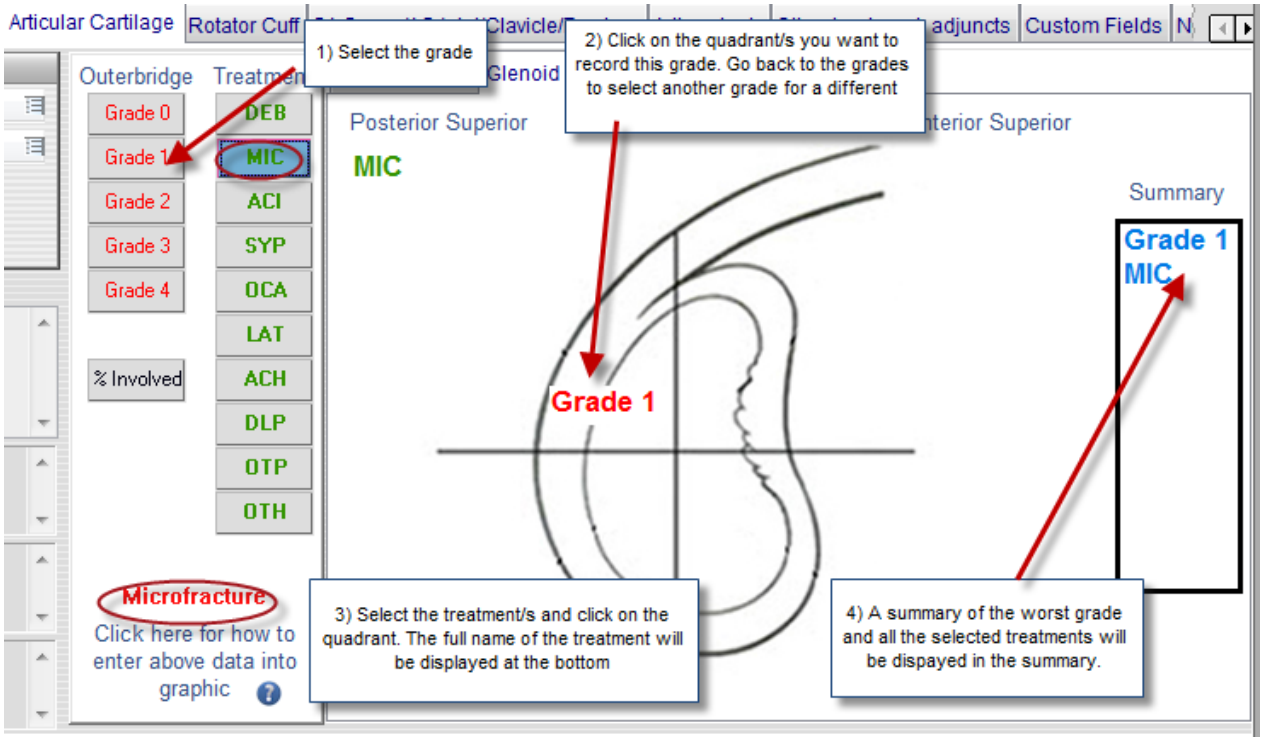
Shoulder Mapping Articular Cartilage Zones

In the **Shoulder module**, you can map an articular cartilage pathology and treatment in similar ways to the methods outlined above for knees and hips. Navigate to the **Shoulder Surgery Screen**, and select the **Articular Cartilage tab**.

This screen allows the Outerbridge Grade and treatments, and the extent of cartilage damage to be entered in either of two ways: a detailed method, and a more general method. The detailed method records the Outerbridge Grade and treatments by quadrants of the glenoid and humerus: anterior, posterior, inferior, superior. Therefore, you can search for lesions that might have affected the anterior superior region, and determine what the treatment was for that specific region.

If you don't want to record this level of detail, the more general method stores one grade for the humerus or glenoid, and the treatments that were selected; the data is not allocated to a specific region.

Adding a grade by quadrant:



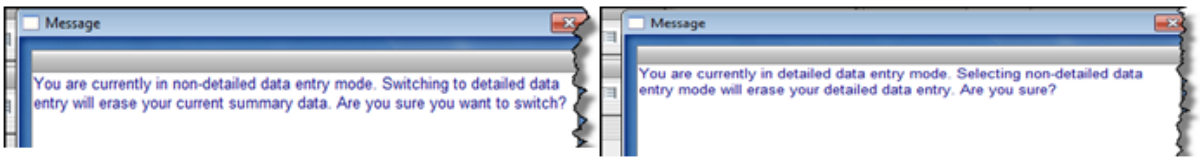
Adding a grade and treatment to the summary

If you are not concerned with recording chondral damage and treatment by quadrant, you can just record the *most severe grade of damage* to the glenoid or humerus, and the overall treatment by clicking directly into the summary box.

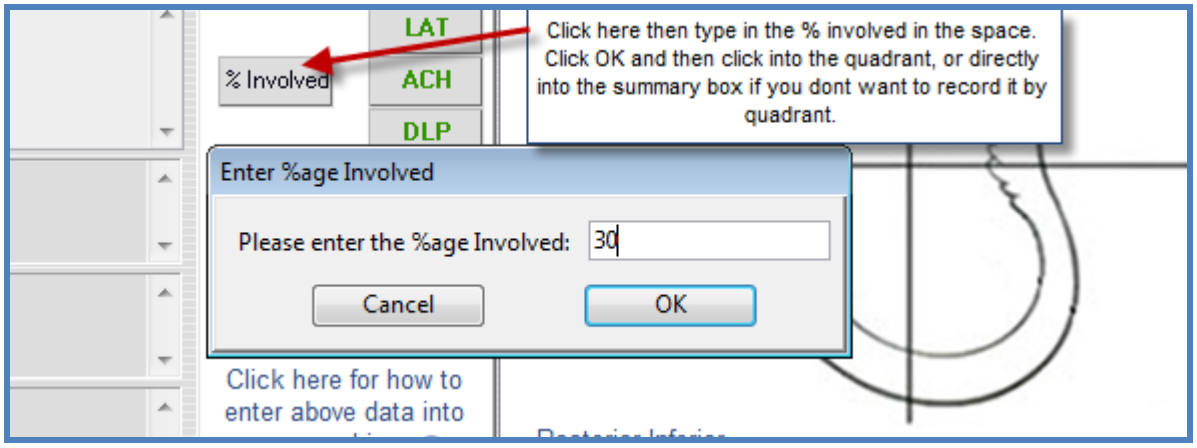
Deleting or Changing Methods

If you want to change or delete data, click on the grade or treatment you want to remove in the box on the left, then click once again on the matching grade or treatment on the drawing. You could also click on the summary box where it was displayed, after which that label will be deleted.

If you decide to change from the summary method to the detailed method (or vice versa) *after you have started entering data*, when you click into the alternative method, you will see one of the messages below. The data you had been entering will be erased, so you must start again.

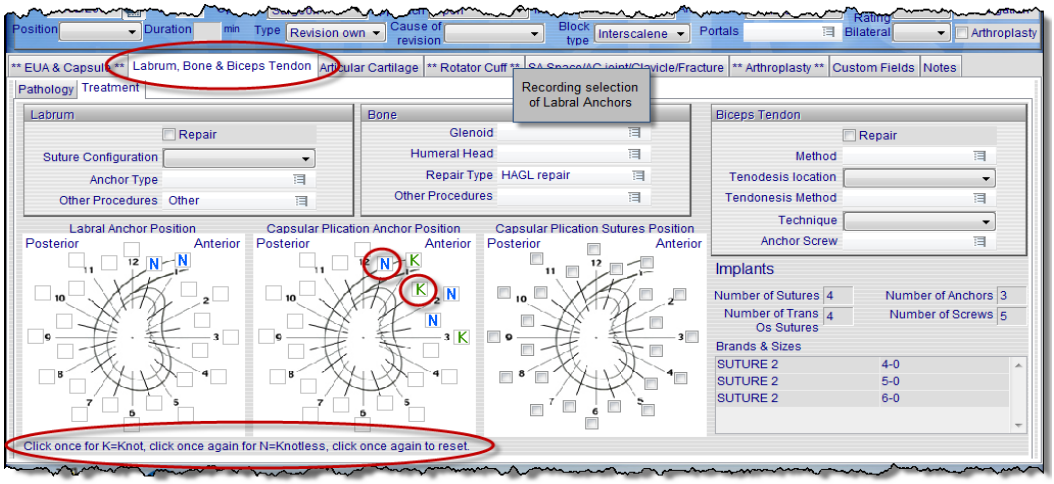


Recording the % of affected area.



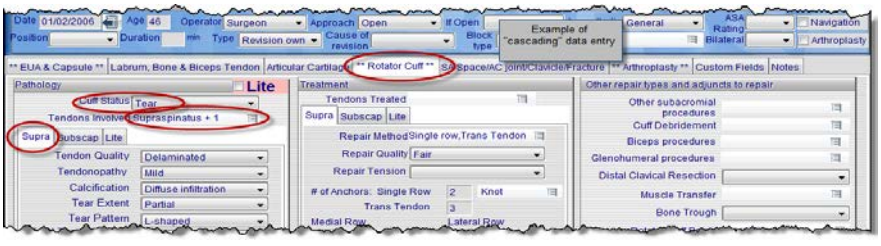
Recording Selection of Labral Anchors

From the **Shoulder Surgery Screen**, select the **Labrum, Bone & Biceps Tendon tab**. In the appropriate boxes, click once for a Knotted anchor (green **K** on the screen); twice for Knotless anchor (blue **N** on the screen); and once again to Reset.



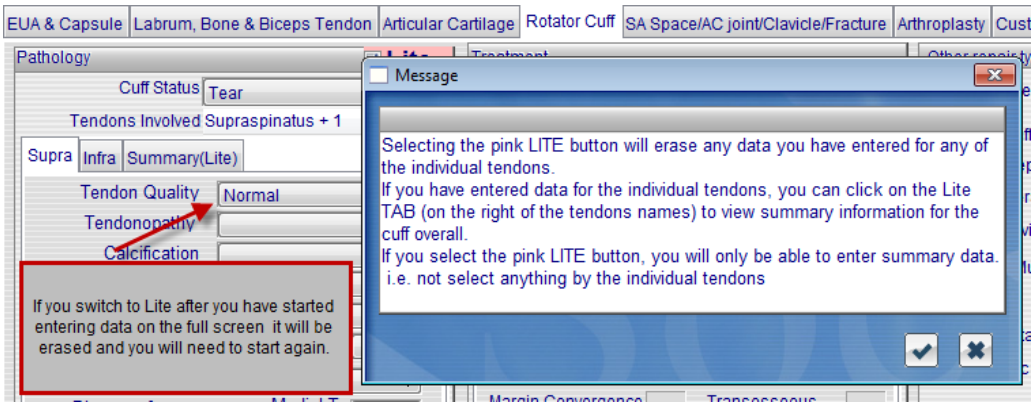
Recording Rotator Cuff Tear Data

Again from the **Shoulder Surgery Screen**, select the **Rotator Cuff tab**. The data fields on this screen become activated (available for data entry) in a "cascading manner" after you indicate a field is relevant. For example, only *after* you indicate there is a Rotator Cuff Tear by choosing "Yes" from the drop-down menu, can the fields below it be populated with the tendons affected. Then, once you have chosen the torn tendons, the tabs for those affected tendons are available for data regarding their pathology and treatment to be entered. In this example, the Supraspinatus and the Subscapularis tendons were torn, and the pathology and treatment tabs, which were previously "greyed out" are now visible.



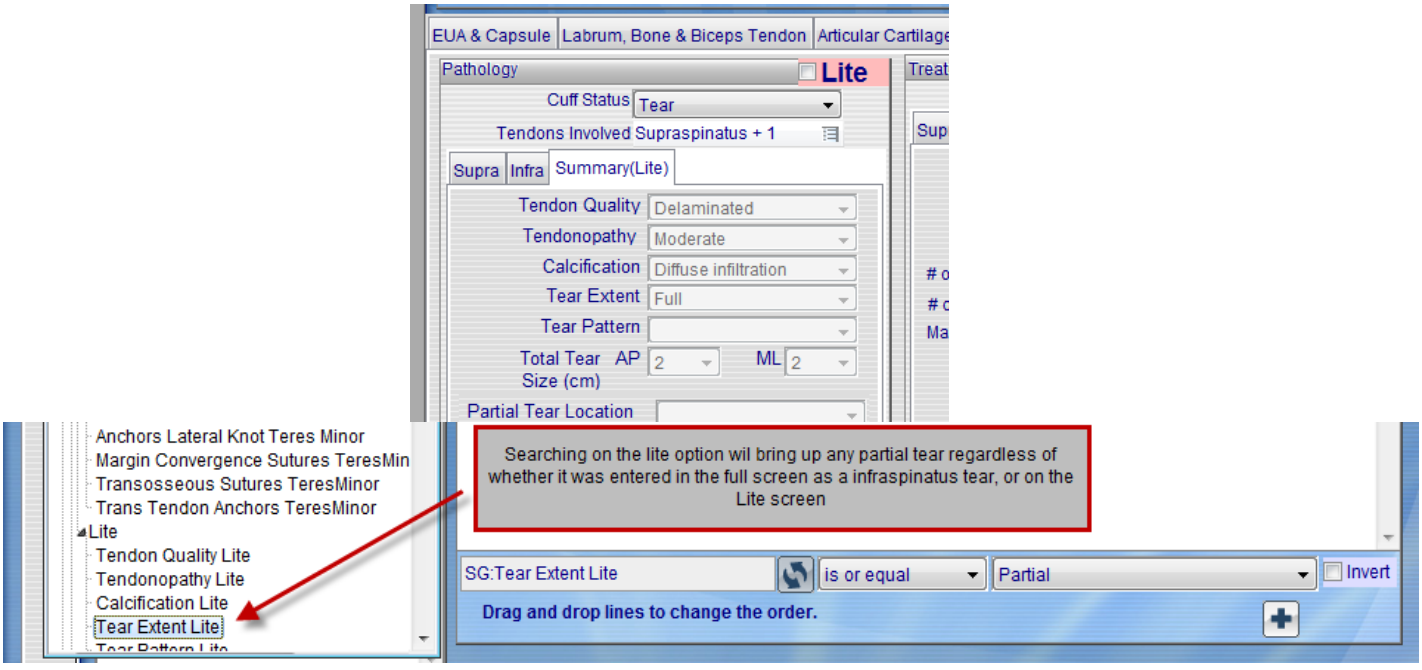
The Rotator Cuff Lite Screen

The rotator cuff screen was the longest screen to develop, mainly due to the discussion about whether the rotator cuff is comprised of one tendon or four. And, if it is four, how does one differentiate where one tendon starts and another stops. In the end, there was no consensus, so we've allowed two options: the full screen, which has tabs for all four tendons; and a lite tab, which acts as if the cuff is all one tendon. The same information is displayed on both of the screens. If you want to go use the Lite screen, just select the Lite check box.



Rotator Cuff Lite Screen/Summary

The Lite screen also acts as a *summary for the cuff,* so you can easily search for pathology and treatment for the cuff overall. For example, you may use the full screen routinely, but you want to be able to search for all surgeries where there as a partial tear without having to select this for each tendon. Socrates chooses the worst option where this makes sense, totals up the tear size/s, and displays it/them on the summary screen in a greyed-out manner to indicate that this information comes from the other screens.



There are also several screens which have the same data fields on them for commonly occurring procedures, biceps tenodesis for example. If these are entered on one screen they will also be populated to the other places they appear. So, if you are searching for all biceps tenodesis you will find it regardless of which screen you entered it into.

THE DRAWING PALETTE – MENISCAL AND CHONDRAL SCREENS

Both the meniscus and the chondral **Surgical Screens** in the **Knee and Hip General modules** have drawing screens. (Apologies to Mac users: this feature isn't yet working on your computer, and is currently hidden.)

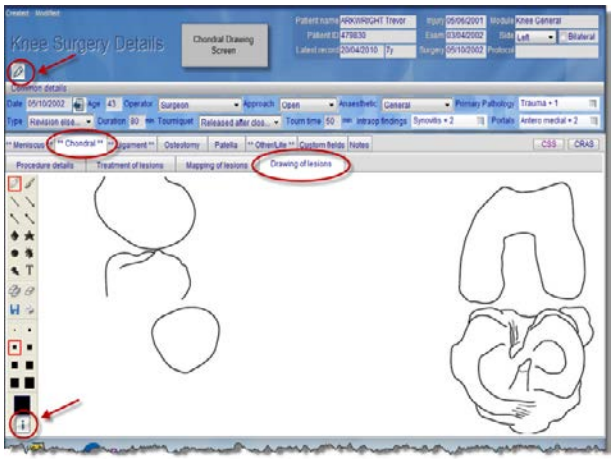
> ***NOTE: This function is descriptive only. The information included is only stored in the program AS A GRAPHIC IMAGE, therefore it is NOT AVAILABLE for searching or for statistical analysis.***

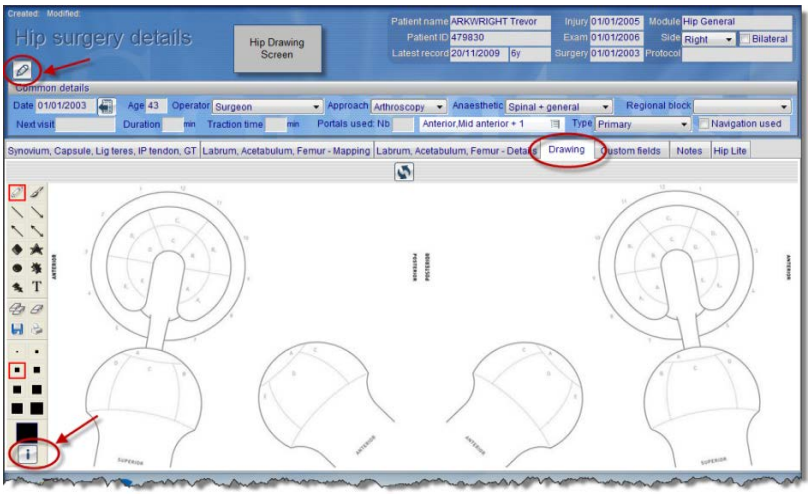
This feature gives a graphic depiction of what was found and treated at the time of surgery. It can be printed to give to the patient, stored in a file as a hard copy, exported to store in another electronic medical record, or just remain in the Socrates patient file as a graphic reminder.

To access one of the drawing screens, navigate to the **Surgical Details Screen** and choosing first, either the **Meniscal Details tab**, the **Chondral Details tab** or the **Hip Surgery Screen** itself, and then choosing the **Drawing tab** on the right. As always, you must click the **Modify icon** to activate the feature.

The following examples show only the Chondral Drawing Screen and the Hip Drawing Screen. The Meniscal Drawing Screen can be accessed in the same way.

The  button at the bottom left of the screens gives you drawing hints immediately accessible on the screen.





How to Use the Drawing Palette

First things first: You will need to practice a few drawings before you get the hang of marking up the illustrations in a clear and efficient way. Have fun; play around a bit!

Remember to click on the **Modify icon** first.

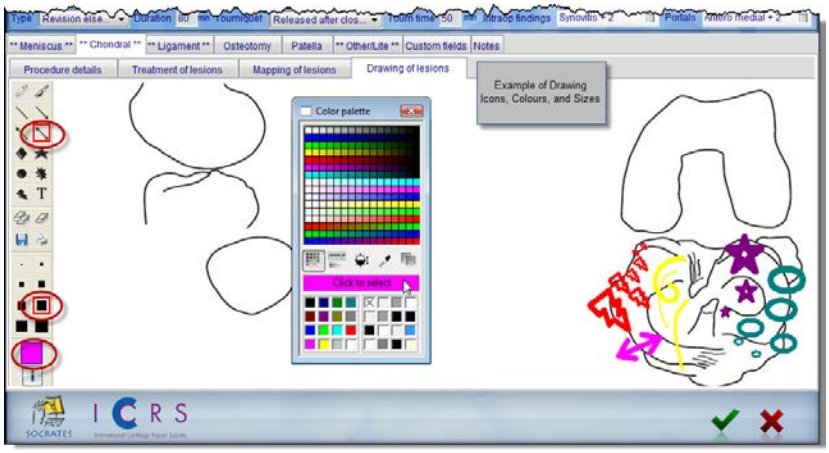
Size

The size of the line or graphic you add to the drawing is chosen from one of the eight black squares on the drawing menu on the left of the screen. Choose one of the squares to start. You will see your choice highlighted with a red square around it. After you choose a size, you will choose an icon with which to draw (see below in Icons).

Colour

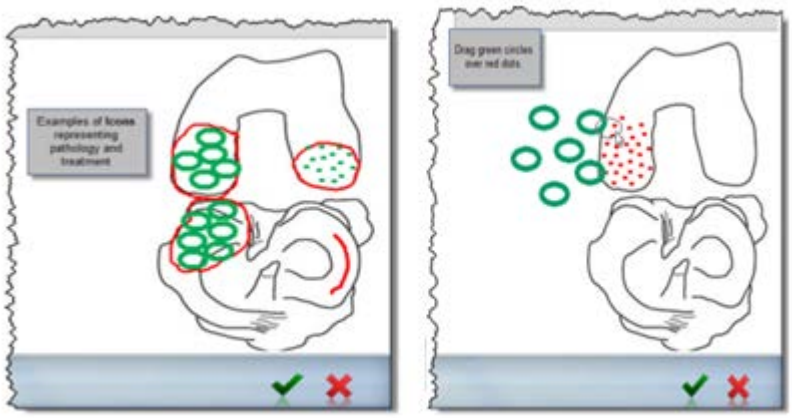
To choose (or change) the colour of the drawing icon, click on the **large black square** *under the group of eight squares*. This particular icon will open up a **Colour Palette** from which you can choose to draw. Select a colour, and click in the "Click to Select" field.

The following example shows some of the icons in different colours and different sizes.



Icons

There are eleven different icons (and a text option – see below) that you can choose to represent intra-operative findings and treatments. Choose whichever *you* feel best represents what you want. You could, for example, show an area of chondral lesions or damage encircled by red, with small green dots representing microfracture treatment on the lateral femoral lesion. Larger green circles could indicate mosaicplasty plugs for the medial tibial and femoral lesions, and a red line could signify a tear on the meniscus. You can place shapes and lines anywhere on the screen, then by clicking and holding the middle of the icon, you can drag it to the location you want it.

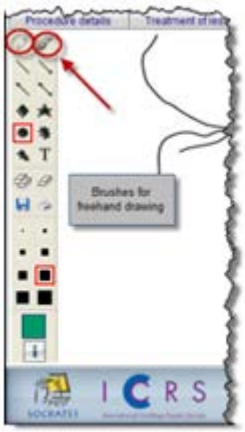


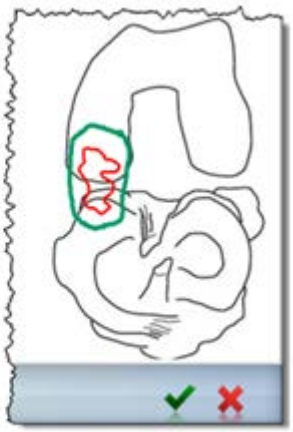
Layers

If you want to put icons on top of each other, (for example, the green circles representing OC plugs over the top of red dots that indicate chondral damage), you must put the second layer of circles outside the zone you eventually want it, and then **drag** them as a layer over the dots. (See example above right.) If you don't layer these two different kind of icons, Socrates think you are trying to "un-do" the first icon. Play around with the icons, and you'll see what we mean.

Brushes

The two **"brushes"** at the top of the drawing menu allow freehand drawing of lines and shapes. The brush on the right gives a wider line. The drawing below could indicate an original lesion in red with the area of resulting debridement in green.



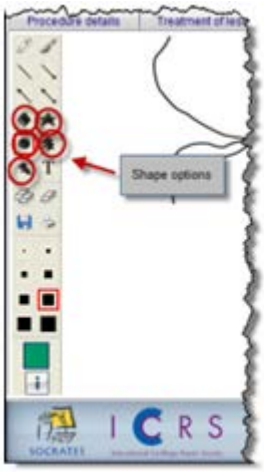


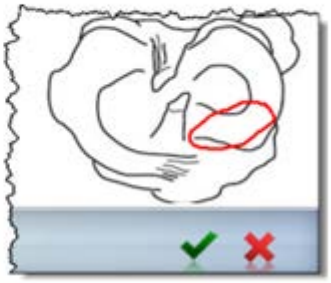
Lines and Arrows

These four options on the drawing menu allow you to draw a straight line, an arrow with the anchor at one end and the point at the other, an arrow in the other direction, and an arrow with two points.

Shapes

Your choice of **shape icons** includes a diamond, a star, a circle (which becomes a dot if you choose it in a small size), a starburst-y thing, and a lightning bolt. Choose the shape that best illustrates the pathology or procedure you encounter. For example, a small diamond on the meniscal diagram could signify a meniscal repair using darts or sutures. A red circle (or one drawn free-hand if the area is rather irregular) could signify the area resected on a lateral meniscus.



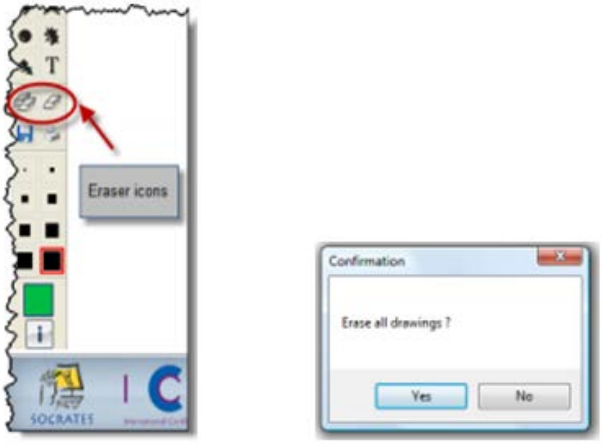


Text

To add text to your drawing, select the **"T" (Text icon)** from the drawing menu. Choose the font, size, colour, and the usual other attributes you want, and type the content into the text window. When you are finished, click OK, then drag the text to the location you want it in the illustration. If you need to make changes, click back on the area of text to activate it, and the window will re-open to allow you to make the changes.

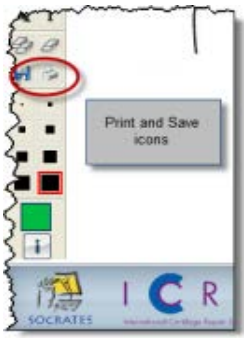
Eraser

If you make a mistake, simply choose one of the two **Eraser icons**. The **single eraser** deletes the last entry, click again for the one before that, etc. The **double eraser** will delete everything you have added to the drawing, but don't worry: not before it provides you with a confirmation opportunity!



Print and Save

After completing the drawing, click the **green tick icon** or the **Enter key** to save it. Your drawing can then be printed or saved to an external file as a TIFF file.



REVISIONS AND RE-OPERATIONS

Definitions

The definition of Reoperation vs. revision is not standardised, so you should make a decision on how you want to record these. In general however, a **reoperation** is agreed to be a surgery *related* to the original one and doesn't require the replacement of the original components or grafts, or a substantial "redo" of the original procedure. A **revision** is the same surgery as the original one being performed again due to failure. Examples of a reoperation include an MUA for stiffness, and removal of screws or other hardware. Some surgeons also consider a change of liner or insert, or a patella replacement down the etc when it wasn't originally replaced to be a reoperation, rather than a revision. The terminology is up to the individual, you decide how you want to record these subtleties. Just be sure to be consistent.

Revisions and reoperations are tied in with what we call "Status " - is the follow up still ongoing for that procedure? . See further down in this chapter for these details.

Revisions

If the surgery you want to record details for is a revision of an existing surgery, or a new revision procedure from another surgeon, both are treated as a **new** surgery. Therefore, go to the **Surgery screen** and add a new surgery. On the **History screen**, you will see the two entries, one for primary, the other revision if the previous surgery was entered into Socrates.

All the patients' scores from now on are entered into the new surgery. The previous primary surgery will no longer be accessed to enter scores.

However, and very importantly, you should **go back to the previous primary surgery** to the **complications screen** on the surgeon f/up and exam screen and record that it failed, and was revised. Enter all the details you know about.

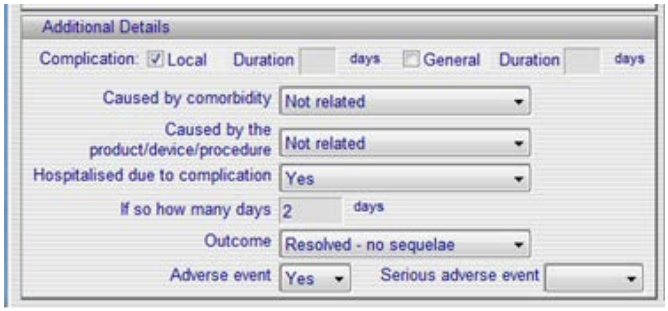
Otherwise, when you try to do statistics you will be see that you had X% of revision surgeries, some of your own, but all your primaries will still be recorded in the database as Ongoing, giving you 100% survivorship. This will also make any attempt to run any survivorship data meaningless.

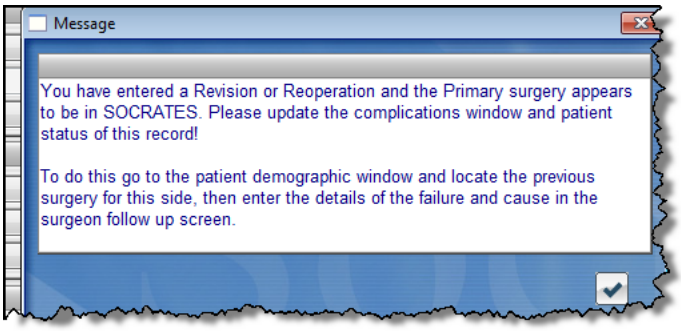
Revision Warning Message

If you create a new surgery and the program finds another one from the same module on the same side, when you save the surgery screen data for the new surgery it will prompt you to do the following. Sorry, if it's annoying but we think it's very important.

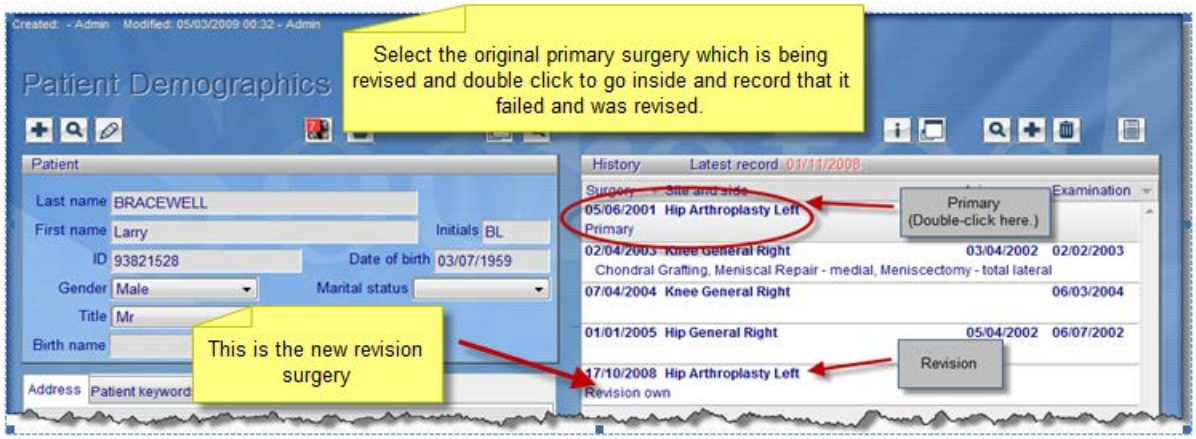
Revision/Reoperation: If either of these occurs enter 'Yes', and the date, the program will calculate the time since the original surgery. These are not the same and for a single surgery you would not have both checked.

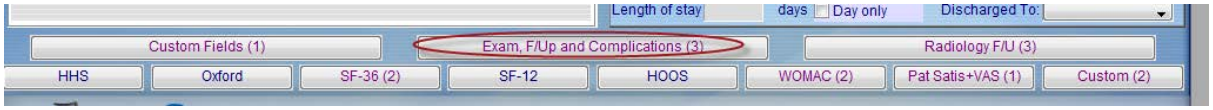
Additional Details: This level of detail may not be needed but if you are trailing a new implant or doing a company sponsored trial they may require this information. It's not mandatory, just ignore it if it's not needed.





To access this record, first double-click on the record of the first surgery that is now being revised from the **Demographics Screen of the patient**, and then click on the **Surgeon Follow-Up and Complications Tab** at the bottom of the screen.

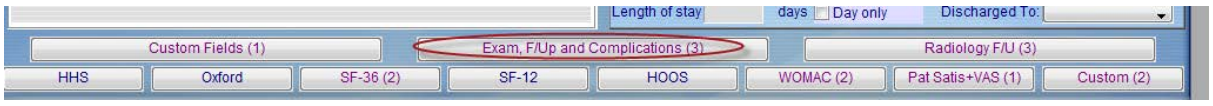




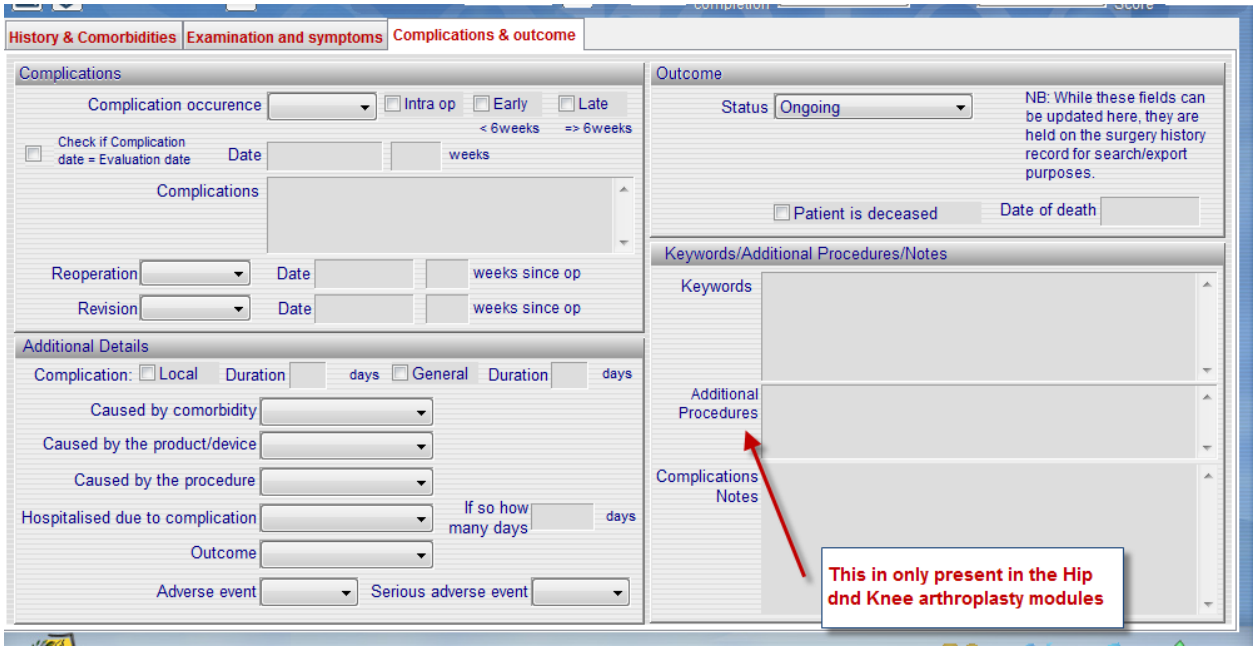
Choose the **Complications and Outcomes tab**, and enter or change as much data as you want here. See later in this chapter for full details about entering complications and outcome status.

Complications

Complications are entered on the Exam/Follow up and complications tab.

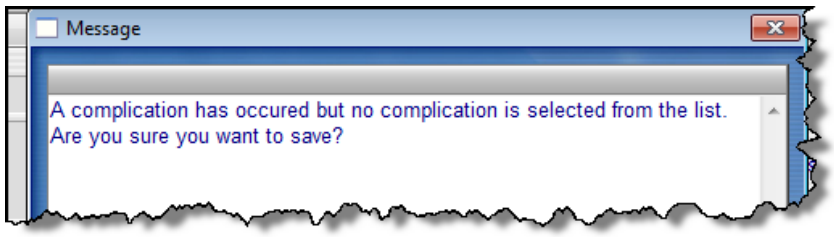


This screen records any complications, what they were, when they occurred and any consequences as well as the current status of the surgery. The user can choose how much information they want to enter onto this screen.

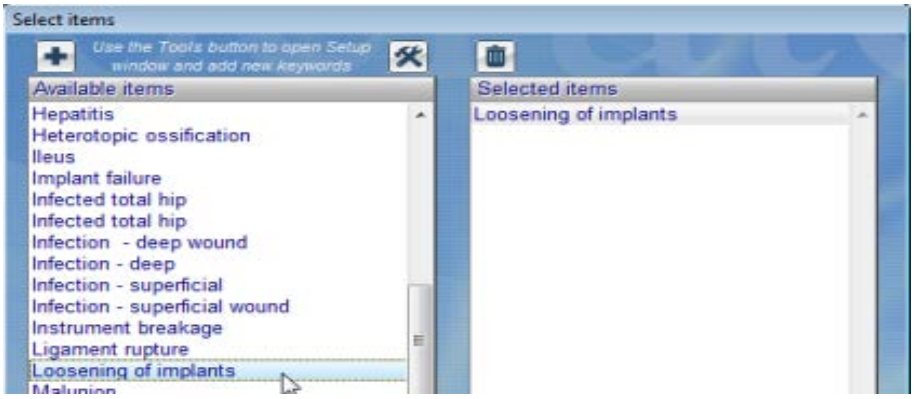


Complication Occurrence: If there has been a complication, enter "Yes" here. If you enter the date, Socrates will calculate the time from surgery to the occurrence of the complication as well as enter if it was an intraop, early or late complication based on the date. If you don't enter a date you can just tick one of these check boxes. The date *may* be the same as the date of the review but it may not be. For example the patient may be there for their 3 month review and tell you about DVT they developed after discharge at 3 weeks which was treated somewhere else. Thus the complication date and the date of review would be different.

If you have entered 'Yes' to a complication and you save the screen without entering the name of the complication you will be prompted to do this.

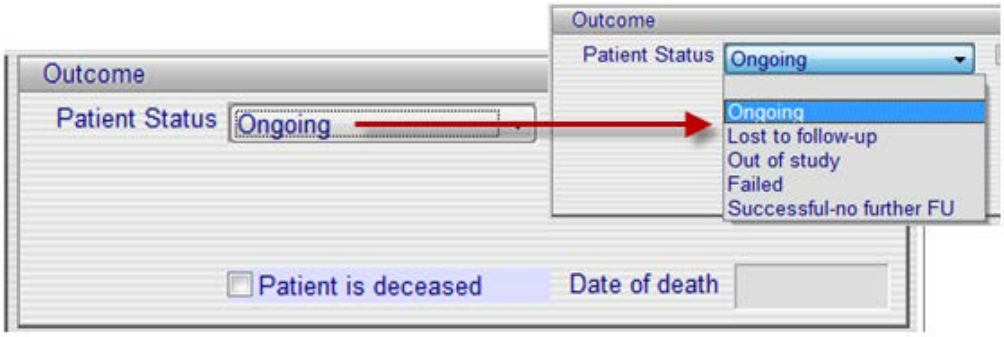


Complication List: This is where you select the name of the Complication(s) you can select as many as are relevant. If you have checked 'Yes' to a Complication Occurrence, you should always select the name/s of the complications from this list.

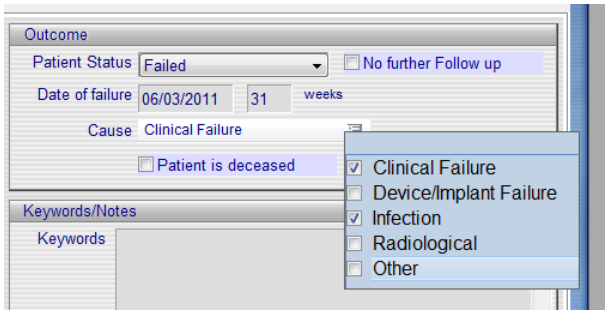


Patient Status

This is an important field as it records the status of the patient. When a new surgery is created the status is set to ongoing and remains so until the user changes it. If the patient has a failed surgery regardless of whether this is revised the status should updated. This is important for users of the web based patient scores as before any emails are sent to a patient with their scores due the program looks to check that the patient is ongoing. If the patient is not being followed for any other reason the status should also be updated - e.g. lost to follow up, no more follow up needed.



If the surgery failed another drop down list will appear asking for the primary reasons. While you may have already recorded this in their revision surgery, sometimes a surgery fails and they don't have a revision, or you may not do the revision so the cause won't be recorded. This is a summary of the reasons for failures entered into the original surgery. If you know the date of failure, enter this. The date of failure is not always the date you are seeing the patient, nor the date of the complication



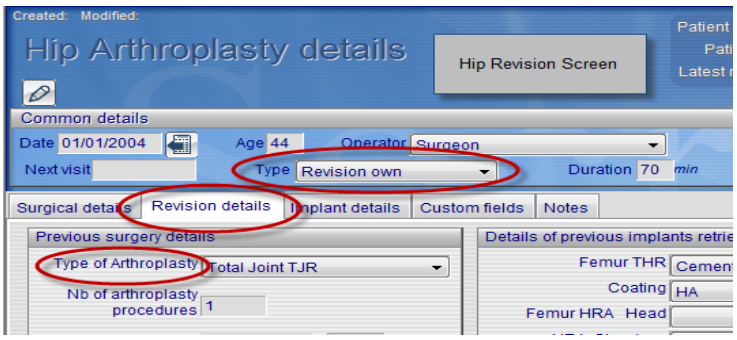
Keywords and notes: You can add general keywords here if there is anything you want to record that isn't on this screen. You might include: "Technically difficult op," or "Cement removal difficult," or "Broken shaver," for example. **Don't enter the actual complication** in this window, they should be entered into the complication window. And remember, new additions to the Keywords List are added via the **Set-Up Screen**. Record anything in the notes that you might want to appear in the operation report, or you want to refer to later on.

Note that it *is* possible to have a reoperation with the patient status staying as Ongoing, if the original operation has not failed. It is also possible to have a reoperation without a complication (for example, routine removal of screws), but it is unlikely to have a revision without a complication. It is, of course, also possible to have a complication without either a revision or a reoperation, for example a UTI, PE, or a wound infection.

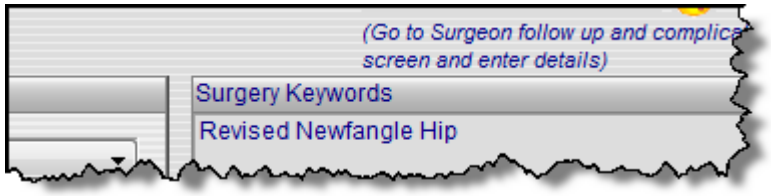
You can also have a status of failure without either a revision or reoperation, the patient may be too frail to have further surgery, or the operation failed to achieve the desired result, and is considered to have failed but the patient is still functioning, or doesn't yet need the next level of surgery. An example of this might be a cartilage grafting procedure, the graft failed, the patient has symptoms but doesn't want to proceed with further surgery.

Entering Surgery Revision Details for Arthroplasty Procedures

In addition to recording the complications and updating the status for an existing surgery in Socrates the new revision will be entered as a new surgery. The surgical details and implant details for revisions are entered via the same screens that you use for a primary surgery, the **Surgery Details Screen**. Additional details need to be added about the cause of the revision, previous surgery details, and other findings under the **Revisions Details Tab**. Make sure the **Type of Arthroplasty** you are revising is entered, and whether this is a revision of your own original surgery, or someone else's. Even if the original surgery is your own, those details may not be entered in Socrates yet, so details of the prior surgery and reasons for failure should be entered here.



We don't record the brand of the implant being revised. If the original entry was in Socrates, this would already have been recorded. If not, you may not know it, since they are not always recognisable when retrieved. If you do know it, you can record these details in the Notes section, or if there were a lot of the same brand suddenly being revised you could set up a Keyword to record this. See the next example.



Intra-operative Complications

All the surgery screens have this check-box. If something goes awry during surgery, select this. When you save the screen, you will be returned directly to the Complications screen.

Enter the details of what happened.

OK, that's it for your data entry lessons but - you haven't finished. You'll need to go to **Set Up and Customisation,** if you haven't already, and set up some of the fields for your own needs.

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