

The Modules: Hip General

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This module deals with procedures in the central and peripheral region of the hip. The majority are arthroscopic but open procedures can also be recorded by simply selecting the *approach* on the top section of the **Surgery screen**.

Don't be daunted by what you may consider as too much data to collect when you first look through the various screens. You can select from a lot of options, from the very brief to the very detailed. Hip arthroscopy is still a relatively new technique and the amount of data that different users want to collect varies a lot more than for some of the other more established procedures. Some users will want to record detailed information about all procedure. Others of you will throw your arms up in horror at this level of detail, and will just want to use the program to track what you've done by diagnosis and procedure name, (and maybe any complications and a patient score to make sure that the patient was happy).

Also, since Socrates will be with you for your entire practice, what you use it for now will change over time: you may decide to follow different surgeries and patients in varying levels of detail.

Regulatory and reimbursement changes are ever-present, and it may become mandatory to follow some of the new procedures and implants in a different level of detail over time. Socrates will let you adapt your needs to cover all the possible scenarios. It's like a one-size-fits-all program, even if you do get a bit lighter or heavier over the years. There is quite a bit of *customisation* possible also, and we regularly add new fields and scores as they become necessary due to changes in technology and technique.

You can set up "Favourites" for some of the screens so that almost all the fields that you might routinely check for some procedures would be populated with one tick for those surgeries. Some procedures such as trauma and chondral lesions aren't set up for these features, they are not as common and there's not a lot that's routine about them. For those that are, you would then just change the details in the cases that are different from the Favourite, add anything non-standard (such as a tear or lesion sizes or location) and Save. This takes less than a minute. Some surgeons have as many as 15 operations saved, one click, 30 seconds making any changes, and you have a huge amount of data captured, and an op report can be generated.

Take a bit of time to look around and decide what screen you are going to use for what procedures.

An Example

Here is an example of the level of detail that you could collect for a Labral tear and resection.

You can go really "Lite" and just record the Diagnosis and Procedure Name, with or without a Patient Score. This minimal approach still enables you to track what you did, and what happened. You can also use the diagnosis or procedure codes lists as well as, or instead of, the clinically descriptive terms that you can modify yourself.

This minimal approach would still enable you to track what you did, and what happened.

Diagnosis Codes	89567 Tear of labrum	▲ ▼
Procedure Codes	56784 Labral resection	▲ ▼
Surgery/Procedure name	Labral resection complete Chondroplasty acetabulum	▲ ▼
Final Diagnosis/ Diagnoses	Labral Tear	▲ ▼

OR:

Enter more data about the tear and treatment and what else might be going in the hip using the "Lite" screen. Remember that you can set up "favourites" here so that almost all the fields that you might routinely select for a procedure would be selected with one tick, just change the ones that are different, add anything non standard and save. It takes less than a minute.

Synovium, Capsule, Lig teres, IP tendon, GT	Labrum, Acetabulum, Femur - Mapping	Labrum, Acetabulum, Femur - Details	Drawing	Hip Lite	Custom fields	Notes
SYNOVIUM Pathology: Focal Synovitis (limited to a/f) Other findings: Haemarthrosis Treatment: Limited synovectomy	LABRUM Pathology: Partial Tear Tear position: Cartilage labral junction Other pathology: Intralabral cysts Adhesions: Labrum/capsule Treatment: Partial resection Sutures / Anchors:	FEMUR - Head/Neck Pathology: Cam deformity Treatment: Bone resection Head neck resection depth: 5 Length: 5 mm Articular Cartilage Pathology: Degenerative Treatment: Microfracture OCD:				
CAPSULE Pathology: None/Normal Treatment: None	RIM Pathology: Treatment: Complete resection					
ILIO - PSOAS TENDON Pathology: Exposed to hip joint Treatment: Decompression via rim trim	ACETABULUM - Articular Cartilage Pathology: Extent of AC path: 10-39% Treatment: Os Acetabulaire: One Osteophytic encroachment: Mild < 25% Fossa Obliterated Treatment: Retained Depth of resection: 2 mms					
TRONCHANTERIC BURSA Pathology: None/Normal Treatment: None ITB:						
LIGAMENTUM TERES Pathology: None/Normal Treatment: None						

Additional Information:

- Intra op complications: (Go to Surgeon follow up and complications screen and enter details)
- Procedure name: Labral debridement, Microfracture acetabulum
- Final Diagnosis/Diagnoses: Acetabular dysplasia, Labral Tear

This screen is an abbreviated version of the previous 3 screens.

OR – enter a lot more detail by going to the first three screens. You can still set up the first screen and the mapping zones to default to “normal” but after that we assume that each surgery would be different.

The first deals with primarily what's going on in the Capsule, Synovium..... see below. Then there's a mapping screen and another for more details of tear sizes, type etc. See the surgery section for full details.

Synovium, Capsule, Lig teres, IP tendon, GT	Labrum, Acetabulum, Femur - Mapping	Labrum, Acetabulum, Femur - Details	Drawing	Hip Lite	Custom fields	Notes
<input checked="" type="checkbox"/> Check to default to normal values Synovium Pathology: Focal Synovitis (limited to a/f) Synovitis: Other findings: Treatment: Limited synovectomy	Ligamentum teres Pathology: None/Normal Treatment: None	Illo - Psoas Tendon Pathology: None/Normal Treatment: None				
Capsule Pathology: Tear Compliance / laxity: Tight Treatment: Suture/plication, Capsulotomy Sutures / Anchors: Number: 3 Brand: SUTURE 1 Size: 3-0	Trochanteric bursa Pathology: Troch bursitis Treatment: Bursa scoped ITB: Gluteus medius: Gluteus minimus: Sutures / Anchors: Number: Brand: Size:					

Diagram: A circular diagram of the hip joint showing various anatomical zones labeled L1 through L12, C1 through C12, and F1 through F12. The diagram is divided into sections for Labrum, Acetabulum, and Femur. The Labrum section shows zones L1-L12. The Acetabulum section shows zones C1-C12. The Femur section shows zones F1-F12. The diagram is used for mapping and detailing the hip joint.

Procedure: Labral resection partial

Final Diagnosis/Diagnoses: Labral Tear

Surgery Keywords:

Hopefully by the time you've got this far you've realised that you do have options in the level of data that you choose to enter and it won't have to take you as long to enter the data as it did to do the operation.

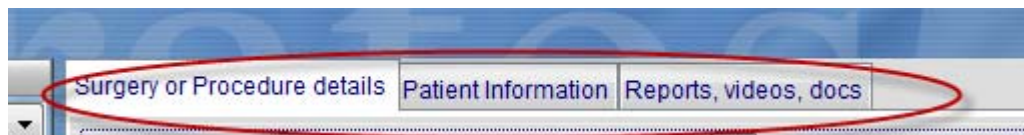
Read ON...

HIP GENERAL HISTORY SCREEN

The first section of this screen records **General Details**: Surgeon, Hospital, Assistants, Referring Dr, Physios and Insurance companies. Any **studies** the patient may be enrolled in are entered in the next window (these are created in the Set-Up screen).

Note: Any notes that may have been entered on the other screens are also displayed on the front screen.

On the right of this screen are 3 tabs.



Surgery or procedure details

The first captures the date of the surgery or beginning of the treatment to be added. We usually refer to a surgery but Socrates can be used for any procedure, or non-operative treatment as well. It just needs a date to be entered as a baseline so follow up delays can be calculated, i.e. 3 month, 1 year, 5 year follow up.

The diagnosis and procedure name can be entered in one of two ways – using a clinically descriptive term and or the codes that you might use – CPT, ICD etc.

Why are there two? Codes used for billing might not be descriptive enough for research, nor are they always what's done since they often don't keep up with technology. Plus you might want to use your own descriptive terms for the different surgeries you do. You can add, remove or import your own lists of these at any time. So you have the option of choosing which you want to use, or both. You will need to import your own codes lists, there are too many in the world for us to import them all, and often surgeons only use a small number of the codes in their own practice. It's easy to import them in one list, or just add them in as you go - see the chapter on Set Up.

Patient information

The next captures some information about the history of the patient's weight and height, BMI (calculated by the program) some details of their injury, workers comp, insurance status, litigation pending, how it occurred, the duration of symptoms, and length of stay.

The screenshot shows the 'Patient Information' tab with the following fields and values:

- Pre-Op Height and Weight:**
 - Weight: 90.00 in Kgs
 - Height: 156.00 in Cms
 - BMI: 37.00
 - Obesity: Medium Obesity (dropdown)
- Date of injury or joint problems:** 01/02/2006
- Date of examination:** 01/05/2006
- Dominant side:** Same as injury/affected side (dropdown)
- Injury to exam time:** 13 weeks
- Injury to surgery time:** 1 weeks
- Workers Compensation:** Yes (dropdown)
- Covered by Insurance:** (dropdown)
- Is litigation pending due to this injury?:** (dropdown)
- Opposite site:** Normal (dropdown)
- Other joint problems:** (text area)
- Onset of symptoms:** Sudden (dropdown)
- Cause of injury:** Work accident (dropdown)
- Duration of symptoms:** 1-3 months (dropdown)
- Years:** (text field)

At the bottom, the 'After surgery' section includes:

- Length of stay:** (text field)
- days:** ☒ Day only
- Discharged To:** Home (dropdown)

Reports, Videos and Documents

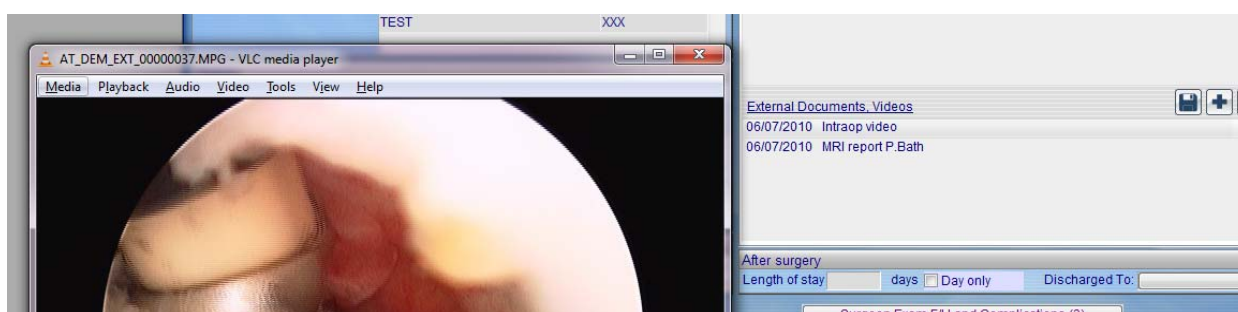
The screenshot shows the 'Reports, videos, docs' tab. It contains two main sections:

- Surgery Reports, Documents:**
 - 06/07/2010 Shoulder exam 2/3/09
- External Documents, Videos:**
 - 06/07/2010 Intraop video
 - 06/07/2010 MRI report P.Bath

Two red arrows point from a central text box to the 'Surgery Reports, Documents' and 'External Documents, Videos' sections. The text box contains:

- Reports generated from here
- Documents and videos attached here

Videos and any type of **electronic document** (PDF, Word, Excel, etc.) can be imported and stored with the surgery record for viewing. Simply click on the **Add icon** to attach a document or video relevant to this surgery. See the chapter on X-rays and videos for more information.



Reports, such as **Surgery Reports** and **Examination Reports** can be generated from the fields you entered into the program. They are generated and stored in Socrates, exported as word or pdf documents or printed from this window. They work like a word processing document with a macro set up. As long as the data is entered into Socrates you can generate a report from it. Here's an example of a Rotator Cuff Repair operation report.

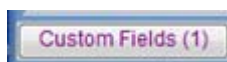
Fairyland Orthopaedics 112 Santos Way South Pole		phone: +50 453 2389 fax: +50 453 7689
Name: Sam WILLIS	DOB: 04/07/1977	Age: 43
Surgeon: Trevor Toogood		Assistant: Mary Hopkins
Anaesthetist: Mark Sleepyhead		Anaesthetic: General
Hospital: Earlyout Hospital		
Diagnosis: Partial Rotator Cuff Tear		
Type: Primary		
Surgery performed: Rotator Cuff Repair, Sub acromial decompression		
Preoperative score: Constant (out of 100): 58		
Intra-operative findings:		
Range of Motion: Forward flexion: 170		Abduction: 170
ER at 0: 75		ER at 90: 80
Anterior translation: 0		Posterior translation: 0
Rotator Cuff Pathology:		
Tear present: Yes		
Tendons involved: Supraspinatus		
<u>Supraspinatus:</u>		
Tendon quality: Thin/very poor quality		Extent of tear: Full
Calcification: Single deposit		Tear pattern: Crescent
Tear size - AP 1 ML 2		Medial retraction (cms) 1.5
Distance from greater tuberosity: 1cm		Medial to glenoid: 1cm
<u>Infraspinatus:</u>		
Tendon quality: Delaminated		
Calcification: Liquid		
Extent of tear: Partial		

At the bottom of the history screen are two rows of tabs. The bottom row shows all the scores/surveys that have been selected to display – more about this later in the scores section.



The top row has the following:

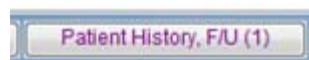
Custom fields



You can create your own Custom Fields and Evaluations (bottom row with the scores) to capture recurring events. These can be new exclusive lists, multi boxes, numeric values, or dates. See the chapter on Set-Up and Customisation for details on how to add these fields. Once you have added them your new list will show up in these tabs just like all the fields in the program. Below is an example of some custom fields set up to capture details that are not on the regular screens. It's only limited by your imagination.

Text fields titles	Text fields lists
Blood group patient	A,B,O,B
Blood group donor	A,B,O,B
Early discharge	Yes, No
Hueter Approach	Yes, No
English speaking	Native, Fluent not native, Moderate, Little, None
Expectation level	1,2,3,4,5,6
Stephanie special	A,B,C,D
Unassigned	

Patient History and Follow-Up Screen

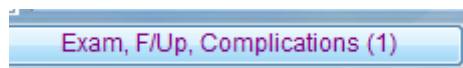


You probably won't want to collect these data from everyone but if you treat high-level sports patients, or if returning to work is an important aspect of a surgery outcome, it can be useful data. The dreaded insurance companies sometimes want to know this data, so it's there if you need it.

This screen tracks the patient's work, functional and sport history over the period of their follow-up until they are discharged from follow-up *for this surgery*. Questions relating to the patient's work, sporting and general function are recorded **pre-operatively** and **at subsequent visits**. Some of the questions are only relevant post-operatively: return-to-work and sports questions, for example. The **Main Sport window** can be added, modified or deleted through the **Adaptable Fields** option on the **Set-Up Screen**. This form is scannable for both pre- and post-op follow-up. The pre-op version includes the questions from the first screen, about the history of the injury, workers' comp, duration of symptoms, etc.

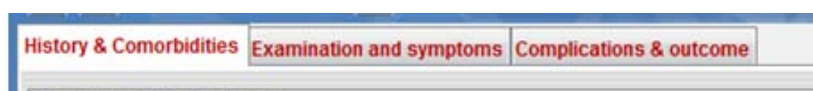
This is a scannable form, both the pre- and post-op versions and these can also be filled in by the patient online just like all the web based scores.

Surgeon Examination and Follow-Up Screen



This screen has 3 sections.

History and comorbidities

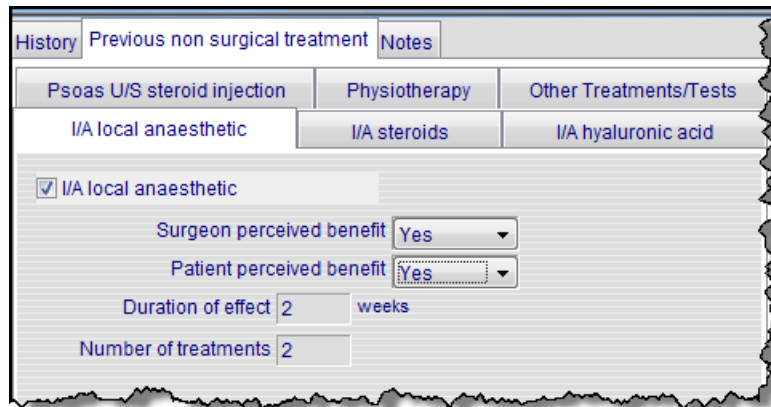


Previous surgery details

Clicking in the **Previous Surgery details** field provides you with a list of previous procedures (as seen in the left image below), with sub-windows for labral, acetabular, and femoral procedures, if you choose to record more details (right image, below).

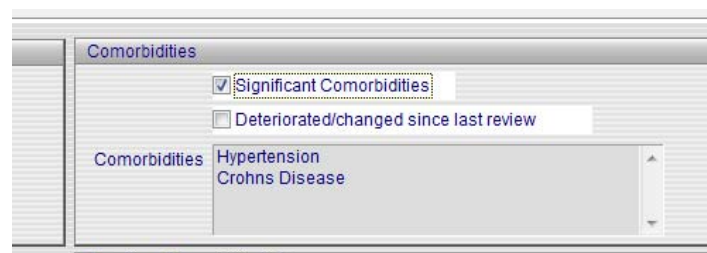
Previous treatment

For this module there's quite a bit of data you can record about any previous treatment. We know that in some countries it's getting harder to get approval to do these surgeries due to escalating costs so it can be handy to be able to prove that all else has failed prior to surgery.



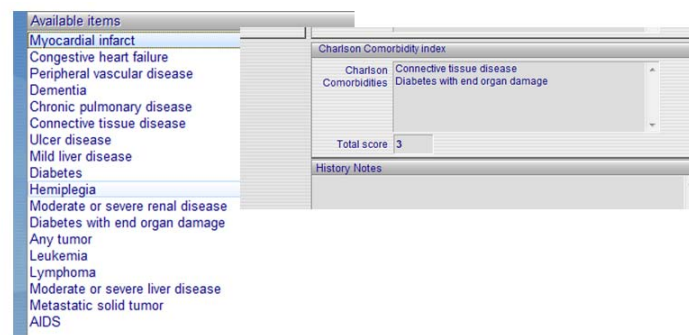
Comorbidities

It's up to you about how much detail you want to collect here but it's obviously a good idea to at least record if the patient had significant comorbidities. It's becoming more important for you to record this sort of information, patients can now go on-line and score themselves using a number of patient-related outcome scores and compare themselves to others. But we all know that all patients are not the same, if you collect some data to demonstrate this it helps to explain results that may differ between patients, and between surgeons. The list can be added to at any time, and more than one can be added to the record, and over time this may change. There is a check box to record this also.



Charlson Comorbidity Index

This is a validated list of comorbidities which when selected and totalled will give a score which can be used to classify patients according to risk, and subsequent cost to care for.



COMPLICATIONS AND OUTCOME STATUS

Complications and Outcome Status

The third tab of the **History screen** allows you to record details about any complications, from the very basic, to a lot more detail. You may need to collect more extensive detail if you are involved in a study, or following a new procedure or implant where complications are a key endpoint. In most cases, surgeons find it sufficient to just record a "Yes" in the Complications drop-down menu, click on the **modify icon**, and then double-click into the Complications window to record what it was. You can also collect details of failures, reoperations or revisions here.

Radiology Assessment and Follow-Up

This screen is accessed by clicking on the **Radiology and Follow-Up** tab bottom right of the **History screen**. It allows you to record radiological findings from X-ray, CT scan and MRI over time.

Surgeon Examination and Follow-Up

This screen is accessed by clicking on the **Surgeon Exam F/U tab** at the bottom of the **History** screen.

Examination and Symptoms tab

This tab has 2 sections, one records symptoms and range of motion, the other diagnostic tests. A number of diagnostic tests are included, since there is not yet consensus as to which are the standard tests to use. These are recorded by date, and a follow-up delay is assigned based on the surgery date. In this way, the ROM and symptoms can be tracked over time. You can also select the normal check box, no fields will be populated but you can search for all that were considered to have normal ROM.

Range Of Motion		Index side	Opposite side
ROM		<input checked="" type="checkbox"/> Normal	<input checked="" type="checkbox"/> Normal
Supine	Flexion / Extension	/	/
	FABER distance	cms	cms
In extension	Abduction / Adduction	/	/
	External / Internal Rotation	/	/
90° flexion	Abduction / Adduction	/	/
	External / Internal Rotation	/	/
Prone	External / Internal Rotation	/	/

Biochemistry	
ESR	Hb
INR	PTT
	CRP
	Unassigned
	Unassigned
	Unassigned

History & Comorbidities		Examination and symptoms		Complications & outcome	
Symptoms, ROM		Diagnostic Tests			
		Index Side		Opposite Side	
Normal					
Quadrant impingement (fl.add.IR)	Positive	Moderate	Negative		
FAbER test	Negative		Negative		
Extension impingement	Negative		Negative		
Log roll test	Negative		Negative		
Generalised end range pain	Negative		Negative		
McCarthy hip extension sign	Negative		Negative		
Anterior apprehension test	Negative		Negative		
Thomas test	Negative		Negative		
C sign	Positive	Moderate	Negative		
Psoas test	Negative		Negative		
Posterior impingement test	Negative		Negative		

SCORES AND EVALUATIONS

The **scores** and **evaluations** are displayed at the bottom of the **History screen**. (See Data Entry chapter for how to enter scores.) You can choose to have only those scores you actually use displayed here by choosing them from the list of all possible scores in the **Set-Up screen**. If they are magenta with a number beside them they have scores entered with the number displaying how many.

Patient History and F/U		Non-operative Therapy		Surgeon Exam F/U and Complications (2)		Radiology F/U (2)	
SF-36	SF-12	Modified HHS (4)	NAH Score (3)	HOS Score	HOOS (1)	Oxford	VAS Pain
							Patient Satisfaction
							Custom (1)

Here are a couple of examples.

Created: 18/10/2010 18:13 - admin Modified: 18/10/2010 18:13 - admin

MAHORN Hip Outcome Tool (MHOT33)

Patient name: ARKWRIGHT Trevor
 Patient ID: 479830
 Latest FUP: 23/04/2010 14w
 Injury:
 Exam: 23/04/2010
 Surgery: 23/04/2010
 Module: Hip General
 Side: Right ☐ Bilateral
 Protocol:
 F/U: preop
 Method of completion:
 Name:
 Next visit:
 Evaluation date:
 Symptoms and Functional Limitations
 Sports and Recreational Activities
 Job Related Concerns
 Social, Emotional and Lifestyle

1. How often does your hip/groin ache?	56	9. How much trouble do you have with stepping over obstacles?	98
2. How stiff is your hip as a result of sitting/resting during the day?	4	10. How much trouble do you have with climbing up/down stairs?	53
3. How difficult is it for you to walk long distances?	78	11. How much trouble do you have with rising from a sitting position?	4
4. How much pain do you have in your hip while sitting?	54	12. How much discomfort do you have with taking long strides?	26
5. How much trouble do you have standing on your feet for long periods of time?	37	13. How much difficulty do you have with getting into and/or out of a car?	34
6. How difficult is it for you to get up and down off the floor/ground?	65	14. How much trouble do you have with grinding, catching or clicking in your hip?	56
7. How difficult is it for you to walk on uneven surfaces?	78	15. How much difficulty do you have with putting on/taking off socks, stockings or shoes?	34
8. How difficult is it for you to lie on your affected hip side?	97	16. Overall, how much pain do you have in your hip/groin?	56

Scores

Physical Symptoms	52	Sport/Recreation	100	Job	100	Social	100	Total Score	77
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Non Arthritic Hip Score
 Ref: C. Christensen, J. McCarthy et al. ODRR 403, pp 3/33 2003

Latest record: 17/06/2010 7y Surgery: 01/01/2003 Protocol: _____

Evaluation date: 20/11/2009 F/U: 6y Method of completion: _____ Name: _____ Next visit: _____

Pain
 The following 5 questions concern the amount of pain you are currently experiencing in the hip that you are having evaluated today. For each situation, please select the response that most accurately reflects the amount of pain experienced in the past 48 hours. Please select one answer that best describes your situation.

How much pain do you have

Walking on a flat surface	2 Mild
Going up or down stairs	3 Moderate
At night while in bed	2 Mild
Sitting or lying	4 Severe
Standing upright	2 Mild

Physical function
 The following 5 questions concern your physical function. For each of the following activities, please select the response that most accurately reflects the difficulty that you have experienced in the past 48 hours because of your hip pain. Please select one answer that best describes your situation.

What degree of difficulty do you have with

Descending stairs	3 Moderate
Ascending stairs	5 Extreme
Rising from sitting	3 Moderate
Putting on socks and stockings	4 Severe
Rising from bed	3 Moderate

Symptoms
 The following 4 questions concern the symptoms that you are currently experiencing in the hip that you are having evaluated today. For each situation, please select the response that most accurately reflects the symptoms experienced in the past 48 hours. Please select one answer that best describes your situation.

How much trouble do you have with

Catching or locking of your hip	2 Mild
Your hip giving out on you	3 Moderate
Stiffness in your hip	4 Severe
Decreased motion in your hip	3 Moderate

Activities
 The following 6 questions concern your ability to participate in certain types of activities. For each of the following activities, please select the response that most accurately reflects the difficulty that you have experienced in the past month because of your hip pain. If you do not participate in a certain type of activity, please estimate how much trouble your hip would cause you if you had to perform that type of activity. Please select one answer that best describes your situation.

How much trouble does your hip cause you when you participate in

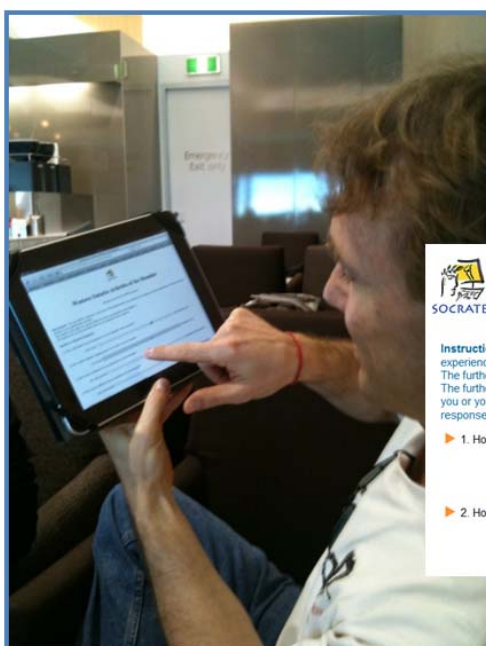
High demand sports involving sprinting or cutting (e.g. football, basketball, tennis, and exercise aerobics)	1 None
Low demand sports (e.g. golfing and bowling)	1 None
Jogging for exercise	3 Moderate
Walking for exercise	2 Mild
Heavy household duties (e.g. lifting firewood and moving furniture)	3 Moderate
Light household duties (e.g. cooking, dusting, vacuuming, and doing laundry)	3 Moderate

NAHS Score

Score	P	15	S	10	PF	9	A	21	Total	55	/100
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Web based data entry

The majority of these can be entered via the web directly by patients via email, or online in the clinic (English only).



SOCRATES ORTHOPAEDIC OUTCOMES
 Western Ontario Rotator Cuff Index

Instructions: You are asked to indicate on this questionnaire, the amount of a symptom you have experienced in the past week related to your problematic shoulder. The further to the right you put the slider the more you experience that symptom. The further left you put the slider the less you experience that symptom. If an item does not pertain to you or you have not experienced it in the past week, please make your **best guess** as to which response would be the most accurate.

▶ 1. How much sharp pain do you experience in your shoulder?

NO PAIN EXTREME PAIN

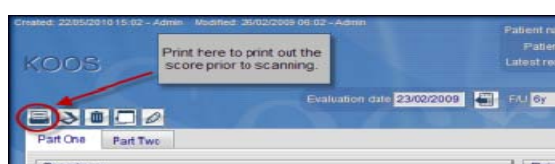
▶ 2. How much constant, nagging pain do you experience in your shoulder?

NO PAIN EXTREME PAIN

In addition the majority of scores can be scanned in using one of the Scannable forms. By scanning the forms, the responses are populated directly into Socrates. Note that scannable forms don't work on the Mac.

All scores can be entered manually and most can also be scanned in using a standard office scanner.

The scan forms are specialised forms generated from within Socrates. They can be printed out using the **Print icon** on the screen of each score, or there are PDF copies in the Forms Folder of your program. You must use these particular forms to enable the scan function to work properly.



A **Post-Op Satisfaction score** is also included. It's can be useful to use this as sometimes the patient may not have the greatest score but may be very happy with the surgery. It can happen the other way of course but either way it's good to know.

How well did the surgery:

Relieve the pain ?
☐ Excellent ☒ Very good ☐ Good ☐ Fair ☐ Poor

Increase your ability to perform regular activities ?
☒ Excellent ☐ Very good ☐ Good ☐ Fair ☐ Poor

Allow you to perform heavy work or sport activities (if allowed by Dr) ?
☒ Excellent ☐ Very good ☐ Good ☐ Fair ☐ Poor

Meet your expectations ?
☒ Excellent ☐ Very good ☐ Good ☐ Fair ☐ Poor

Would you have the operation again if needed on another joint ?
☐ Definitely yes ☒ Probably yes ☐ Possibly not ☐ Definitely not

How satisfied are you with your medical care? (0 is the least satisfied, 100 is the most satisfied) **90**

How normal does your affected joint feel? (0 is the least normal, 100 is normal) **80**

How would you rate your pain on a scale of 0 to 100? (0 is no pain, 100 is the worst possible pain) **10**


HIP SURGERY SCREENS

Now we get to the screens where you record what you did during the surgery. Don't forget you have options as to the amount of detail you collect so don't get too overwhelmed by the most detailed screens.

From the **Hip History Screen**, click on the **Surgery icon** to start entering data about the surgery itself.

Created: 11/05/2010 13:01 - Admin Modified: 19/04/2010 11:44 - Admin

Hip History and Examination

Patient name: ARKWRIGHT Trevor Injury: Exam: 23/04/2010 Side: Right Bilateral
 Patient ID: 479830 Latest record: 11/05/2010 2010 Protocol: 

Click here to open the Hip Surgery Screen.

General Surgeon: BURWOOD Tim Referring Dr:
 Patient Information Reports, videos, docs

Common Details

The top section of the **Hip Surgery Screen** records details of the approach, anaesthetic details, portals used, surgery time and traction time, type of surgery and whether navigation was used.

Created: Modified:

Hip surgery details

Patient name: ARKWRIGHT Trevor Injury: Exam: 23/04/2010 Side: Right Bilateral
 Patient ID: 479830 Latest record: 11/05/2010 2w Surgery: 23/04/2010 Protocol:

Common details

Date: 23/04/2010 Age: 50 Operator: Surgeon Approach: Arthroscopy Anaesthetic: General Regional block:
 Next visit: Duration: min Traction time: min Portals used: Nb Anterior + 1 Type: Primary Navigation used:

The surgery screen in this module has seven tabs, and accommodates as much (or as little) detail as you want to collect. There are *no mandatory fields* other than the Date of Surgery and Type (Primary, Revision, or Re-operation).

Created: Modified:

Hip surgery details

Patient name: ARKWRIGHT Trevor Injury: Exam: 23/04/2010 Side: Right Bilateral
 Patient ID: 479830 Latest record: 11/05/2010 2w Surgery: 23/04/2010 Protocol:

Common details

Date: 23/04/2010 Age: 50 Operator: Surgeon Approach: Arthroscopy Anaesthetic: General Regional block:
 Next visit: Duration: min Traction time: min Portals used: Nb Anterior + 1 Type: Primary Navigation used:

Synovium, Capsule, Lig teres, IP tendon, GT Labrum, Acetabulum, Femur - Mapping Labrum, Acetabulum, Femur - Details Drawing Custom fields Notes Hip Life

The first three tabs allow a detailed amount of information to be recorded regarding the pathology found, and what was treated.

Synovium, Capsule, Ligamentum teres, IP tendon and Trochanteric Bursa

The first tab of the **Surgery screen** records Pathology and Treatment of the Synovium, Capsule, Ligamentum Teres, IP Tendon, and Trochanteric Bursa.

“Normal” Defaults/Favourites


As a time-saver, you can set up a “Favourite Normal” surgery in which you select all the checkboxes for “Normal” pathology and “None” for treatment. Subsequently, each time you have a surgery where *most* of these parameters are normal, you can select this Favourite, only changing those few fields which vary from normal, or had treatment on selected fields. See the chapter on Data Entry – Adding Favourites. You can also just select the normal tick and normal values will populate for these fields.

Otherwise, simply travel through the various fields, noting the appropriate pathologies and treatments from the drop-down menus or checkbox lists. Details of findings and treatments for **arthroscopic post-joint replacement surgery** can be recorded on the right side of this **Hip Surgery screen**.

Labrum, Acetabulum, Femur - Mapping

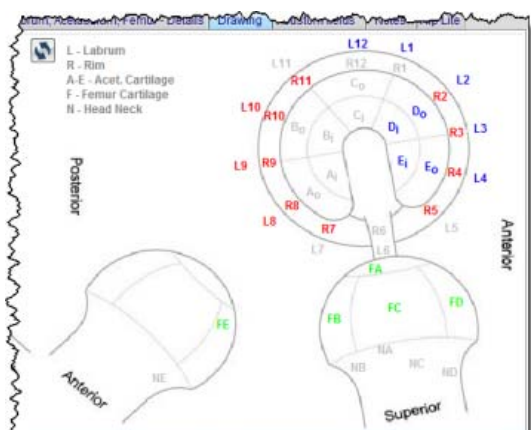
Under the **Labrum, Acetabulum, and Femur – Mapping** tab, there are **two mapping systems** available to record pathology and treatment of articular cartilage for the acetabulum and femur. At the time of releasing this version of Socrates, there is no standardised nomenclature for the zones, so we have selected two systems to allow you a choice.

The first system (shown on the left) is from Professor Damian Griffin from the University of Warwick UK, who has kindly given us permission to reproduce it. The other (shown on the right) is from Ilizaliturri, et al., *Journal of Arthroscopy and Related Surgery*, Vol. 24, No.5 (May) 2007, pp 534-539. We have called the areas on both mapping systems **GZs – (Geographic Zones)**.

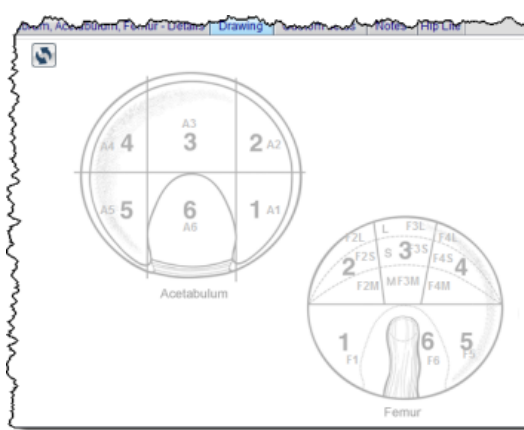
You can select either system, using the small **Switching icon**  to switch from one drawing to the other. Alternatively, you can select from the last two tabs on the mapping window: **Acet B** or **Fem B**.

Note that only the zone diagram for the side having the surgery will be displayed.

Professor Griffin Geographic Zones



Ilizaliturri, et al., Geographic Zones



Mapping of Pathologies and Treatments

OGH	DGS	Cur	Degenerative	
TRG	MIC	Zone	Pathologies	Treatments
NFT	RCF	Any	<input type="checkbox"/> All Normal	<input type="checkbox"/> No treat
DYS	PN	A1		
QTH	GRA	A2		
	TSH	A3		
	ACT	A4		
	AC2	A5		
	ATP	A6		
	ALP			
	QCP			
	QTH			

Labrum Acet AC Acet Rim Fem AC Fem **Acet B** Fem B

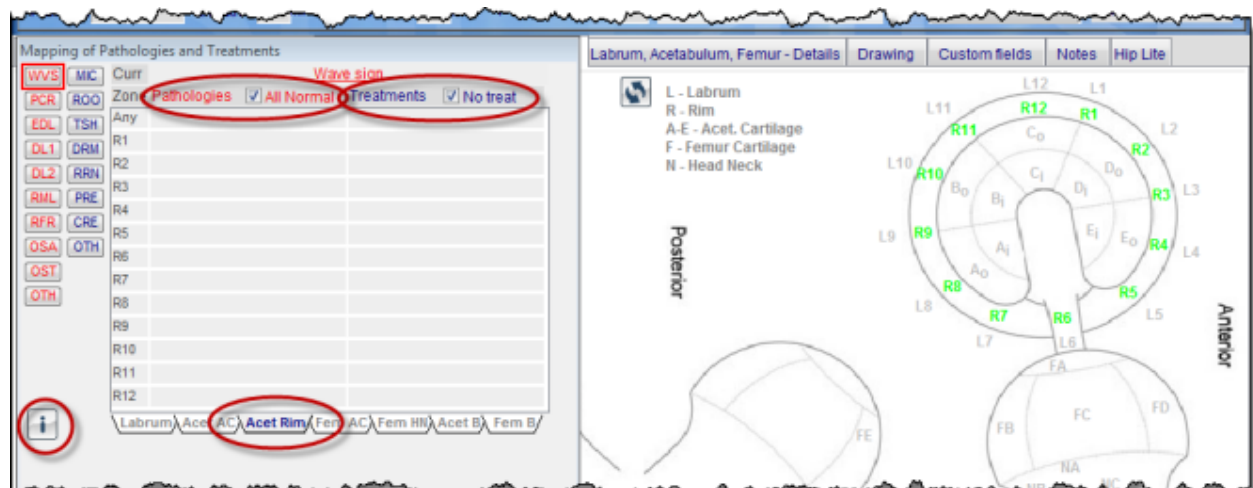
The zones are displayed on one side of the screen; the data entry window automatically pops up on the opposite side.

If you are entering data into this screen, it will take you 5-10 cases to become familiar with the layout, and how it all works. Chapter 4 on Data Entry has full details on how to enter data into these fields.

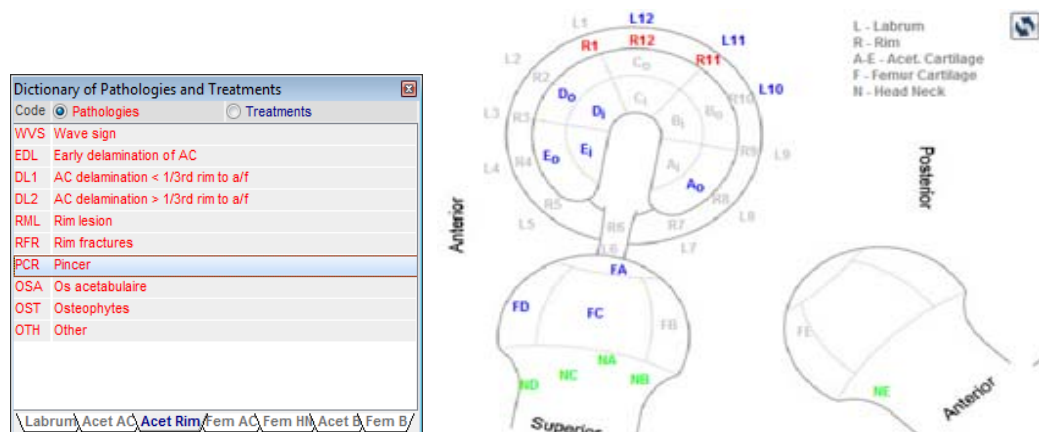
Quick summary:

- First select the region you want to record on the tab at the bottom, Labrum, Rim, etc.
- Then select the relevant pathology tab in the red column, and click on the affected zones on the drawing. An explanation of each abbreviation will appear at the top of the columns. For example, clicking on "WVS" in the Pathology column causes "Wave Sign" to appear at the head of the table.
- Select the treatment from the blue column, and do the same for the zones you have treated.
- Once a pathology has been selected, the corresponding number of the zone on the data entry window becomes **red**. If this zone is then checked with a treatment, a **blue** entry is inserted. If "Normal" or "No Treatment" is selected, the zone labels will be **green**.
- Once any zone has been clicked on with either pathology or treatment, "**Any**" at the top of the Current Zone List is also checked. This helps in searching, as it allows a search for the pathology and treatment entered in *any zone*.
- If the zones for the particular regions are all normal, and there is no treatment, you can also check the "Normal" and "No treatment" boxes and all the zones will be filled in, and coloured green.

In the next diagram the Acetabular rim has been checked as "Normal" and "No treatment," so these zones are coloured green.



If you click on the small "**Info**" button, you can view a window that gives a full description of the abbreviations used to describe the pathologies and treatments. As explained in the bulleted list above, clicking on the abbreviation causes the full name to be displayed at the top of the window -- see WVS Wave sign on previous diagram. On the right is an example of a completed mapping screen.



There are matching forms for the mapping screens which you could fill out but it's difficult for a data entry person to fill in the screens for these rather complex forms. Here's what it looks like.

LABRUM		Zone	1	2	3	4	5	6	7	8	9	10	11	12
Pathology	Normal	NNO												
	Partial Tear	PTT												
	Full thickness tear	FTT												
	Sulcus variant	SUV												
	Previous resection	PRE												
	Degenerative	DGN												
	Haemorrhagic	HAE												
	Hypoplastic	HPO												
	Hyperplastic	HPF												

This is the form that matches the hip zones screen

Analysing the hip Zones

If you are going to use the zones to map, you should be aware that the basic statistics provided with Socrates won't be able to analyse these data. They will need to be exported to a spread sheet and sent to a statistician to make some sense of.

Labrum, Acetabulum, Femur – Details

After you have mapped pathologies and treatments in the appropriate zones, you can enter *more* details about the pathology and treatment under the **Labrum, Acetabulum, and Femur – Details tab**. For example, you may want to note a description of tears, classification of OCD, number and type of sutures, anchors, or plugs used, and sizes of lesions.

“Lite” Surgery Tab

OK, you wouldn't be the first surgeon to get to this point and decide that you either have time to do the surgery, or record these details but not both.... Don't worry we have an alternative. But if you do persevere you'll be surprised at how fast you get after 20 or so cases.

The tab at the far right of the **Surgery screen** allows you to capture most of the important summary details from the previous 3 screens in **one screen**.

The screenshot shows the 'HIP GENERAL' software interface. The 'Hip Lite' tab is highlighted with a red circle. The interface is divided into several sections: 'SYNOVIUM', 'CAPSULE', 'ILIO - PSOAS TENDON', 'TROCANTERIC BURSA', 'LIGAMENTUM TERES', 'LABRUM', 'ACETABULUM - Articular Cartilage', 'FEMUR - Head/neck', and 'FEMUR - Head/neck'. Each section contains fields for Pathology, Treatment, and other clinical data. The 'Labrum' section shows 'Partial Tear' selected for Pathology and 'Shrinkage, Partial resection' for Treatment. The 'Femur - Head/neck' section shows 'Cam deformity' for Pathology and 'Bone resection' for Treatment. The 'Acetabulum - Articular Cartilage' section shows 'Degenerative' for Pathology and 'Debridement/shaving' for Treatment. The 'Femur - Head/neck' section also includes fields for 'Head neck resection depth' and 'Length'.

It is also important to note that any data which is on both the full screens and the hip lite, including the **mapping pathology and treatment** summary will be *cross-populated onto the other screen*. In the example below, a Partial Tear (PTT) was selected in the Labrum, Zones 1, 2 and 3 on the mapping zones. The data entered will automatically appear on the Lite screen in Labrum, Pathology, i.e. Partial Tear is checked. The treatment Shrinkage (SHR) was also recorded on the mapping, and automatically appears on the Lite screen in the treatment field. This also happens in reverse, so if you entered a partial tear in the lite screen, it would show up on the mapping zone as a partial tear in the "any" field.

The screenshot shows the 'Mapping of Pathologies and Treatments' screen. It features a table with columns for 'Zone', 'Pathologies', and 'Treatments'. The 'Pathologies' column has a dropdown menu with 'PTT' selected. The 'Treatments' column has a dropdown menu with 'SHR' selected. A red dashed arrow points from the 'PTT' and 'SHR' entries in the table to the corresponding fields in the 'LABRUM' section of the HIP GENERAL interface. The 'LABRUM' section shows 'Partial Tear' selected for Pathology and 'Shrinkage' for Treatment. The 'ACETABULUM - Articular Cartilage' section shows 'Degenerative' for Pathology and 'Debridement/shaving' for Treatment. The 'FEMUR - Head/neck' section shows 'Cam deformity' for Pathology and 'Bone resection' for Treatment.

Hip Zone drawing

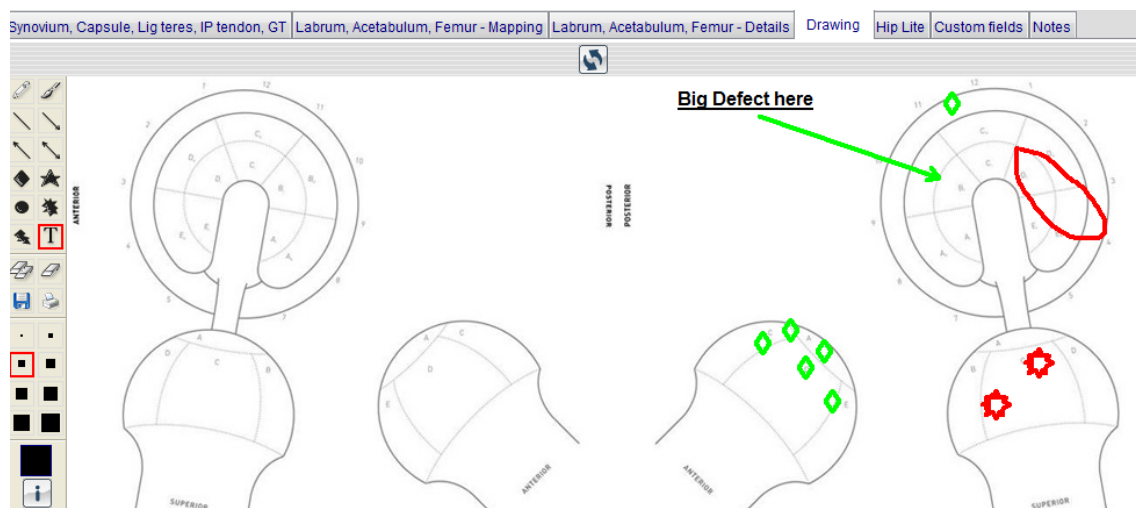
There is a drawing screen accessed through the sub-tab on the right. This is not available on the Mac at this stage.

Note that this is only a drawing. The information is not stored in the program other than as graphic images, and therefore is not available for Search or Statistics.

This feature gives a **graphic depiction** of what was found and treated at 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.

You will need to spend a little time initially getting to understand the icons and sizes, etc. The **Info button** at the bottom of the screen under the large black square will give you some drawing hints. See chapter on drawing for more detailed instruction on the drawing function.

Sorry to the Mac users but this doesn't yet work for you.



POST-OP AND REHAB DETAILS



This screen is common to all the modules. It is accessed by clicking on the **Rehab icon** at the top right of the **History screen**. See the section in the chapter on Set Up and Customisation for details on how to add data to the **Post-Op and Rehab screen**.

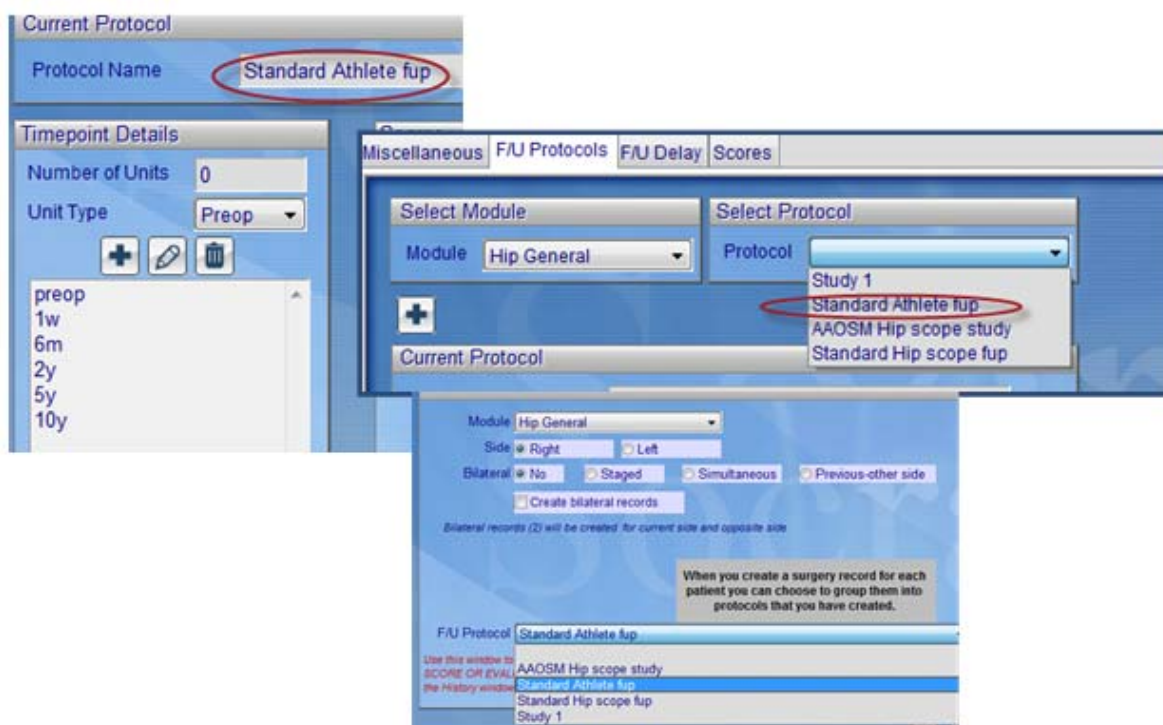
Non-Operative Therapy Screen

The Hip and Knee General modules include a **Non-Operative Therapy screen**. If you can't see this screen displayed at the bottom of the history screen, go to Set-Up – Scores, and select it from the list of scores to be displayed. This screen allows collection of detailed data and follow-up of non-operative therapies such as Steroids, Psoas injections, analgesia or Intra-articular Treatment such as Hyaluronic Acid.

FOLLOW-UP PROTOCOLS

Don't lose your patients (unless you want to). You can choose a **Follow-Up Protocol** so the program knows when the patients are due back for their next follow up and can remind you. The different options in the drop-down menu are created by you in the **Set-Up screen (tools icon)**. It's a good idea to make sure that each surgery you do belongs to one of the protocols you set up. It makes it easy to generate statistics and search for patients and surgery outcomes as well as following them up at the required time points. For example if you set up a protocol for Standard athlete follow up it is easy to pull data on the pre op and post op scores for all surgeries in these groups.

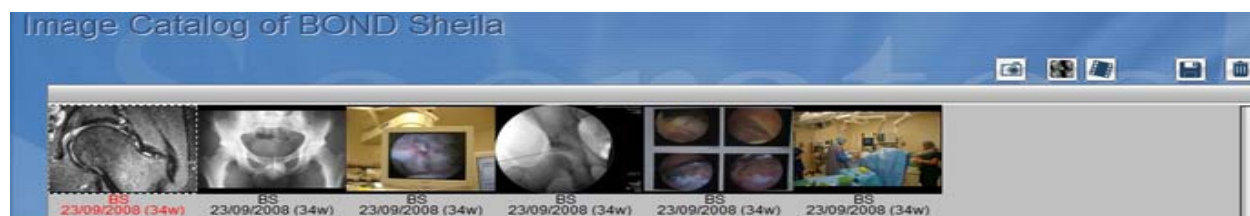
These are also essential for the web scores as this is how the program knows what scores to send out at what time points.



IMAGES



Images can be stored, searched for, printed and exported from the **Surgery screens**. See Chapter on **Images** for more details, including how to give the images Keywords for easy searching and selection at a later date.



SEARCH

A specialised search function in Socrates' **Surgery screens** allows you to search for any field or combination of fields in the database. The example below shows the window that sets up a search for all surgeries with male patients over 50 with labral tears. See Chapter on Searches for details on setting up your own Searches.

Data field	Operator	Text or value
PAT:Gender	is or equal	Male
HG:Age at surgery	greater or equal	50
HG:Diagnosis	contain	Labral Tear

STATISTICS

Socrates provides you with basic Descriptive Statistics functions for you to calculate and demonstrate your own basic statistics without the help of a statistician. However, if you do find you want to do more sophisticated statistical analysis, all of the fields in Socrates can be exported to Excel for transfer to a dedicated stats package. See Chapter on Statistics.

Variable follow-up selection

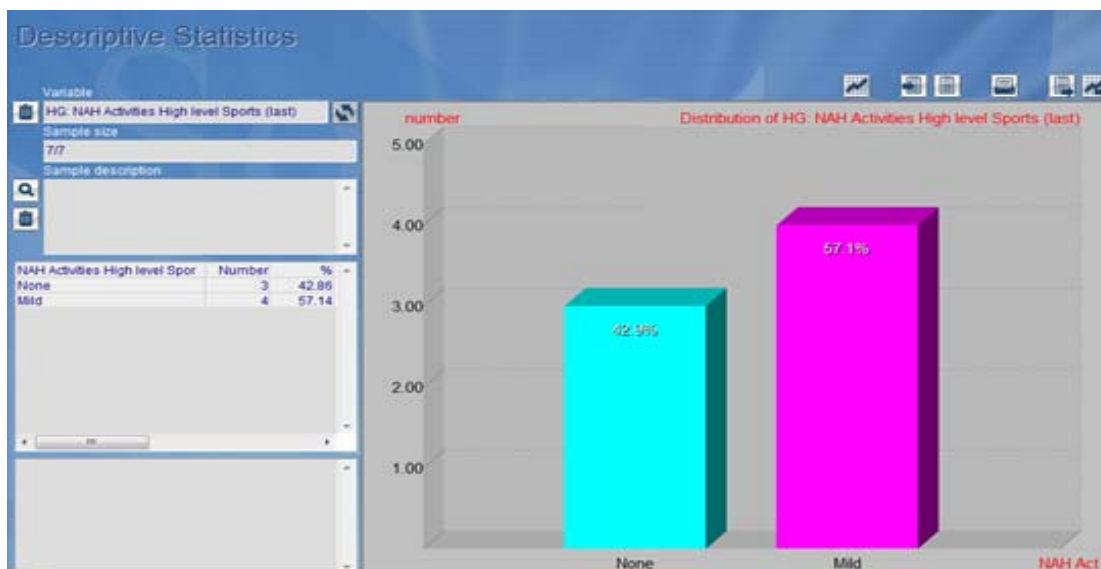
☒ Last evaluation (excluding the pre op)

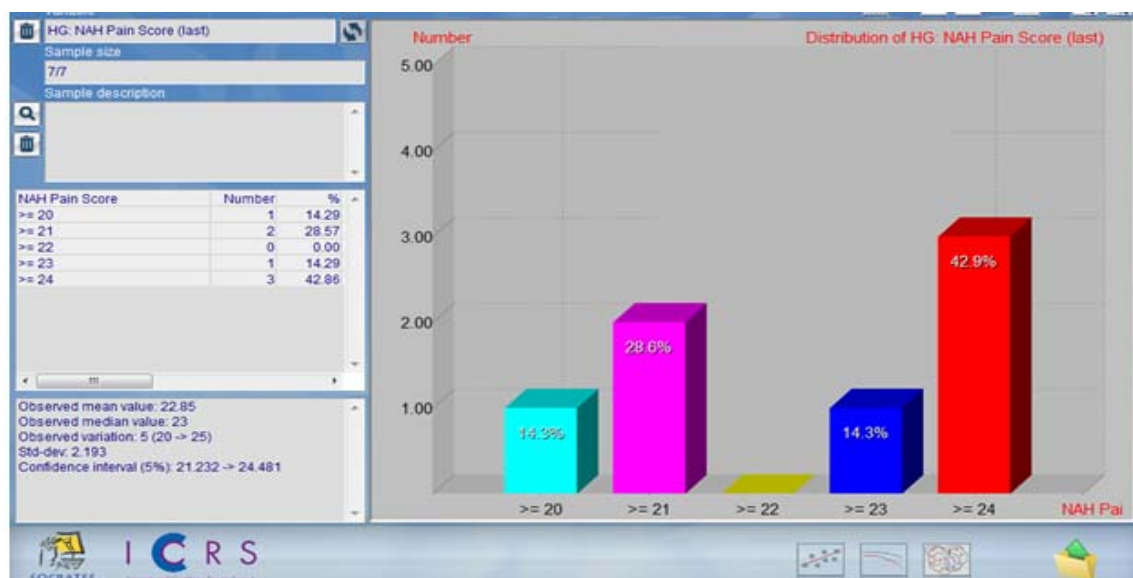
☐ Evaluation @

☐ Evaluation between

☐ All

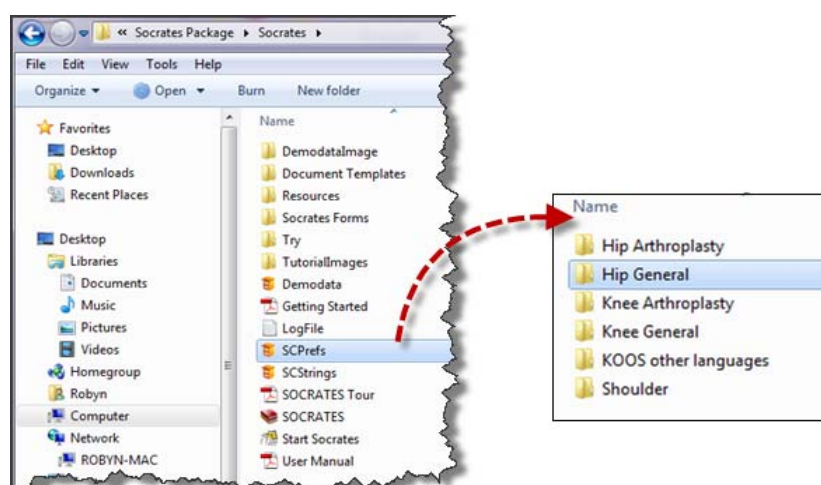
☒ ☐





FORMS

All the screens in Socrates have forms to match. These are in a Word.doc format in the Socrates Folder inside the main Socrates Package folder, and can be modified to accommodate those particular fields you might want to collect. Copies of all the scannable forms are also inside the relevant folder.



List of forms

LEGEND
Y: these forms are available in the format of the column heading.
ALG missing: Y indicates that an algorithm is built in to the score so that if some questions are missing, a score is still possible. See chapter on scores for individual scores information.
Scan forms: forms available as a scannable PDF to capture data via a Scanner
Type: QS = patient questionnaire; SU = surgeon form; SC = Score
Patient/Surg: P indicates the patient completes the form; S is a surgeon completed form; C is combined

HIP GENERAL	HG	WORD FORM	WEB SCORE	SCAN FORM	ALG MISSG	Type	Patient /Surg
GROC Global Rating of Change		Y		Y		QS	P
Patient Satisfaction, Normal, and Pain VAS Postop	S8	Y	Y	Y		QS	P
Patient Satisfaction, Normal, and Pain VAS Preop	S8	Y	Y	Y		QS	P
Patient Work & Sport PostOp	HG3	Y	Y	Y		QS	P
SOMOS - US Military Patient History	NEW	Y	Y	Y		QS	P
Patient Work & Sport & History PreOp	HG1	Y		Y		QS	S
Euroqol EQ5D		Y	Y	Y		SC	P
HAGOS - Hip and Groin Outcome Score	NEW	Y	Y	Y	Y	SC	P
HOOS - Hip Dysfunction and Osteoarthritis Outcome Score	S3	Y	Y	Y	Y	SC	P
HOS - Hip Outcome Score		Y	Y	Y		SC	P
MHOT 14 - MAHORN Hip Outcome Quality of Life		Y	Y	Y		SC	P
MHOT 33 - MAHORN Hip Outcome Quality of Life		Y	Y	Y		SC	P
Modified Harris Hip Score	S6	Y	Y	Y		SC	P
Non Arthritic Hip Score	S5	Y	Y	Y	?	SC	P
Oxford Hip Score	S4	Y	Y	Y	Y	SC	P
UCLA Activity		Y	Y			SC	P
VAIL Hip Score	NEW	Y	Y	Y		SC	P
VAS Pain Score			Y	Y		SC	P
Veteran Rand-12 General Health Survey	NEW	Y	Y	Y		SC	P
Veteran Rand-36 General Health Survey	NEW	Y	Y	Y		SC	P
WOMAC Hip Index	S10	Y	Y	Y		SC	P
Clinical History and Examination	HG2	Y				SU	S
Complications		Y		Y		SU	S
General Surgical Details	HG4	Y				SU	S
Hip Post Op Examination	HG9	Y				SU	S
LITE (surgical details)	HG11	Y		Y		SU	S
Non Operative Therapy		Y				SU	S
Pathology and treatment L DG zones	HG6	Y				SU	S
Pathology and treatment R DG and GZ zones	HG7	Y				SU	S
Pathology and treatment L DG and GZ zones	HG8	Y				SU	S
Pathology and treatment R DG Zones	HG5	Y				SU	S
Patient Demographics and Surgery Details	NEW	Y				SU	S
Radiology	HG10	Y				SU	S
Rehab and Post Op	S9	Y				SU	S