

## Adding Adaptable Fields and Keywords

Permission to Access.....	3
Keywords .....	3
Procedure and Diagnosis .....	5
Procedure and Diagnosis Codes .....	5
Procedure and Diagnosis Names .....	6
Comorbidities .....	6
Complications .....	8
Adding or Changing Adaptable Fields.....	9
Shortcut to Adaptable fields .....	10
Prioritising/adding favourites to Adaptable fields .....	10
Deleting/Modifying Adaptable Fields.....	10
Deleting Adaptable Fields .....	10
Modifying Adaptable Fields .....	11
"Mapping" or Transferring Adaptable Fields .....	11
Importing Lists of Adaptable fields/Keywords.....	13
Importing Procedure and Diagnosis codes. ....	16
Importing or Exporting lists of surgeons, assistants, referring Dr's etc. ....	17
Printing/Saving the lists.....	17

These are important fields as they enable the user to set up diagnoses, procedure names, complications and other necessary parameters to enable you to add to the surgery record. Complications, Comorbidities, Sport, Diagnoses and Procedure names will be pre filled if you selected the default option when you created your new database. However these lists are not exhaustive and can be modified or deleted by the user at any time, and new ones added.

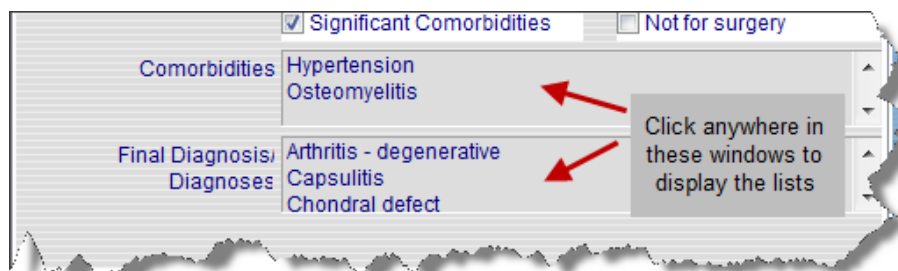
To access these fields to add, modify or delete, select Adaptable Fields near the middle of the right-side list in the Set Up screen.



This will display a window with the following tabs:

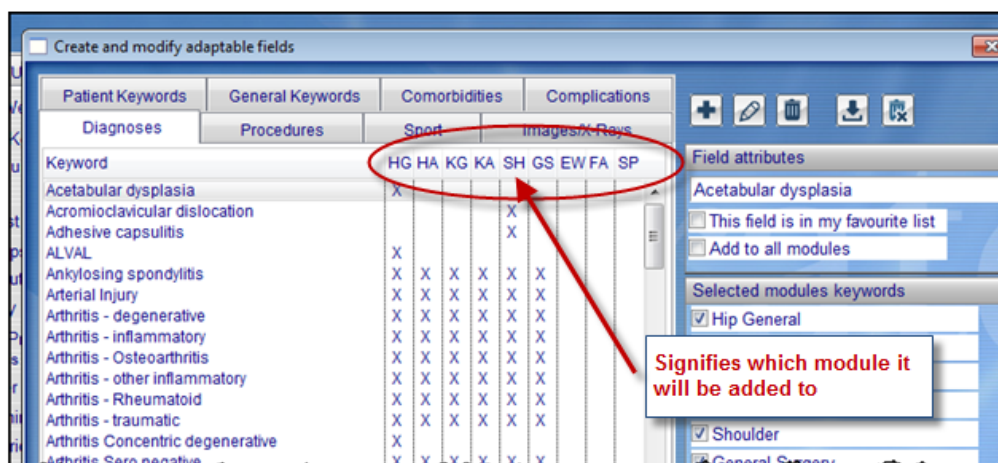
- Patient Keywords
- General Keywords
- Comorbidities
- Complications
- Diagnoses
- Procedures
- Diagnosis Codes
- Procedure Codes
- Additional Procedures
- Sport
- Images/X-Rays Keywords
- Additional procedures (Hip and Knee arthroplasty and Spine modules only)
- Spine assessments (Spine module only) See Spine chapter for these details
- Spine counselling notes (Spine module only) See Spine chapter for these details

These fields are displayed by clicking on the small windows on the relevant screens, next to their titles.



Note: The following abbreviations head the columns

HG = Hip General      HA = Hip Arthroplasty  
 KG = Knee General      KA = Knee Arthroplasty  
 SH = Shoulder      GS = General  
 EH = Elbow/Hand      FA = Foot/Ankle      SP = Spine



## PERMISSION TO ACCESS

Only users who were set up with permission to maintain the setup files will be able to add or modify anything on these lists. In a multi-centre site, it is a good idea to restrict access to only experienced users to avoid duplication of terms.

## KEYWORDS

Keywords are used when you want to highlight an event or something of interest that happened with a specific patient or surgery, and you want to recall it later. The term or field you want is not included in the main database, so you need to add your own. Socrates has provided you with Patient Keywords, General Keywords, and Image Keywords. If what you want to add may have some statistical significance, use the Custom Fields or Evaluation to set it up and record it, rather than use a keyword.

**Patient Keywords** relate to the patient as an *individual*, rather than to a specific surgery. Examples of events or terms that would be appropriate to label as Patient Keywords are in the next example. They are normally selected for all modules as they are relevant to the patient overall regardless of what surgery they are having.

These are located on the patient's demographic screen on the 2<sup>nd</sup> tab.

**Surgery Keywords** relate to something you want to capture regarding *a specific surgery*. Examples of events or terms that would be appropriate to label as Surgery Keywords include:

Procedures	Sport	Images/X-Rays	Diagnosis Codes	Procedure Codes					
Patient Keywords	Surgery Keywords	Comorbidities	Complications	Diagnoses					
Keyword	HG	HA	KG	KA	SH	GN	EH	FA	SP
Difficult hamstring harvest			X						
Must recall			X						
Technically challenging op	X	X	X	X	X				

Some may be relevant to all modules, some only to specific modules.

These are located on the history, surgery and complications screens for each module.



**Image/X-ray Keywords** - Images in Socrates are automatically attached to a patient's record and all the fields that are associated with it. However, you may want to add some additional information about a specific image you have imported by attaching an **Image Keyword**. For example:

- Broken hardware (Use this label to flag all images with hardware breakages.)
- Autolysis (The patient's record has recorded "Autolysis" as a Complication, and has many X-rays in his record, but only one shows autolysis. Therefore, an Image Keyword can be set up and attached to this specific image so it can be retrieved.)
- Fixation failure or Graft delamination. You want to be able to easily recall all the surgeries where the X-rays show these features.

Patient Keywords		Surgery Keywords		Comorbidities		Complications		Diagnoses						
Procedures		Sport		Images/X-Rays		Diagnosis Codes		Procedure Codes						
Keyword						HG	HA	KG	KA	SH	GN	EH	FA	SP
Broken hardware						X	X	X	X	X	X	X	X	
Osteolysis						X	X	X	X	X	X	X	X	
Presentation Xray						X	X	X	X	X	X	X	X	

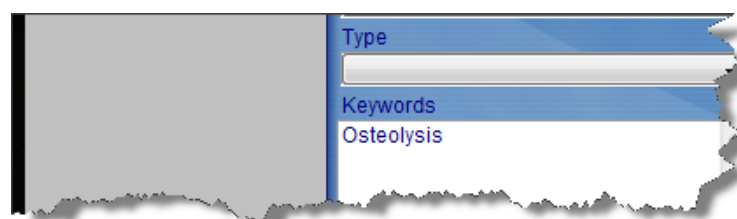
Field attributes

Presentation Xr

☐ This field is in

☐ Add to all mo

These are located on the image import screen inside the surgery screen.

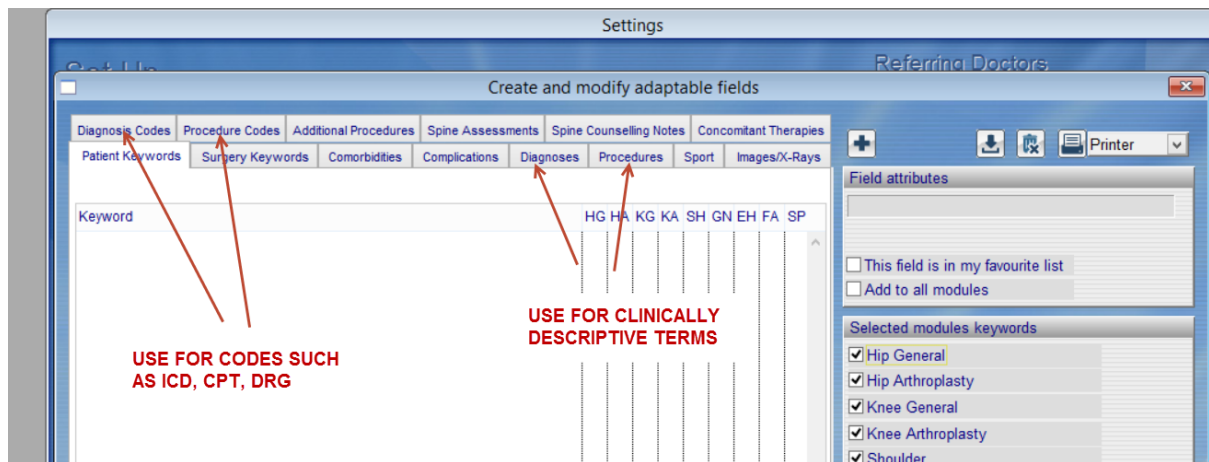


## PROCEDURE AND DIAGNOSIS

There are 2 ways these can be recorded.

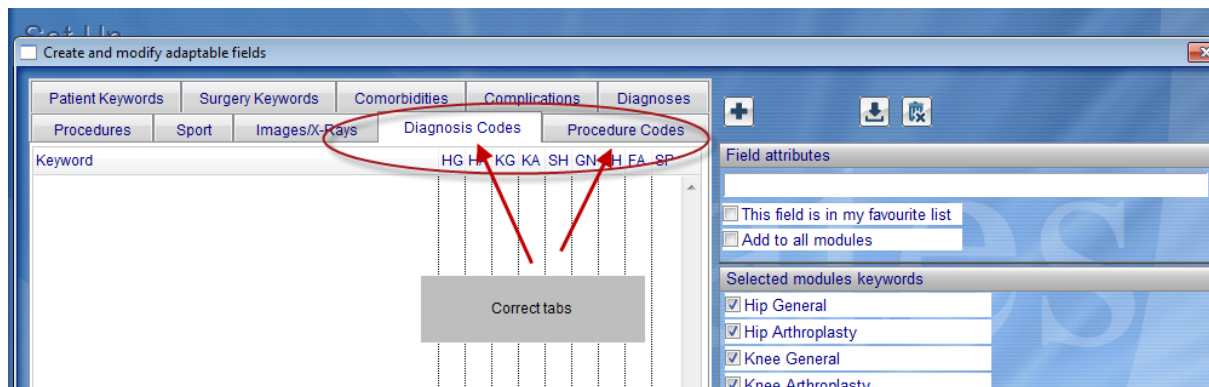
The Diagnosis and Procedure Name tabs are for **clinically descriptive** terms, and can be added and modified for whatever the user wants. The Diagnosis and Procedure **Codes** tabs are to enable users to import standard lists of codes which are relevant to their regions. In the USA they could be used for CPT or ICD9/10 codes, in New Zealand for ACC codes, in Australia for Medicare Item numbers, in the UK for NHS billing codes, DRG codes etc.

In some cases only the clinical names will be used, others only the codes, and others both will be used. It's not uncommon for the codes used for billing to be different from the actual procedure name, or the billing or ICD code simply isn't descriptive enough to describe what was done for research purposes.

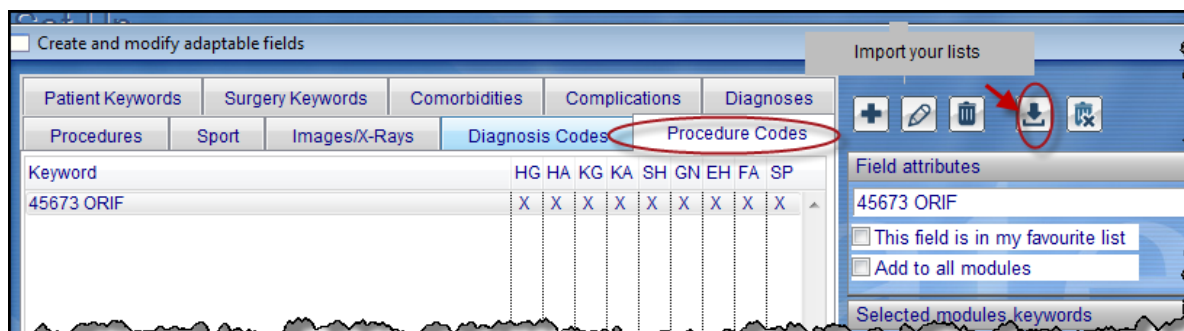


## Procedure and Diagnosis Codes

Don't muddle them with the other Diagnosis and Procedure tabs.

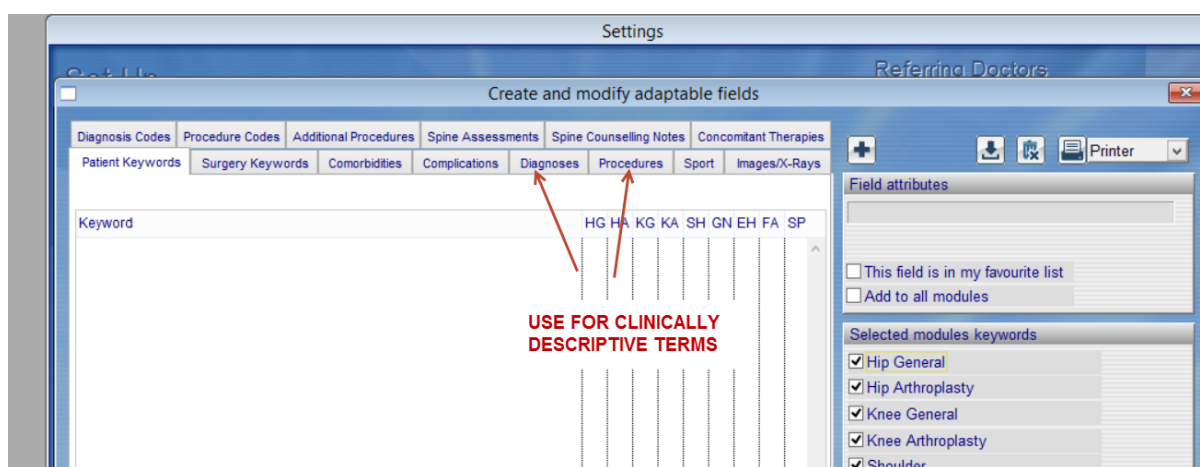


The fields are not pre populated to allow the users the option of importing the codes that they want to use that are relevant for their region. You are limited to 61 letters or numbers which includes spaces for these lists. See later in this chapter for how to import your lists.



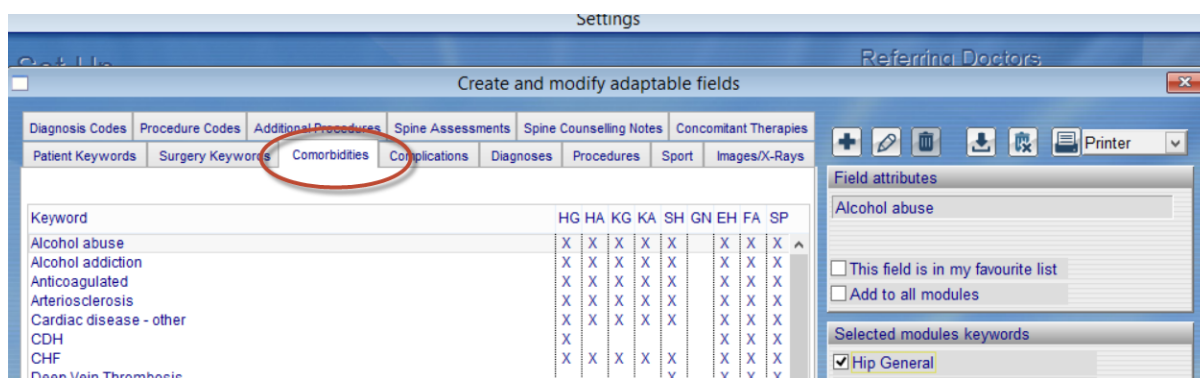
## Procedure and Diagnosis Names

These allow users to add their own clinically descriptive terms for procedures and diagnoses. The default list can be deleted, modified and added to by users with the correct privileges.



## COMORBIDITIES

Create your list of comorbidities.



There is a section to record comorbidities and their significance, this is located on the surgeon examination/FUP and complications screen on all modules. It's important to record if there were comorbidities present, since this obviously can have an effect on the outcome. All patients are not the same, they or the insurance companies may not realise this and if users don't record this information, they may not be able to explain some outcomes which were adversely affected by the patient's other conditions.



Length of stay  days ☐ Day only Discharged To:

**Exam, F/Up, Complications** Radiology F/U

SF-36 SF-12 HOOS WOMAC VAS Pain (1) UCLA Activity (1) Pat Satis+VAS

The screen allows users to record what the comorbidities were, whether they were significant, and over time, if they deteriorate, this can also be checked to allow the user to search for this subgroup.

History & Comorbidities Examination and symptoms Complications & outcome Additional Procedures/Surgeries

Previous surgical treatment

Previous surgeries  # of previous surgeries

Previous op done by

Locations/type

Comorbidities

Significant Comorbidities

Comorbidities

Charlson Comorbidity index

History & Comorbidities Examination and symptoms Complications & outcome Additional Procedures/Surgeries

Previous surgical treatment

Previous surgeries  # of previous surgeries

Previous op done by

Locations/type

Comorbidities

Significant Comorbidities

Comorbidities

☐ Deteriorated/changed since last review

The master list can be modified and added to in the Set up screen.

Procedures	Sport	Images/X-Rays	Diagnosis Codes	Procedure Codes
Patient Keywords	Surgery Keywords	Comorbidities	Complications	Diagnoses
Keyword		HG HA KG KA SH GN EH FA SP		
Sad person		X X X X X X X X		
Alcohol abuse		X X X X X		
Alcohol addiction		X X X X X		
Anticoagulated		X X X X X		
Arteriosclerosis		X X X X X		
Cardiac disease - other		X X X X X		
CDH		X		
CHF		X X X X X		
Deep Vein Thrombosis		X X X X X		
Diabetes		X X X X X		

**Spine Module users** – you will note that there is a set list of these in your module but you also have the option of using this additional list, as above, that you can create and modify yourself.

Standard lists included in Spine Module

Latest FUP 01/11/2011 DOS

Evaluation date 18/11/2012 F/U 12m Method of completion

Comorbidities & Biochemistry History-PreOp Examination-PreOp Assessments Recommendations Complications &

Comorbidities

☐ Significant Comorbidities

☐ Deteriorated/changed since last review

Mental Health

Neurological

Cardio/Pulmonary/Vascular

GI/GU

Musculoskeletal

Infection/Immune

Systemic

Other Comorbidities

Charlson Comorbidity index

Charlson

Mental Health

☐ Alcohol abuse

☐ Alcohol Addiction/Dependence

☐ Substance Abuse

☐ Narcotic Dependence

☐ Narcotic Abuse

☐ Drug Seeking Behavior

☐ Depression

☐ Anxiety

☐ Schizophrenia

☐ PTSD

☐ Insomnia

☐ Mental Illness

☐ Personality Disorder

☐ Prior Suicide Attempt

Add your own here

## COMPLICATIONS

Complications are entered in the Surgeon Examination, Follow Up and Complications screen. The list can be modified and added to in the Set up screen the same as the other adaptable fields. If a complication date is entered, the program will auto populate the intra, early or late check boxes. The "weeks since" will also auto populate if a date is entered. They can also be entered manually as just the weeks.

Note that the date of complication may not be the same as the date of the visit, which is why there is a separate date.

Complications and outcome status

Evaluation date 23/02/2009 F/U 6y Method of completion Name Next visit

Complications and outcome status Knee Examination & Symptoms IKDC Score-Index

Complications

Complication occurrence Yes ☐ Intra op ☐ Early ☐ Late

< 6 weeks => 6 weeks

Date weeks

Complications Deep Vein Thrombosis

Reoperation Date weeks since op

Revision Date weeks since op

Outcome

Patient Status Ongoing ☐ No further Follow up

☐ Patient is deceased Date of death

Keywords/Notes

Keywords



Complications Outcome/Keywords

Complication occurrence: Yes

Check if Co date = Eval

2012 55 weeks

Reoperation Date weeks since op

Revision Date weeks since op

Complication Details:

Procedure Related: Implant Failure - Rod Breakage

Spinal Injury

Extra-Spinal Injury

Systemic: Infection - Urinary Tract Infection

General/ Miscellaneous

Other complications: Add your own here

## ADDING OR CHANGING ADAPTABLE FIELDS

When you are adding or modifying, ALL the lists will be displayed for each module. But when you are in each module, only those that you have selected for that module will be visible on the list.

Assuming you selected the default "include adaptable fields" option when you set up your own data file, you will already have lists of certain complications, comorbidities, diagnoses, etc. for some modules. To add to these lists, (or to begin a new list if yours is blank), select the tab you want to add to, then click on the **Add icon** (blue cross). You need to then choose which of the modules you want to add this to. They are all visible on this main list, but inside the module, only those which are selected for that module will be visible.

Procedures Sport Images/X-Rays Diagnosis Codes Procedure Codes

Patient Keywords Surgery Keywords Comorbidities Complications Diagnoses

Keyword: HG HA KG KA SH GN EH FA SP

Field

Your cursor appears in the field attribute line. Enter the term you want to add, then choose the module/s in which you want this term to be displayed, from the list of available modules. Some will be applicable to all of the modules, but many will be for specific modules. In the following example, "Lawyer" is added to the Patient Keyword list, and before saving, the "Add to All Modules" option was clicked. Then, either use the **<Enter>** key, or click on the **blue tick** to save.

Create and modify adaptable fields

Diagnoses Procedures Sport Images/X-Rays

Patient Keywords General Keywords Comorbidities Complications

Keyword: HG HA KG KA SH GS EW FA

Blind X X X X X

Hearing impaired X X X X X

Lawyer X X X X X

Field attributes

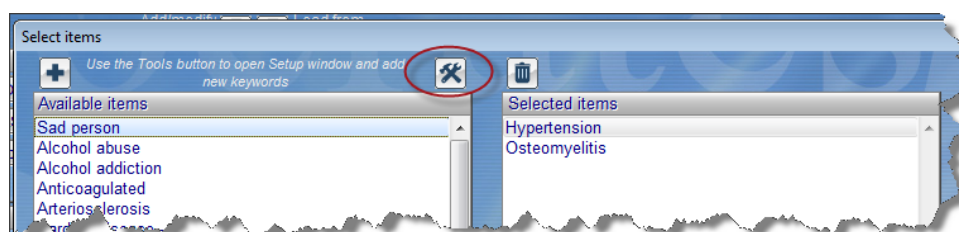
Lawyer

This field is in my favourite list

Add to all modules

Selected modules keywords

## Shortcut to Adaptable fields

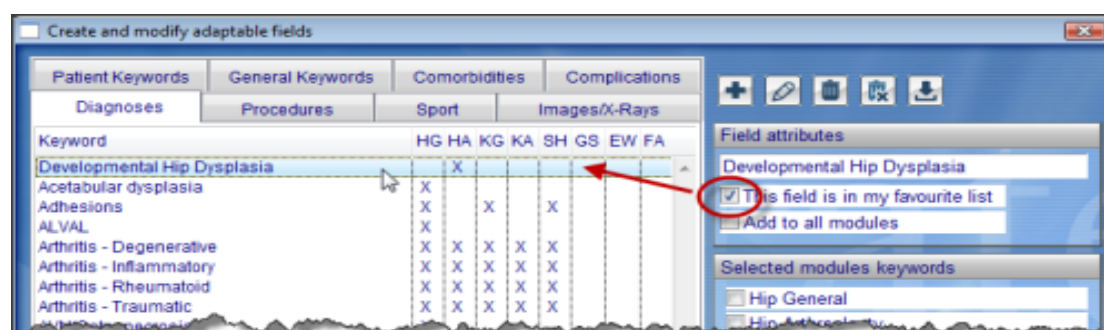


If you are in the screen where these lists appear and the term you want isn't on the list, instead of closing the screen and going back to the Set-Up screen to add a new one, you can take a short cut. Select the **Tools icon** at the top right of the list of available terms, which will take you *directly* to the *Set-Up* screen to add or modify a term. When you have saved the change, you will be automatically returned to the screen you were in.

## PRIORITISING/ADDING FAVOURITES TO ADAPTABLE FIELDS

The terms on the keywords lists are alphabetised by default, but quite a few of the terms may be rarely used by individual surgeons. Additionally, you probably have a few procedures that are more commonly used. Therefore, to save you time when scrolling down the whole list, it is possible to select the terms you use most often, and assign them a "favourite" tag, thereby moving them to the top of the alphabetised lists.

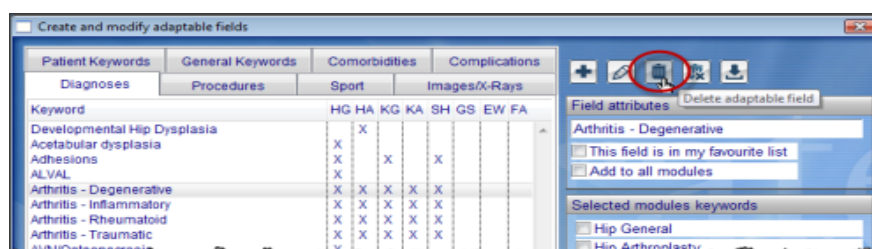
To give an existing field a "favourite" status, highlight the word or phrase, then click on the **Modify icon**; check the "This field is in my favourite list" option, and click **OK** or **<Enter>**. To save a *new* entry as a favourite, just check the "This field is in my favourite list" before you save it.



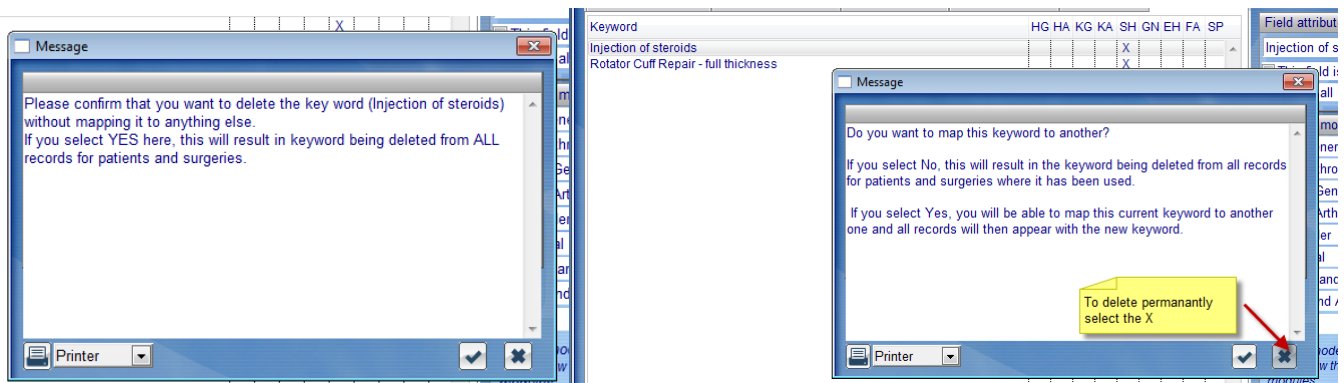
## DELETING/MODIFYING ADAPTABLE FIELDS

### Deleting Adaptable Fields

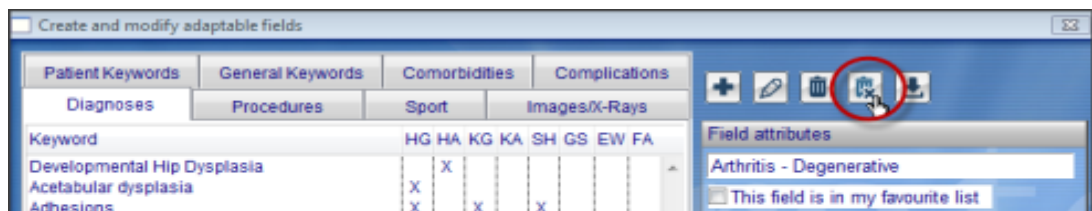
If you want to delete a keyword from a list, simply select the item by highlighting it, and click on the **Delete icon** which doesn't have the little cross at the bottom. This is only possible if you are an administrator.



You will receive a message asking if you want to map it to another (see further down this page). If you really do want to delete it altogether, select NO, the X icon. After another prompt asking if you are sure, then the keyword will be deleted from the set up screen and from **all records**.



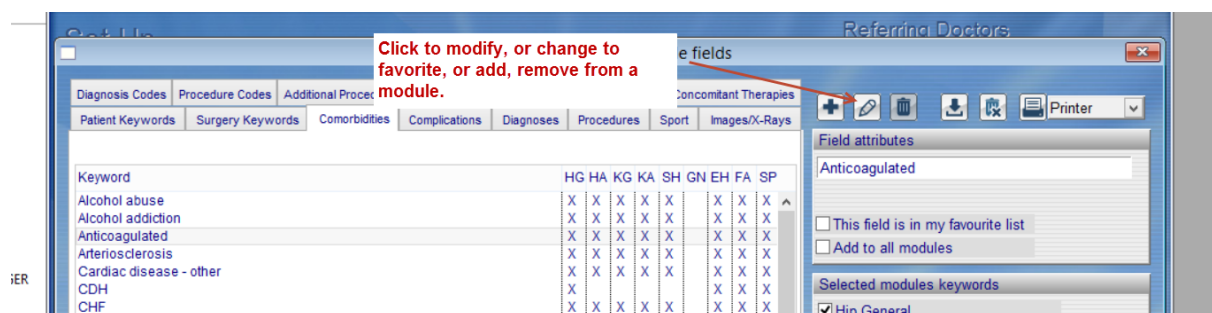
If you want to delete the **entire list** and enter your own list, select the **Delete icon** with the **X** on it, and all entries will be deleted from within that tab (e.g. from the Diagnoses tab). You should only do this when you are first starting out if you don't want to use any of the default ones. Once you have any records assigned to any keyword, unless you map them to another, once they are deleted the keywords in the patient records will also be deleted.



**BE CAREFUL DOING THIS!!!!!!** If you delete a keyword all records which have that keyword will have it removed from those records also. **There is no UNDO.**

## Modifying Adaptable Fields

To make changes to a keyword or *remove it from just one module (as opposed to deleting it completely, as above)*, highlight the pertinent keyword, and then click on the **Modify icon**. Make the change you want in the Field Attributes field, then select the tick/check to save the change. To add or remove it from a module check or un-check the module that you want to remove it from then click the **blue tick** to save. The keyword will no longer appear on that list for that module. It isn't currently possible to remove keywords from individual modules in bulk; you need to do this one word at a time.



## "Mapping" or Transferring Adaptable Fields

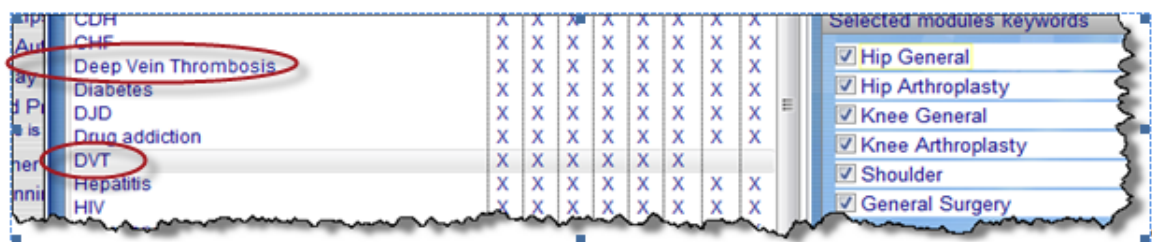
Due to the customisation possible with Socrates, you may find over time (you may add other users, or when you combine your files with those of other surgeons), that some of the Adaptable Fields are the same, but are listed slightly differently, e.g. DVT and Deep Vein Thrombosis. It's possible to "map" one Adaptable Field keyword and the records it has been assigned to the other keyword. This process would change the name of the keyword and **ALL** records with DVT to now read Deep Vein Thrombosis - the surgery records with DVT previously would now be present as Deep Vein Thrombosis.

This function is activated when you select the **Delete** option by clicking on the rubbish bin/trash icon without the x on it in the Adaptable Fields screens. You will see this message. If you just want it deleted entirely, click the X.

You will get another "are you sure" message, then it will be gone from there AND **deleted from any records where it might have been entered.**

If you selected the Yes, tick to the 'Do you want to map this keyword to another', you will then be able to map the selected field to another.

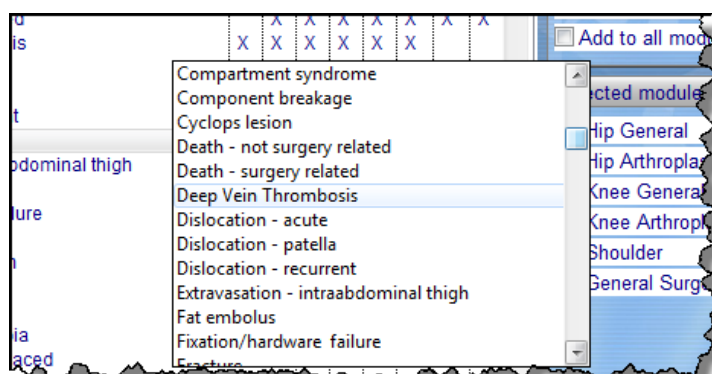
In the example below, you want to *map* all the records from DVT to Deep Vein Thrombosis, as they are the same term, and then delete the DVT field.



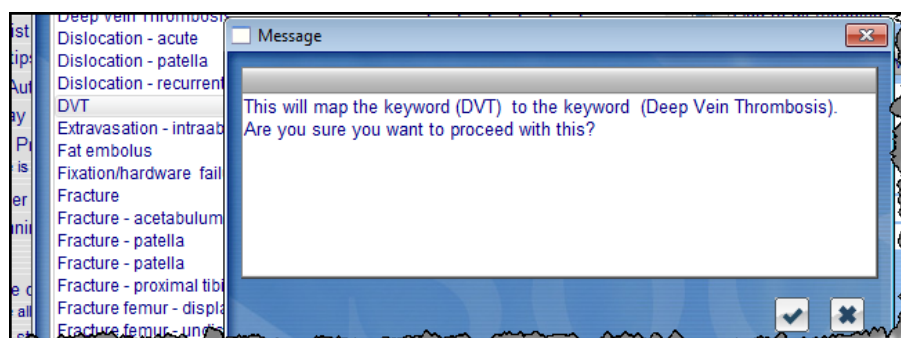
Highlight the term you want to delete or transfer (map) to another, then select the **delete** icon; you will get the message – do you want to delete or map. Select the tick.

You will then have the option of *mapping* this keyword to another – this action will take all the records that have the field you selected to delete, and map (transfer) them to another keyword field. In the example, Socrates will change all surgeries that had 'DVT' recorded against them to show 'Deep Vein Thrombosis' instead.

If you selected the **tick icon** (Yes, you want to map it to another), you will be shown the list of keywords to enable you to select the one you want to map this one to. Highlight the keyword you want and double-click it.



We'll ask you again to confirm that you have selected the *correct* keyword to which to map the previous terms. If you make a mistake here, you could end up with all your DVTs being mapped to Fixation Failures!



If you made a mistake, don't panic; just select the X icon, and start again. If you've got it right, select the **tick icon**. Once you have done this, all the surgeries with DVT will now show as Deep Vein Thrombosis.

If you aren't sure about this, why not add a couple of new dummy keywords, and have a practice. It won't matter if you get rid of them by accident.

Now, let's look at what you just did. Mr Browning had a complication of a DVT – see below. You decide that you'll remove this keyword, since it's the same as Deep Vein Thrombosis, but you want *all the surgeries that were noted to have a DVT* now to show up as Deep Vein Thrombosis. Follow the instruction above and map all the DVTs to Deep Vein Thrombosis.

Patient name: BROWNING Andrew    Injury:    Module: Hip General  
 Patient ID:    Exam:    Side: Right    ☐ Bilateral  
 Latest record: 01/01/2006    DOS:    Surgery: 01/01/2006    Protocol: Standard Athlete fup  
 F/U: 27m    Reviewer: Operating Dr    Name:    Next visit:   

**Complications**  
 Complication occurrence: Yes  
 Date: 03/06/2008    126 weeks  
 Complications: DVT

Now, let's look at a record = Mr Browning's History screen, the previous example shows that he had a DVT and we see he now has *Deep Vein Thrombosis* instead of a DVT after we mapped it to this.

Patient name: BROWNING Andrew    Injury:    Module: Hip General  
 Patient ID:    Exam:    Side: Right    ☐ Bilateral  
 Latest record: 04/04/2008    27m    Surgery: 01/01/2006    Protocol: Standard Athlete fup  
 F/U: 27m    Reviewer: Operating Dr    Name:    Next visit:   

**Complications**  
 Complication occurrence: Yes  
 Date: 03/06/2008    126 weeks  
 Complications: Deep Vein Thrombosis

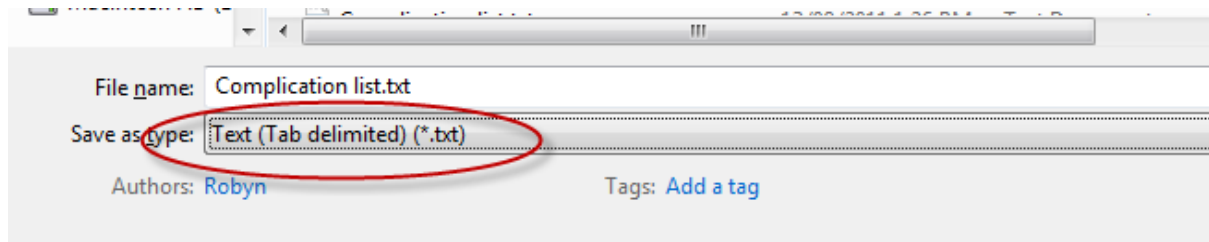
## IMPORTING LISTS OF ADAPTABLE FIELDS/KEYWORDS

Lists of keywords, whether in text or numerical format, and other lists, can be imported from other sources. Examples include CPT, ICD, or DRG codes (depending on your country), or other codes or names your system may use to identify diagnosis, procedure name, etc. It is possible to have lists containing both numbers and text, and on the Surgery screens, it is possible to select more than one for a particular surgery.

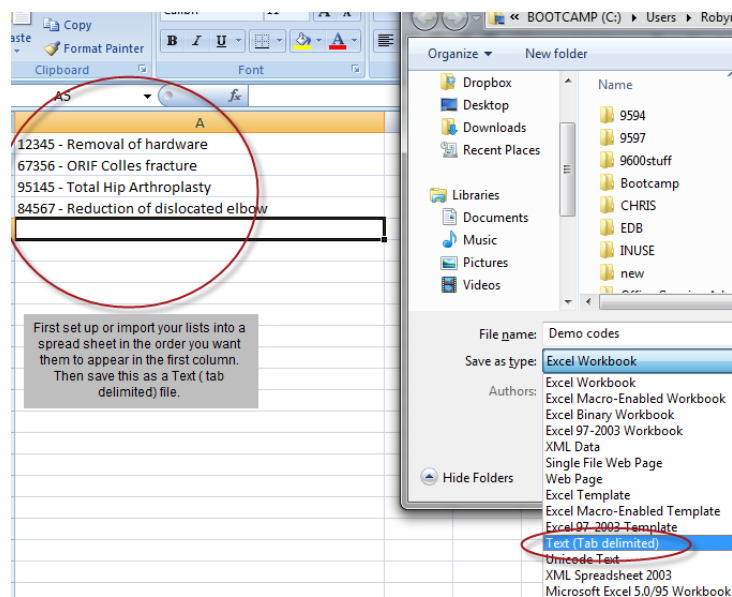
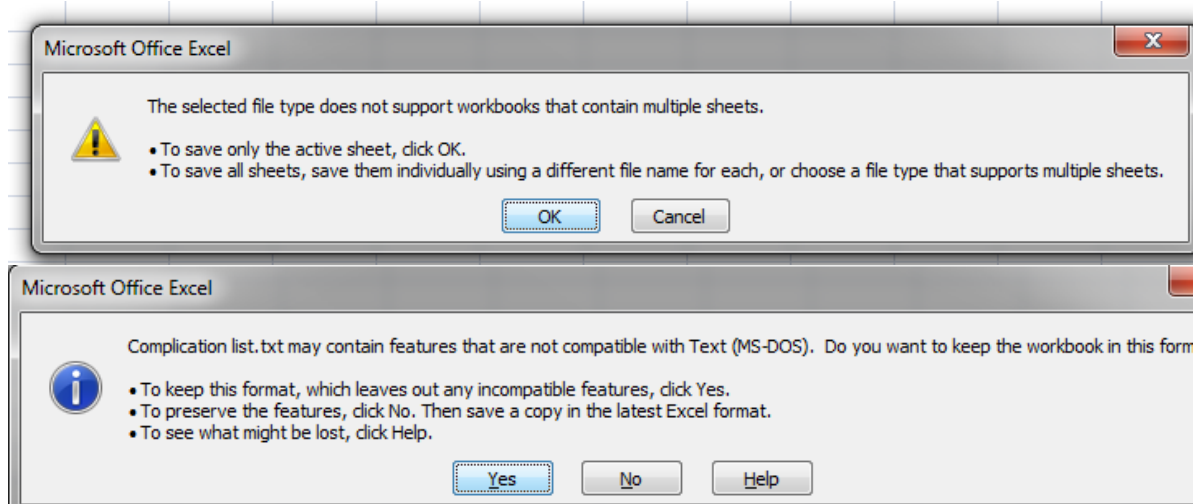
In order to import text as a list, make sure the original file you are importing from is saved in "delimited-text" format, (a .txt file). If the original list is in Excel, make sure it starts in Row 1/Column A, and then save it as a text (tab-delimited) file. No heading should be on the spreadsheet. If it finds anything on your new list that is already there it will not import it, as long as it is exactly the same.

"What's a text (tab-delimited) file? Simply use the 'Save As' option when you save the excel file, and choose the Text (tab delimited \*.txt) option from the 'Save As' Type pull-down menu.

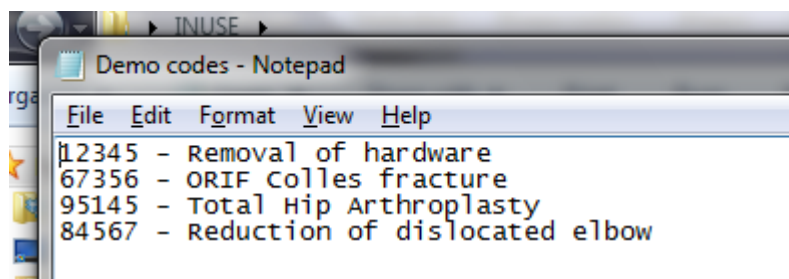




You will see the following Excel warning messages, just click OK.



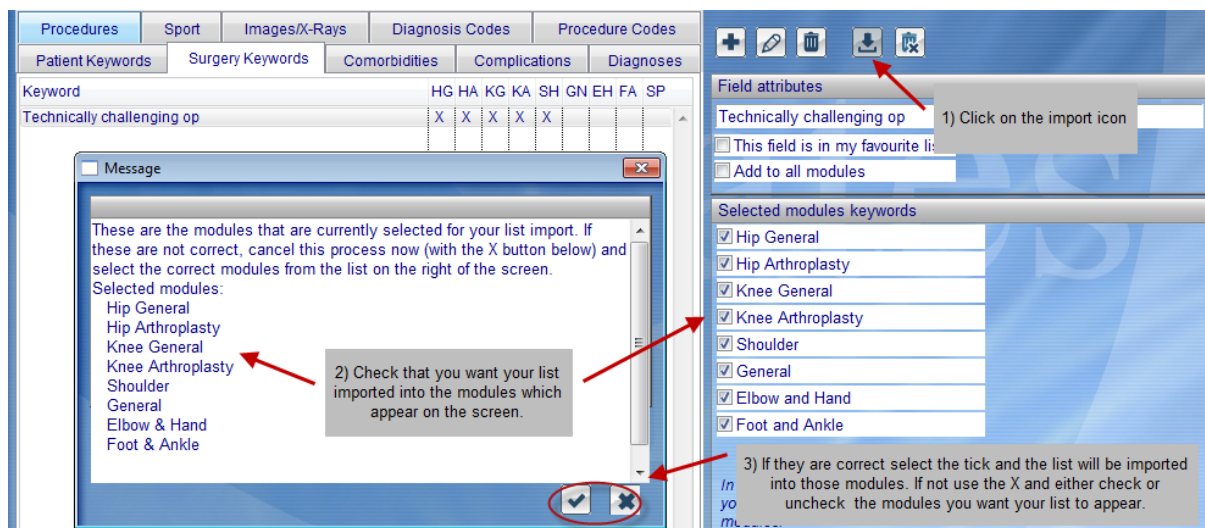
This is what they will look like on the text file once you have saved it



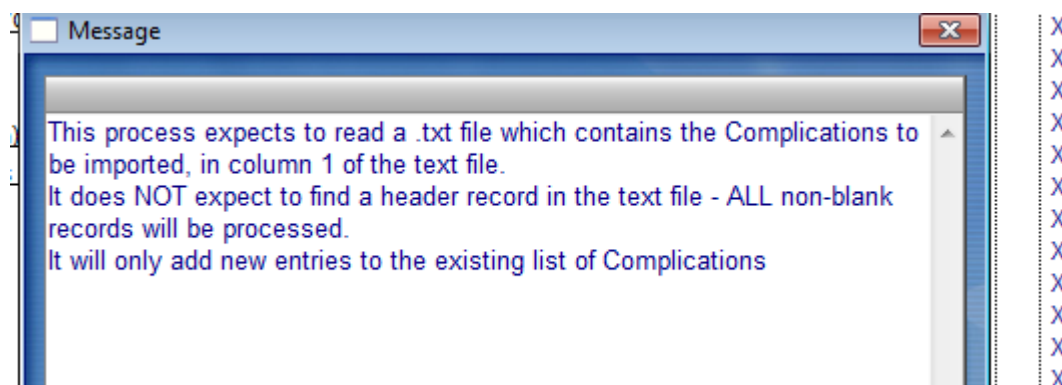


**IMPORTANT:** Make sure you have selected the correct list to import from and into (Complications, Diagnosis, etc.), and that you have then selected only the modules you want the list imported into (Hip General, Hip Arthroplasty, Knee General, etc.).

Now you have the list you want to import and have saved it to a location on your computer, click on the **"Import Adaptable Field"** icon on the right side of the rubbish bin icon in the 'Create and Modify Adaptable Fields' window. You will be prompted to make sure you have selected the correct module – you don't want all your Spine CPT codes in the Hip module.



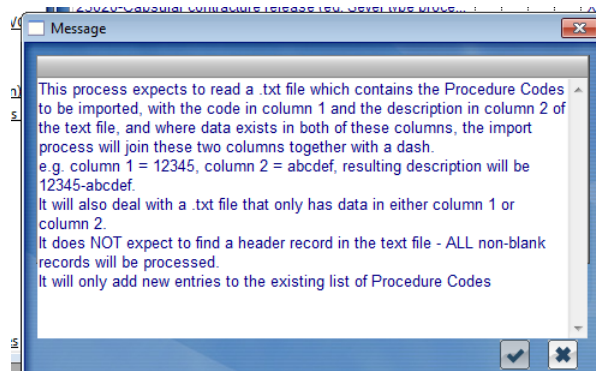
Once you are sure you've got the correct module/s selected, browse to where your .txt file with the list you want to import is. Double check that it's the right one, then select the import icon. Firstly you will see the message below asking if you are sure that you want your list to be imported into the modules displayed. Select the tick if you are. Then you will see this message.



Once you are sure that you have selected the correct list, and you are in the correct tab, and have selected the correct modules you want it imported into, select the tick and in a few seconds all the fields from your text list will now be in this list in Socrates. If you've mucked it up you can select delete all and do it again (assuming that there were no fields already on the list before that you need or have used in patient records.) If there were and you have imported the wrong list you would need to delete them all individually. This can be very tedious so take care that you select the right list, for the right module.

## Importing Procedure and Diagnosis codes.

The procedure is exactly the same but there is a difference in the format of the list these will import from. Many of the codes are available in spreadsheets with 2 columns, one for the number, and the next for the description. You can import from a list with data in either one or two 2 columns for these lists. You will see this message – proceed in the same way as the normal import process already described.

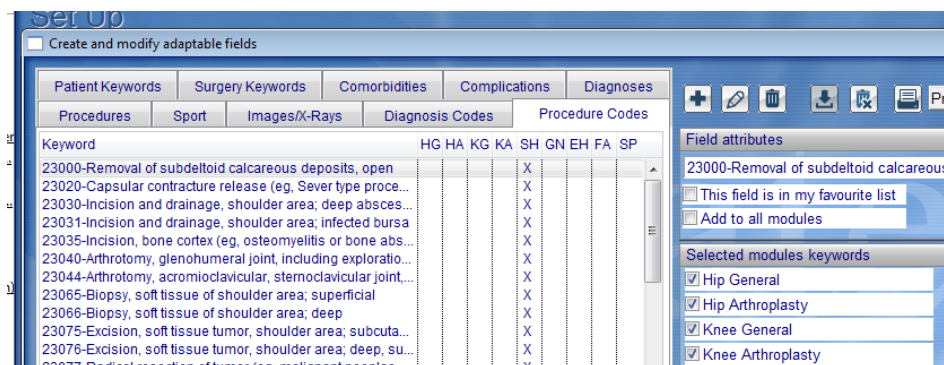


This is an example of a list that was imported from a 2 column list.

A	B	C
29820	Arthroscopy, shoulder, surgical; synovectomy, partial	
29821	Arthroscopy, shoulder, surgical; synovectomy, complete	
29822	Arthroscopy, shoulder, surgical; debridement, limited	
29823	Arthroscopy, shoulder, surgical; debridement, extensive	
29824	Arthroscopy, shoulder, surgical; distal claviclectomy including distal articular surface (Mumford procedure)	
29825	Arthroscopy, shoulder, surgical; with lysis and resection of adhesions, with or without manipulation	

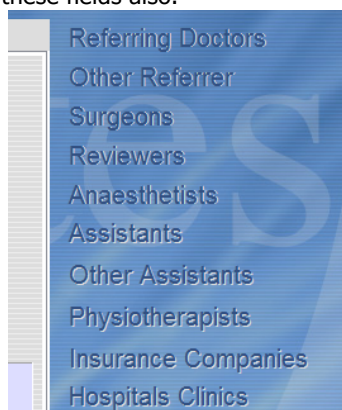
Data is in both column A and B

It imports as below into the one list.



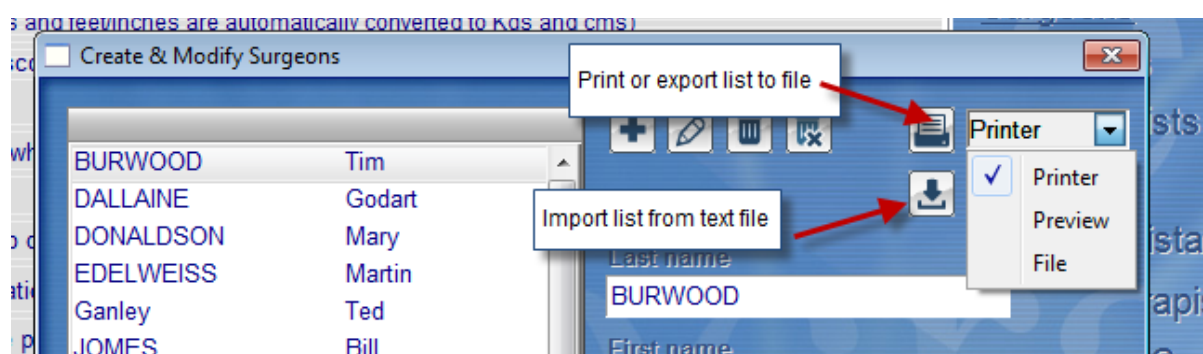
## Importing or Exporting lists of surgeons, assistants, referring Dr's etc.

Data can be imported or exported from these fields also.



To export, select File from the drop down list next to the printer icon, and click on the Printer icon to run the export. This process will prompt you for the location of the file to be output and its name. The file will always be output as a .txt file.

Once it has been output, open the file in an excel format making sure that you choose Open All formats, then click on Finish to transform it into an excel list. (The drop down list also has the option of Print, and print preview for printing or reviewing the list, but to export to excel, you must always select File).



## PRINTING/SAVING THE LISTS

Select from the list of options on the right of the printer icon. If you are printing adaptable fields, also ensure that you have the correct field type and modules selected. i.e. if you only want Shoulder Surgery Keywords, click on the Surgery Keywords tab, and only tick Shoulder in the module list, before you click on the Report icon. If you print to file, it will export as a .txt file, you will need to open excel using "open ALL files" then click Finish to save it as an excel file.

