

# SOPHIEs made easy: Part 2



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Welcome to the second instalment of this beginner's guide to the SOPHIE Graphical Editor.

Don't forget that this whole series is intended to be a step-by-step approach to everything required to build your own guidelines, so if you're completely new to SOPHIE then it would make sense to get hold of a copy of the previous edition of Torus (or download it from the web site) and start at the very beginning.

This time we shall start to explore the construction of the questions<sup>1</sup>, or building blocks, which go to make up a guideline and the ways they can be used in particular situations.

So what are these 'questions' all about? Essentially they are a series of building blocks which can be put together in as simple or complex a fashion as you like, to assemble your own guidelines. One of the best ways of looking at it is to think of the analogy between amino-acids and proteins, if the clinicians can think back to their biochemistry days! Amino-acids are fairly straightforward chemicals, but when assembled into giant proteins they take on a much powerful role in the way the body functions. It's quite a good analogy for another reason—there are just over a dozen or so basic SOPHIE questions to learn, and that's of roughly the same order as the number of amino-acids in human proteins!

The various types of questions used in SOPHIE are the ones listed on the palette, which we played around with during the last article. These questions fall into four distinct types, and it is important to understand what these categories of questions are designed to do, to avoid later mistakes at the design stage in creating your own guidelines.

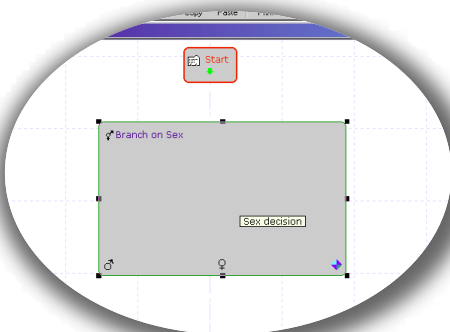
- **Database questions.** These require no input from the user: a database question asks the software to look into the electronic patient record and to retrieve some element of the patient's registration or clinical details.
- **Information questions.** This type of question also requires no input from the user. It simply gives a point of information to the user, and is often used to forewarn the practitioner about what he or she can expect from the next section of the guideline.
- **Patient questions.** This does require

input from the user, usually as a result of information gleaned from the patient during the history or examination.

- **Function questions.** This most recent addition to the SOPHIE engine allows the user to fire up another software application from within the SOPHIE guideline.

All we've done so far is to group the SOPHIE questions into four broad categories. Now it's time to look in detail at the questions which make up those categories and the ways they can be used in constructing your own guidelines.

We're going to start by looking at SEX, the first of the database questions. It's easy to find on the palette because that's exactly what it says on the label! Just left-click with your mouse on the sex icon, and then left-click again with your mouse to place the cursor on the blank drawing board. Holding down the left button of your mouse, drag the mouse down and to the right, to open up the question 'box'. If you've done it correctly you'll see something like this:



OK, so what can you actually use this for? What it does is refer back to the patient record to determine the patient's sex. This gives the guideline designer the chance to omit questions which are unnecessary for patients of a particular gender: obvious examples are those relating to cervical smears (which are often part of the construction of new patient screening guidelines). Not only is it inappropriate to ask a man about cervical smears, but unnecessary on-screen questions like this irritate the user. As we shall see in a later article, during the design stage of our guideline, user irritation is something to be avoided at all costs! At best it leads to an unhappy user, and at worst the practitioner will avoid using the guideline completely because he can anticipate the unhappiness it will cause him!

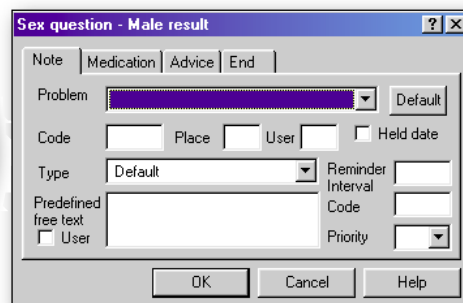
Back to our example. Try double-clicking on the line at top of the SEX question box, where it says 'Branch on Sex'. The Editor confirms that there are no properties to edit for this type of question because the gender identification will happen automatically during the running of the guideline.

A word of warning: on every patient database, in every practice, there are at least one or two patients whose gender is not recorded, and where the Sex

field in the record is either blank, or contains the letter 'U' (for 'Unknown'). This usually happens as a hangover from the days of patient record downloads from the old FPCs. If you run a SOPHIE containing a SEX question on a patient whose gender is unknown then the SOPHIE will abort suddenly. It doesn't often happen, but if a SOPHIE aborts unexpectedly then this is one place to start looking for possible causes.

At the bottom of the SEX question box are three small icons which denote—left to right—the path taken if the patient is male, the path taken if the patient is female, and the path taken whatever the gender of the patient. Hang on a minute, I hear you ask, what is the point of the question if you have the possibility of the same answer whatever the sex of the patient? All will be revealed in the fullness of time!

Try double clicking on the 'Male' icon at the bottom left hand corner of the SEX question box. You'll find that you've opened up quite a complicated looking box with four tabs at the top, labelled Note, Medication, Advice and End:



You get this same view when you configure the way out for any of the questions, so we're going to spend some time getting to grips with it. Don't worry: although there are four tabs (Note, Medication, Advice and Exit) and the fields themselves look quite complicated, you don't have to fill them all in for every question. Basically they all boil down to the fact that when you exit any question you have the option of adding a note, adding some medication, adding a note to the Patient Advice Sheet, or ending the guideline at this point: you can also make multiple combinations of these choices.

## The Note tab

This is the bit which determines whether or not you add a note to the patient record.

- The first field allows you to choose the **Problem Heading** to which you will add the note. When you click the down arrow to the right of this box you get a problem list appearing, which is determined by the one-or-

<sup>1</sup> There's room for confusion here. Strictly speaking, these are really all 'question blanks'—in other words, structures that support an actual question which will be added in later, rather than what we conventionally think of as a question in its own right. Unfortunately, these 'question blanks' have always been referred to as 'questions'.

more headings you listed in your Start Box options (see Part 1 of this article). Open up the list and click to highlight the desired heading. Clicking on the Default button to the right of the Problem box uses the default problem heading for that note<sup>1</sup>.

- In the **Code** field you need to enter the Read code of the note you want to enter. This might be a 4-byte or 5-byte Read code depending on which type your system runs, but the code must always be padded out to the full 5 characters no matter which system you use. Unlike some areas of System 5 and System 6000 there doesn't need to be a full stop in front of the Read code, but if you plan to use a chapter heading for your code then you do need to put in the requisite number of trailing full stops to make up the difference. For instance, if you want to add the code G31 for hypertension, then you would need to type G31. in the box to make it up to five characters for a 5-byte system. Don't forget that, as you're using an application which is isolated from your clinical system to compile this guideline, the SOPHIE editor has no means of knowing whether the code you are entering exists on your system, so it's a good idea to jot down the codes you want to use from your system in advance of sitting down with SOPHIE.
- The next two fields are for System 5 users only and both are entirely optional: they allow you to determine the **Place Code** and the **User code** which might be tagged to the code you want to add on the patient record. For instance, many System 5 users have the Place Code COD on their system to denote cause of

death, and since a number of practices use SOPHIE to check the administration details at the time of death this would be one practical occasion for using the Place Code constructively.

You only need to enter initials in the User field if you want the code to appear in the record tagged with someone else's initials. If a receptionist is running the guideline, for instance, and wants the record to be tagged with a clinician's initials, for audit purposes, then this is the place to determine what happens.

You have a choice of the date to be tagged to the note at this point. Doing nothing will mean the note is entered as today's date; by clicking on the 'Held date' box you will tag the note with the date as determined by the last DATE question you entered. Confused? No need to be: we will be coming back to this very point in the next issue, when we move on to tackle the intricacies of the DATE question.

- The **Type** field is again for System 5 users and is once again optional: you can either accept the default note type for the note you are about to add, or you can change it for one of the other categories.
- The **reminder interval** is also optional. Simply enter, say, 3W or 5Y in this field, which will tag the code with a 3 week or 5 year recall in System 5, or generate the equivalent reminder line in System 6000. The Code field below the Reminder Interval has to be used by System 6000 users to enter the appropriate Reminder Read code.
- System 6000 users can also play with the drop-down list in the Priority

field, which generates a number of shrieks (!) from 1 to 4, to alert users to the reminder. The original design specification suggested a much more exciting use for this Priority Level, where one ! was the basic level, while !!!! meant that the reminder was viewable by any user on booting up their system. Sadly this great idea has yet to reach the implementation stage

- Once the code is auto-generated by this part of the SOPHIE then it is possible for free text to be added using (you guessed it) the 'Free Text' field. You can either put some 'set' free text in the field to make sure it is added to the code every time the SOPHIE guideline is run, or you can leave the Free Text field blank and click the 'User' box. This will give the user the chance to add (different) free text of his own every time the guideline is run.

So that's the Note tab. Phew! Only another three tabs to go. Don't worry: once the main principles have been grasped it's quite straightforward: and don't forget that these tabs are the same for the exit options on any of the other SOPHIE questions, not just the SEX question we started with.

<sup>1</sup> - In **System 6000**, the default problem heading is the problem that was highlighted when SOPHIE was started.

- For a **hooked SOPHIE in System 6000**, it is the problem associated with the note that triggered the SOPHIE.

- In **System 5**, the default problem heading is the first problem in the problem list.

Next time we'll be looking at the other tabs options on the question exits, before moving on to look at the other SOPHIE questions and their uses.

Owing to lack of space, the second article in the 'Comfortable Computing' series has been held over to the March issue of Torus

### Print-head blocked?

The pins on a dot-matrix printer sometimes get glued up with ink, particularly the pins responsible for the descenders of letters, as these pins are used less frequently. You don't need to buy a new print head! Take out the print ribbon, undo the print head and using a fine artist's paintbrush apply some alcohol or meths to the front; then place the print head face down on blotting paper to draw out the alcohol and dissolved ink. Repeat a number of times. Now put the print ribbon back and everything should work normally. (You can use soapy water instead of alcohol.)

### Premiere

Get to Observations by using ALT-M then N—it's much quicker than fumbling for the mouse. So, to prescribe, hit ALT-M N P.

### Graphical SOPHIE Editor

There's a bug in the first version of the Graphical SOPHIE editor. When exporting an MCQ10 the header line looks like this:

```
#1/
$MCQTEN///
You have to edit it using Notepad or similar so it looks like this:
#1/
$MCQ10///
$Q1//
```

### Micro-Doc—fast selection within lists

When accessing any list or directory with Micro-Doc you will get to the desired item on the list more quickly by keying in the first letter of that item. e.g. within 'Adding a Patient History' item, if you wish it to be defined as a 'significant medical event' select 'Groups' then enter 's', and 'Significant Event' will immediately be visible.

### Premiere—Advice Leaflets

'Advice Leaflets' can be used to print a leaflet on the right hand side of a prescription. This can be a private sickness certificate, instructions for getting blood tests, or information to provide to the patient or reception staff. The different sets of advice are configured from Options/Document Templates/Advice Leaflets. The master leaflets can be edited. When issuing a prescription, to print an Advice Leaflet as well, choose the 'book' icon, select the leaflet, edit its content and print the document on finishing the consultation.

### Things not to ask Windows to do, or you may regret it...

Don't try installing a modem or dial-up networking on your workstation without first consulting Torex. It can wreck access to your clinical system.