

## **Quick Guide: How to make your questionnaire go electronic**

If you are new to AnyQuest for Windows and fear getting lost in the manual, this page gives you a practically oriented overview. You may print it as a guideline to editing and applying questionnaires.

You should follow this guide once, and do exactly, what is suggested in it. Hereby you will generate a demonstration questionnaire, and many "How do I..." questions will be answered. Then, you can follow the steps described herein to make your own questionnaires go electronic. However, keep in mind: this is a quick-guide; it remains far from exploiting all features of this software!

### **Well, if you want to make your own questionnaire go electronic with this program, you need the following:**

- A questionnaire, usually printed on paper or as a word-processor file. Preferrably, it contains checkboxes and/or linear analogue scales. I will use a demo questionnaire here.
- A collection of algorithms which are used to score the questionnaire.
- A PC with a suitable input device and a Windows 3.1 or Windows 95 compatible operating system.
- AnyQuest for Windows installed in the default directories.

### **Required time:**

It will probably take you between 45 and 120 minutes to complete all the steps of this guide, depending on your concentration and your computer literacy.

### **Conventions for this guide and further general instructions:**

- You should be familiar with the general use of MS Windows. If not: embark on the MS Windows introduction tour and get a friend for assistance.
- Remember: If any text in input fields is highlighted, it will probably be replaced by the next character you type.
- When I ask you to **ACTIVATE** a menu option, please open the menu and look whether there is a checkmark left of that option. If yes, this option **IS ALREADY** activated, so just close the menu. If no, this option **IS NOT** activated **YET**, so select it. You can open the menu another time to confirm that it is activated thereafter.
- When I ask you to **DEACTIVATE** a menu option, ... vice versa.
- When I ask you to type [Ctrl][Enter], I'd like you to hold down the key labelled "Ctrl" (or "Strg" on German keyboards) and then press the "Enter" (or "Carriage Return"). key.
- When I ask you to type "example", I'd like you to press the keys: [e] [x] [a] [m] [p] [l] [e]. Don't type the quotation marks!
- When I ask you to **Click-Left**, I'd like you to press the primary button of your input device, usually the left mouse-button.
- When I ask you to **Click-Right**, I'd like you to press the secondary button of your input device, usually the right mouse-button.
- Please don't mix up left and right mouse clicks, because then this guide will not work. E.g., if you click left on an object before you click right, it receives a selection frame - and this will make its context menu change.
- I'd suggest you to print this guide and to strike out every single operation you completed. So you won't get mixed up.

### **Here are the suggested steps to make a questionnaire go electronic:**

- Start up AnyQuest for Windows.
- Set up the AnyQuest environment in a way optimal for editing:
  - In the navigation window, click-left on the button "Setup".
  - Select "File" - "Clear all".
  - Activate "Edit" - "Edit layout".

- Activate "Edit" - "Show text rectangle size".
  - Activate "Display" - "Show long questionnaire name".
  - Activate "Display" - "Show short questionnaire name".
  - Activate "Display" - "Show questionnaire number".
  - Activate "Display" - "Show question number".
  - Activate "Display" - "Show numeric and string results of question".
  - Activate "Display" - "Show graphical progress indicator".
- Generate a new questionnaire:
    - Click-Right into main window area to open context menu.
    - Select "Add questionnaire".
    - Click-Right into questionnaire long name (by default:"New questionnaire - long name"..
    - Select "Text".
    - Enter a long questionnaire name, i.e."General Quality of Life Questionnaire 8 Core".
    - Click-Left on "ok".
    - If your long name is too long for the text area: Click-Left on long questionnaire name. Then, drag the right middle handle further right.
    - Click-Right into questionnaire short name (by default:"NewQuireX"..
    - Select "Text".
    - Enter a short (!) but supposedly unique (!) questionnaire name, i.e."GQLQ8C".
    - Click-Left on "ok".
- Prepare a patient introduction screen:
    - Click-Right somewhere into the main window, where there is no questionnaire object.
    - Select "Insert Question". note increased total question count in status display at lower right corner.
    - Click-Right into the red frame of one answer field.
    - Select "Delete".
    - Click-Right into the red frame of the other answer field.
    - Select "Delete".
    - Click-Right onto "New explanation".
    - Select "Clear text".
    - Click-Right onto "New explanation 2".
    - Select "Clear text".
    - Click-Right onto "New question".
    - Select "Text".
    - Enter:"Dear Patient," + [Ctrl][Enter] + [Ctrl][Enter] +  
 "we would like to ask you some questions concerning your quality of life." + [Ctrl][Enter] +  
 [Ctrl][Enter] +  
 "Please fill in the following questionnaire by answering each question." + [Ctrl][Enter] +  
 [Ctrl][Enter] +  
 "Thank you for your cooperation."  
 or the introduction specific to your questionnaire. You can enter up to 65535 characters here;  
 line breaks are entered by pressing [Ctrl][Enter] (or [Strg][Enter] on German keyboards).
    - Click-Left on "ok".
    - Probably this introduction won't fit in the supplied text frame. So Click-Left on that frame and then drag the lower middle handle of the selction frame further down, until all text has become visible.
    - Don't be confused by the two overlapping text areas for explanations. As they are empty, they don't matter.
    - Click-Right on the newly entered introduction, avoiding the explanation text areas.
    - Select "Text alignment" - "Left".
    - Click-Left somewhere into the main window, where there is no questionnaire object, to make sure that no object is selected.
    - Click-Right on the newly entered introduction, avoiding the explanation text areas, again.
    - Select "Options".
    - Check "Infoscreen".
    - Click-Left on "ok".

- Locate the transport bar in the lower middle region of AnyQuest's main window. It is a means to move within loaded questionnaires and questions and it consists of four buttons, labelled "|<<", "<", ">", ">>|".
- Click-Left on ">" to go to the next question; note the changed current question in the status display at the lower right corner.
- Transfer questions from paper to AnyQuest:
  - Have a close look at your paper questionnaire: How many answer fields does the first question have?
  - My example will have 5 answer fields for each of the first three questions. So:
  - Prepare first question, defining the layout for the first set of similar questions:
    - Click-Right somewhere into the main window, where there is no questionnaire object.
    - Select "Add Answer Field".
    - Click-Right somewhere into the main window, where there is no questionnaire object.
    - Select "Add Answer Field".
    - Click-Right somewhere into the main window, where there is no questionnaire object.
    - Select "Add Answer Field". Now you should see 5 fields, the last two overlapping.
    - Click-Right onto the text area of the question (currently reading: "New question").
    - Select "Options".
    - Click-Left on "Center H". Your answer fields are being arranged horizontally.
    - Just for fun: Enter "20" at "Distance of labels". Click-Left on any of the four buttons right to that field and watch the labels move. Finally, Click-left on the lower button of the four.
    - Click-Left on "ok".
    - Click-Right on the second answer field from the left.
    - Select "Numeric or text value".
    - Enter "1" and Click-Left on "ok".
    - Click-Right on the middle answer field.
    - Select "Numeric or text value".
    - Enter "2" and Click-Left on "ok".
    - Click-Right on the second answer field from the right.
    - Select "Numeric or text value".
    - Enter "3" and Click-Left on "ok".
    - Click-Right on the rightmost answer field.
    - Select "Numeric or text value".
    - Enter "4" and Click-Left on "ok".
    - Click-Left somewhere into the main window, where there is no questionnaire object, to make sure that no object is selected.
    - Press and hold down the [Ctrl]-key (On German keyboards: [Strg]).
    - Still holding down the [Ctrl]-key: Click-Left once on every answer field label (the label is the text below each answer field).
    - Release the [Ctrl]-key.
    - Click-Right somewhere into the middle of the selection frame around the answer fields, avoiding the handles.
    - Select "Text".
    - Enter "extremely bad" and Click-Left on "ok".
    - Enter "quite bad" and Click-Left on "ok".
    - Enter "average" and Click-Left on "ok".
    - Enter "quite good" and Click-Left on "ok".
    - Enter "extremely good" and Click-Left on "ok".
- Click-Left somewhere into the main window, where there is no questionnaire object, to make sure that no object is selected.
- Click-Right on the text area of the question (currently reading "New question").
- Select "Text".
- Enter "How did you feel physically?" and Click-Left on "ok".
- Click-Right on the text area of the explanation (currently reading "New explanation").
- Select "Text".

- Enter "During the last week..." and Click-Left on "ok".
  - Click-Right on the text area of the explanation 2 (currently reading "New explanation 2").
  - Select "Clear Text".
  - Click-Left in the middle of the text area of the explanation (currently reading "During the last week...").and drag it upwards to between the short questionnaire name and the question.
  - Click-Right on the text area of the explanation (currently reading "During the last week...").
  - Select "Position" - "Center x at 0.5 window".
  - Click-Left in the middle of the text area of the question (currently reading "How did you feel physically?").and drag it further downwards about to the middle between the answer fields and the first explanation text area.
  - Click-Right on the text area of the question (currently reading "How did you feel physically?").
  - Select "Position" - "Center x at 0.5 window".
  - Click-Left somewhere into the main window, where there is no questionnaire object, to make sure that no object is selected.
- Adding further questions in the same layout as the first one:
    - Click-Right somewhere into the main window, where there is no questionnaire object.
    - Select "Add question". Note changed status display at lower right corner. And note that the new question appears in the layout of the last one!
    - Click-Right on the text area of the question (currently reading "New question").
    - Select "Translation utilities" - "Copy text from previous similar item".
    - Click-Right on the text area of the question.
    - Select "Text".
    - Change text to "How did you feel mentally?". (If you have actually copied the text dictated above, you can just mark "physical" with your mouse and then immediately type "mental".)
    - Click-Left on "ok".
    - Click-Right somewhere into the main window, where there is no questionnaire object.
    - Select "Add question". Note changed status display at lower right corner. And note that the new question appears in the layout of the last one!
    - Click-Right on the text area of the question (currently reading "New question").
    - Select "Text".
    - Enter "How would you judge your ability to work in your job?".
    - Click-Left on "ok".
  - Adding further questions in another layout, streaming in text from a text-file:
    - The next five questions will use a Visual Analogue Scale, and I will illustrate a quicker mode of question generation. So please:
      - Click-Right somewhere into the main window, where there is no questionnaire object.
      - Select "Add question". Note changed status display at lower right corner. And note that the new question appears in the layout of the last one!
      - Click-Right on the rightmost answer field.
      - Select "Delete".
      - Click-Right on the rightmost answer field.
      - Select "Delete".
      - Click-Right on the rightmost answer field.
      - Select "Delete".
      - Click-Right on the rightmost answer field.
      - Select "Numeric or text value".
      - Enter "100" and Click-Left on "ok".
      - Click-Right on the question text area (currently reading "New question").
      - Select "Options".
      - Select "LASA / VAS".
      - Double the number in the "Distance" field and Click-Left on "Center H".
      - Click-Left on "ok".
      - Click-Right on the rightmost answer field label (currently reading "quite bad").
      - Select "Text".
      - Enter "excellent".

- Click-Left on "ok".

Now for accelerated questionnaire design: If you have your source questionnaire in a word processor file already, you can probably transfer it rather easily into a simple text file. You can import such a file in one step, and this will save you from typing in the text by hand.

For this example, I shipped the file `5demoqns.txt`, which you will find in your directory `c:\anyquin`. If you do not know how to generate such a text file from your word processor files, you can still proceed as shown during the last three questions.

To quickly import the prepared demo-text-file, however, do the following now:

- From the menu "Jörg's Magic Questionnaire-O-Matic", select "Spread a text file to questions".
- Select the file `c:\anyquin\5demoqns.txt` and Click-Left on "ok". note changed status display at lower right corner.
- Looking at all questions:
- On the transport bar, Click-Left on "<" and ">" to have a look at all questions - 3 created manually, and 5 completed automatically after preparation of their layout.
- Entering a conditional branch:

In this section, you will learn how to ask one question ("Did you need pain medication?"), and to skip another one ("How effective was it?") depending on the answer to the first one.

- Using the buttons "<" or ">" in the transport bar, display question nr. 7 referring to pain control.
- Click-Right somewhere in AnyQuest's main window, where there is no other object.
- Select "Insert question".
- Click-Right on the question text (currently reading "New question").
- Select "Text".
- Enter "Did you require medication for pain control?" and Click-Left on "ok".
- Click-Right on the question text.
- Select "Options".
- Select "Discrete Answer, Single Check".
- Reduce the value in "Distance". which you doubled before, to half of itself.
- Click-Left on "Center H".
- Click-Left on "ok".
- Click-Right on the left answer field label.
- Select "Text".
- Enter "No" and Click-Left on "ok".
- Click-Right on the right answer field label.
- Select "Text".
- Enter "Yes" and Click-Left on "ok".
- Click-Right on the right answer field.
- Select "Numeric or text value".
- Enter "1" and Click-Left on "ok".
- Click-Left on the button ">" on the transport bar to display question nr. 8 of 10 referring to pain control.
- From the menu "Edit", select "Edit conditional branch formulas...".
- In the field "UPN Condition for execution of command", please enter: `"v7 0 ="`. This formula means: take the value of question nr. 7 and test whether it is equal to zero. If yes, the result of the formula will be "true", and the command specified below will be executed. The preselected command, "Skip this question", is adequate here.
- Click-Left on "ok" to close the CB formula editing window.
- Defining formulas for computation of questionnaire results:
- From the menu "Edit", select "Edit result formulas".
- When the edit window opens, the first formula is displayed and selected. Please type `"v2 25 * "` immediately. (Don't forget the asterisk at the end! If you moved the cursor before or Clicked the mouse into the input field, you have probably deselected the example list of UPN

commands and must delete it manually using the backspace, [Del] or [Entf] keys.) The specified formula means: Take the value of question 2. Multiply by 25.

- If you wish to, you can use the transport bar even while the formula editing window is displayed to review your questions while constructing formulas.
- Click-Left into the input area for "File output label".
- Type "Physical wellbeing".
- Click-Left into the input area for "Single printout label".
- Type "Physical wellbeing".
- Click-Left into the input area for "Cumulative printout label".
- Type "PWB".
  
- Click-Left onto the arrow pointing upwards next to "Formula#" (top left area of window). Formula #2 should appear.
- Click-Left into the input area for "UPN Formula", just right of the " $\sqrt{2}$ ".
- Change " $\sqrt{2}$ " into " $\sqrt{3}$ ". The formula " $\sqrt{3} \ 25 \ *$ " now means: Take the value of question 3. Multiply by 25.
- Click-Left into the input area for "File output label".
- Type "Mental wellbeing".
- Click-Left into the input area for "Single printout label".
- Type "Mental wellbeing".
- Click-Left into the input area for "Cumulative printout label".
- Type "MWB".
  
- Click-Left onto the arrow pointing upwards next to "Formula#". Formula #3 should appear.
- Click-Left into the input area for "UPN Formula", just right of the " $\sqrt{3}$ ".
- Change " $\sqrt{3}$ " into " $\sqrt{4}$ ". The formula " $\sqrt{4} \ 25 \ *$ " now means: Take the value of question 4. Multiply by 25.
- Click-Left into the input area for "File output label".
- Type "Role function".
- Click-Left into the input area for "Single printout label".
- Type "Role function".
- Click-Left into the input area for "Cumulative printout label".
- Type "RF".
  
- Click-Left onto the arrow pointing upwards next to "Formula#". Formula #4 should appear.
- Click-Left into the input area for "UPN Formula".
- Clear the currently displayed formula using backspace, [Del] or [Entf]. Enter " $\sqrt{5} \ \sqrt{6} \ 2 \ \text{avg}$ ". This formula now means: Take the values of questions 5 and 6. Compute average of 2 questions.
- Click-Left into the input area for "File output label".
- Type "Social function".
- Click-Left into the input area for "Single printout label".
- Type "Social function".
- Click-Left into the input area for "Cumulative printout label".
- Type "SF".
  
- Click-Left onto the arrow pointing upwards next to "Formula#". Formula #5 should appear.
- Click-Left into the input area for "UPN Formula".
- Clear the currently displayed formula using backspace, [Del] or [Entf]. Enter " $\sqrt{7}$ ". This formula " $\sqrt{7}$ " now means: Take the value of question 7.
- Click-Left into the input area for "Bar max".
- Type "1". because this scale only will return 0 or 1 as result.
- Click-Left into the input area for "File output label".
- Type "Pain medication required".
- Click-Left into the input area for "Single printout label".
- Type "Pain medication required".
- Click-Left into the input area for "Cumulative printout label".
- Type "PMR".
  
- Click-Left onto the arrow pointing upwards next to "Formula#". Formula #6 should appear.

- Click-Left into the input area for "UPN Formula".
- Clear the currently displayed formula using backspace, [Del] or [Entf]. Enter " $\sqrt{8}$ ". This formula now means: Take the value of question 8.
- Click-Left into the input area for "Bar max".
- Type "100". because this scale (and the following ones) will return results from 0 to 100 again.
- Click-Left into the input area for "File output label".
- Type "Pain control".
- Click-Left into the input area for "Single printout label".
- Type "Pain control".
- Click-Left into the input area for "Cumulative printout label".
- Type "PC".
  
- Click-Left onto the arrow pointing upwards next to "Formula#". Formula #7 should appear.
- Click-Left into the input area for "UPN Formula".
- Clear the currently displayed formula using backspace, [Del] or [Entf]. Enter " $\sqrt{9}$ ". This formula now means: Take the value of question 9.
- Click-Left into the input area for "File output label".
- Type "Appetite".
- Click-Left into the input area for "Single printout label".
- Type "Appetite".
- Click-Left into the input area for "Cumulative printout label".
- Type "AP".
  
- Click-Left onto the arrow pointing upwards next to "Formula#". Formula #8 should appear.
- Click-Left into the input area for "UPN Formula".
- Clear the currently displayed formula using backspace, [Del] or [Entf]. Enter " $\sqrt{10}$ ". This formula now means: Take the value of question 10.
- Click-Left into the input area for "File output label".
- Type "Global QoL".
- Click-Left into the input area for "Single printout label".
- Type "Global QoL".
- Click-Left into the input area for "Cumulative printout label".
- Type "GQL".
  
- Now, just close the formula editing window (Windows 95/NT 4.0: Click-Left on "X" in its top right corner, Win 3.x: From AnyQuest's main menu, deactivate "Edit" - "Edit result formulas"..
  
- Adding comments on questionnaire copyright, history, literature reference:

If you generate or modify an electronic questionnaire definition file, you can add some documentation in a protected area of the questionnaire. Information from this area cannot be removed easily, after a questionnaire definition file has been saved.

- From the menu "Help", select "Questionnaire Copyright & History".
- Click-Left on "Add information".
- Write "AnyQuest for Windows demonstration Quality-of-Life-Style-Questionnaire."
- Type [Ctrl][Enter] (on German keyboards: [Strg][Enter]).
- Type [Ctrl][Enter] again.
- Write "Generated by " + your name + ", following the Quick guide from AnyQuest's help file on the " + the current date.
- Type [Ctrl][Enter] twice.
- Write "AnyQuest was first developed for the original Quality-of-Life Recorder:"
- Type [Ctrl][Enter] twice.
- Write "Sigle-JM, Porzsolt-F: Practical aspects of quality-of-life measurement: design and feasibility study of the quality-of-life recorder and the standardized measurement of quality of life in an outpatient clinic, Cancer Treatment Reviews (1996) 22 (Supplement A), 75-89"
- Click-Left on "Add information permanently".
- You can review all added information using the scrollbars.
- Click-Left on "Close".

- Saving your newly generated questionnaire:
  - Select "File" - "Save as".
  - Keep your directories tidy: double-click on the subdirectory `questns` under `c:\anyquin`. This is, where questionnaire definition files should go.
  - Enter the filename: `q1demo`. You do not need to supply an extension, but please be sure NOT TO enter a trailing dot, either!
  - Click-Left on "ok".
- Changing the AnyQuest environment from optimal for editing to optimal for applying questionnaires:
  - Deactivate "Edit" - "Edit layout".
  - Deactivate "Display" - "Show long questionnaire name".
  - Deactivate "Display" - "Show short questionnaire name".
  - Deactivate "Display" - "Show questionnaire number".
  - Deactivate "Display" - "Show question number".
  - Deactivate "Display" - "Show numeric and string results of question". (You can keep these activated, if you wish to test drive your newly generated questionnaire. I do not regularly show them to patients to keep the display simple.).
  - If you wish to receive any printout, Select "Printing" - "Printer setup".
  - If you wish to receive a single printout, then activate "Printing" - "Automatic single printout". Otherwise, deactivate "Printing" - "Automatic single printout".
  - If you wish to receive a cumulative printout, then activate "Printing" - "Automatic cumulative printout". Otherwise, deactivate "Printing" - "Automatic cumulative printout".
  - Activate "Navigation" - "Automatic proceeding to next question".
  - Activate "Navigation" - "Automatic check, calculate, output & erase after last question".
  - Deactivate "Navigation" - "Show transport bar".
  - Activate "Navigation" - "Patient identification options to ask for" - "Ask for first name".
  - Activate "Navigation" - "Patient identification options to ask for" - "Ask for last name".
  - Activate "Navigation" - "Patient identification options to ask for" - "Ask for date of birth".
  - Activate "Navigation" - "Patient identification options to ask for" - "Ask for patient ID code".
  - Deactivate "Navigation" - "Patient identification options to ask for" - all other ID options.
- Now close AnyQuest for Window, e.g. by selecting "File" - "Exit". This saves all currently selected options and the currently loaded set of questionnaires (only one, in this example) in an initialization file.
- Performing questionnaire sessions:
  - From the Windows 95 / NT 4.0 start menu or the Windows 3.x program manager, start AnyQuest for Windows. Note that the navigation window appears and that your questionnaire is already loaded.
  - Click-Left on the "Go" button.
  - Follow the instructions and answer all questions once.
  - Click-Left on the "Go" button again, if you wish to perform further questionnaire sessions, or Click-Left on the "Exit" button, if you're done.
- Data export and evaluation:
  - Now let's go for data export into MS Excel 97 as an example:
  - From the Windows 95 / NT 4.0 start menu or the Windows 3.x program manager, start AnyQuest for Windows. Note that the navigation window appears and that your questionnaire is already loaded.
  - Click-Left on the "Setup" button.
  - Select "File" - "Generate export file...".
  - Click-Left on "ok", leaving the export options unchanged.
  - Click-Left on "ok".
  - Close AnyQuest for Windows.
  - Open MS Excel 97.

- Select "File" - "Open".
- In the file-open-dialog, select the file `c:\anyquin\data\anyquin.dif` and click on "open".
- Confirm the import-options suggested by Excel's ASCII-File-Import assistant.
- Scroll around in your table and enjoy your data.

- Other topics:

Of course, there are other possibilities to search, display and print your data.

You can load more than one questionnaire definition file at the same time and they will be presented to patients one after another automatically.

German users just can rename or remove the file `c:\anyquin\anyquin.msg` to make messages addressing the patient appear in the German language. A Swedish version will be available soon. If you wish to have them in French or any other language, please translate this file using a simple text editor (e.g. notepad) instead.

Much more advanced topics include:

- advanced editing support, translation utilities,
- undo-functionality and crash-recovery,
- exporting and importing sets of questions among questionnaires,
- preparing a system for convenient use of multiple sets of questionnaires,
- interrupting and resuming a single session with a patient,
- complex interactive questionnaires,
- advanced result formulas, complex transformations of data
- coding of text through answer fields,
- can-not-answer, don't-want-to-answer data,
- free text input fields,
- processing of questionnaire raw data,
- multimedia questionnaires including graphics and sound,
- modular questionnaires and questionnaire libraries,
- questionnaire library in the world wide web,
- storage and (online-) exchange of data.

Many of these aspects, and many more, are covered in this help-file. Here is its [table of contents](#).