

Pathology

Health2000 gives you the ability to both create pathology requests as well as receive them electronically. This option will allow you to access both these options.

Pathology Request

This option allows you to request a pathology report and sends the report electronically to the lab. Only certain labs allow this facility, and you would need to check with your lab whether they support electronic lab requests

The Pathology Viewer

The Pathology Viewer is a sophisticated system that links into the Health Focus software and allows you to receive pathology reports electronically and securely from the pathology lab. When installing Health Focus, all the necessary programs to activate this facility are available. You do however need IE5 levels (Internet Explorer 5) to cater for the security and a dial up Internet account. The pathology lab will provide a secure email address, which is used exclusively for pathology reports.



Setting Up The Lab

Before the Pathology Viewer can be used, you need to let the system know the source of the report. This is done from the main menu, by selecting Utilities | System Setup | Pathologist Files. Once the screen appears, you need to enter the basic information.

Code:

Because the pathology viewer allows you to access reports from an unlimited number or different pathologists, each pathologist is allocated a code. This can be any code that is allocated by yourself.

Account number:

This is the account number that you have with the pathologist. The lab will match the requests to this number, so please ensure its accuracy.

Business hours:

These are the business hours that the pathologist operates and is for your records only.

Password:

The password is allocated to you by the pathologist and allows you access into their systems for the submission of report requests.

Access Code:

This access code is provided by the pathologist and is entered here. Once entered, it never need be changed.

User name:

Like the password and access code, the username is allocated by the pathology group and allows you access into their systems

Test list path:

This path is a directory on your computer, which allows tests to be accessed. It is normally a temporary directory, or a directory that has been allocated specifically for reports.

Name:

This is the name of the pathologist that you are dealing with.

Contact details:

These details are the details for the pathology group, and are provided by the pathologist lab and must be entered in these spaces provided.

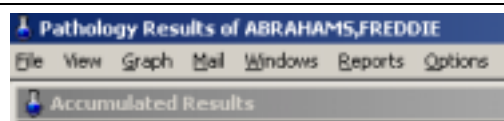
Subject:

The subject is a critical part of the pathology report, because the subject identifies the action that should be taken with the incoming report. Please make sure that the subject is entered correctly. At this point, contact your lab for the email certificate. Once issued, you can start receiving your reports electronically.

Accessing the Viewer

There are a number of entry points to access the Pathology Viewer.

You can either access it from the patient file, in which case, the currently selected patient will be the active or working patient, or from the EDI menu (off the main screen). If you have accessed the patient from the patient maintenance screen, the top left hand side of the screen will indicate the patient that you are currently working with.



Setting the Pathology Viewer Defaults

Before you can activate the Pathology Viewer, you must have defined the options within which the Pathology Viewer must work. This is done by accessing the Pathology Viewer and selecting the Options menu item. At this point a further window will appear, requesting you to enter the information. Three tabs are available.



General Tab

The general tab allows you the email access to the mailbox that provides the encrypted pathology report.

SMTP name:

This is the name of your server that is provided by the dial up network. It is the simple mail transfer protocol name or IP address.

Pop name:

This pop name is provided by your Internet service provider (ISP), and is the point of presence or IP address.

User name:

This is the user name that is logged into the secure email box and is normally provided by your pathology group.

Password:

This is the password, which is provided by the pathology group and allows you access into your email clients.

Pop-port:

This port is the port that the email is accessed on. It is normally set to eighty.

Decrypt directory:

This is the directory where the encryption will take place and is a directory for temporary working files.

Auto Allocations

The auto allocations tab allows you to specify various limits in order to match the pathology report, to the patients record. When a pathology report is received from the lab it can be automatically allocated to a patients clinical record. These criteria determine how it will match to the patient's record.

Each field allows a specific percentage of probability with an overall probability level. For example: If you enter 90 as the percentage that the surname must agree, then only if the surname agrees with a ninety percent match, will the report be allocated against this account. The same applies for the other general auto allocation criteria.

The overriding factor is whether you wish to have the allocations skip, if the probability is less than 90 percent. It is recommended that the minimum percentage allocated is 70 percent.



Certificates:

This window allows you to select which encrypted certificate must be used in order to access the email. The certificate is provided by your pathology group and is used uniquely for the receipting and decrypting of the pathology reports.



The Pathology Viewer is made up of four windows. Each window can be minimised or maximised.

Accumulated Results

These items are set-up once and once activated need never be accessed again. The accumulated result window shows you the tests that are unfilled for a specific patient. A number of features are available when accessing this window option; these include the ability to graph the information as well as to view the relevant information.



| Patient Code | Date / Test | B | ESR | FW | LE | PT | HR | MC | MC | MC | MC |
|--------------|-------------|----|------|------|------|------|------|----|----|----|----|
| TEST_APT | 06/04/08 W | 28 | 5.00 | 6.00 | 0.40 | 86.2 | 86.2 | | | | |
| TEST_ABT | 06/04/08 W | | | | | | | | | | |
| TEST_ABT | 06/04/08 W | | | | | | | | | | |
| TEST_ABT | 11/04/08 W | | | | | | | | | | |
| TEST_ABT | 12/04/08 W | | 4.00 | 1.00 | 0.40 | 86.2 | 86.2 | | | | |
| TEST_ABT | 06/04/08 W | | | | | | | | | | |

By highlighting a column, and clicking on the right mouse button, a further menu appears, which allows you to graph the column or alternatively change the heading or abbreviation of the column.

Graph results:

This option allows you to view the reports graphically, in a variety of graphs. To be able to graph a result you need to be able to compare accumulative report results. This is done by accessing the accumulated results column, right clicking and selecting the graph option. On activation, the graph will automatically appear.

The reports window allows you to view the reports to allocate it against the account that has been specifically selected, as well as the reports that are not allocated. To allocate a report, which has not been allocated, to a specific patient, simply highlight the report, and click on the transfer button. The transfer button allows two way transfer



allowing you to extract a report from that patients clinical record and move it into the unallocated area, or vice versa. You can also double click on any report, which will be viewed in the selected report window.

The select report displays the report, which is currently highlighted and selected. You can select and view any other report by simply double clicking on the allocated or unallocated report.

Viewing reports:

Once a pathology report has been allocated to a patient, the reports can be viewed by accessing the patient's clinical notes. Simply click on the pathology radio button to indicate to the system that it is a pathology report, and then the available notes click on the report that you require, it will then be displayed in the lower window and can be referenced at any time.

The Menu Options

A number of menu options are available in the pathology viewer:

File:

The file option offers a number of printing options as well as the ability to log into a patient. If you have accessed the pathology reader, from within the patient record, the selected patient is automatically selected, however you may wish to change to a front patient, this is done under the files option, where you log into another patient. On selecting this option a further window appears, where you can search for that patient, by surname, initials, ID number, medical aid or account. Once you have highlighted the selection, selected patient, click on the ok button, if dependants are available for that account, the dependants screen will appear, simply highlight the dependant and click on the ok button. You will then automatically be logged in to that selected patient. Using the reporting window you can then allocate reports that should not have been allocated against that specific patient.

View:

This option allows you to select whether you wish to view the graphing option, the reporting option, the accumulative results or the allocation form. The view option operates on a toggle basis. You can select whether or not you want to view it. This is done by clicking on the selective item.

Graph:

The graph option allows you to view all reports, or selected reports. An alternative to using the graph option is to highlight the column in the accumulative results, right click on the column and select the graph option.

Mail:

This facility allows you to update your system with new mail. It will automatically log into your secure mailbox and collect the new results.

The time the system takes to update will depend on the amount of mail that is available. You also have the facility to update the system with files; these are files that may be sent to you via disk or an alternative means from the pathology lab. The most common option under mail, to refresh your system, is to select the mail option and to update with new mail.

Windows:

This option is your standard windows viewing option. It allows you to stipulate on which window you want to be active at any one time.

Reports:

This option, selected from the main pathology window, allows you to view either one or all the new reports, or the reports that have been allocated against the specific account. Note that the new reports are not necessarily reports that have not been allocated, but reports that might have come in subsequent to an allocation. The options menu brings up the pathology options, which allow you to set up your system and need only be accessed once.

Daily operation:

When using the pathology viewer your daily operation is simply to access the mail option and to update with new mail. Once this procedure is complete, the reports will then be displayed in the unallocated window allowing you to allocate it against a specific account.

This is done by accessing the file menu option, logging into another patient, selecting the patient and then dragging over the report, which is not allocated through to the allocated reports.

Pathology Viewer Requirements.

You will need an email address, preferably one that is specifically dedicated for medical use. Should the pathology laboratory use certification encryption you will need to contact either the laboratory and obtain the necessary encryption/decryption programs and certificate. Alternately it is possible to obtain a certificate from Verisign. Certain laboratories use zip encryption and the program already caters for this method of transmission This does not require a certificate to be obtained. Please discuss these requirements with your local supplier with regard to the laboratories which are able to provide such a service and what there requirements are.

Extracting Pathology Mail.

The Pathology Viewer looks at the subject of the mail message to identify if this message is a pathology report. It compares the subject with the subject field set in Pathology File, and if found in the subject of the mail message, it will be retrieved from the mail server and processed.

For example: If the subject of the mail reports read: Lancet Pathology Report # 123456 for A.N.Ybody, a probable string would be Lancet Pathology Report. If however the subject varies with language, and it could also read Lancet Patologie Verslag # 98765, you could use Lancet Pat.