Electronic Test Requesting using Sunquest ICE integrated with INPS Vision.
Overview

Electronic test requesting provides an integrated link directly from the patient record in Consultation Manager to the laboratory system via a secure NHSNet connection. Vision is currently integrated with the Sunquest (ICE) requesting system. The integrated test requesting functionality allows for:

The request details to be recorded on the patient record.
- The request and/or specimen details to be updated after they have been sent.
- Immediate access to patient results.
- The ability to view outstanding requests.

Other benefits of integrated electronic test requesting:
- There is no longer a need to re-key/write out demographic data for each test request.
- There will be a reduction in errors and mismatches when the result comes back.
- It reduces the need to chase results from the laboratory.
- There will be an improvement in data quality as the patient record is more up-to-date.
- Reduction/cessation of ordering duplicate test requests.

Note - Your Hospital Trust is responsible for delivering your Sunquest test requesting integration. Please liaise with them to arrange installation or with any queries regarding your Requesting System outside of the Vision software. On instruction from Sunquest, INPS will remotely enable the software at each practice in a timely and controlled manner.
Workflow Overview

The network and request workflow process for test requesting with Vision is as follows:

**Network Workflow**

*Workflow between Vision, Test Requesting System and Hospital System*

**Request Workflow**

Go to **Add - Requests – Electronic Requests**. Then link to the test requesting interface.

Make test request and print the details. Affix specimen to the printed request. OR make the test request, but leave the sample collection details to be entered at a later date.

The details are copied back to the request form in Vision and are saved to the Journal.
Setting up

Switching On

The integrated test request functionality is delivered as part of DLM 280. Your Hospital Trust is responsible for delivering your Sunquest test requesting integration. Please liaise with them to arrange installation or with any queries regarding your Requesting System outside of the Vision software. On instruction from ICE, INPS will remotely enable the software at each practice in a timely and controlled manner. Once this has been done, you will need to:
- Add required provider(s) in Control Panel – Test Request (see page 4).

Make sure you have staff accounts details (provided by your trust).

It is also advisable to liaise with your trust and provide them with a list of Clinicians and non-Clinicians who want to use the service before go live.

Please note that Vision supports the following services for ICE:

- Order Test – make a request.
- Update Test – edit a request.
- Update Sample – record sample collection for an existing request.
- View Incomplete Tests – view the status of previous requests.
- Patient Report List – audit requests

Adding Providers

Firstly, you need to add the provider(s) which you intend to use for electronic test requesting. This is done from Test Requests in Control Panel. You will need the provider URL, Provider Type and Organisation Code which you can obtain from your trust.

Basingstoke and North Hampshire Hospitals NHS Foundation Trust URL:

URL: https://gpereq.bnhft.nhs.uk/icedesktop/dotnet/ws/AhsI.CE.webservices.asmx

1. From the Vision front screen, go to Management Tools - Control Panel.
2. Select File Maintenance and click on the Test Requests icon.
3. Click on Add.
4. Complete the Provider-Add form.

Description

Provider

Provider Type – select ICE.

Organisation Code

Logon URL

URL: https://gpereq.bnhft.nhs.uk/icedesktop/dotnet/ws/Ahsl.ICE.webservices.asmx

Requestor ID – Leave blank.

Click OK to save changes. The provider details are added to the list in the Test Request Pane in Control Panel.
Creating an Electronic Test Requests

Electronic test requests are generated in Consultation Manager from the Electronic Requests form. From here, you can link to the ICE test requesting system. There are various scenarios in which you can apply electronic test requesting, you can either:

- Record the full request and sample collection details, (you would also follow this method if samples are collected by an external hospital phlebotomist, for example). This is the Collect sample now option on the requesting system

OR

- Record the request only (for instance, when allowing another member of staff to record the sample collection details), (i.e. the GP can add a request and the practice nurse can collect the sample and update the request). This is I want to complete sample details option on the requesting system

OR

- Record the sample collection details for a previously generated request.

All request and sample collection details are written back to the patient record. You can edit and view the requests and sample details at any time.

Recording a test request

Electronic test requests are generated in Consultation Manager from the Electronic Requests form. From here you can link to your laboratory(s) ICE test requesting system.

1. In Consultation Manager, select the patient and open a consultation.
2. Go to Add - Requests - Electronic Requests.
3. At the Electronic Test Requesting - Select System and Account screen, select the request system and provider you would like to use and enter your login details:
   - Test Request System and Service – Select the required test request interface and provider.
   - Show All – when ticked, this allows you to select from the full list of providers on your system.
   - Default – when ticked keeps the current provider as the default option. This is a per user setting.
   - Select Service – lists the possible services that your test request interface offers. This defaults to Order Test for new requests and Update Test when editing.

Enter personal Account Details – Enter the user name and password which is normally provided by your hospital trust. See also Add practice Login Details on page 29.
Save Details – allows you to select from the following account options:
- Save these details for my own personal use. (Use this option).
- Allow these details to be used by all practice members
- Do not save details (prompt me on each access)

Enter personal account details:
User Name: G9999999
Password: ******
Member Password: ******
- Save Details:
  - Save these details for my own personal use
  - Allow these details to be used by all practice members
  - Do not save details (prompt me on each access)

Enter the G code for the Dr’s or the J code for the non GP staff.
Click OK to login to the chosen request system. Patient Demographic information is uploaded onto the test request system when you connect, saving the need to search for a patient.

This will open Internet Explorer and display the ICE request page. The patient details are automatically transferred to the ICE request page.

In order to be able to find and select the required tests, it is important to understand what is on the requesting screen, and the conventions that have been used in designing this system.

Navigating around the screen

At the top of the ICE screen are the patient’s details. Below the patient’s details there is a menu bar (with only one menu – Services). The services bar allows you to navigate within the ICE environment.

The currently selected panel and page are shown in a different colour for emphasis. The Main page on the panel labelled ‘GP Main Page’ contains the most commonly requested tests in primary care.

The individual discipline panels contain the tests available from each discipline. The tests on the ‘GP’ panel are replicated within the individual discipline panels. The layout of each discipline panel varies, but the labels on the vertical tabs indicate the contents of each page.

The following shows the tests held on each page for each page test listing:
## Hormones/Markers

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testosterone</td>
<td>1000 ng/dL</td>
</tr>
<tr>
<td>Estrogen</td>
<td>200 pg/mL</td>
</tr>
<tr>
<td>Progesterone</td>
<td>50 ng/mL</td>
</tr>
</tbody>
</table>

**Note:** Values are approximate and may vary based on individual health conditions.
Haem/Trans

Coagulation:
Test requesting is performed using the central (darker grey) part of the screen.
There are three different items in this area (with examples):

Headers

**CHEMICAL PATHOLOGY**

These are headers for groups of related tests for discipline specific tests

Tests

**THROAT SWAB ME & S**

These are tests or groups of tests that can be requested. Click on the test name or the white box to request the test. When the test has been request there will be a tick in the box and the box will have a blue outline. If a test has a box with a tick and a red outline, it has been automatically requested by requesting another test. If you hover the mouse over the test, and there is advice or information relevant to this test, it will be displayed in blue in the banner bar. Selecting certain tests will cause a pop-up window to open. These windows may require you to enter additional information relating to the sample being collected, or may provide additional information.
Test Collections

These are collections of related tests. Clicking on the box takes you to a further short list of related tests where you can select the required ones. If you hover the mouse over the box, and there is advice or information relevant to these tests, it will be displayed in the banner bar.

At the bottom of the main requesting screen are the five most recent requests for this patient. Just above these results there are two links. These enable you to look at all of the patient’s requests, or all of the requests appropriate to the selected panel (for example, if you had the Immunology panel selected, this option would only display immunology requests). This information is relatively straight forward, except the status field. Four statuses can appear in this field:

- POS – a request has been made, but held at the sample collection stage
- REQ – a request has been made and the Request form printed
- REC – the sample has been received in the laboratory
- RR – the report is available (clicking on this link will open the report)

Searching for a Test

Each panel has a search tab at the bottom of the horizontal tabs. Clicking on the search tab brings up the search function.

There are several options in the search function, which can enable you to narrow down the search if you wish. It is advisable to leave these on the default settings (search in: all tests, search type: descriptions and codes, search for text: Anywhere in the test name).

Type the name (or part of name) and click the search button. See the picture below for an example, using ‘thyroid’ for the search.
Making a request

Select all of the tests you require on the requesting screens, and then click on the big green ‘Continue with request…’ button. You will then be presented with the request details screen.

On the left hand side of the screen are the details common to all requests. These include:

- The user – this is the name of the user making the request and is entered automatically.
- Bleep / contact details – these can be added if required.
- Requesting Consultant / GP – this is filled in automatically but it can be altered. This should be either the requesting clinician, or the details of the clinician to which the results are to be returned.
- Location – again this is filled in automatically. This should be the location of the clinician entered in the box above.
- Global Clinical Details – this is where you type in the clinical details relevant to the patient. This field is mandatory and can only handle 78 characters. Clinical details entered in the ICE system are stored with the request, and will be shown on the report within ICE, and returned to the clinician via the final report. Category – this is used to select NHS / Private / Category II patients (defaults to NHS).

On the right hand side are the details that are specific to the different disciplines (though both Biochemistry and Haematology requests appear as General Pathology, as they are processed together). The details in each of these discipline specific areas have to be completed separately.
Each of these follows a similar format:

- Name of the discipline at the top, with the tests for that discipline underneath.
- Next is a tick box labeled ‘I want to fill out specimen details later’. Ticking this box enables you to hold the request at this point, and complete it at a later point. This may be useful if the phlebotomist has access to the system and to a suitable printer. In this case, the clinician can generate the request, and the phlebotomist can then print the request at the time they collect the samples. If you select this option, the collection options will be removed, but you will be given the option to select ‘Print a postponed request summary for this order’ if you wish to.
- The order clinical details box. This box is used to fill in the relevant clinical details for each department. This field is optional, and is used to record additional information about the test. However, there is no means of recording this additional information in the Laboratory computer system, this box can be filled out for each discipline, but you can use copy and paste to copy the contents of the box to the other ones. To do this:
  - select the text with the mouse
  - press Ctrl and C together to copy the text
  - click in the next clinical details box
  - press Ctrl and V together to paste the text
- Then there is a choice of three collection options (assuming you are going to print the request at this point rather than holding it at this point). These choices are:
  - Collect now – use this option if you are going to collect the sample(s) now. The request form (and electronic request) will take the current date and time as the date / time of request.
  - Patient to Collect Sample – use this option if you wish to print the request labels now, but are unsure when the samples will be taken since the sample will be collected by the patient. It is important to ask the patient to write the correct date and time of collection on the request form when the samples are taken.
  - Sample to be Collected at Hospital – use this if you require the patient to be bled at the hospital. Generate the request form, give to the patient to take to the Trust to give to the hospital Phlebotomy staff.

At the bottom of the screen, there are three options:
- More Tests – this will take you back to the main requesting screen if you wish to add more tests.
- Accept Request – this will complete the request and take you to the printing screen.
- Review – this takes you to a screen with a summary of the requested tests. There are three options on this screen:
  - More Tests – this will take you back to the main requesting screen if you wish to add more tests
  - Proceed with Request – brings you back to the request details screen
  - Print Preview – creates previews of the request forms on the screen
Printing the Request

The pathology reports are printed on A4 sheets.
On Completing the request, you will be prompted to print the request form to a specific printer.

Print the request from your appropriate Windows printer.

Once you have printed all of the sheets, you will be presented with two options:

Click on 'Proceed' if you have finished printing the request form.

The request form should be collected from the printer. If you use the special stationary supplied by the Pathology Department, four sample labels are provided at the base of the sheet. If you use plain A4 paper, please ensure you label the sample with the relevant patient information. Please apply the label so it is flat, as it can be hard to read the label, also place the label length against the length of the sample container length.
Once the sample has been labelled, please ensure that you attach the request form to the appropriate sample bag to transport the sample to the Pathology Department.

Green bags apply to Microbiology
Blue Bags apply to Blood Sciences/Transfusion
Clear bags apply to Cellular Pathology

Seal the bags and send them via the normal samples transport.

Using the correct sample bag enables the samples to be routed to the appropriate laboratory promptly, and helps to reduce delays in processing the samples.

Once your request has been made, you are taken back to Consultation Manager to the Request SDA. If you have printed labels in ICE while making the request, there is no need to click on the Labels button within Vision.

You can see that the request has been recorded, for example, in the Journal. The following details are saved:

**The date of the request.**

**Clinician.**

**Read term for request.** All requests have the Read code 413.00 - Laboratory Test Requested, although you are able to manually change this Read code if required.

**Urgency** (routine or urgent).

**Other details** including test request system, provider, sample description, sample status, date sample was updated are added to the details section of the Requests form.

**Note** that the Details field should not be changed manually as this field is maintained by Vision and any manual changes may be lost.

**Viewing electronic test request records**

Existing test requests can be listed from the Medical History category of the navigation pane under Requests.
Recording Sample Collection

Often a GP will make a test request, for the sample to be taken at a later time by the practice nurse. To record that a sample has been collected for a previously recorded request:

1. Find the previous request from the navigation pane, under History, or look in the Journal.
2. Right click on the request and select Edit.
3. From the Requests – Update screen, click on the Order button.
4. Select the provider and fill in any login details if necessary. The Select Service defaults to Update Test. Click OK.
5. You are taken to the test request system where you can record that the sample has been collected and print the request and sample details.

This will launch Internet Explorer and take you to the Request completion summary screen in ICE.

This screen shows a summary of the request. Select the appropriate collection option and click on ‘Accept Request’. This will take you to the print screen.

Printing the Request

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Once you have printed all of the sheets, you will be presented with two options:

Click on ‘Proceed’ if you have finished printing the request form.

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Next, you are returned to the open Request - Update form. The details of the sample collection are copied into the Details section, which should not be changed manually as this field is maintained by Vision and any manual changes may be lost.

You are advised to update the Date Specimen taken field.

Click OK.

Editing a Test Request

You can append to or edit an existing ICE test request via Consultation Manager. Any changes made in the ICE interface are automatically logged in the patient record.

1. Find the existing test request. Requests can be accessed from the Navigation Pane under Medical History – Requests or in the Journal.
2. Right click on the request and select Edit.

From the Requests – Update screen, click on the Order button.

4. Select the provider and fill in any login details if necessary. The Select Service defaults to Update Test. Click OK.
5. This opens the previously created request.
6. Once you have made your editions and exit the test request system, the details are saved back to the Request – Update form in Consultation Manager.
Deleting Electronic Test Requests

Once you have made a request, you can delete individual or all tests within a request. This must be done from the ICE interface via the corresponding request form. The request form in Consultation Manager is updated to reflect any deletions made in ICE. Note – If you delete an entire request form in Consultation Manager this does not in turn delete the request from the ICE interface. If part of a request is deleted, the Journal entry is updated automatically to show a status of Cancelled. There is no need to delete the Journal entry. If one test is cancelled in a multi-test request, the Journal entry will be updated automatically to mark that specific test as cancelled. In this case, it is most important that the Journal entry should not be deleted.

The above screenshot shows three test requests.

1. In the first request, the Albumin and ANA tests have been cancelled. This Journal entry must not be deleted because other tests (Ferritin and Iron) are still active.
2. The second request has been completely cancelled. Although this Journal entry could be deleted, it is advisable to leave it for audit purposes.
3. The third request consists of two orders (or samples). One of the orders has been cancelled. This Journal entry must not be deleted because the other order is still active.
Reports

View Incomplete Tests

You can look at previous test requests for an individual patient. You are able to tell by the status of the request whether the result is ready, if the sample has been received or if the request is still outstanding:

1. Select the patient in Consultation Manager and open a consultation.
3. From the Select Services box, select View Incomplete Tests.

Click OK to be directed to the relevant pages of the ICE system.

This will open Internet Explorer and take you to the Patient Reports screen.
This report screen shows all of the available reports for the selected patient.

The reports can be filtered using the search fields at the top of the screen.

Clicking on an individual report in this window will open the report.

Clicking on the ‘Back’ button takes you back to the list of reports. Clicking on the ‘Cumulative’ allows you to look at the cumulative results for this patient.
This screen displays the patients results in chronological order, with the most recent on the right. Six results are shown on the screen at any time, but clicking on the '<' and '>' buttons on the screen allows you to move through all of the results.

Clicking on a test on the left hand side of the screen opens a window with a summary of the results for that test. (This picture needs replacing – it has a patient name on it).

Clicking on graph in this window opens a graph of these results.

Clicking on graph in this window opens a graph of these results.
The Graph shows the results, with the reference range shaded in green. These are several options on the left of this window, which will allow you to alter this graph.

**Changing Provider Details**

**Editing Providers**

If you need to change the details of a provider, i.e. if the provider changes their URL/logon ID:

1. From the Vision front screen, go to Management Tools - Control Panel.
2. Select File Maintenance and click on the Test Requests icon.
3. Right click on the provider you would like to change and select Edit Provider.
4. On the Provider Form, make the necessary changes, and click OK to save.
Inactivating Providers

1. To inactivate a provider, right click on the required provider and select **Inactivate**.

2. The inactive provider remains in the list but displays a grey icon.
Managing ICE Login Details

Resetting Passwords

You can reset an ICE password from Control Panel – Test Requests. You might need to do this, for instance, if a user has opted to save their password details on the Select System and Account screen in Consultation Manager, but has saved the wrong password details.

2. Select the Test Requesting icon.
3. Click on the plus next to the provider for the failed login to view a list of the staff listed to use this provider.
4. Right click on the failed login user, select Remove Staff Password.
5. You can enter a new password when you next attempt to login to ICE from Consultation Manager.
Add practice Login Details

You can either add a practice login details in Control Panel for a Test Request provider, or you can create either a user or practice login when making a test request in Consultation Manager. Either each user has their own login details or there can be one login access per practice. Adding a practice login lets any practice member make a test request. The audit trail is traced through the Vision login details. The right menu option of Add practice is available only if there are no user records for this provider (either practice or staff). It allows the user to enter the username and password in order to create a user record.

2. Select the Test Requesting icon.
3. Right click on the Test Request Provider and select Add practice.

![Image of Vision Control Panel]

4. User Name and Password - Information you can get from your Trust.
5. Confirm the password and click OK to save.