



Identifying overseas visitors

User guide to the Message Exchange for Social care and Health (MESH)

July 2021

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What is the MESH tool?

The Message Exchange for Social care and Health (MESH) tool helps overseas visitor managers (OVMs) working in secondary care, to identify possible non-UK residents who are required to pay for provided healthcare.

Covering the majority of NHS trusts and NHS foundation trusts, the MESH tool provides patient information (such as NHS number and date of birth) to [Spine](#) (who maintain our NHS IT infrastructure nationwide) via a MESH mailbox to recognise indicative or potential chargeable status and demographics.

Key benefits of the MESH tool

- MESH is a free, secure NHS Digital product with no associated software or licensing costs and includes full 24/7 user support.
- Reduces time and effort of cross-checking patients individually against the Spine.
- A systematic check of patients' chargeable status.
- Filtering returned data frees up time.
- Automates the process to assist upfront charging and billing.
- Proactive identification of visitors in advance enhances up front charging and subsequent potential waiting list reductions.
- Increased identification and possible income generation.
- MESH supports cost avoidance, ie surcharge payees seeking fertility treatment easy identification and cancellation of appointments in advance.

Minimum system requirements

- To use the MESH tool, you will need a Smartcard with role-based access control (RBAC) 0259/0266 access; MESH mailbox; and an input file in the correct .dat (data) format.

Key information and helpful tips

- RBAC lets employees have access rights only to the information they need to effectively carry out their jobs. A registration authority (RA) agent within your organisation will assign your B0259 or B0266 access code to your smartcard.
- How many records? Up to 1,000 records per submission with no limit on the number of daily batch submissions.

- How to set up? With the assistance of a local administrator and IT department – mailbox request form is available on the NHS Digital website – see the [MESH Online Enquiry Service](#).
- Within the Department of Health and Social Care (DHSC) [eXchange toolbox](#) locate and save a copy of the OVMReadRequest Excel spreadsheet (also referred to as the MESH tool) to your local internal drive, this will be used to convert and submit NHS numbers and date of births to summary care records (SCRa) for cross matching.
- Further information can be found in the MESH folder on the [DHSC eXchange](#).

Getting started

Prior to using the MESH tool, you will need the organisational data necessary to provide the required accurate information.



Contact your local IT or informatics team to develop and request an internal report of all trust patient data for submission ie new outpatient appointments, inpatients and waitlist patients, etc. Please note that if this data exceeds the 1,000 records threshold, your data will need to be split into batches for upload.

NHS Number	DoB
9990006954	22/02/2006
9990006660	05/11/2005
9990045704	13/08/1983
9990095485	01/02/1948
9990104018	16/01/1912
9990104034	20/10/1941
9990040257	25/05/1974
9990241902	23/05/2007
9990240272	29/10/1943
9990240736	01/10/1994

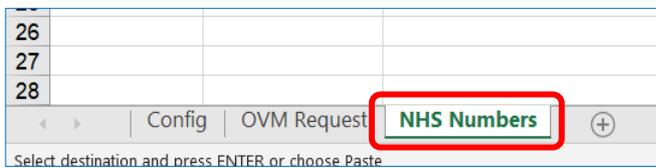
Your internal IT reports can be developed in an Excel format. Your IT or Informatics teams can develop these reports for you on a daily basis. Please ensure that the required fields NHS number and date of birth are adjoining and that the date of birth field is formatted as DD/MM/CCYY to ensure compliance with MESH upload submissions.

It is important that your information governance department is aware of the OVM activities and data control. Data extracted from MESH must be protected appropriately, whether stored locally, on servers, removable media, or paper, which should be destroyed when no longer needed for your intended purpose (as referenced in your trust's privacy statement and record retention policy).

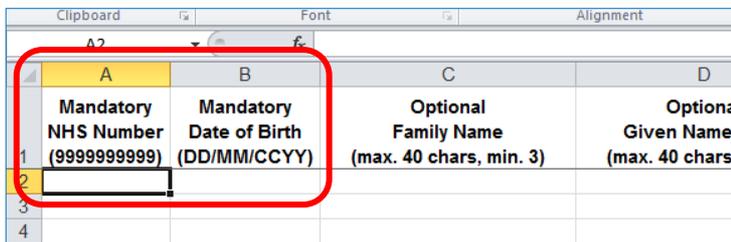
Overseas visitor managers read requests

You will now need to input and submit your data as an OVM read request. This is essentially an Excel spreadsheet (v7.1 or greater) displaying visitor demographics to bulk query and obtain the chargeable status for a list of patients from Spine.

Open your read request spreadsheet and select Enable Content on start-up.

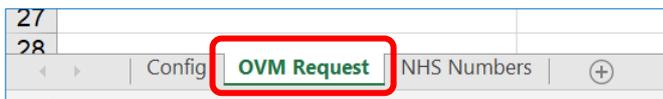


Click the NHS Numbers tab within the Excel MESH read request file.

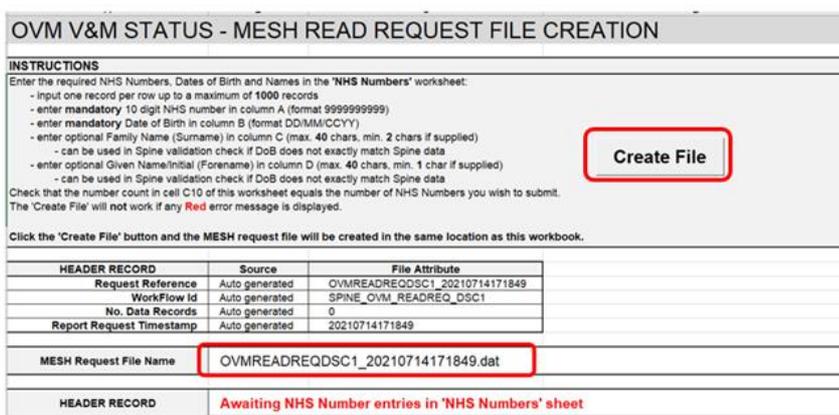


Collate your report data ie outpatients, inpatients and waitlist patient NHS numbers and date of births, then copy and paste these data items into the mandatory NHS Number (9999999999) and mandatory date of birth (DD/MM/CCYY) columns.

If an incorrect mandatory field is entered an error message will be displayed in red until corrected.



Click the OVM Request tab to create your file.



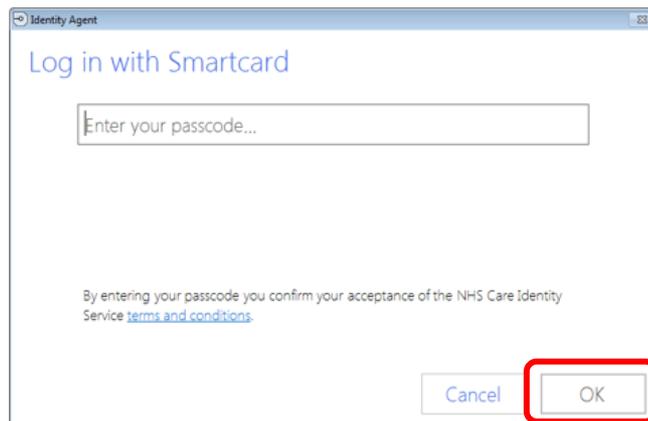
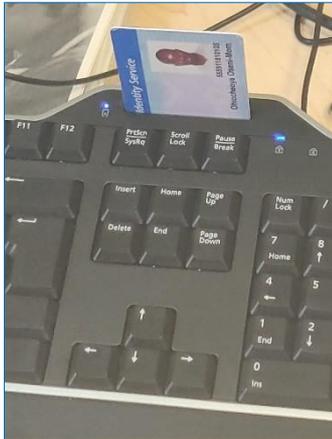
Click Create File button within the MESH read request file to create your OVM read request .dat (data) file for submission to the Spine.

Your file will be 'timestamped' for ease of identification when you need it later on.

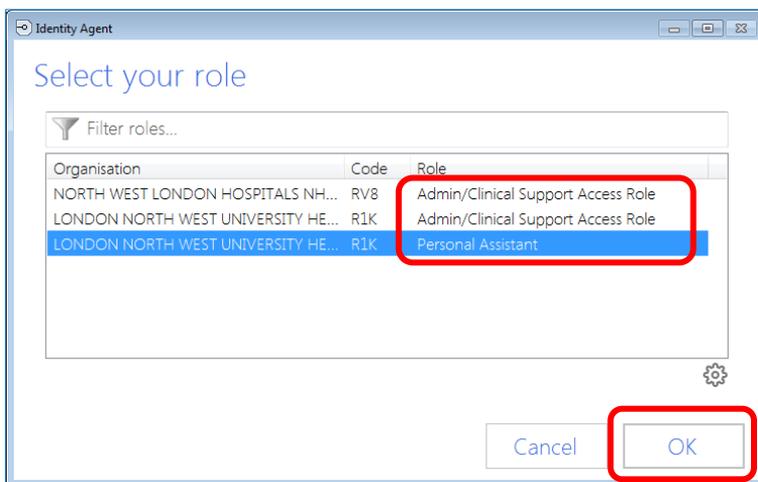
Accessing the Spine portal

Spine allows information to be shared securely through national services such as summary care records (SCRa). The spine contains information as to whether a patient may be charged for their healthcare.

Start by inserting your Smartcard into the reader on your keyboard.



When the login screen appears, enter your passcode and click OK.



If required, select your Role, this will be your role with RBAC 0259/0266 access assigned.

Click OK.

Now launch the [NHS Spine application](#) in your browser.

You will now see a list of applications accessible via the Spine portal. You will only be able to access those applications which are relevant to the role you logged with.

Scroll down the list and select Launch MESH User Interface.

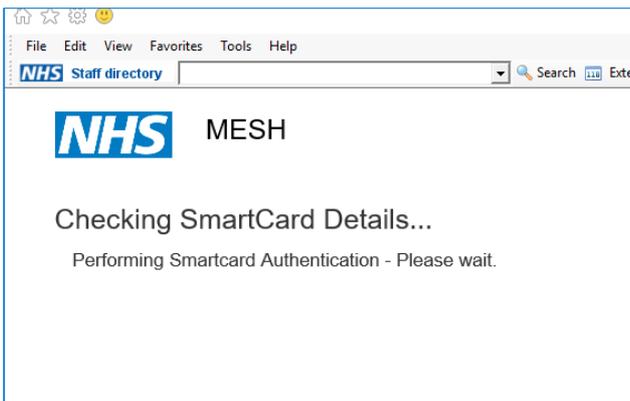
National Health Service Spine Portal

NHS Applications

Welcome to the Spine Portal. The portal now lists all applications. You will only

Note that all applications are launched in a child window.

- ▶ [Launch EPS Prescription Tracker](#)
- ▶ [Launch Summary Care Record \(SCR\)](#)
- ▶ [Launch End Point Registration Service](#)
- ▶ [Launch Digital DS1500 Service](#)
- ▶ [Launch Spine Reporting Service](#)
- ▶ [Launch MESH User Interface](#)
- ▶ [Launch Care Identity Service](#)
- ▶ [Launch TES Alert Viewer](#)
- ▶ [Launch MESH Online Enquiry Service \(MOLES\)](#)
- ▶ [Launch Demographic Spine Application](#)



Once clicked, your Smartcard will be verified to ensure you have the right credentials to access this particular application.

Your trust mailbox will now be displayed with your username (next to the person icon in the top right corner of the screen and your trust name clearly displayed to inform you that you are on the correct path.

NHS Message Exchange for Social Care and Health

NHS FOUNDATION TRUST - SPINE
SUBMISSIONS - REPHC001 - REP

Inbox Sent Page last refreshed at: 10:53 [New Message](#)

Search

Mailbox Name	Type	Received On	Expires On	
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	24-May-2018 09:46	29-May-2018 09:46	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	21-May-2018 10:39	26-May-2018 10:39	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	18-May-2018 08:45	23-May-2018 08:45	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	16-May-2018 12:33	21-May-2018 12:33	Download

Click New Message.

NHS Message Exchange for Social Care and Health

NHS FOUNDATION TRUST - SPINE
SUBMISSIONS - REPHC001 - REP

Inbox Sent Page last refreshed at: 10:53 [New Message](#)

Search

Mailbox Name	Type	Received On	Expires On	
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	24-May-2018 09:46	29-May-2018 09:46	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	21-May-2018 10:39	26-May-2018 10:39	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	18-May-2018 08:45	23-May-2018 08:45	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	16-May-2018 12:33	21-May-2018 12:33	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	11-May-2018 09:59	16-May-2018 09:59	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	04-May-2018 09:50	09-May-2018 09:50	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	03-May-2018 08:49	08-May-2018 08:49	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	02-May-2018 09:47	07-May-2018 09:47	Download

10 1

Inbox Sent

New message

*** Select Message Type**
Spine OVM Bulk Visitor and Migration Information Request (SPINE_OVM_READREQ_DSC1 ▼
Please select a message type from the drop down list

*** To**
INTERNAL-SPINE - INTERNAL-SPINE x ▼
Select a message type before choosing a recipient

*** Attach a document**

Please attach the relevant document here

+ Additional Information

Select Spine OVM Bulk Visitor and Migration Information Request from the Select Message Type drop down menu.

Select Internal Spine from the “To” drop down menu,

Locate your file via the Attach a document field by clicking the Select file button.

Select your .dat (data) file from your drive and click Submit.

MESH responses



On submission, repeatedly press F5 to auto refresh your screen until your .dat (data) response file becomes available to download. Submitting 100s of NHS numbers and date of births takes seconds and 1,000s of NHS numbers and date of births takes minutes.

Click your bold highlighted response file. Select Download and save your returned .dat (data) file to your local drive.

NHS Message Exchange for Social Care and Health

NHS TRUST - SPINE
SUBMISSIONS - RYJHC001 - RYJ

Inbox 1 Sent Page last refreshed at: 14:49 New Message

Search

Mailbox Name	Type	Received On	Expires On	
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration I...	12-Jun-2019 14:49	17-Jun-2019 14:49	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	10-Jun-2019 08:44	15-Jun-2019 08:44	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	10-Jun-2019 08:43	15-Jun-2019 08:43	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	04-Jun-2019 12:51	09-Jun-2019 12:51	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	04-Jun-2019 12:23	09-Jun-2019 12:23	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	04-Jun-2019 12:09	09-Jun-2019 12:09	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	03-Jun-2019 08:54	08-Jun-2019 08:54	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	03-Jun-2019 08:54	08-Jun-2019 08:54	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	31-May-2019 16:29	05-Jun-2019 16:29	Download
INTERNAL-SPINE	Spine OVM Bulk Visitor and Migration Info...	31-May-2019 16:04	05-Jun-2019 16:04	Download

10 1 2 >

When the dialog box appears at the bottom of the screen, select the drop-down arrow next to the Save option and select Save As from the subsequent menu.

Do you want to save RESP_OVMREADREQDSC1_20210707143307_202107071339....dat (222 KB) from portal2.national.ncrs.nhs.uk?

Save Save as Save and open

Click Save to store the file.

File name: RESP_OVMREADREQDSC1_20210707143307_20210707144305

Save as type: DAT File

Hide Folders Save Cancel

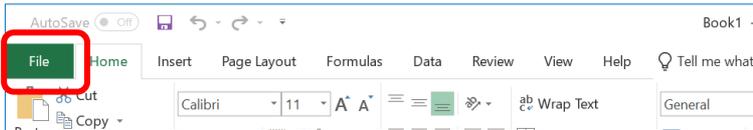
A .dat (data) file will be automatically generated and stored locally within your specified drive. Here is an example of a response .dat (data) file.

Do not change the name of this file prior to submission.

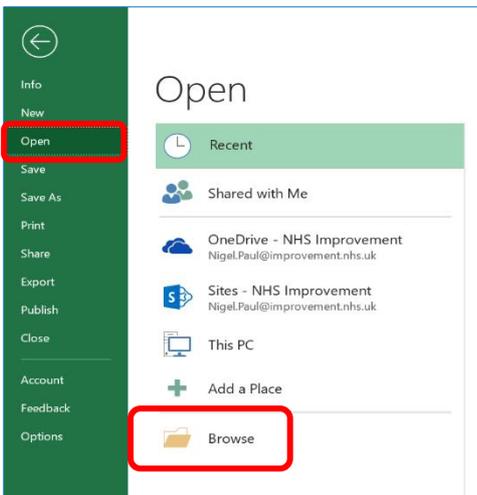
RESP_OVMREADREQDSC1_20210707143307_20210707144305.dat 07/07/2021 16:08 DAT File

Now going back to the Excel Spreadsheet tool (OVMReadRequest_V7.1.xlsm) you can run the Funnel+ algorithm (macro) on the returned response .dat file as described in the “Funnel+ Quick User Guide.docx” that can be found on the DH eXchange in the MESH\UI\Tools folder.

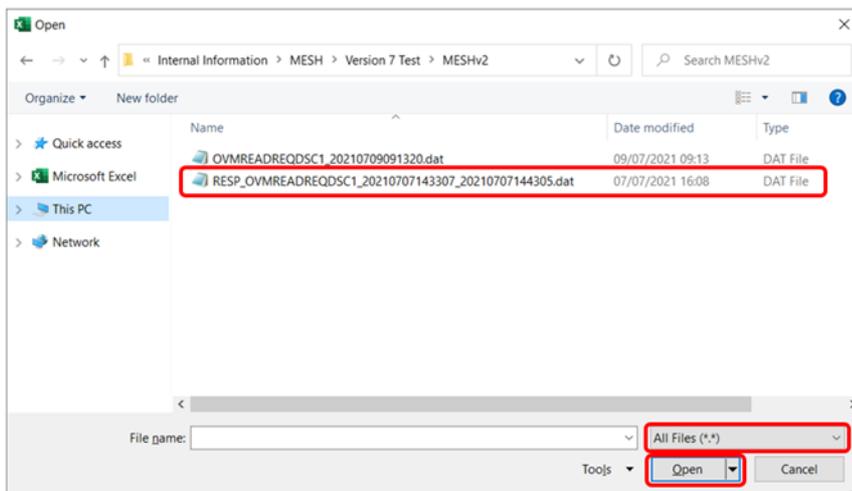
Alternatively you can open and view the data manually:



Open a new Excel spreadsheet. Select File.



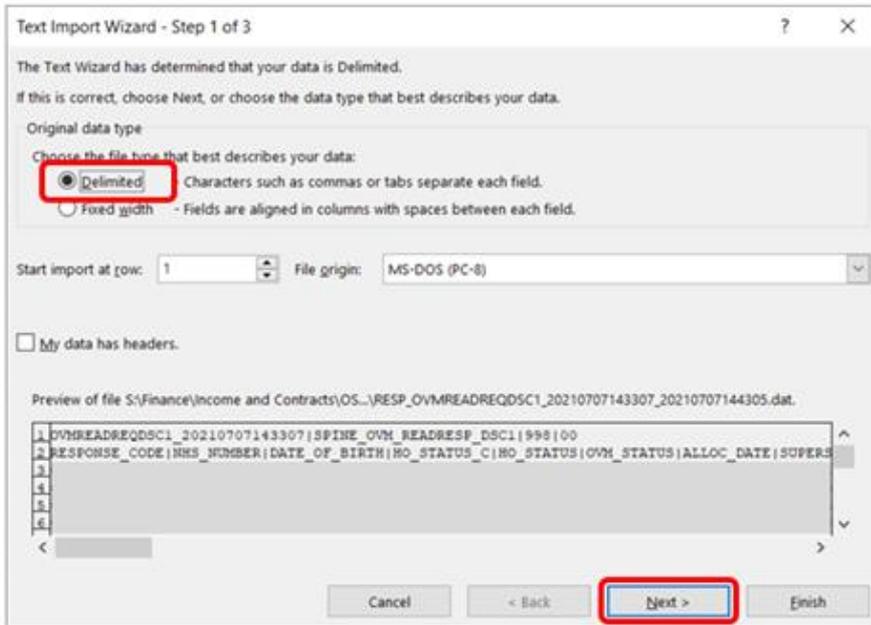
Scroll down the list on the sidebar and select **Open** and then click **Browse** to find the folder where your file is stored.



Click on the folder in which your file is stored, to open it.

Ensure that All Files has been selected so that the full list of .dat. files are displayed.

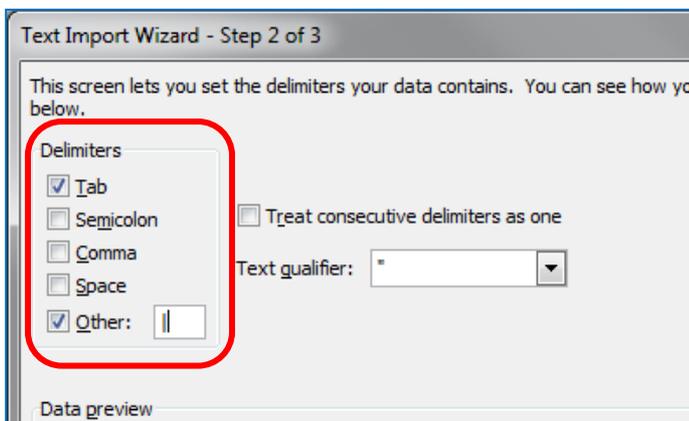
Select your response .dat (data) file, then click Open.



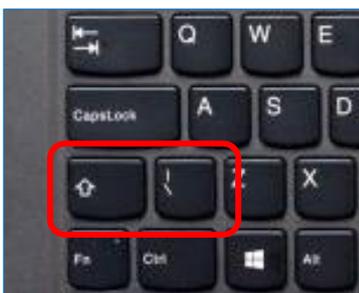
An Excel wizard dialog box will appear.

Using this Text Import Wizard, select Delimited.

Click Next.

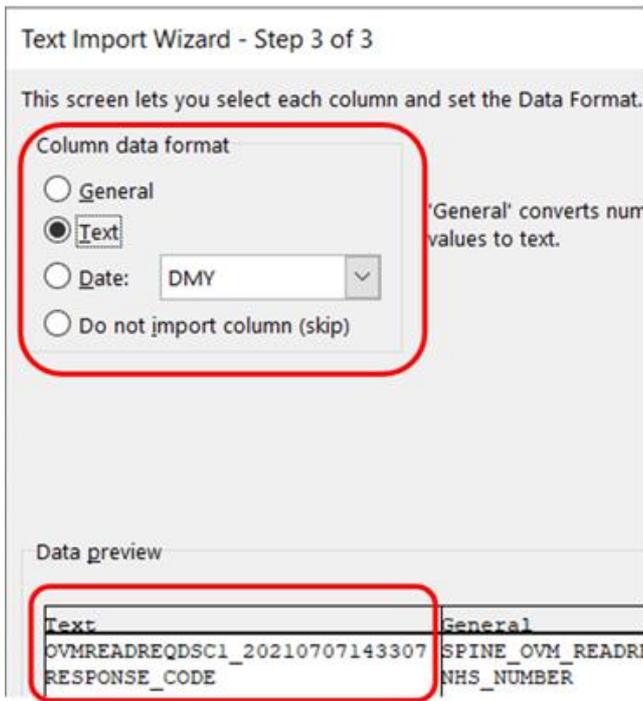
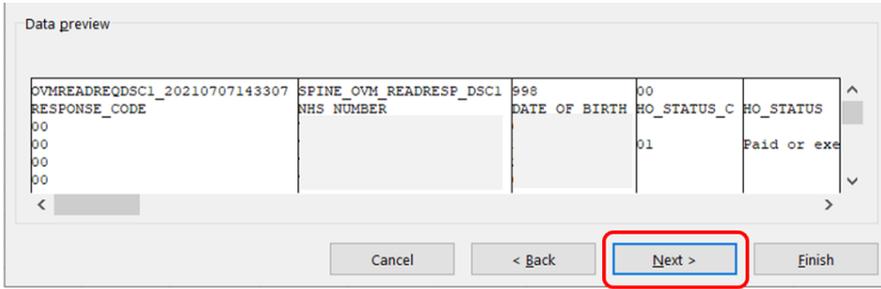


For Step 2, untick the Tab delimiter and tick Other within the delimiters box.

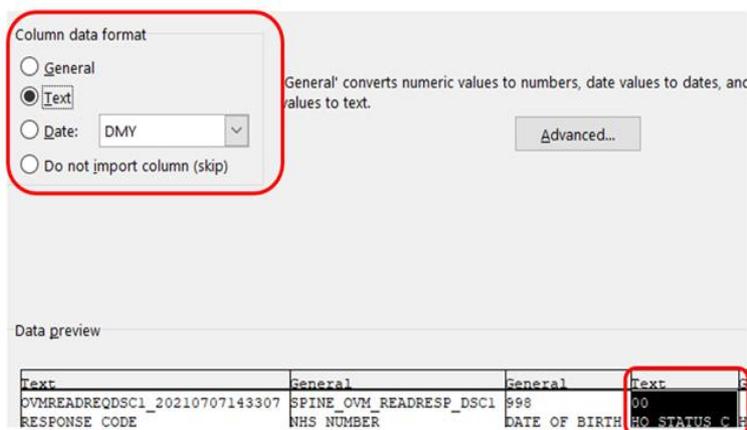


Select Shift and the vertical bar symbol (typically located above backslash symbol) which will split the file into columns. This is known as a pipe command.

Now click Next.

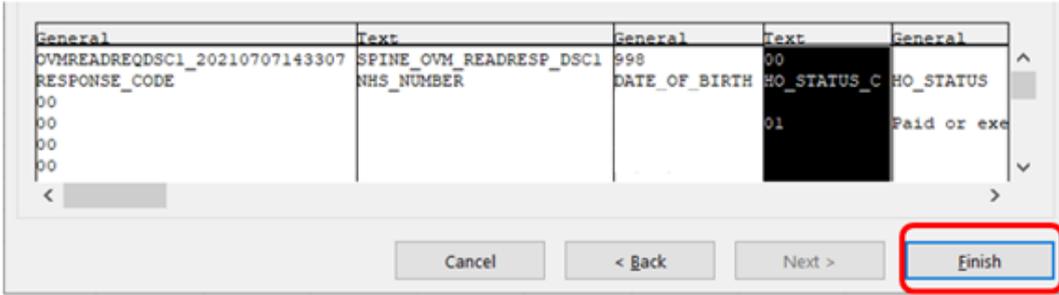


When the final Wizard step appears, click to highlight the Response Code column (under the Text heading) and then change the Column data format from General to Text.



Now highlight the HO_Status_C column and again change the data format from General to Text. This will ensure the status codes will appear correctly ie response code 00 Success and HO Status Code 02 Likely chargeable for NHS services.

Click **Finish**.



Response OVM read request file

The query response file will contain multiple data records with a record for each patient, providing OVMs and overseas visitor officers with information to assist in determining eligibility to free NHS treatment.

Having clicked Finish, your response .dat (data) file will now present your data within Excel.

A	B	C	D	E	F	G	H	I	J
1	O SPINE_OVM_READRESP	267	0						
2	RINHS_NUMBER	DATE_OF_BIRTH	HO_STATUS_C	HO_STATUS	OVM_STATUS	ALLOC_DATE	SUPERSEDED_BY	FAMILY_NAME	GIVEN_NAME
3	0					30/08/2016			
4	0					01/08/2017			
5	0			1		26/09/2017			
6	0					04/02/2016			
7	0					22/09/2017			
8	0					08/03/2017			
9	0				P	13/02/2018			
10	0					07/04/2017			
11	0					16/02/2017			
12	0			1		02/11/2015			
13	0			1		28/11/2017			
14	0					05/12/2017			
15	0			1		06/09/2016			
16	0					25/07/2017			
17	0					05/10/2016			
18	0				P	30/01/2018			
19	0					16/05/2016			
20	0			1		13/06/2017			
21	0					02/03/2016			
22	0					01/12/2017			
23	0					25/09/2017			
24	0			1		26/09/2017			
25	0					05/10/2017			
26	4								
27	0			1		24/05/2017			
28	0			1		10/10/2017			
29	0			1		28/11/2017			
30	0			1		10/10/2017			
31	0			1		12/04/2017			
32	0					05/06/2017			
33	0			2		23/08/2016			

The table displays those who have paid or are exempt (in this example, circled in green), those who are likely to be chargeable (circled in red) and where there is a decision pending, P is displayed (circled in this example, in Amber).

Quick tip:

	A	B	C	D	E
1	OVMREADREQDSC1_20210707143307	SPINE_OVM_READRESP_DSC1	998	00	
2	RESPONSE_CODE	NHS_NUMBER	DATE_OF_BIRTH	HO_STATUS_C	HO_STATUS

You can quickly sort the data by selecting the corner arrow and double-clicking between column A and B in the tab bar.

The Query Response Record Data table provides a numeric code regarding the processing of each individual request ie 00 provides a successful match with a visitor identified from a Trusts Patient Administration System and the Spine, providing possible further information as to whether the visitor is likely chargeable, surcharge paid or exempt alternatively checks may need to be done for further evidence.

Response code	Description
00	Success
01	Failure: Invalid format/missing NHS Number
02	Failure: NHS Number not found on Demographics (or flagged "Invalid")
03	Warning: NHS Number superseded on Demographics
04	Failure: X-check failed
05	Failure: Missing DoB
06	Failure: Invalid DoB
07	Failure: parse failure
99	Failure: unexpected error
10	Bad request. A required attribute was not passed in the API call. The body of the API response will include an error providing further information.
11	Bad request. A parameter that was passed in the API call failed validation. The body of the API response will include an error providing further information.
12	Unauthorised. Authentication failure (eg due to a missing / invalid / expired token).
13	No record of the applicant was found in the data sources that the API checked, indicating a data quality issue. In addition it may indicate that the applicant's status has been cancelled or nullified by the Home Office, although this is temporary 'holding functionality', is subject to policy/legal advice and will have a more long term functionality developed in the future to deal with cancelled statuses.
14	The Home Office matched multiple identities against the given request parameters.
15	Too many requests. The API or one of its dependencies has exceeded its capacity to handle requests.
16	A generic error message, given when an unexpected condition was encountered and no more specific message is suitable eg: internal server error at Home Office.
17	Request timed out with no response from HO

Quick tip:

Further information for all fields in the tab bar can be located in the OVM Query Batch document, section 2.2.3 available within the OVM Toolbox, Finance, MESH on the [DHSC eXchange](#).

	A	B	C	D	E	F	G	H	I	
1	OVMREADREQ_30100612014736	SPINE_OVM_READREQ	11	0						
2	RESPONSE_CODE	NHS_NUMBER	DATE_OF_BIRTH	HO_STATUS_C	HO_STATUS	OVM_STATUS	ALLOC_DATE	SUPERSEDED_BY	FAMILY_NAME	GIVEN

Need help?

Should you discover issues with MESH, in the first instance, you should contact your own trust IT helpdesk to rule out if one or all of the following, is causing the issue:

- user local network account
- hardware (eg PC)
- software (eg web browser).



If no local issues are found, please contact the National Service Desk via email or telephone. Please ensure you state Spine-OVM in your communications and state the severity to ensure it is directed to the correct support operative

Known issues and requests

- Once local support from your IT department has established there is a MESH mailbox problem unrelated to your PC and its setup, you will need to log an email/call with NHS Digital National Service Desk.
- Urgent issues will need to be raised as an Incident under Spine-OVM Severity 3.
- General information/non-urgent requests need to be raised as a Service Request Spine-OVM Severity 4.
- An attempt may be made on a call to resolve your issue immediately or it may be passed/deferred to a dedicated team member to help in resolution.

- This table outlines NHS Digital’s priority type and timescales in providing a response and resolution to your incident or request.

Severity / Priority	Maximum Resolution Target
3	Used for mailbox deactivation/password changes/urgent new mailbox requests - 15 working hours maximum resolution
4	Used for general enquiries / non urgent – Maximum 10 working days resolution.

- OVMs should note the priority number severity, those who do not receive a resolution within the appropriate timescales should escalate via the NHS service desk (details are outlined below).
- When your issue is resolved or your request completed, the National Service Desk will close the call and will inform you via a confirmation email.

If you have any further questions or queries, please contact the NHS Digital National Service Desk on 0300 3035 035 or email ssd.nationalservicedesk@nhs.net.

To add a user you only need to complete the [online form](#) where you will be informed via email when your account has been created.

Further MESH information, documentation and helpful videos can be found in the OVM Toolbox on the [DHSC eXchange](#) forum. If you don’t have an account and wish to become a member then please email your details to: NHSCostRecovery@dhsc.gov.uk.