University Hospital Southampton **NHS**

NHS Foundation Trust

Southampton Pathology and Radiology ICE Download User Guide v1.4

Contents

Version Information

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Version	Date	Notes	Author
1.0	25/03/2020	Initiated following practice download UAT sessions with grateful assistance from EMIS Hedge End and TPP Solent practice	Keith Burrill, UHS Pathology
1.1	20/04/2020	Consolidated reporting views and added Appendix 2	Keith Burrill, UHS Pathology
1.2	05/06/2020	Noted 'fatal' issue with complex reference range results on download. Supplier put into development to fix but likely to be delayed due to Covid19 priorities. Recommended more benefit go live as SARS-CoV-2 results and others can be downloaded without issue	Keith Burrill, UHS Pathology
1.3	09/04/2021	Supplier fixes for issue in 1.2 have been applied live and passed UAT. This manual updated with table summarising legacy result formatting issues for download reports	Keith Burrill, UHS Pathology
1.4	28/04/2021	Correction to date of live patch to Free Testosterone result issue	Keith Burrill, UHS Pathology

Notes.

ICE download is an additional GP links reporting service from UHS. New practices connecting to UHS ICE
GP system administrators should refer to Appendix 2 for registering this and other UHS core reporting services

This ICE report messaging is also required to deliver Radiology request status update (SU) messages back to practices where a SU needs to be sent

It is assumed users reading the guide know how to view their patient reports in ICE
If this is not the case then see service contact details in Appendix 1

Table of legacy result formatting issues found and patched during the development of this new HL7 ICE result translation to ICE download service.

Issue	Date fix applied	Recommendation
Any Pathology results with numeric results downloaded prior to the ICE result modification date 11th Nov 2019 will not have internal reference range detail	11/11/2019	Avoid download of numerical results prior to this date, see report example 3. On page 7
Should pathology reports have textual type complex reference range eg Glucose then download report will error and not download	18/02/2021	Avoid download of these results with reporting date preceding 18/02/2021. See report example 4. Page 9
Noted Free Testosterone result has a ref range >= which caused download fail	27/04/2021	Avoid download of reports containing Free Testosterone result with reporting date prior to 27/04/2021. See report example 5. top of page 10

ICE Download Overview

ICE download allows GP practice ICE users to select Pathology and/or Radiology reports belonging to their patients which were not requested by their practice eg UHS inpatient or outpatient reports to be 'downloaded' via ICE gplinks service into the practice.   The results on collection by the practice system via the NHS MESH network will then be integrated into the practice clinical patient record.   The same set of Read/SNOMED CT codes where applicable will be employed which should mean benefit in QOF reporting and potentially less duplicate testing and administration.

There is a textual stamp on the reports which indicate the report has been downloaded. Previous downloaded report audit is also displayed/available.

ICE download buttons show within ICE Patient Reports View

The ICE reports view now has Download button options on the right hand side and this option is available for all report locations:

On clicking a Download button users are presented with box to select recipient from drop down list,
For example, GP is selected from this practice:
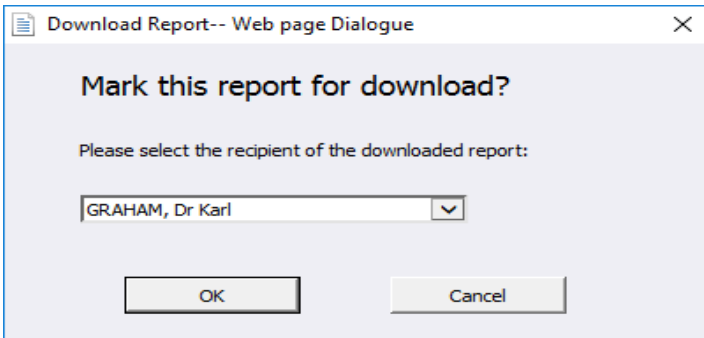
On clicking OK there may be a short delay where system triggers the download.
Should this not clear after a few seconds just click the report view screen .

The ICE result screen then shows and indication the report has been downloaded and
this audit retains within ICE with any new download requests adding to the audit
which can be displayed by moving the mouse over the icon
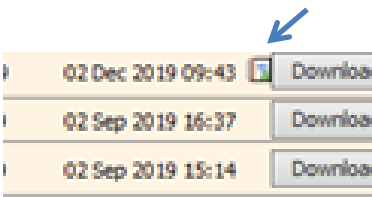
Report examples.

1. **EMIS Inbox example showing Radiology report and Downloaded by? Preceding selected GP/clinician:**

2. Pathology result set with numeric results, reporting dating from 11th Nov 2019 or later. All have reference ranges and Hi/Lo flags when provided against numeric results, test sample H30103093S, all OK:

EMIS system view

29-Nov-2019	!	◢	Full blood count - FBC	(BM) - Abnormal - See Note
	!		Haemoglobin estimation	102 g/L (130 - 170)
	!		Total white cell count	13.0 10*9/L (4.0 - 11.0)
			Platelet count	315 10*9/L (150 - 400)
	!		Neutrophil count	11.9 10*9/L (2.0 - 7.5)
	!		Lymphocyte count	0.7 10*9/L (1.5 - 4.0)
			Monocyte count	0.4 10*9/L (0.2 - 1.0)
			Eosinophil count	0.0 10*9/L (0.0 - 0.5)
			Basophil count	0.0 10*9/L (0.0 - 0.1)
	!		Red blood cell (RBC) count	3.47 10*12/L (4.5 - 5.5)

TPP system view

File Entire Report | File Battery | Next Report | Previous Report | Close | Graph Old Readings | Message | Print | Delete

The report below is for Mr Thirtythree Editestpatient - 999 004 2128

Unspecified Clinical Information: TEST PATIENT RESULTS ONLY FOR TR860

Full blood count (424..)

Specimen: Blood Collected: 29 Nov 2019 Provider Comments: Downloaded by: Graham (J82089 Hedge End Medical Centre) on

Investigation	Code	...	...	Result
Full blood count	424..	i		
Haemoglobin concentration	Xa96v	i	▬	102 g/L [130.0 - 170.0] Below low reference limit
Total white blood count	XaldY	i	✚	13.0 10*9/L [4.0 - 11.0] Above high reference limit
Platelet count - observation	42P..	i		315 10*9/L [150.0 - 400.0]
Neutrophil count	42J..		✚	11.9 10*9/L [2.0 - 7.5] Above high reference limit
Lymphocyte count	42M..		▬	0.7 10*9/L [1.5 - 4.0] Below low reference limit
Monocyte count - observation	42N..			0.4 10*9/L [0.2 - 1.0]
Eosinophil count - observation	42K..			0.0 10*9/L [0.0 - 0.5]
Basophil count	42L..			0.0 10*9/L [0.0 - 0.1]
Red blood cell count	426..	i	▬	3.47 10*12/L [4.5 - 5.5] Below low reference limit

3. **Pathology numerical result pre 11th Nov 2019**
   KNOWN ISSUE, Units and reference ranges are missing, though the Hi flag is indicated
   on the AKI and Read codes still map OK, test sample B30102993V

CAUTION: Any results with numeric results downloaded prior to the ICE result reporting modification applied 11th Nov 2019 will not have internal reference range detail. It is recommended that these older numerical results are not downloaded from ICE .

Image 1: ICE results view itself is not impacted, the arrow below shows ICE record of download transaction.

Patient Name:	Mr Thirtythree Editestpatient		Hospital Number:	7464076 See Case
Date of Birth:	01 January 1945		NHS Number:	999 004 2128
Address:	c/o HSCIC TEST DATA MANAGER, Solution Assurance, 1 Trevelyan Sq.,...			

< | Unfile | File & Next | > | Back | < | Cumulative | > | Print | Hide | Audit Trail | Move | Delete | ICEMail

	Reported	Specialty	Location	Clinician
	28 Aug 2018 16:16	Point of Care	PARK SURG, J82143, HURSLEY RD	Dr VIRTUALONE (General Practice)

Filed by **sunquest** (Sunquest Administrator) at 28 Sep 2018 06:00, Reason: Filed - Report over 30 days old

```
   TEST REPORT FOR ICE
For Clinical advice please bleep 2612. If the patient
is of African-Caribbean or African family origin,
multiply the eGFR result by 1.159. Do not use eGFR to
calculate drug doses.
Downloaded by: Graham (J82089 Hedge End Medical Centre) on 13/03/2020 08:38:09
Downloaded by: Dr Laura Regan (J82024 Solent GP) on 24/03/2020 08:53:12
```

Sample B30102993V (Plasma) Collected 28 Aug 2018 16:11 Received 28 Aug 2018 16:15
Renal Profile

Sodium	140	mmol/L	133 - 146
Potassium	4.0	mmol/L	3.5 - 5.3
Creatinine	81	umol/L	80 - 115
eGFRcreat (CKD-EPI)	83	mL/min/1.73m2	
AKI Warning Stage	* 1		0 - 0

```
Significant rise in creatinine consistent with


AKI Stage 1 - refer to AKI Map of Medicine Guidelines


for management advice.
```

Image 2: GP practice systems result download error example
EMIS system view, note - no reference ranges are shown and is clinical risk

| 28-Aug-2018 | ! | Renal profile | (BM) - Abnormal - See Note
Significant rise in creatinine consistent with
AKI Stage 1 - refer to AKI Map of Medicine Guidelines
for management advice. |
| --- | --- | --- | --- |
| | | Plasma sodium level | 140 |
| | | Plasma potassium level | 4.0 |
| | | Plasma creatinine level | 81 |
| | | eGFRcreat (CKD-EPI)/1.73 m²2 | 83 |
| | ! | AKI warning stage | 1 |

TPP system view – note no reference ranges are shown

The report below is for Mr Thirtythree Editestpatient - 999 004 2128

Unspecified Clinical Information: **Test report for new unit**

Renal profile (44J5.)

Specimen: Plasma Collected: 17 May 2018 12:55 Provider Comments: Downloaded by: Yates (J82089 Hedge End/J82001 Burgess Road) on 13/03/2 020 08:2

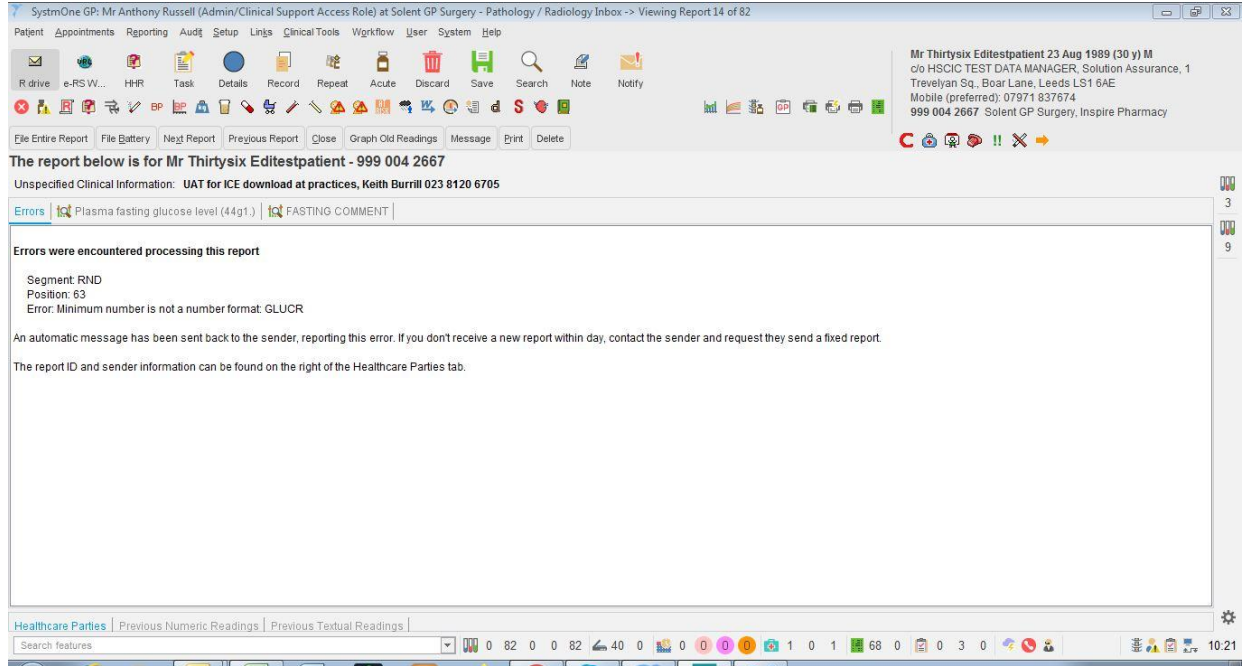Filed 24 Mar 2020 10:28 by Mr Anthony Russell: Normal, No Further Action,

Investigation	Code			Result
Renal profile	44J5.	i		
Plasma sodium level	XaIRf	i		140
Plasma potassium level	XaIRl	i		4.0
Plasma creatinine level	XaETQ	i	PA	Potentially abnormal 53
eGFR using creatinine (CKD-EPI) per 1.73 square metres	XacUK			> 90 mL/min/1.73m2

4. Glucose and other lab 'complex reference range' issue and fixed examples

Fix applied to results published post 18/02/2021

Pre 18/01/2021 results will error on download though ICE download errors will not interfere with our main GP links results which are delivered via different reporting stream

ICE Labcomm service view

Pre 18/02/2021 result Non- delivery error message recorded at (TPP) practice

Post 18/02/2021 Example of result downloaded without error

5. **Further filed report examples**

Recent Free Testosterone result example

TPP - SARS-COV-2 test sample 20V814272J

Urine microscopy

Patient: Thirtysix Editestpatient

Date Of Birth: 23-08-1989

NHS Number: 9990042667   **Recipient GP:** VIRTUALONE

Status: Filed   **Viewed:** VIRTUALONE

Specimen: Midstream urine **Taken:** 21/11/2019 11:35 **Recieved:** 21/11/2019 11:48

Origin: Not Specified   **Volume:** Not Specified

Collection: Not Specified   **Id:** 19M170042B

     Amended Report Text ?: TEST REPORT

     E.coli is an Extended Spectrum B-lactamase producer

!Urine microscopy

! Sample microscopy : leucocytes	>20/cumm (Raised)
Sample microscopy : red cells	0/cumm
Sample micro : epithel cells	0/cumm
Urine microscopy: yeasts	Not seen

! Urine culture

     Please see Culture Field

!CULTURE

! ORGANISM	Escherichia coli
! ORGANISM GROWTH	>10*8 organisms/L
TRIMETHOPRIM	S
AMP/AMOXICILLIN	R
CO-AMOXICLAV	R
NITROFURANTOIN	S
TAZOCIN	S
FOSFOMYCIN	S

Notes: Assorted samples for ICE testing

Appendix 1 – Queries and Support

Pathology
UHS.GPLinks@nhs.net
Tel 023 8120 3379, 4355 or 6705

PACS (radiology)
uhs.pacssupport@nhs.net
Tel 023 8120 8196

ICE Support web link, including manuals:
Click here

Appendix 2 – UHS connectivity settings for Pathlinks live and ICE Download

UHS ICE download services utilise a new additional MESH mailbox **694x0pm**
Our current pathology and radiology reports use 694x0pm1 and this must be left unchanged.
ICE Radiology service Status Update messaging (SU messaging) also utilises the new ICE service
694x0pm mailbox

Our Laboratory EDI 'trader' identifier remains for the new service as 1100000522
However within the ICE services pathology has a 'free part of 00005 and radiology 00006
These settings are important to retain uniqueness of each of the services.

The new service are shown below with pilot TPP and EMIS examples shown on subsequent pages

ICE LABCOMM – NEW SERVICES
MESH service mailboxID: **694x0pm UNIVERSITY HOSPITAL SOUTHAMPTON ICE**

 ICE Labcomm Organisation details:
 ICE Org code: **RHM00**
 ICE Organisation Name: **Southampton Hospitals NHS Trust**

ICE Download Services:
UHS lab EDI: 1100000522
Pathology = MEDRPT:NHS003
1100000522 free part: 00005

Radiology   MEDRPT:NHS002
1100000522 free part: 00006

For reference only:

Current operational services – for reference only - KEEP THESE SETTINGS IN YOUR SYSTEM
UHS lab EDI: 1100000522
Keystone MESH service mailboxID: **694x0pm1** (freepart: 00002) UNIVERSITY HOSPITAL SOUTHAMPTON
LABORATORY

Services:
Pathology MEDRPT:NHS003
110000052200002

 Radiology   MEDRPT:NHS002
110000052200002

TPP SystmOne (Solent Practice)

Advice from TPP: Good afternoon Keith,

The GP practices are able to set this up for themselves, this is not something that TPP would normally do. All they have to do is go to Setup > Users & Policy > Staff & Organisation Setup > EDI Setup > Add Lab.

Kind regards,
Software Support Analyst, TPP

EMIS (Hedge End J82089)

Advice from EMIS:
IN177241 has been resolved - Dear Emis Our site code is 130001

Hi Keith,

This is something that would be unable to do for you as we are not allowed to change the practice systems. However it is possible for the practice to add extra trading partners themselves. If the practice have any problems doing this then please advise them to contact the EMIS Web Support Team via the normal channels

694x0pm UNIVERSITY HOSPITAL SOUTHAMPTON ICE

New ICE services details setup (note organisation cipher removed from view)