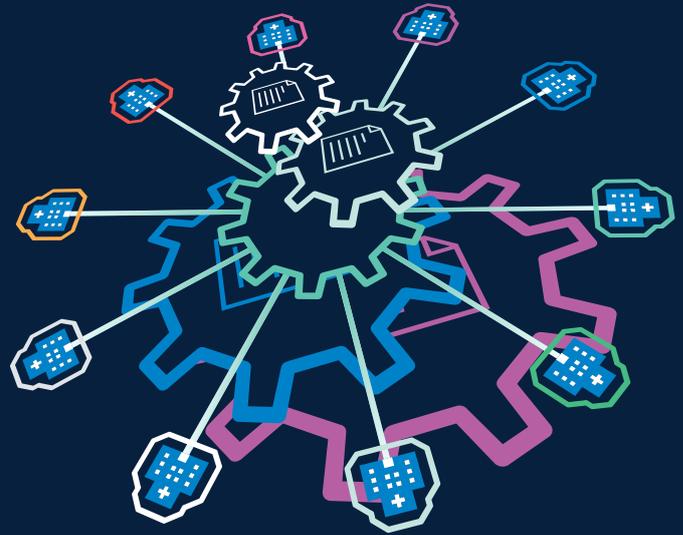


# NPEx Newsletter

November - Issue 7



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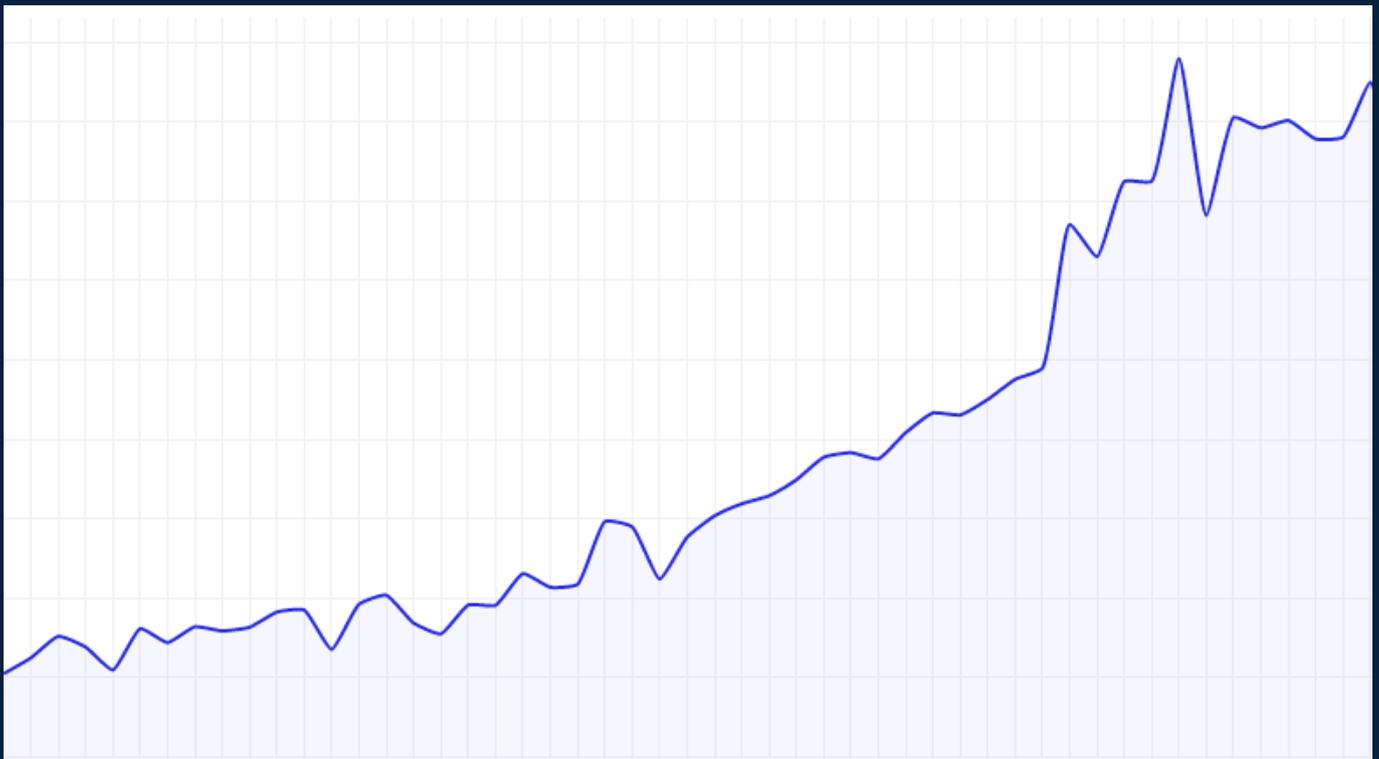
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## NPEx Volumes



The NPEx service continues to expand across the UK with an average of 1-2 new NHS pathology laboratories connecting every month and over 70 NHS Trusts already signed up with most others actively reviewing connection options.

NPEx is expected to hit 1-million test requests annually in March or April next year, which equates to over 80,000 requests being sent through the system each month. One major laboratory now receives over 20,000 digital test requests from eight other laboratory connections.

Andy Harris, General Manager at X-Lab states *“NPEx is a rapidly growing service as these figures show. It is doubling in size approximately every 18 months. The technology underlying NPEx is very similar to that used in NHS Spine 2 and has been designed with scalability in mind. We are looking forward to supporting very significant growth rates for the longer term.”* Message rates passing through the exchange have been seen to peak at more than 500 per second and there is capacity for many times this volume as pathology networks start to exploit NPEx as a simple and proven digital platform for regional reconfiguration.

## NHS Improvement

As part of NHS Improvement, it is proposed that the 105 individual pathology services within NHS hospitals in England join up in order to form a series of 29 Pathology Networks. In doing so, clinical expertise could be brought together and pathology services across the country will become more efficient in delivering high quality care for their patients.

Chris Dunne, Assistant Director of Information at The Health Informatics Service (THIS) stated *“Rationalisation across the 29 Pathology Networks will see the volume of lab-to-lab communications growing significantly and it will not be acceptable, practical or financially sensible to attempt this rationalisation using paper based approaches. In addition, digital volumes are set to continue to grow with the consolidation of specialist services, the rapid growth in point of care testing and the opening up of the marketplace for laboratory services. The NHS NPEx service is already well established across the UK as the de facto solution for these issues in lab-to-lab communications. Most of the 29 proposed pathology networks have already adopted NPEx at one or more sites and five networks have achieved 100% adoption. Crucially, NPEx is an NHS service and it can be procured through the NHS, requires minimal costs and can be done quickly.”*

More than 50% of NHS acute providers have adopted NPEx, with over 70 NHS Trusts subscribed to the NPEx service. The elimination of paper for pathology requests/results is in line with the NHS Five Year Forward View and Trusts are expected to be implementing initiatives, such as NPEx, that provide digital alternatives to using paper.



## GDEx



Linking diagnostic devices to laboratory systems is one of the many challenges that the healthcare sector faces across the globe. As showcased by Leeds University Researchers at the World Health Organisation (WHO) 3rd Global Forum on Medical Devices, the proposed solution is a Global Diagnostic Exchange (GDEx) which is based on the National Pathology Exchange (NPEx).

By enabling full integration between medical devices and laboratory systems there will be a reduction of errors produced from paper-based processes and furthermore, doctors will have the opportunity to view results quicker, enabling them to make decisions for the patients at a quicker rate.

GDEx is the future! Watch this space!

For more information on this please visit:  
<https://www.npex.nhs.uk/news/171020>

The video of GDEx can be found here:  
<https://youtu.be/IRT-xC5T0t0>

## NPEx Roadshow



NPEx was pleased to host another regional roadshow event last week on Thursday 16th November in central Birmingham where representatives from 8 organisations, new and prospective customers, attended the day.

The day covered topics including setting the strategic context, discussing exciting new opportunities for laboratories to get involved with and a user story from Sandwell and West Birmingham NHS Trust.

Our roadshows so far have been very successful in engaging delegates on the challenges of modernisation in Laboratory Medicine, and the importance of how IT can serve as an enabler for change.

We're excited that NPEx falls in line with the recently proposed 29 pathology networks, as well as providing a solution for some of the challenges that laboratories face.

The next roadshow event will be held in Edinburgh for the laboratories across NHS Scotland.

Please check NPEx News for more information regarding roadshows near you or get in touch via [events@x-labsystems.co.uk](mailto:events@x-labsystems.co.uk) if you have any enquiries.

## Cyber Security: WannaCry Attack



Earlier this year a global cyber-attack occurred causing disruption across multiple countries. The worldwide attack known as the WannaCry ransomware cryptoworm, targeting computers running Microsoft Windows, infected over 230,000 computers in over 150 countries. The infected computers were made unusable unless the ransom was paid, and this differed from previous attacks due to the speed in which it took hold and spread.

The NHS experienced significant impact, which consequently resulted in closure of various departments within the trusts as well as GP practices across the country. This had a negative impact on patient care, as patients were being turned away, appointments were cancelled or postponed.

It didn't end there, as a few weeks later a variation on the ransomware called the 'NotPetya' was used for another attack a few weeks later using a different attack method.

The NPE team saw indirect impact of the attack with some digital connections temporarily closed off and NPE customers seeking reassurance about the status of our infrastructure before switching on those connections.

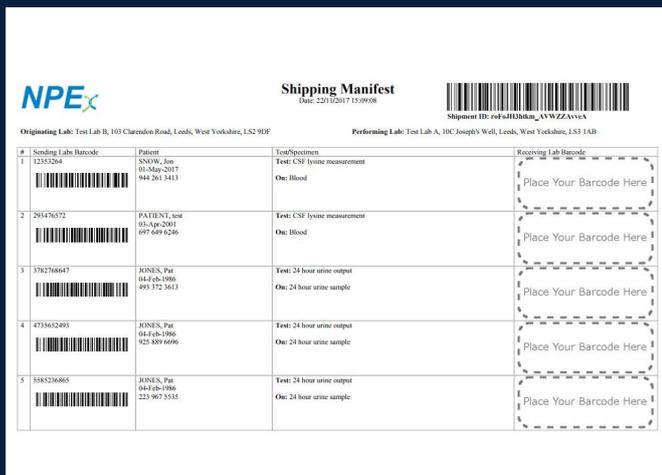
Luckily for us, Jason Cresswell the IT Security Manager at The Health Informatics Service (THIS) and his Cyber Security colleagues were able to respond to this threat immediately and ensured complete protection of their entire customer base. This meant that all their primary and secondary care services remained fully operational and only one site was slightly compromised, however there was no direct impact on patient care and this site was fully operational within 2 days of the attack. This also meant that NPE also remained untouched and unaffected.

Jason stated that *"This level of protection was, and is achieved through multi layered security practices. Not only are technical controls implemented using the most up-to-date methodologies, but more importantly, the ethos and attitude of the Cyber Security service strengthens working practice, guidelines, and policy, through understanding the current and future threat landscape and attack vectors."*

We're really thrilled to have a strong partnership between X-Lab and The Health Informatics Service, ensuring the best standards in security and governance at all times.

# Tech Update: Editing Shipments

# UK NEQAS



**Shipping Manifest**  
Date: 22/10/2017 15:09:08  
Shipment ID: npe438386aa\_vvWZzAvvK

Originating Lab: Test Lab B, 103 Clarendon Road, Leeds, West Yorkshire, LS2 9DF  
Performing Lab: Test Lab A, 100 Joseph's Well, Leeds, West Yorkshire, LS3 1AD

#	Sending Lab Barcode	Patient	Test/Specimen	Receiving Lab Barcode
1	1215204	SNOW, Jon 01-May-2017 949 261 1413	Test: CSF lysine measurement On: Blood	Place Your Barcode Here
2	20476572	PATIENT, test 03-Apr-2003 697 669 6246	Test: CSF lysine measurement On: Blood	Place Your Barcode Here
3	378238847	JONES, Pat 04-Feb-1986 899 372 3613	Test: 24 hour urine output On: 24 hour urine sample	Place Your Barcode Here
4	473863203	JONES, Pat 04-Feb-1986 925 889 6896	Test: 24 hour urine output On: 24 hour urine sample	Place Your Barcode Here
5	588236866	JONES, Pat 04-Feb-1986 229 967 5533	Test: 24 hour urine output On: 24 hour urine sample	Place Your Barcode Here



Once a lab has packaged a shipment in NPEx, the sending lab cannot add further specimens to it, neither can they remove specimens they no longer wish to include in the shipment. The current way this is managed is when the shipments are booked in at the receiving lab, they are able to book in additional specimens received and mark any specimens not present as missing – not ideal as it would be preferable for the shipping manifest to accurately reflect the shipment when sent out.

Keren Pearson, Software Developer for NPEx stated *“A new feature I have been working on recently is to allow the sending lab after they have packaged a shipment and before it has been dispatched, to add additional specimens, or remove specimens from a shipment. This feature will be made available to labs who book shipments in using the NPEx User Interface. It will not currently be available to labs that do not as it is unclear yet how many of the LIMS would cope with the addition and removal of shipment items.”*

The NPEx team is delighted to announce the successful delivery of a pilot to automate reporting of the General Chemistry UK NEQAS scheme, working in collaboration with Birmingham Quality.

Finlay MacKenzie, Director and Lead Scientist at Birmingham Quality, added *“We are pleased with the results from the pilot. There was a lot of hard work to address the foibles that exist in booking-in EQA specimens, but we think we are now ready for a larger roll-out.”*

If you are an NPEx customer and would like to take part in the digital reporting of UK NEQAS schemes, then please email:

[npe@x-labsystems.co.uk](mailto:npe@x-labsystems.co.uk).

## Newly Subscribed!

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We're excited to announce our new NPEx subscribers. They're currently in deployment but will be going live very soon!

HCA Laboratories

Royal Devon & Exeter NHS Foundation Trust

Northern Devon Healthcare NHS Trust

Berkshire and Surrey Pathology Services

Southwest London Pathology Services

We'd like to congratulate Epsom and St Helier University Hospitals NHS Trust for winning the award for 'The Fastest Deployment' at our annual User Group in July 2017. They managed to deploy in 16 weeks which is a new record.