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Questions or comments?

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Eastern Pathology Alliance



www.easternpathologyalliance.nhs.uk

If you have any requests for topics you'd like to see in future newsletters, please let us know...

EPA LAB NEWS

It seems throughout the NHS that there are difficult times; this also applies to pathology. We have seen increases of 30% in workload over the previous year from primary care. This has affected the equipment and the staff, meaning work has been pushed into Saturday and even Sunday. Unfortunately this means results will take longer, but there is nothing we can do to change this at the moment.

Everyone will notice that the vans picking up the specimens from surgeries have changed. Following a tender, EMED have taken over the contract, this seems a relatively smooth change, but if you have any issues please let us know...

Nigel Roberts

Newsletter Spotlight

BLOOD BOTTLE EXPIRY DATE CHECK — ACTION REQUIRED

We have been receiving increasing numbers of samples collected into expired containers.

Out of date blood bottles often contain additives/gels for separating serum/plasma which is required to correctly process the tests and, due to the 18,000+ high volume of samples received daily, old tubes can go un-noticed which may lead to erroneous results being produced and reported. If a sample is noted to be passed the expiry date prior to testing, it will not be run in most cases and you will then be asked to re-bleed your patient.

Please could we therefore ask you to check your current stock of blood bottles to make sure you are not using expired bottles

If you find any near expiry products that you do not envisage using prior to their expiration, please let us know (Laboratoryquality@nnuh.nhs.uk) and we can swap them for newer bottles and have the NNUH phlebotomy team use the older ones to avoid wastage.

We would also be grateful if you could ensure that your practice has a functioning stock control process in place to ensure the use of the oldest containers first and that when ordering new stock, you do not over order bottles to prevent them expiring prior to usage.



EPA USER SURVEY

The EPA User Survey is now live!

You can access the survey via the communications page of the EPA website (www.easternpathologyalliance.nhs.uk) or by clicking on the following link:

<https://forms.office.com/e/BPFtGS6L8M>

User surveys are a really useful tool to enable us to assess our current services and plan improvements so your participation assists us in providing the best service we can for you and your patients.

We really value your opinion and therefore hope that you can find a few spare minutes to click on the link and respond. The closing date for the survey is Friday 26th July 2024

Thank you.



LDL SAMPSON EQUATION

The laboratory has recently changed how LDL cholesterol is calculated, by moving from the Friedewald equation (first published in 1972) to the newer Sampson equation (published in 2020) for all lipid requests.

The Sampson equation is more accurate at low LDL concentrations and allows LDL to be reported in patients with triglycerides up to 9 mmol/L. The Friedewald equation is not suitable with triglycerides greater than 4.5 mmol/L, which has become an important issue since non-fasting lipid samples were endorsed.

There is no cost associated with this service improvement as the calculation uses results already included in the lipid profile.

During a 12-month period 47,024 lipid requests were processed at NNUH, and by using the Sampson equation an extra 1,206 patients would have received an LDL result. This will improve the use of LDL in cardiovascular disease risk management.

Look out for the comments on your results!

PAEDIATRIC SAMPLE COLLECTIONS

Recently, we've had several instances in primary care where adult blood tubes were used in place of paediatric tubes.

ICE is designed to calculate how many tubes of blood are required for the number of tests that are requested. If a paediatric request is made, ICE assumes that paediatric collection tubes will be used. As paediatric tubes collect ~4 times less blood than adult tubes, if, for example, an ICE request asks for three paediatric tubes, this would be the equivalent to one filled adult tube.

To prevent over-collection, please remember that the number of tubes collected should be adjusted, if adult tubes are being used.



TROPONIN REQUESTS IN PRIMARY CARE & ACUTE CORONARY SYNDROME (ACS)

Troponin is an excellent marker in the investigation of acute coronary syndrome (ACS) and in recent years the introduction of high sensitivity troponin I (hs-TnI) has allowed for more rapid triaging of patients both in and out of hospital. Although hs-TnI can be used in the investigation of other disorders, it is primarily for ACS and therefore is treated within the laboratory as an urgent test, with strict phoning protocols to ensure that no patient is missed. Patients presenting with ACS must also be treated with high urgency to ensure best outcomes.

Recurrent incidents have been reported in the past, with elevated Troponin results requested in primary care not being urgently actioned. Very unfortunately, **one of those incidents had a fatal outcome**. As a consequence, and [in agreement with the NWICB's and Cardiology, troponin therefore cannot be requested within Primary Care.](#)

There may be exceptional circumstances for this request, in which case please contact the duty biochemist (via NNUH switchboard (01603 286286) or NNUH.DutyBiochemist@nnuh.nhs.uk) to discuss, but any patient with a suspected ACS should be referred to the Rapid Access Chest Pain Clinic or the Emergency Department for urgent assessment as appropriate.

ALT, AST & GGT REFERENCE RANGE CHANGES

Due to recent reformulations of Abbott Chemistry assays to align these methods with the International Federation of Clinical Chemistry (IFCC) calibrations, this has resulted in a number of reference range changes.



These changes have already taken effect. Apologies that this information was not relayed at the time of the change.

If you have any queries regarding these changes please contact the duty biochemist on NNUH.dutybiochemist@nnuh.nhs.uk

Assay	Old Reference Range	New Reference Range	Amended Date
ALT	Adult 0 to 55 U/L	Adult Female <34 U/L Adult Male <45 U/L	27/02/24
AST	Adult 5 to 34 U/L	Adults 11-34 U/L	12/12/23
GGT	Adult Female 9 to 36 U/L Adult Male 12 to 64 U/L	Adult Female <38 U/L Adult Male <55 U/L	31/01/24

FAMILIAL HYPERCHOLESTEROLAEMIA (FH) PILOT IDENTIFICATION SERVICE

In our last newsletter we advised you of the new familial hypercholesterolaemia pilot service we are undertaking, and would like to share a few of our interesting results so far:

- 16 PCNs with a total of 46 Primary Care Practices involved in this project
- 692 patients contacted
- 132 genetic requests sent to CUH for analysis
- FH identification rate of 1:5, much higher than the 1:23 rate in the published literature, thus putting Norfolk on the map with this pioneering FH Identification Pathway.

FH is an autosomal dominant condition whereby patients are genetically predisposed to reduced clearance of atherogenic LDL-C in the blood and are at an increased risk of premature CVD. If FH is left undetected and untreated, 50% of males aged >50 and 30% females aged >60 are at risk of a heart attack or a stroke. The prevalence of FH is 1:250 and in Norfolk alone, there are ~4,100 patients who have undetected FH.

Bespoke software within NWICB ECLIPSE-engaged Practices enables patients to be identified who are at risk of having FH. Thanks to multiple key stakeholder involvement and a Clinical Nurse Specialist - FH, we have been able to set up a unique pathway that seamlessly provides patients who have been identified as at risk of FH to engage with the service to receive bespoke FH genetic counselling, arrange genetic testing for FH, and the provision of results to patients and their GPs.

TRANSFUSION FACTS

On World blood donor day (14th June – Karl Landsteiners' birthday!), the NNUH held a Blood Transfusion Study Day. As part of the laboratory presentation we included some facts and figures about blood transfusion at the NNUH laboratory that we thought we'd share with you...



- **The NNUH lab processes 5,500 Group and Screen samples per month.** Around 150 of those screens are positive, requiring antibody investigations. Currently we have up to 13,100 patients with at least one antibody on our records...
- **Last year (May23/24) 3,426 samples were reported as duplicate and untested samples.** That's a lot of blood tests being taken unnecessarily!
Often these are due to some confusion about '2 samples needed' – if we have a previous group on record then we only need a current sample, not two samples for every admission. We also rejected 659 sample for poor labelling and 495 for poor sample quality. Guidance can be found on the [EPA website](#)...
- **We process about 900 Cross Match requests a month, resulting in the issue of around 13,000 units of red blood cells per year.**
We provide blood for; East Anglian Air ambulance, Priscilla Bacon Lodge, Bowthorpe kidney services and Spire hospital as well as providing a full 24/7 service to the hospital, for routine and emergency services.
We are the furthest site from an NHSBT reference centre in the UK, have deliveries of blood twice a day and stock less than 150 units at any time.
The 150 includes units from each blood group, and also a very small stock of specific types of units, such as irradiated.
We need to order blood for specific patients – such as a patient with antibodies. This blood could come from as far away as Scotland and is the reason a group and save report may state a patient is NOT suitable for rapid issue.
- **We also issue up to 100 doses of 28 week prophylactic Anti-D for the NNUH area every month.**
- **The computer software we use was first developed in 1982!** (and looks like it's still in the 80s). This software works alongside other computer systems, such as electronic blood tracking, to increase patient safety and allow full history and traceability of all units from the moment they are booked into stock.

POINT OF CARE TESTING IN PRIMARY CARE SURVEY REMINDER

Assessment of Current Situation with Point of Care Testing (POCT) in Primary Care

Please find a link and QR code to a brief survey on the current situation with reference to Point of Care Testing (POCT) in Primary Care...

<https://forms.office.com/e/3tbTRAbLHs>

There are recent National recommendations on improving Quality Assurance, identifying best practice, Governance and a more structured approach to providing a Point of Care Testing (POCT) service within Primary and Secondary Care.

In consideration of this, we would be grateful if you could spare a few minutes to complete the attached Questionnaire, as the N&W ICB are aiming to understand the situation and processes currently within Primary Care. The survey is essentially anonymous, but if you have any specific comments or issues, please enter your details in any of the notes sections.

If you have any other questions please do not hesitate to contact me at ian.thirkettle@nhs.net
(Dr Ian Thirkettle, Programme Transformation Manager, Diagnostics, N&W ICB)
Thank you.

Assessment of Current Situation
with Point of Care Testing (POCT)
in Primary Care



Norfolk & Norwich University Hospital, Level 1, East Block
Colney Lane, Norwich, Norfolk, NR4 7UY



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