

Exeter Laboratory News

April 2021

GP-Laboratory Interface Team (GLInT)

The GP-Laboratory Interface Team (GLInT) met on 12th March 2021

Anthony O'Brien (GP Wyndham House Surgery), Jayne Govier (GP Partner Pinhoe and Broadclyst Medical Practice), Kate Gurney (GP Partner, Coleridge Medical Centre), Chris Carr (Pathology Computer Systems Manager), Tim MacDonald (Laboratory Director Blood Sciences), Jen Poyner (Consultant in Clinical Microbiology and Infection)

Guest - George Allen (Clinical Scientist Blood Sciences) presented the centrifuge data

Microbiology

Thank you for your patience during the COVID-19 pandemic. The laboratory had to rapidly stand up to performing molecular (PCR) tests on a mass scale, prioritising SARS-CoV-2 testing over most other samples. Despite the fluctuations in prevalence, the lab continues to process around 1000 tests/day, but thankfully now have more staff to help. As a result, we are able to recommence some routine services which were stood down following RCPATH guidance:

- 1) Faecal samples are being processed routinely without the need to contact the department. Please continue to provide helpful clinical details which help select the tests/agars and interpretive comments
- 2) The processing of skin/nail samples for dermatophytes is underway in a controlled manner whilst we validate the new computer system, which should be completed by May. This specimen type has not been processed since the new IT system went live (Oct 2020) hence the need to validate it



(Reference:

<https://mycology.adelaide.edu.au/descriptions/dermatophytes/trichophyton/>)

Blood Sciences

Community phlebotomy – due to MyCare (new EPR IT system at RD&E), a community phlebotomy team was set up to ensure the blood samples could be collected for orders made by secondary care on adult patients. This service is available at all of the community hospital sites (e.g. Honiton, Exmouth, Whipton) on set days at each site and the letter sent to patients informs them of the process and how to choose the site they wish to attend

It was noted that patients living in more remote areas might struggle to access the service and some practices would be happy to facilitate phlebotomy for their patients but cannot see which bloods are required

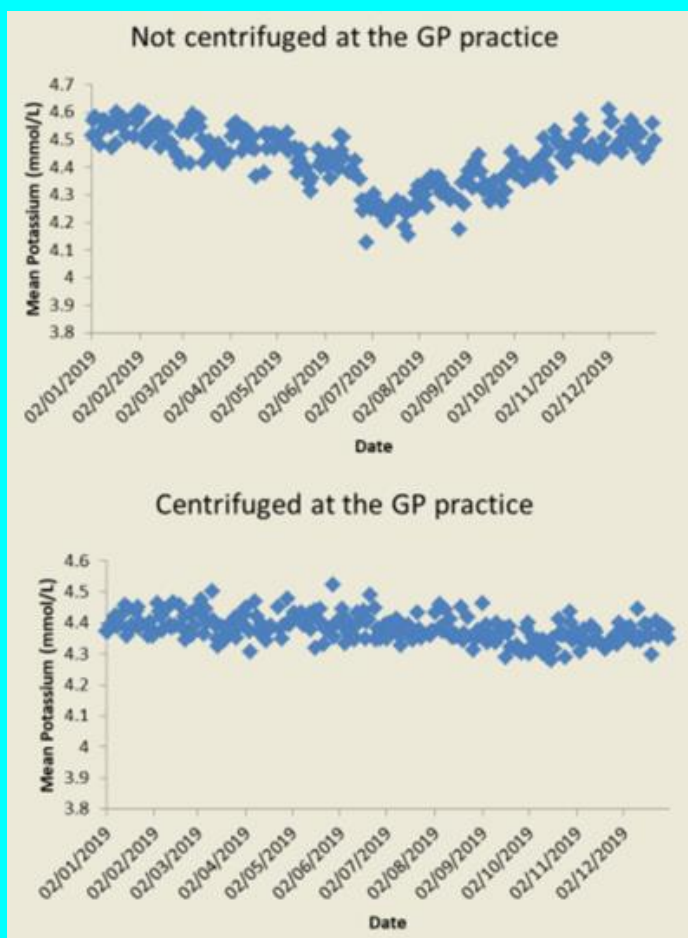
Ideas were proposed for how to overcome this, including printing labels for patients to take to their GP or secondary care emailing requests for specific patients/practices where bloods will be taken at the GP practice. There is the option for practices to be remunerated for bloods. The community phlebotomy service is funded for another year

Centrifuges

All GP practices were issued with a centrifuge some time ago. Many use them regularly, some use them at certain times and others are not using them. Data shows that spun samples maintain the sample integrity and prevent false potassium readings which are affected by time and temperature

The lab process 2-3,000 samples per day and report 2.5% abnormal K+ in spun samples compared to 4.4% in unspun samples hence spinning samples can prevent many phone calls and repeat bloods

The science... After a sample is taken, Na+/K+ pump slows as ATP levels drop and K+ leeches from cells. In warm temperatures, the pump works faster but for a shorter time and in cool temperatures, it works slowly but for longer. This leads to falsely low K+ levels in the summer as the pump stops working more quickly, after which K+ leeches out. In the winter, falsely raised K+ levels occur as the pump continues to work slowly, maintaining the K+ levels in the cells



IT

When the RD&E moved onto MyCare, the laboratory system changed too. This altered the eGFR calculation and it was not reported for age >90 for a temporary period. This has been reinstated in March 2021.

eGFR>60	eGFR 30-59	eGFR<30
CKD stages G1 and G2	CKD stage G3	CKD stages G4+G5

(Reference: <https://renal.org/health-professionals/information-resources/uk-eckd-guide/about-egfr>)

Also related to the transition onto MyCare, it has been noted that in SystemOne, microbiology reports were not filing correctly. This is to be reviewed and hopefully corrected going forward but unfortunately results between 10th October 2020 and April 2021 will not be updated



Finally...

If you have any ideas or items you would like GLInT to discuss, please email: rde-tr.MicroConsultants@nhs.net or lisa.beaumont-barns@nhs.net

You can follow the lab team on twitter [@Exeter_lab](https://twitter.com/Exeter_lab)

Remember there is useful information on the Exeter laboratory website www.exeterlaboratory.com including previous editions of the newsletter, test catalogue and general news updates.