

National Pathology Programme Newsletter - January 2023

Welcome to our Newsletter and to 2023!

The Newsletter is quarterly and keeps you updated with our recent work, achievements, and future plans.

In this edition: Updates on the Programme workstreams
An article on the computational pathology project in cellular pathology
Meet the new Clinical Lead to the Programme
Upcoming Events

Programme Background:

The National Pathology Programme is a strategic body in Wales sitting within the NHS Wales Health Collaborative, which in turn is hosted by Public Health Wales. Its remit is to work with health boards and trusts across the Wales to support the development of high quality, effective and sustainable pathology services. Priority areas for improvement which are the focus of the National Programme were originally identified in the *Pathology Statement of Intent (2019)* and current work is aligned with the *Diagnostics Recovery and Transformation Strategy for Wales (2022 – 2025)* document which is due to be published.

Updates on the key areas of our work:

Communications and Engagement

The Programme has set up a group to improve communications about Healthcare Science (HCS) and Biomedical Scientist (BMS) training and careers. Pathology Training Leads, together with representatives from HEIW, the universities and Careers Wales are working together to attract school children to study scientific subjects and to improve how we communicate the different training routes which can lead to scientific careers in NHS Wales.



The group has been reviewing promotional resources being developed by HEIW, including an interactive career pathway. Take a look at the Laboratory Sciences Job Profiles booklet [Link](#) published by the Healthcare Science Programme, and the avatars for use in promotional and training materials [Link](#)



Workforce, Training and Education

The Programme has been working with the Healthcare Science Programme's ESR Coding Review. The aim of this work will be to ensure that all pathology roles (clinical, scientific and support) in Wales are consistently and correctly coded in the ESR system, so that there is a complete picture of the workforce capacity across Wales.

Quality Assurance

The Pathology Quality And Regulatory Compliance Group (PQARCG) has collected information about UKAS accreditation across Wales, identified where there are gaps and documented the different reasons why and the quality systems in place in mitigation.

The Group is working with the Programme to develop metrics and data dashboards to provide quality assurance for our pathology services across Wales.

Point of Care Testing

Work has continued on finalising the paper on the draft proposal for a National Point of Care Testing (POCT) Strategy. The revised paper has been reviewed by the National Pathology Programme Oversight Committee (formerly NPN). It was presented to the POCT Strategy Group for approval and will be presented to the new National Diagnostics Board in February. More information on the PoCT Strategy will be given in subsequent Newsletters.

Pathology Service Collaboration/Regionalisation

The Programme continues to liaise with the ARCH Programme in South West Wales and the Regional Pathology Collaboration for South East Wales and is involved in discussions about the regional diagnostic centres and community diagnostic centres in Wales.

In January a second meeting of the National Phlebotomy Forum will take place. The Forum will support the development of services across Wales, seek opportunities for phlebotomy services to be available in Community settings and create a training and development structure for phlebotomy staff.

Business Intelligence

The Programme has continued to work with the NHS Wales Delivery Unit to develop data dashboards to show the demand on cellular pathology services. Discussions have also been held with DHCW on data dashboards from the ETR system, which is being implemented in pathology. A single SharePoint site will be set up to share all of these dashboards, so that colleagues can view, share and use the information locally. We aim to have this site available in the coming months and will give more information in the next Newsletter.

Digital Cellular Pathology

The Programme has continued to work with cellular pathology and Procurement colleagues to update the Business Justification Case (BJC) for Phase 3 of the Digital Cellular Pathology Group. The draft version was submitted to the National Pathology Programme Strategic Board in December, and will be presented to the Collaborative Executive Group (CEG) on 24th January. It will follow the Programme governance route and be presented to the National Diagnostics Board on 2nd February and submitted to Welsh Government on 8th March.

Successful deployment of computational pathology for primary diagnosis of prostate biopsies in Wales

by

Dr Muhammad Aslam (Consultant Pathologist & Clinical Director, Diagnostics & Specialist Clinical Support Services) Betsi Cadwaladr University Health Board

Prostatic pathology has a challenge of screening a lot of tissue; from 5-8 cores routinely per slide with 3 levels each; therefore, having a built-in risk of missing tiny cancers and difficulties in getting diagnostic and prognostic accuracy with reproducibility.

A team of pathology colleagues from Betsi Cadwaladr University Health Board initiated a very successful project supported by the Small Business Research Initiative (SBRI). The project later expanded to Swansea Bay University Health Board and Aneurin Bevan University Health Board. The project involved using computation pathology tools commonly called artificial intelligence (GALEN platform) developed by Ibex.

Progress so far:

- In 14 months, 3 of the health boards in Wales have moved to double reporting of all prostatic core biopsies by AI and human pathologist; overall involving 24 pathologists contributing towards more than 50% of prostatic biopsy pathology workload in Wales.
- More than 1600 patients biopsied in Wales had their samples double reported by AI & human pathologist.
- 13% increased cancer pick up rate post deployment mainly contributed by the reduction in missing tiny tumour foci.
- Increased confidence over tissue diagnosis by pathologists.
- Significant improvement in the turnaround time for prostatic cancer diagnosis
- 59% reduction in use of immunohistochemistry for cancer cases and overall 49% reduction of immunohistochemistry for prostatic biopsy pathway resulting in saving of multiple resources including scientists and pathologist time plus consumables.
- Improves standardisation of reporting prognostic markers including perineural invasion and Gleason Grading.
- Improves pathologist productivity by reducing the time required for MDT review, meaning Pathologist are better able to manage the increasing workloads.
- Improves the turnaround time of cancer diagnosis by enabling triage and prioritisation of prostatic biopsies based on AI pre-screening.
- Addition potential to improves turnaround time of prostate biopsies requiring immunohistochemistry to confirm diagnosis, by pre-ordering the tests based on initial AI pre-screen.
- Improves overall pathologist work environment and job satisfaction, leading to increase staff retention and ability to recruit.

Additional computational pathology plans:

Improved breast biopsy reporting pathway using computation pathology supported by Moondance charity is already started. Other projects in infancy stage include gastrointestinal pathology.

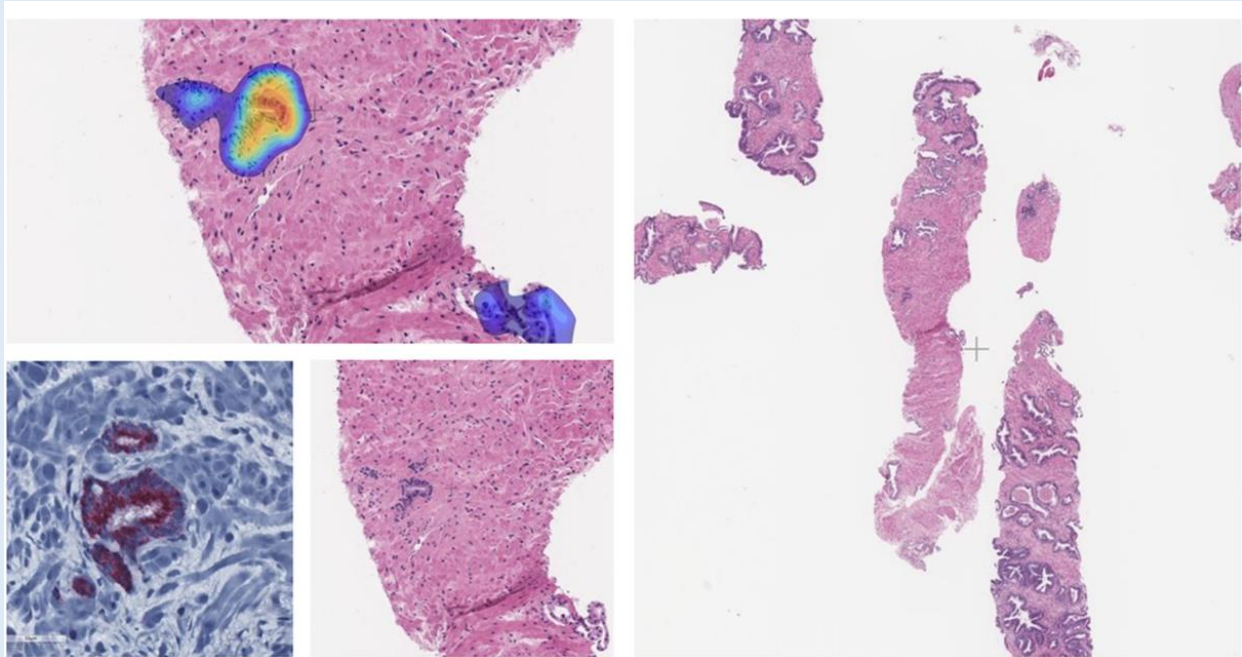


Figure 1: Tiny focus of cancer picked up as hot spot by algorithm and supported by immunohistochemistry

Focus On Dr Adam Christian, the new Clinical Lead to the National Pathology Programme



I am Adam, consultant in cellular pathology at UHW, Cardiff. I have been a consultant for nearly 12 years, having previously trained in pathology in South Wales after moving here from Nottingham, where I went to medical school. I am originally from Kent, where I still have family and visit often. I report mostly gastrointestinal pathology specimens as well as some head and neck specimens. I have been laboratory director for Cellular pathology for nearly 5 years. I attend a number of local, regional and tertiary cancer MDTs, and through the laboratory director role I have been involved in a number of regional and local programmes of work, including digital pathology and the LINC Programme. For the past 2 years I have been job planning lead for C&V UHB.

In the last few weeks, I was successful in being appointed to the new role of Clinical Lead to the National Pathology Programme. I am looking forward to taking on this challenging position at a time when it feels like pathology services are under the most pressure they have ever faced.

I am hoping to evolve some of the ongoing great work that the National Pathology Programme is currently supporting. A real focus is going to have to be on a sustainable workforce, so working with HEIW to support our scientific staff in career progression is something I am keen to engage with in the very near future. There is a real opportunity to drive improvement, certainly in cellular pathology, but in all disciplines by rolling out innovative and new technology, not least a digital pathology platform that will help get the right result to the patient in a timely manner. My key driver is for pathology to no longer be a service confined to the background of clinical pathways but to move it towards the front and be seen as a key implementer in patient care.

I am very keen to hear of the issues, and ideally solutions, to any issues you may be having across pathology disciplines, and how the programme can support you, so please get in touch.

The Programme team:

Alan Deacon National Pathology Programme Lead

Adam Christian Clinical Lead

Caity Thomas Senior Project Manager, focussing on Digital Cellular Pathology

Jane Long Project Manager

Leanne Barker Senior Project Support Officer

... and our new recruits:

Lynda Ferron Senior Project Manager. I joined the team in November 2022. I have worked for the NHS in England in various roles and am looking forward to working with colleagues in Wales. I will be supporting the programme of works for pathology and in the first instance I will be working with the South East region on demand and capacity, which will include scoping requirements for implementation.

Joanne Everett Senior Project Support Officer. I joined the Programme from Gloucestershire Hospitals NHS Trust and will be supporting our workstreams.

Pathology Events:

7th February NHS Pathology Conference North 2023 – Manchester [Link](#)

28th February NHS Innovation Conference 2023 – London [Link](#)

13th March Healthcare Science Cymru Conference 2023 – virtual event [Link](#)

14th March MediWales BioWales in London [Link](#)

Contact us:

Please email NHSWHC.National.Pathology.Programmes@wales.nhs.uk if you would like:

- to be added to the circulation list for our newsletter
- to provide feedback or contributions
- opportunities to engage with the work of the Programme

Website: We will be updating our pages on the NHS Wales Collaborative website with new content soon.

Next edition – April 2023