

Update from your Genomic Medicine Centre: November 2019

Results from 100,000 Genomes Project being returned to clinical teams across the region

The scientists and clinicians within the West of England Genomic Medicine Centre (WEGMC) have been working hard this year to ensure the swift return of results from the 100,000 Genomes Project to clinical teams and patients across our region.

The WEGMC anticipates that over 1,600 reports will be returned to patients by the end of the 100,000 Genomes Project. Genomics England has been sequencing the genomes of our patients recruited to the project and over 95% of these are back in the Bristol Genomics Laboratory, where our scientists are analysing them and liaising with clinicians to identify the key genomic variants. The focus of the WEGMC over the next few months will be to support the return of results to clinical colleagues and to their patients. The infographic below highlights our progress to date.

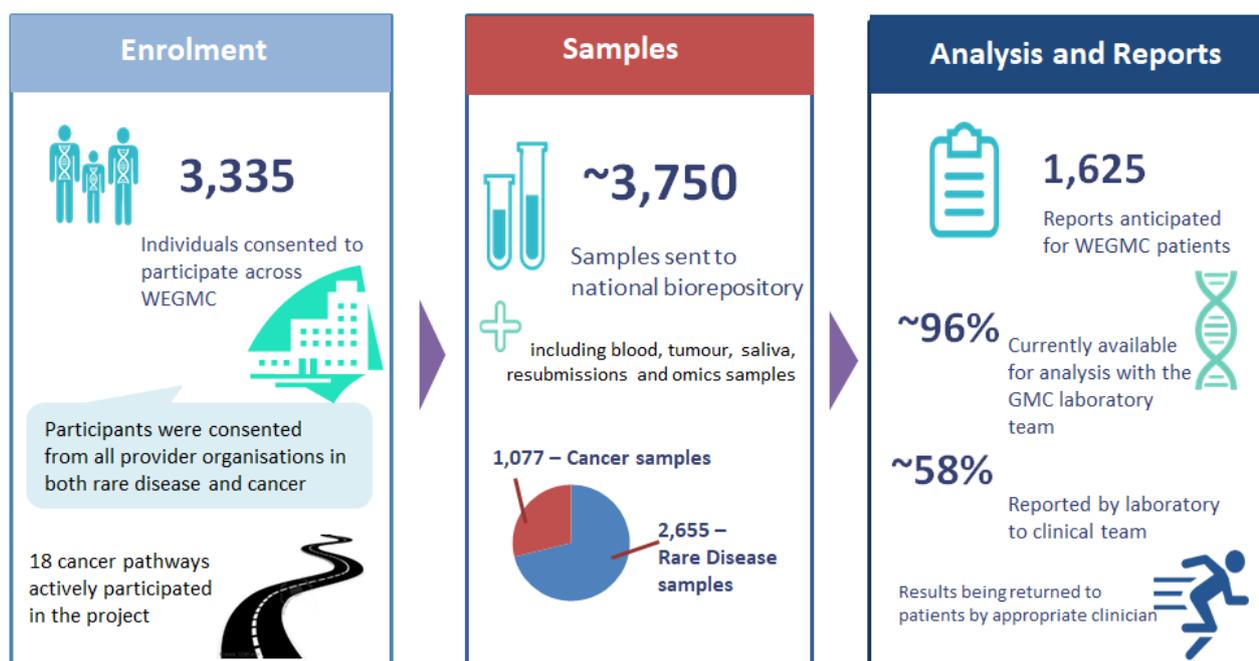
The WEGMC team is keen to work with and support local clinicians to ensure that the results provided are clear and manageable. We are establishing relevant meetings and education and training sessions to facilitate this. If you wish to discuss the return of results process or have queries about results from the project please do get in touch.

We are also investigating what other helpful information we can obtain from genomic samples. This is just the start for how we can use genomics in mainstream clinical practice to benefit our patients. The future is incredibly promising.

Professor Sarah Smithson, clinical director for the WEGMC, and lead consultant of the UH Bristol Clinical Genetics Service



WEGMC 100,000 Genomes Project Summary — 1 November 2019



Online training opportunities



Learn about the fundamentals of genomics and its impact on healthcare in a collection of introductory courses.

Lasting no more than 30-40 minutes each, learners will develop their understanding of genomics through written content, infographics, film, animation and interactive elements, and can test their knowledge with a quiz.

Further details are available by visiting <https://www.genomicseducation.hee.nhs.uk>

Forthcoming events and educational opportunities

The WEGMC is working with colleagues across the region to support the delivery of educational events to promote genomic education and understanding. A number of events have been scheduled and others are being planned by colleagues across the region including:

- Monthly tumour specific Genomics Tumour Advisory Group meetings:** WEGMC and South West Genomic Laboratory Hub colleagues are coming together to provide a series of monthly educational sessions based on learning from clinical cases consented to the 100,000 Genomes Project. Successful meetings were held in October and November where haematological malignancy and colorectal cases were discussed respectively. The meetings aim to review how genomic information had influenced and had the potential to influence patient management for certain patients. Further sessions are planned to discuss sarcoma, paediatric, gynecological and breast cancer cases early next year. This series of meetings is aimed at clinicians supporting cancer patients in any of the appropriate tumour pathways. For more information please contact nbn-tr.gtab@nhs.net
- Regional cancer event on 29 January 2020:** The aim of this event is to provide information and educational content around the introduction of the new NHS Genomic Medicine Service and the provision of molecular genetic testing for patients with cancer in the South West Region. The event will promote discussion to support and inform the direction of the future development of genomic testing. The meeting is aimed at professionals working in both primary and secondary care across the multi-disciplinary teams, including clinical nurse specialists, oncologists, surgeons, histopathologists, radiologists and multidisciplinary (MDT) co-ordinators. To register to attend please visit <https://www.eventbrite.co.uk/e/genomic-medicine-service-cancer-education-programme-tickets-76421555931> or for more information call Ana Juett 01392 408177 or email rde-tr.swgmc@nhs.net
- Bespoke educational events with rare disease clinicians:** WEGMC and SWGLH colleagues are establishing a series of bespoke genomic update and educational case study sessions with clinical teams who have supported the 100,000 Genomes Project and wish to know more about the results return pathway and future genomic medicine service. Please contact ubh-tr.wegmc@nhs.net if you would like to consider an update meeting for your clinical service.

100 positive diagnostic results reported at WEGMC to date

So far the rare diseases arm of the 100,000 Genomes Project has been able to identify over 100 diagnoses for patients across the region.

The laboratory team in Southmead is busy reviewing the analysis and reporting the results back to the patients' referring clinician and clinical teams.

The laboratory team are also keen to share the wider education and learning from being involved in the project and Maggie Williams, laboratory lead for the WEGMC, and the team recently gave a presentation at the British Society of Human Genetics national meeting.

Maggie said: "the team reported on the positive diagnoses made outside the GEL Tiering system and the lessons learnt which will improve pipelines for analysis going forwards into the Genomic Medicine Service.

"The Cardiac team have also submitted a similar collaboration on south west 100,000 cardiac cases to the 7th International Cardiovascular Genomic Medicine Conference in early December."

We hope to share more updates on the impact of the 100,000 Genomes Project on clinical practice shortly.

