



Fact Sheet No.52

100,000 Genomes Project: Top Tips for Primary Care.



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100,000 Genomes Project:

Top Tips for Primary Care.

What is a Genome?

- A genome is one whole set of genes, plus all the DNA between the genes.
- There is a copy in almost every cell of the body and it's the instructions for making, running and repairing it.

What is the 100,000 Genomes Project?

- This NHS project aims to sequence 100,000 whole genomes from about 70,000 NHS Patients and their families.
- With their consent their genomes will be sequenced and linked to details about an individual's medical condition.

Why is it important?

- Doing this may help medical teams provide better diagnosis or treatment.
- By adding key information from medical records and putting all the data in one highly secure place, scientists can compare the data from tens, hundreds or even thousands of people with the same condition. Allowing approved scientists to have monitored access to this data is a very powerful way to understand the causes of ill health and how to treat it.

Who is suitable to be in the 100,000 Genomes Project?

- NHS patients with certain types of cancer.
- rare disease plus their families.

What is the process?

- If you believe your patient would be a suitable participant for the project please write a letter of referral to our Clinical Genetics team at Liverpool Women's Hospital.
- The team can assess the referral; if your patient meets the eligibility criteria we will contact the patient for recruitment and if not we will let you and your patient know.

Why we should get involved?

Because the end result hopes to:

- **Improve care for patients:** Some patients with rare disease may get a diagnosis for the first time or discover what treatment might work best.
- **Set up an NHS genomic medicine service:** By the time it finishes, this project will have put everything in place to enable the NHS to offer genomic medicine to those patients who need it.
- **Improve healthcare for future generations:** By looking at all the 100,000 Genomes Project data, scientists will gain new insights and understanding about the causes of disease and find better ways of helping patients, especially those who have conditions that are currently hard to treat.
- **Kickstart a UK genomics industry:** Participants generously agree that researchers from industry can look at their data. This is the best and quickest way to ensure that understanding from the project is turned into new medicines and diagnostics for patients.



For more information

If you are in the North West Genomic Medicine Centre (Merseyside, Cheshire & South Cumbria)

- refer to our website www.nwcgmc.org
- email NWCGMC@lwh.nhs.uk or
- phone Angela Hargreaves 0151 702 4427

If you are outside this area please:

- refer to the 100,00 website www.genomicsengland.co.uk/taking-part/genomic-medicine-centres/
- email info@genomicsengland.co.uk
- phone 0207 882 6392

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