**Which healthcare professionals are involved in my genomics healthcare journey?**

**Florence:** **Which healthcare professionals are involved in my genomic healthcare journey? I'm joined with Amanda Pichini, Clinical Director for Genomics England, and genetic counsellor to find out more. So firstly, when someone has a genetic or genomic test, what kind of healthcare professionals might they come into contact with?**

**Amanda:** Well, everyone has a different journey, and it can depend on the type of test you have and the reason for having it. Some tests might only look for a single gene. Some might look at many genes, and some look for a very specific gene change that's already known to be in someone's family. Some genomic tests are there to find the cause of a person's diagnosis, understand more about their cancer, or maybe to predict a future health problem that they may have or that's in their family.

So usually people start with their GP, who they go to with a question about their health or their child's health, and this could lead to them being referred to a clinical genetic service or perhaps another specialist team.

**Florence:** **So, then what is the purpose of a clinical genetics team?**

**Amanda:** Well, a clinical genetics team, in brief, aims to provide people that have a genetic condition or are at risk of one with health information, including information about prevention, counselling support, and genomic testing, and they focus on the whole family.

Adults and children can both be seen in a genetic service. Clinical genetics teams tend to focus on rare conditions and rare predispositions to certain types of cancers, so really anything that might have a strong genetic basis and could impact someone at any stage of their life. A clinical genetics team is made up of a range of roles, and that could include clinical genetics, doctors, genetic counsellors, clinical scientists, and administrative staff.

**Florence:** **Could you tell me a little bit more about each of those roles?**

**Amanda:** Sure. I am a genetic counsellor, so I'll start with that. Genetic counsellors are specially trained healthcare professionals that help patients and families understand information about their genomic health, as well as provide guidance and emotional support.

So, this could be about understanding their family history, making informed choices about having a genetic or genomic test, or helping them to come to terms with a result or a new diagnosis and the impact that could have on them or their family. Clinical geneticists are medically trained doctors that specialise in genetic conditions.

They understand the underlying ways that genetics can affect health, and they use that to help make diagnoses for patients. How about genomic scientists? These are often not seen directly by patients, but they're vital to someone's genomic healthcare journey. So clinical genomic scientists and genetic technologists work in labs, and they're involved in processing patient samples, working with those other healthcare professionals to select the most appropriate genomic tests to perform and interpreting those results based on the variance or genetic changes that are seen in patients, which are usually summarised in a lab report.

There's lots of other healthcare professionals that can also, um, be in a clinical genetics team. That could include administrative staff, family history coordinators, genomic practitioners or genomic associates. They might help arrange appointments, gather medical and family history details after a referral to help the clinical team know what might be done next.

Some genetic services also have psychologists, nurses, or other allied health professionals embedded in their team or in specialty clinics that they work with, and it's really important that everyone is working together as a multidisciplinary team to help those patients and families in their healthcare journey.

**Florence:** **So, we know there are lots of different healthcare professionals within the clinical genetics team. Are there any other professionals involved in genomic healthcare as well?**

**Amanda:** Absolutely. As genomics becomes part of routine healthcare, that means there's lots of other healthcare professionals involved in arranging genomic tests and giving back results, or at least having initial discussions about genomic tests before referring on to another specialist.

So, some examples might be midwives, arranging screening tests for women in pregnancy, a number of those screening tests have a genetic or genomic basis. They might also refer families with a history of a genetic condition whilst they're pregnant for more specialist genetic testing. Many paediatricians are ordering genomic tests for children that might be suspected to have a syndrome or an underlying cause for their health or developmental issues.

And many nurse specialists like those who work with people with cardiac conditions or neurological conditions. Might be involved in arranging or discussing genetic testing. Final example in the cancer world is oncologists who might often arrange genetic tests that will help give information about someone's cancer.

The last thing to call out isn't necessarily healthcare professionals, but patient charity organisations are super crucial to someone's genetic healthcare journey. It's really important for families when they've had a new diagnosis or when they're seeking information, and there are some charities that do have healthcare professionals that work for them, like a nurse or genetic counsellor or psychologist that may help to run a helpline, for example.

**Florence:** **That was Amanda Pichini explaining which healthcare professionals are involved in a genomic healthcare journey. If you'd like to hear more explainer episodes like this, you can find them on our website at www.genomicsengland.co.uk. Thank you for listening.**