The implementation of genetic testing at East Lancashire Hospital Trust; the role of the breast care nurse



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Introduction Breast care nurses (BCN) are well placed to manage the pathway for breast cancer patients undergoing genetic testing to ensure patients and their families are fully informed and supported. NHS **ATM Genomic Medicine Service TP53 BRCA1** Evidence shows that continuation of care can have a positive effect on the patient, their experiences and health outcome (Lautamatti, 2020), 10% supporting the reason for completing the genetic testing within their local hospital with their cancer of breast cancers are RAD51D **BRCA2** team. Cancer nurses are often the first line of caused by alterations communication for patients, supporting patients by in inherited genes. (Cancer Research, 2020). helping to navigate through diagnosis, treatments and the psychological impact that comes with these. Therefore, cancer nurses are ideally situated RAD51C CHEK2 to play an important part in providing genetic health care. PALB2 (Calzone et al 2010)

What training has the BCN undertaken?

"To feel confident in implementing this service I am undertaking a Masters level course in genomics and genetic conversations, PG Cert in Genomics at the University of the West of England aimed at Nurses and midwifes.

My interest began after taking over the Family History Clinic for breast cancer within the trust.

This was the inspiration for seeking greater depth of understanding in the role genomics plays in the patients' cancer journey. At present overseeing genomics for breast cancer and cascading the information on the pathway and its delivery to other members of the multidisciplinary team members and other breast care nurses in the trust. In line with the requirements of the Nursing and Midwifery councils (NMC) Standards of proficiency (2018) where a basic level of understanding of genomics is essential for all nurses."

Percival, N.(2016) Discussed Cancer nurse specialists (CNS) are ideally placed to deliver BRCA consent and testing as the CNS and patients already have a rapport, ensuring patients are comfortable with the conversation and facilitating questions that may not otherwise have been asked, He looked at these factors and CNS felt it was a natural expansion of the role. It has been noticed regarding holistic nurses can have a perspective that can be important in purpose of genetics on health promotion, caring, and understanding the relationship between caring and families, community, and society. (Sharoff 2016)

Scott (2020) Identified as part of the Mainstreaming Cancer Genetics (MCG) program extended the role of the BCN with the MDT and allows the BCN autonomy, responsibility, and accountability for the developing and improving the service.

Hallowell (2019) considered some issues to facilitating implementation of genetic testing in the mainstream identification of a mainstream champion, more comprehensive guidelines, and education support.

As the main point of contact having oversight of all patients in the unit who have undergone testing and ensuring the results are obtained and discussed with patients in a timely supportive manner to aid in their decision making. To aid this a spreadsheet has been developed to record those patients eligible for testing and the outcomes (Diagram 1 Results).

Method

East Lancashire Hospital Trust, has utilised the National Genomic Test Directory eligibility criteria alongside the Greater Manchester cancer pathway.

QR code for National Genomic Test Directory – R208 + R216. This shows who is eligible to undergo genetic testing locally.



Process for local genetic testing

Clinician and MDT to identify which patients are suitable for testing and then which of these can be tested locally and who should still be referred to the RGC (Regional Genetics Centre).

Breast Care Nurses (BCN) provides and discuss the patient information on Genetic Test

Consultation between BCN and patient to consider:

- Patient understands fully why they are being offered the test
- What the test involves
- What the results mean
- Benefits and potential negative impact of having the test
- Possible effect on their wider family
- Offering them written information

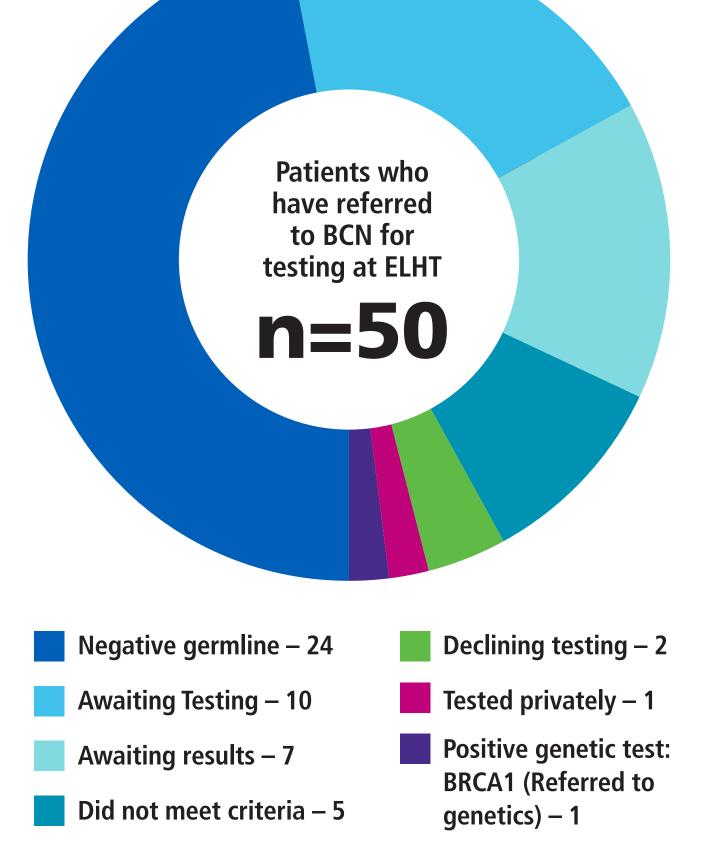
Once the patient fully understands the consent form is signed

Test will be requested by the BCN0

Results

Data has been collected for all patients referred to the BCN for genetic testing between October 2022 and April 2023.

- At present, the waiting time for referral to RGC could be as long as nine months with a further wait of approximately ten weeks for results of testing.
 By carrying out genetic testing in Trust, this has shortened the length of time the patient has to wait with it usually taking only three months from when they first present.
- In addition to reducing the time taken for testing and receiving the results, this service offers additional benefit to developing the relationship between the BCN and the patient.
- It is not uncommon for surgeons to focus on the impact genetic testing may have on their choices for surgery. The oncologist tends to focus on the impact genetic testing may have on treatments given. The BCN appointments allow time for holistic needs of the individual to be considered and the potential impact on others in her family and their relationships



Of the 24 with a negative germline result, they all had their family history rechecked checked to see if they still required referral to RGC; none did.

Conclusion

- With a greater understanding of the role genetics plays in cancer diagnosis and treatment, so the demand for such testing increases.
 Regional Genetic Centres that provide this service become overwhelmed with demand (White et al 2020). By bringing the patient pathway to local clinics the pathway is simplified and expediated (George et al 2016).
- ELHT has successfully introduced a BCN service for utilises the skills that Breast Care Nurses have with patients.
- Going forward I would like to work towards becoming one of the mainstreaming champions within the trust, not only to deliver the service to the patients, but to provide in-Trust training to other cancer nurses and members of the MDT.
- ELHT plans to develop this service to ensure other tumour groups have equitable access to genetic testing using the breast model. The experience of the BCN they will be central to this.
- In addition, the ELHT model is being shared across the ICS with support given to other units to develop their pathway and provided equity to patients across the patch.

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