

NHSBSP Higher risk Screening: The experience of a UK Breast Screening Programme in organising the surveillance of the higher risk population, 5 years on.



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Introduction

In 2007, the cancer reform strategy stated that women identified at higher risk of developing breast cancer, should be managed by the NHSBSP. This was to ensure standardisation across centres with regular intervals between screens and provide high quality screening and assessment. NHSBSP commenced the management of higher risk screening from April 2013.

The Newcastle Breast Screening Programme manages the higher risk MRI screening for its own local population and two adjacent screening programmes. Up until 2013, women who were considered at higher risk of breast cancer, in the geographic region surrounding these three screening units, were managed in the Newcastle symptomatic unit predominantly but also scattered across different symptomatic units.

Since April 2013, higher risk women meeting the NHSBSP MRI criteria from the 3 screening units are screened and assessed in the Newcastle Breast Screening Unit.

Risk Assessment



The Newcastle upon Tyne Hospitals NHS Foundation Trust
FAMILY HISTORY BREAST SCREENING REFERRAL

Section A: To be completed by Referring Clinician

Name: _____ Address: _____ Telephone Number: _____

Section B: To be completed by Geneticist

Risk assessment and any relevant family history

Has patient had breast cancer? Yes/No

Has patient had prophylactic mastectomy? Yes/No/Unknown

Risk category: Age Surveillance Protocol* Please tick

Supradiaphragmatic irradiation below age 30: 30-39 MRI Annually

BRCA1/2 or other inherited susceptibility: 30-39 MRI Annually

TP53 (Li-Fraumeni): 30-39 MRI Annually

AT Hereditary: 40-49 Mammography + MRI

High Risk - Non-BSP: 30-39 Mammography + MRI

Moderate Risk: 40-49 Mammography + MRI

Low Risk: 50+ Mammography + MRI

Section C: To be completed by Screening Service

Referral accepted for high risk screening? Referral requested for high risk screening?

Form not completed? Does not meet criteria?

Protocols for the surveillance of women at higher risk of developing breast cancer

Genetic referrals can be made by clinicians, GPs and self referrals. Women who are eligible for the higher-risk screening are referred to the screening units using this proforma by genetics. Women are also referred following mantle radiotherapy from oncology/ haematology and general practitioners. These must meet the criteria for screening following mantle radiotherapy.

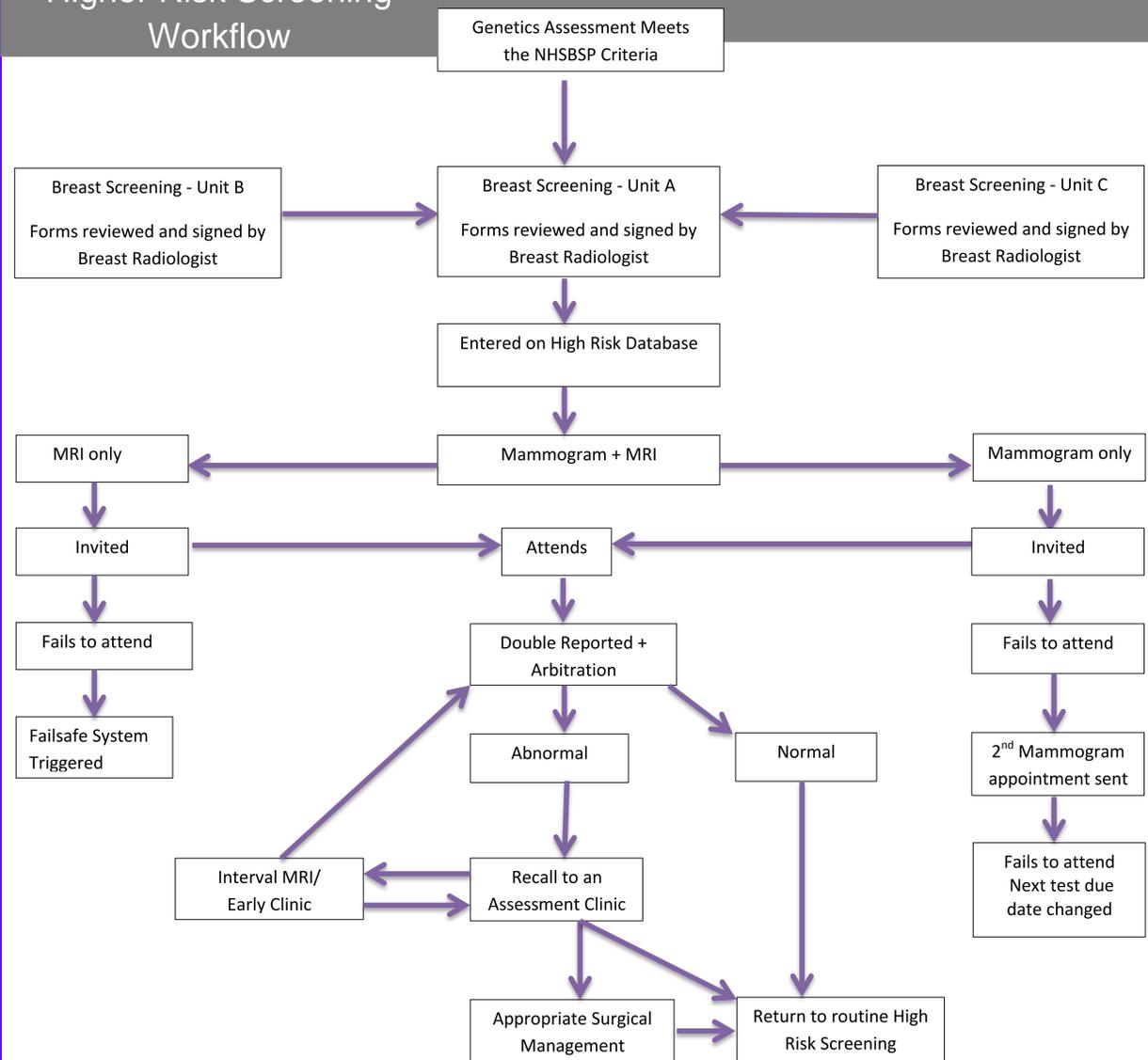
Ref	Risk	Ages	Surveillance Protocol	Frequency	Notes
1	a) BRCA1 or b) BRCA2 carrier or c) Not tested, equivalent high risk	20-29 30-39 40-49 50+	n/a MRI MRI + Mammography Mammography + MRI	n/a Annual Annual Annual	Review MRI annually on basis of background density
2	TP53 (Li-Fraumeni)	20+	MRI	Annual	No mammography
3a	A-T homozygotes	25+	MRI	Annual	No mammography
3b	A-T heterozygotes	40-49 50+	Mammography Mammography	18 monthly Routine screening (3 yearly)	Routine screening from 50
4	Supradiaphragmatic radiotherapy-irradiated below age 30.	30-39 40-49 50+	MRI MRI + Mammography Mammography + MRI	Annual Annual Annual	Surveillance commences at 30, or 8 years after first irradiation, whichever is the latter. Review MRI annually on basis of background density.

Ref	Risk	Notes
5a	Repeat MRI < 6 weeks	If recall is within 6 weeks of the original assessment then it should be part of the same episode
5b	Repeat MRI > 6 weeks	If recall is after 6 weeks then should be logged as a short term recall episode. If recall then usually it would be at 6 months.

Failsafe Systems

1. Each screening unit get NBSS to generate a SPNTD (screening program next test due) high risk list every month.
2. Genetics also send each screening unit a list of women due to be screened
3. The High Risk Database is interrogated each month and cross referenced with lists from 1 and 2.
4. MRI only patients are sent a questionnaire asking if they would like to have a MRI. If they fail to respond to this, they are sent a 2nd questionnaire.
5. Failure to respond to 2 MRI questionnaires /MRI-DNA triggers a letter to the subject and genetics or mantle radiotherapy subjects receive a letter.
6. If a subject responds positively to the MRI questionnaire but fails to contact MRI for an appointment, then a letter is sent to the subject +/- genetics if appropriate.
7. If a subject DNA's a mammogram only appointment then they are offered a 2nd appointment, failure to attend the 2nd appointment then changes their NTD to the next year.
8. Mammogram and MRI screening subjects are offered a mammogram only appointment if they opt out of the MRI.
9. The High Risk Screening is managed by the Breast Screening Office Manager or the deputy if they are away.

Higher Risk Screening Workflow



5 years on

No. of MRI's	Breast Screening Unit B	Breast Screening Unit A	Breast Screening Unit C	Total
2016	57	57	28	142
2017	66	57	23	146

Our process of organising higher risk screening continues to be reviewed and updated. The communication links between the 3 screening departments and genetics is excellent and this certainly is pivotal in providing our high risk screening.

Those who fulfil the criteria following Mantle Radiotherapy, is potentially more complex. This group may have moved geographically since their treatment and may no longer be under the care of that clinician. They may be referred by the treating clinician but also by their GP. In order for them to be included onto the NHSBSP for higher risk screening, a letter from the treating clinical oncologist or radiation oncologist with details of the breast tissue which has been included in the radiotherapy volumes treated, with dates of when the treatment took place.

The numbers involved are small with small variations having a greater impact on Recall Rates and cancer detection rate. Our recall rates have varied from 9-11% and a CDR of 2%

Key points

1. The higher risk screening is co-ordinated by our Breast Screening Office Manager. They have set up excellent communication links between the 3 screening centres.
2. A close relationship with the MRI department is essential. Our communication with the subjects is all arranged from our breast screening office which helps ensure a co-ordinated approach.
3. All 3 screening units have an established good working relationships with the Genetics Department with regular reviews and updates of lists ensuring the appropriate women are screened.
4. Robust failsafe systems are in place to ensure women are screened appropriately and at correct intervals.
5. Results are transmitted efficiently, in a confidential manner to the subject and the referring screening unit.
6. Auditing our results to include recall rate and CDR

References

1. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/440208/nhsbsp_74.pdf
2. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/439634/nhsbsp_73.pdf
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