

Improving the Efficiency of Breast Multidisciplinary Team Meetings: A Toolkit for Breast Services

Section 2: Background

The Multidisciplinary Team

The multidisciplinary team (MDT) has been defined by the Department of Health as a 'group of people of different health care disciplines, which meets together at a given time (whether physically in one place, or by video or teleconferencing) to discuss a given patient and who are each able to contribute independently to the diagnostic and treatment decisions about the patient'¹.

The historical development of the Breast MDT

The publication of the *Forrest Report*² in 1986 led to the commencement of the NHS Breast Screening Programme (NHSBSP) in the late 1980s. The report recommended that 'a skilled multidisciplinary team (MDT) was an essential prerequisite of a screening service for breast cancer'. The introduction of the NHSBSP led to the development of a nationwide network of teams of designated breast specialists, and the widespread adoption of triple assessment for diagnosis in breast screening assessment. There was a requirement for regular MDT meetings (MDTMs) to be held to discuss the concordance of screening assessment findings to ensure accurate diagnosis, and for planning of breast cancer management.

At the time, this organised multidisciplinary approach to screen-detected disease contrasted sharply with the absence of an equivalent approach to patients presenting with breast symptoms. Multidisciplinary breast care gradually spread to symptomatic breast services and the triple assessment process was widely introduced in symptomatic breast clinics by the mid-1990s. The MDT approach also started to be adopted by other tumour sites.

In 1995, the Chief Medical Officers of England and Wales, formalised this multidisciplinary model of cancer care in the *Calman-Hine report: A Policy for Commissioning Cancer Services*³, with equivalents in Scotland and Northern Ireland.

There followed the publication of tumour site specific improving outcomes guidance, providing detailed recommendations for each of the main types of cancer. The first breast cancer guidance was published in 1996⁴, setting out the nature and roles expected of multidisciplinary breast cancer care teams. When breast cancer was diagnosed it became a requirement to discuss and plan management at MDTMs, mandating the additional input of clinical and medical oncologists.

Recognising the increasing complexity of cancer diagnosis and treatment, all subsequent cancer policy in the UK has emphasised the importance of specialist multidisciplinary care provision for cancer patients⁵.

MDT management has now become the established model of cancer care worldwide⁶ and is fundamental to the delivery of high-quality breast care in the UK.

The principle of MDT care and regular MDTMs is sound: despite a limited evidence base regarding improvements in outcomes through MDT working and MDTMs it seems likely that the impressive reductions in mortality, improvements in outcomes and patient experience over the last 3 decades may be as much due to effective MDT care (and MDTMs) as new treatments.

There seems to be a universal acknowledgement that over and above the perceived MDTM primary function of case review, discussion and treatment planning, MDTMs also have secondary benefits including:

- Team learning and development

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- Team communication and relationship building within and between different professional groups involved in patient care
- Improving operational efficiency of the team through review, audit and service evaluation
- Education and learning opportunities particularly for junior staff
- Validation of accuracy of data collection
- Standard compliance monitoring
- Enhanced accrual into clinical trials

The need for change

MDTMs have become a victim of their own success and the expectation of what can be delivered by the MDTM in the limited time available has become unrealistic. As the population ages, cancer care has become more complex requiring more sophisticated MDT discussion. This is on a background of steadily increasing workload and time pressures generally and in breast cancer specifically^{7,8} as a result of rising cancer incidence worldwide^{9,10}, financial pressures on healthcare^{10,11} and severe staff shortages¹². The forum for treatment planning (i.e. the MDTM) has increasingly become focused on the process of care (documentation, standard compliance monitoring and data collection), rather than what they were set up to achieve: the opportunity for the clinical team to meet to review cases.

Consequently, MDTMs can be bureaucratic, unwieldy, and time consuming. Increasingly complex cases necessitating detailed MDT discussions may be subsumed by process requirements. This diminishes the value of the MDTM for all patients and its effectiveness for those that need it the most. The cost effectiveness of the MDTM was questioned in an observational study where only 6% of the clinic decisions were altered by the MDTM discussion, yet meetings cost over 500,000 PAs in staff time¹³.

The future success of breast cancer treatment and outcomes will increasingly require the thoughtful combination and sequencing of multi-modality treatments to harness the benefits and minimise the harms of modern therapies. Consequently, high calibre, focused, timely MDTMs are ever more crucial to future breast care.

The pathway to change

Multidisciplinary care delivered by teams remains core to specialist cancer services. However, there is a need to address concerns that MDTMs are no longer fit for purpose and need streamlining and re-formatting to regain their core clinical function. Any changes made must preserve the quality of care and safety of patients with breast cancer.

The 2017 Cancer Research UK Report, *Meeting the patient's needs: improving the effectiveness of the multidisciplinary meetings in cancer services*¹⁴, gave a powerful mandate for key stakeholders to redefine what a model MDTM should 'look-like'. The key findings and recommendations of the report are summarised in [Appendix 1](#).

Following publication of the report the Cancer Transformation Board and Department of Health asked Professor Martin Gore to lead a project whose aim was to transform the working of cancer MDTMs. The aim was to make them more effective and for the reforms to be within the framework set by the recommendations of the 2017 Cancer Research UK Report. This resulted in a **Proposal to Transform MDTMs** (detailed in [Appendix 2](#)) being circulated that would use the following principles:

- Only patients requiring true multidisciplinary input are to be discussed
- Patients on predetermined agreed algorithms will be recorded and not discussed
- The time all members of the MDT in general and radiologists and pathologists in particular, spend on MDTMs is to be reduced

Whilst supportive of a review of MDTMs to increase efficiency and best utilise available resources, the initial feedback from the disciplines attending breast MDTMs generated a number of concerns and comments:

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- All breast cancer patients deserve true, prospective multidisciplinary input through discussion at a MDTM. It would not be acceptable for a patient not to be discussed at a MDTM and then retrospectively be found to have had inappropriate care following a retrospective audit.
- There are many good examples of breast MDTs being able to discuss all breast cases efficiently, ensuring good documentation and data collection. A more appropriate approach would be to gain a better understanding of those that function well and spread good practice rather than introduce mandatory selective case discussion.
- The scheduling of attendees from all disciplines, not just pathologists and radiologists, should maximise their involvement and MDTMs should run to time.
- Trusts under financial pressure may see this as an opportunity to cut Consultant PAs and save money, but not reinvest that money to support the additional administrative costs in relation to case categorisation, audit and data collection, which will be required by these proposals.
- Unilateral decision-making, without MDTM discussion, increases the risk of an individual clinician providing inappropriate care. A recurring theme in many incidents of substandard patient care is the finding of a clinician working in isolation and not engaging appropriately with MDT colleagues.

A survey of all clinical groups attending breast MDTMs was carried out through the relevant specialty associations and societies:

- Association of Breast Pathology: Pathologists
- Association of Breast Surgery: Surgeons and nurses
- British Society of Breast Radiology: Imaging team members
- UK Breast Cancer Group: Oncologists

The results of the surveys carried out in 2018-19 are summarised in [Appendix 3](#).

The survey results appeared to confirm that the majority of clinicians in all disciplines involved in breast care saw benefit in discussing the care of breast patients at all key points in the pathway (diagnostic breast biopsy, new cancer diagnosis, post-surgery, at recurrence of breast cancer) at an MDTM. The survey results suggest that individual disciplines felt that they may not need to be present for all types of case discussion.

Whilst there was some support, there was also uncertainty about the proposals for MDTM transformation. Of note, those involved most directly in clinical care (surgeons, oncologists and nurses) were less in favour of an algorithmic approach with the exclusion of discussion on some patients, than those with a greater focus on diagnosis (radiologists and pathologists).

The development of a Breast MDTM Toolkit

It is likely to be possible to develop safe and efficient processes to reduce the number of cases requiring formal discussion at breast MDTMs. This will require equitable access to administrative and IT resources if there is to be widespread national introduction as well as proof of the value and safety of this approach.

Feedback from the breast pilot at Bart's Health in London ([see section 7](#)) suggests that the most significant gain from the 'Triage MDTM' is to remove inappropriately listed cases (e.g. where results are not ready, where the MDTM is being used as a means for double checking results, where full MDT discussion is not required etc) and that a minority of cases (12%) were suitable for management through use of protocols.

Nevertheless, it is clear that action is urgently required to improve the functionality and outputs of some MDTMs and to maximise existing resources. A single solution is unlikely to be appropriate for every breast MDTM; these vary in their frequency, caseload, setting (large teaching hospital vs small district general hospital) and model of delivery (single site vs hub and spoke).

The disciplines involved in delivering breast MDT care have collaborated in developing this toolkit, which

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we hope will prove useful to clinicians looking to maximise the efficiency of their MDTMs. It has been assembled using:

- Existing evidence and guidance relating to MDTMs
- From the ideas of national leaders of the different disciplines involved in breast care
- From examples of effective changes inputted by individual breast MDTs

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