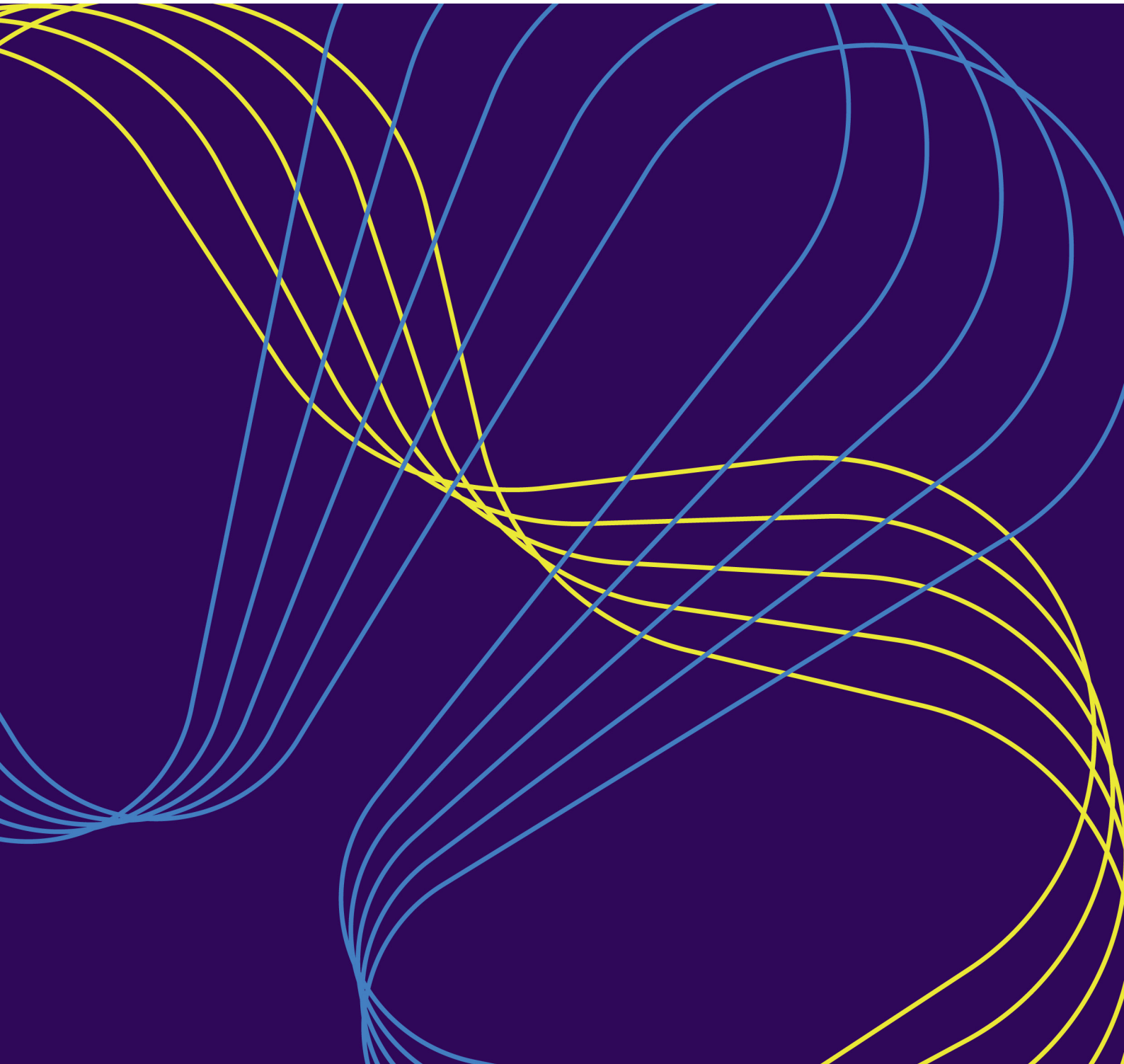
Clinical Radiology

Multidisciplinary team meetings: standards for clinical radiologists

DECEMBER 2023

The Royal College of Radiologists



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01 Key recommendations

Standard 1

Address attendance at multidisciplinary team meetings (MDTMs) as part of the job planning and appraisal process.

Standard 2

Expand MDTM attendance where appropriate and where agreed with the radiology clinical director (e.g. trainees, reporting radiographers) and record attendance.

Standard 3

Ensure all images are reviewed prior to the meeting by someone with appropriate expertise and sufficient time to give their professional opinion.

Standard 4

Triage cases prior to the MDTM so that only those cases that do not follow established clinical pathways are discussed.

Standard 5

Ensure that individual scheduled treatment planning MDTMs are quorate at least 95% of the time.

Standard 6

Ensure image storage, retrieval and display systems conform to The Royal College of Radiologists (RCR) standards[1] and are available within the MDTM room with appropriate access for those working remotely, including across imaging networks.

01

Key recommendations

Standard 7

Capture a summary of discussions and record it in the radiology information system (RIS). Include the images reviewed, histological diagnosis, TNM staging of malignant tumours and MDTM management plan.

Standard 8

Record a patient risk score using a recognised risk stratification framework (e.g. WHO, ECOG or Karnofsky).

Standard 9

Record major discrepancies between the radiological opinion and the surgery/pathology reports, and present major radiology discrepancies at the local radiology events and learning meetings (REALMs).

Standard 10

Audit the effectiveness of MDTM working practices on a regular basis.

02 Introduction

Modern medicine requires a multiprofessional team of doctors and allied staff to manage patients effectively in a range of medical conditions, particularly cancer.

Each cancer MDT is responsible for all cancers within its specialty, must fulfil predetermined quality criteria and is subject to peer review on a regular basis. National standards for cancer services have been developed in each of the four UK countries (Appendix 1). However, the same good practices should also be undertaken in non-cancer MDTMs.

Membership of MDTMs

Imaging plays a key part of the decision-making in virtually every field of medicine, particularly cancer. Radiologists are considered 'core' members of MDTMs. For cancer MDTMs core members are required to attend two-thirds of the MDTMs, and for radiology a named reviewing radiologist is required. For cancer MDTMs the presence of both a radiologist and a pathologist has been mandated to ensure that the meeting is quorate. While MDTMs may have a positive effect on patient care, they also have a significant impact on clinical radiologist workload,[2] and on radiology departments generally. There is a requirement for interventional radiology to be represented as a specialty at some MDTMs.

Another core member of the MDT is the MDT co-ordinator. A significant number of operational tasks are delegated directly to the co-ordinator, or their designated deputy, to enable the MDTMs to function efficiently. If the MDT is of sufficient size, there may be provision for an MDTM secretary in addition to the co-ordinator.

Principal issues for radiology involvement in MDTMs

The standards set forth in this document outline the requirements for clinical radiologists and oncologists to maximise the benefit to patients. They provide suggestions for performance targets and audit. The guidelines also suggest mechanisms for the recording of outcomes and how these can feed into REALMs where necessary.[3]

Although most of the guidance applies to cancer MDTMs, many of these recommendations will also be applicable to non-cancer MDTMs and other clinicoradiological meetings.

02 Introduction

The Independent Cancer Taskforce report[4] recommended that NHS England should encourage providers to focus specialist time in the MDTM on those cases that do not follow well-established clinical pathways. Standard-of-care pathways need to be developed locally to optimise utilisation of MDTM resources.[5] The RCR national MDT[6] audit demonstrated the three key issues hampering the effectiveness of MDTMs and which should be addressed urgently to improve the delivery of MDTMs for patients:

- Radiology involvement in MDTMs may be compromised by a lack of dedicated programmed activity (PA).
- Late additions to MDTMs are impeding radiologists from providing a prepared opinion on the imaging.
- Pre-MDTM meetings, an MDT referral pro forma and treatment pathways are currently underutilised.

03 Time requirements

The time commitment required from a radiologist in providing useful input to an MDTM varies depending on the frequency of the meetings, their duration, the number of patients to be discussed and the complexity of the cases, and it is often underestimated.[7] These should be agreed with the reviewing radiologist, and the relevant clinical directors (CDs) should be informed by regular audit.

The following aspects of time requirements need to be considered.

Attendance

Radiologists are core members and should show a personal commitment to attending the majority of the MDTMs in their areas of focus. Attendance time, recorded as a direct clinical care (DCC) session, should form part of the weekly job plan of all the radiologists who attend the MDTM.[8]

In addition to attendance at the meetings, time should be made available as DCC in the radiologists' job plans for reviewing images in advance of the meeting and for carrying out tasks resulting from decisions taken at the meeting, such as arranging biopsies or preparing MDTM supplementary reports. The volume of primary referral/reporting workload from the oncologists, surgeons, physicians and core members in a particular MDTM, the number of less-than-full-time whole-time equivalent (WTE) members of the MDTM and leave arrangements will determine the number of radiologists required.

Primary reporting allocation

Radiologists attending the MDTMs should where possible be responsible for the primary reporting of most cases discussed at the MDTM, particularly the outpatient staging investigations and the post-treatment follow-up investigations. The volume of investigations requested by the oncologists, surgeons and physicians can easily be identified from the RIS. This should allow radiology managers to plan the number of radiology reporting sessions for the MDTM radiologists.

Primary reporting of scans by special interest radiologists is a very important quality feature as radiologists reporting investigations are familiar with how these patients are managed and the team managing them. They can easily alert the team to any unexpected or significant findings. They can organise the next radiology investigation and can communicate directly with the cancer care nurse (CCN). Ideally if a scan has been reported by the MDTM radiologists, they should display and discuss the images themselves at the MDTM. This provides an opportunity for them to get feedback, which is important for the overall quality of services.

03

Time requirements

Duration of meetings

Most MDTMs are scheduled for 60–90 minutes but have the potential to either overrun or not allow sufficient time for the discussion of patients. The length of the meetings should be periodically audited, and if they are found to exceed the allotted time regularly, or to provide inadequate time to review patients, then following discussion with CDs the time should be increased in job plans. However, this time should be used efficiently to focus on more complex patients who do not follow well-established clinical pathways, with clear clinical questions for the radiologist to answer in advance. Not every case needs full discussion at the MDTM, and triage prior to the meeting by the MDT co-ordinator, with discussion with the relevant leads, can support this. Members of the MDTM should agree the structure of and time allocation within the meeting, including a pre-MDTM triage process, to prevent unnecessary repetition and non-impactful case discussion, but also allow sufficient time for all aspects of patient care to be discussed. Some units review the imaging at the beginning of the meeting, which allows the clinical radiologist to leave earlier and perform other duties. However, following surgical treatment, discussion of the surgical findings and pathology frequently provides valuable feedback to the radiologist and serves as a useful educational resource, contributing to continuity of care.

04 Quality control

It is quicker to review cases that have already been seen and reported personally than to review multiple examinations reported by other colleagues or those received from referring hospitals. However, review of examinations not previously seen automatically enables the MDTM to be given a second opinion.

The lead and deputy radiologists should have a degree of specialist interest, and it is likely that many of the patients discussed at MDTMs will previously have been scanned or investigated by one of them before the meeting. To be able to provide specialist expertise in a particular radiological area, a minimum number of the specialist examinations should have been performed by the reviewing radiologist, as agreed within job plans in each radiology directorate.

If possible, members of the MDTM should participate in the 360° appraisal of the radiologists involved in the MDTMs, and radiologists should take the opportunity to assess the quality of their work using feedback from MDTMs.

Commenting on examinations that have not been reviewed in advance of the MDTM

An opinion provided by a clinical radiologist given adequate time to review an examination may be significantly more accurate and complete than one provided without prior viewing, therefore imaging and reports must be available to MDTM radiologists before the meeting.

However, sometimes patients will be discussed at MDTMs whose images have not previously been available for review. To enable all patients discussed at MDTMs to benefit maximally from the radiological component of the meeting, the number of patients to be discussed without prior review must be kept to an absolute minimum and this should be audited. There is valid concern among radiologists involved in MDTMs that it is possible for non-reviewed scans to be given only a cursory glance during the MDTM, and consequently they may make a significant error to the detriment of patient care that could result in litigation. Opinions given on examinations without time for prior review should be recorded as such.

For these patients, there are three possible courses of action for the MDTM radiologist:

1. Decline to review the examinations.
2. Briefly review the examinations and pass comment, but also agree to provide a written supplementary report to the referring clinician and the MDTM co-ordinator at some stage after the MDTM.
3. Decline to review the examination during the MDTM, but agree to provide a written supplementary report to the referring clinician and the MDTM co-ordinator at some stage after the MDTM.

04

Quality control

The above process should be agreed with the MDTM team and any decision should be recorded.

No MDTM radiologist should feel obliged to review previously unseen films and provide an instant opinion if they feel that this is not in the best interest of the patient.[9]

Supplementary reports and opinions

As per the General Medical Council's (GMC) Good medical practice guidance, when radiologists review images, they must document that they have done so.[10]

For cancer patients particularly, the cancer may have been picked up incidentally and hence may be reported by a colleague who does not attend that MDTM. However, once the case is discussed at the MDTM, the MDTM radiologist reviewing the images in the light of diagnosis of cancer must include an MDTM supplementary radiology report. This could be a copy of the recorded MDTM discussions in their RIS or they could simply state they agree with reported findings. Supplementary reports by the MDTM radiologist provide the most up-to-date information on imaging and are useful in keeping any doctor involved in the future care of the patient updated, including subsequent reporting radiologists.

These should include, where applicable: the cancer type; the TNM stage; the absence or presence and extent of regional lymph node metastasis and the absence or presence of distant metastasis as decided by the MDT; and the plan for patient management (for example, surgery with curative intent, palliative chemoradiotherapy).

Differences of opinion between the previously issued report and the report to be given to the MDTM must be dealt with sensitively and professionally. It is the responsibility of the MDTM radiologist to issue an accurate supplementary report, which is recorded on the RIS so that it is available to all clinicians who may review those images in the future on the picture archiving and communication system (PACS).[1,6] Ad hoc reviews that influence clinical decision-making should also be recorded on the RIS.[1] There should be a robust method of feeding differences in opinion between the primary reports and supplementary reports to the primary reporting radiologist, and good communication with the referring hospital should be established to facilitate this. The supplementary report should state, where applicable, that there has been a second review at an MDTM, the histological diagnosis, the TNM staging and the MDTM plan of management.

Major differences in opinion

The MDTM radiologist should record, at the time of the MDTM, whether they have given an opinion on an examination that substantially differs from the initial report (such as an opinion that affects clinical management).[3] These cases and postoperative review cases with significant differences from the recorded MDTM radiologist should be presented at a departmental REALM as a mechanism for education and audit.[3]

05 Facilities and record-keeping

Facilities

The RCR has published several documents on PACS and the IT requirements for image reporting and videoconferencing and these should form the basis for MDTM requirements.[1,9,12] Linking the MDTM co-ordinator's personal computer to the projection facilities to enable the display of patient demographics and to record information and decisions made at the MDTM will allow all members to view the decisions made.

Record-keeping

A list of patients to be discussed at the MDTM should be made available to the MDTM radiologist or their designated secretary/clerk at an agreed minimum time in advance of the meeting. If images are not available on PACS, or a substantial number of patients who have not been imaged at the base MDTM hospital are to be discussed, the MDTM co-ordinator should agree a mechanism with the MDTM radiologist for these examinations to be available (on film or CD) an appropriate length of time before the meeting. In addition to the images, the formal primary report should also be available at the time of review.

Attendance record

It is mandatory for all individuals with a key role in MDTMs to have their attendance recorded, and this must be available for peer review. The MDTM co-ordinator is responsible for this action and should provide individuals with annual attendance figures for inclusion in their appraisal.[11]

References

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8. The Royal College of Radiologists. *Clinical radiology job planning guidance for consultants and SAS doctors*. London: The Royal College of Radiologists, 2022.
9. The Royal College of Radiologists. *Standards for the reporting and interpretation of imaging investigations, second edition*. London: The Royal College of Radiologists, 2018.
10. General Medical Council. *Good medical practice*. London: General Medical Council, 2013.
11. The Royal College of Radiologists. *Supporting information for appraisal and revalidation: guidance for clinical radiology and clinical oncology*. London: The Royal College of Radiologists, 2013.
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A1 National standards for cancer services in the four UK countries

Cancer waiting times

Details of the national cancer standards and strategies for cancer in all four nations can be found via the following links.

England

www.cancerresearchuk.org/about-us/cancer-strategy-in-england

Northern Ireland

www.health-ni.gov.uk/publications/cancer-strategy-northern-ireland-2022-2032

Scotland

www.gov.scot/publications/recovery-redesign-action-plan-cancer-services

Wales

www.gov.wales/quality-statement-cancer

A2 Toolkit for MDTM request

Not all patients need to be fully discussed at the MDTM. The MDTM should focus on complex non-standard pathway patients.

Only histology and imaging that will directly affect patient management needs to be reviewed.

MDTM request	
Patient name	
MRN and/or NHS number	
Clinical history synopsis	
Provisional diagnosis	
Is this patient to follow the standard pathway for treatment? If yes, please discuss at a pre-MDTM and record that there will not be full MDT discussion.	Y/N
If for full discussion, confirm relevant imaging (CT/ MR/ nuclear/ US/ EUS) is available and has been uploaded to the local PACS.	Y/N
Where histology discussion is necessary, please confirm this is available for review/discussion. (If not available then please defer to next MDTM.)	Y/N

Conduct of the MDTM	
Is the MDTM quorate?	Y/N
Who is present?	
Provisional stage of lesion if patient has cancer	
Synopsis of discussion	
Planned treatment	
Timelines for planned treatment	
Need for further assessment? If yes, what are the timelines?	Y/N
If further discussion is required can this be done in a pre-MDTM meeting?	Y/N

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The Royal College of Radiologists.
Multidisciplinary team meetings: standards for clinical radiologists. London: The Royal College of Radiologists, 2023.

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