

Cancer Multidisciplinary Team Meeting – Standards for Clinical Radiologists



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Cancer Multidisciplinary Team Meetings – Standards for Clinical Radiologists

RCR Standards

The Royal College of Radiologists, a registered charity, exists to advance the science and practice of radiology and oncology.

It undertakes to produce standards documents to provide guidance to radiologists and others involved in the delivery of radiological services with the aim of defining good practice, advancing the practice of radiology and improving the service for the benefit of patients.

The standards documents cover a wide range of topics. All have undergone an extensive consultation process to ensure a broad consensus, underpinned by published evidence, where applicable. Each is subject to review four years after publication or earlier, if appropriate.

The standards are not regulations governing practice but attempt to define the aspects of radiological services and care which promote the provision of a high quality service to patients.

Specific cancer standards are issued separately by the Department of Health, the Welsh Assembly Government, the Scottish Executive, and the Northern Ireland Government. These RCR standards will, therefore, need to be interpreted in the light of separate standards issued by the separate national governments of the United Kingdom.

Dean's Foreword

Sir Liam Donaldson, Chief Medical Officer for England, at a gathering of medical directors on 20 November 1998 said, "The days of quality improvement by exhortation have surely gone. We are in a new era of partnership where teamwork will be the route to success and where we must specifically address the rough edges which stop organisations joining together to form genuine partnerships."

The intent behind a team-based approach is to bring to patient care an appropriate mix of knowledge, backgrounds, and expertise to ensure that it is conducted in a comprehensive, yet cost effective manner. It is a concept to which radiologists widely subscribe.

The concept of multidisciplinary team (MDT) working has taken root within the health service, but nowhere more so than in cancer care. The enthusiasm for MDT working reflects recognition that this way of working offers the promise of increased effectiveness in the delivery of both quantity and quality of patient care and greater progress than can be achieved through individual endeavour. It is clear that the MDT meeting (MDTM) lies at the centre of the new methods of management for cancer patients, and increasingly now in other clinical situations, and is fundamental in achieving the *Improving Outcomes Guidance*. It is also an essential part of the continuous and systematic audit of clinical services, including radiology.

This document considers certain key aims in developing effective MDTMs. These include:

- Time requirements
- Quality control
- Record keeping
- Facilities, and
- Job planning

I am sure that the standards presented here will be an aid to improving radiological participation in MDTMs and contribute to better patient care. The College is grateful to members of the RCR Standards Sub-Committee for producing this valuable document and, in particular, to Dr Fergus Gleeson. The College also thanks Dr Paul Dubbins for his contributions to the development of this standard during his tenure as Dean and Vice-President of the Faculty.

Dr Gill Markham

Dean and Vice-President
Faculty of Clinical Radiology
Royal College of Radiologists
November 2005

1 Introduction

Multidisciplinary Teams (MDTs) and clinico-radiology meetings have become a core component of medical care and are mandatory within the NHS for hospitals providing cancer services. Each MDT is responsible for all cancers within its specialty, has to fulfil predetermined quality criteria and is subject to peer review on a regular basis. Each MDT has to meet regularly at multidisciplinary team meetings (MDTMs), the frequency of which varies depending on the incidence of the malignancies for which it is responsible.

The objective of MDTMs is to improve patient outcome. All patients with cancer or suspected cancer have to be referred to a member of the relevant MDT and, subsequently, discussed at the MDTM. There are now in England specific guidelines relating to the time of referral (via hospital 2 week wait) to diagnosis of 31 days, and to treatment of 62 days. There are also guidelines concerning time from diagnosis (if not via the 2-week wait) to treatment of 31 days. These figures are audited as part of a Trust's performance, reported to the Department of Health (DH) and are likely to become "targets" by the end of 2005. In Scotland, the guidelines at present state that all cancer patients should start definitive treatment within 62 days of referral, and this is to be mandatory by the end of 2005. In the 2005 Welsh standards, patients diagnosed with cancer must begin definitive treatment within 2 months of receipt of referral at the hospital.

Guidelines for referral to the MDT for cancers and suspected cancers from non-MDT members need to be agreed within each Trust, so that decisions about these patients can be recorded at the MDTM.

The MDTMs have specific membership requirements for all relevant medical and non-medical groups. For radiology, a named lead radiologist and a deputy are required, each of whom must be present for at least 50% of MDTMs and should provide cross-cover. This level of attendance is a prerequisite for a successful Cancer Standards Peer Review. While MDTs and MDTMs have been shown to have a positive effect on patient care, they also have a significant impact on consultant radiologist workload, and on radiology departments generally.

A 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 MDT secretary in addition to the co-ordinator (*Improving Outcomes in Cancer Guidelines*). Where possible, the radiology department should make use of these resources.

The standards set forth in this document are an outline of the requirements necessary for consultant radiologists and radiology departments to maximise the benefit to patients of imaging discussed at MDTMs. They provide suggestions for performance targets and audit. While designed specifically to apply to Cancer MDTMs, some of the recommendations will also be applicable to other clinico-radiological meetings.

The principal issues for radiology's involvement in MDTMs are broadly divisible into five topics:

- Time Requirements
- Quality Control
- Record Keeping
- Facilities, and
- Job Planning and Appraisal

2 Time Requirements

The time commitment required from a consultant radiologist in providing useful input into an MDTM depends upon the frequency of the meetings, their duration, the number of patients to be discussed and the complexity of the cases. The frequency of the meetings, e.g., weekly or fortnightly, should be agreed with the lead radiologist and may only be increased after appropriate discussion with him or her and the director of the radiology department. Time should be made available in the lead radiologist's job plan for attendance at the meeting itself, 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 follow-up reports.

Because all patients with cancer or suspected cancer have to be referred to the MDTM, the number of patients to be discussed at each meeting may vary considerably. Most MDTMs are scheduled for 60 to 90 minutes, but have the potential to either over-run or to allow insufficient time for the discussion of patients appearing towards the end of the meeting. The length of the meetings should be periodically audited, and if they are found regularly to exceed the allotted time or to provide inadequate time to review patients at the end of the list, then consideration should be given to increasing the time allocated

Patients are usually divided into two categories, pre-treatment and post-operative, although specific sub-categories, such as post-neoadjuvant therapy, also need to be discussed. Most MDTMs discuss additional categories of patients, such as post-chemotherapy, post-radiotherapy, and disease relapse. These additional groups may add considerably to the time requirements.

Following surgical treatment, discussion of the surgical findings and pathology frequently provides valuable feedback to the radiologist, and serves as a useful educational resource.

Members of the MDTM should agree the structure of and time allocation within the meeting to prevent unnecessary repetition and to allow sufficient time for all aspects of patient care to be discussed.

Standard

The MDTM should be efficiently organised in order to utilise participants' time most effectively.

Indicator for audit

Time spent by MDT members on meeting preparation, attendance, and follow-up activities should be monitored.

3 Quality Control

Image review prior to the MDTM

Adequate time to review all the appropriate imaging is needed to provide a robust radiological opinion. It is, of course, quicker to review cases already 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.

Improving Outcomes Guidance requires the lead radiologist and deputy to have a degree of specialist expertise and, as such, it is likely that many of the patients discussed at MDTMs will previously have been scanned or investigated by the lead or deputy prior to 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 lead radiologist or deputy, as agreed within each radiology directorate.

The relevant radiological reports, as well as the images themselves, must be available for review by the lead or deputy. The opinions to be given to the MDT should be annotated on the MDTM list, and these should be retained after the meeting by the reviewing radiologist for future reference. Differences of opinion between the previously issued report and the report to be given to the MDTM should also be annotated on the list and highlighted if of clinical significance at the MDTM.

Commenting on examinations not previously reviewed at the MDTM

An opinion provided by a consultant radiologist given adequate time to review an examination may be significantly more accurate and complete than one provided without prior viewing during the restricted time available in the MDTM. Sometimes, however, patients will be discussed at MDTMs whose images have not previously been available for review. These patients may or may not be on the provided MDTM list. This may occur for a variety of reasons. To enable all patients discussed at MDTMs to benefit maximally from the radiological component of MDTMs, the number of patients to be discussed without prior review must be kept to an absolute minimum and should be audited. The media provided for review on such occasions must be recorded by the radiologist and the MDTM co-ordinator. Image quality varies between hard and soft copy, and between original image data and compressed data. Opinions given on examinations without time for prior review should be recorded as such.

Radiologists involved in MDTMs frequently express concern that only a cursory glance at examinations is possible at non-reviewed scans during an MDTM, and as a consequence they may make a significant error to the detriment of patient care. Additionally, their review would obviously be inadequate in comparison to that of the reporting radiologist and might result in litigation.

For patient examinations not reviewed prior to the MDTM, there are three possible courses of action for the lead or deputy radiologist:

- (1) to decline to review the examinations.
- (2) to briefly review the examinations and pass comment but also to agree to provide a written report to the referring clinician and the MDTM co-ordinator at some stage after the MDTM.
- (3) to decline to review the examination during the MDTM but to agree to provide a written report to the referring clinician and the MDTM co-ordinator at some stage after the MDTM.

In both 2 and 3, above, the lead or deputy should retain a copy of any report supplied.

The course taken depends on a number of factors, and the mechanism for dealing with these cases should be agreed with clinical colleagues attending the MDTM and discussed within the radiology

department. No lead radiologist or deputy 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 patients.

Standards

There should be prior review of all images by an individual with appropriate expertise and with sufficient time to provide an unhurried professional opinion for the MDTM.

Indicators for audit

1. Attendance. Target is: 50% or greater for each radiology lead and deputy
2. Number of examinations (CT/MR/etc) where the lead radiologist or deputy is involved in the formal report. Target to be agreed by Radiology Directorate and MDT.
3. Number of reports and films available for review prior to the meeting. Target is: 100%.

4 Record Keeping

A list of patients to be discussed at the MDTM should be made available to the radiology lead or deputy or their designated secretary/clerk an agreed minimum time prior to the meeting. If PACS is not available or a substantial number of patients not imaged at the base MDTM hospital are to be discussed, then the MDTM co-ordinator should agree a mechanism with the radiology lead or deputy for these examinations (on film or CD) to be available an appropriate length of time prior to the meeting.

It is mandatory for all individuals with a key role in MDTMs to have their attendance recorded, and this has to be available for peer review. The MDTM co-ordinator is responsible for this.

All reports should be available to the lead radiologist or deputy 24 hours prior to the meeting, and if these reports relate to examinations performed outside the base MDTM hospital, the MDTM co-ordinator is responsible for obtaining them.

The opinion of the lead radiologist or deputy should be recorded at the time of the MDTM in an agreed manner, i.e., in the notes or electronically, and these should be returned within 24 hours of the meeting and retained within the radiology department to enable review to occur, if necessary.

The lead radiologist or deputy should at the time of the MDTM record whether they have given an opinion on an examination that substantially differs from the initial report (i.e., an opinion that affects clinical management). The MDTM should be made aware of the difference in opinion and either agree with the second opinion if it is clearly correct, or ask for the examination to be jointly reviewed by the radiologists involved and an amended report issued both to the patient's referring physician/surgeon and the MDT co-ordinator responsible. Differences in opinion/interpretation may either be minor (not of clinical significance) or major (of clinical significance). Where major differences occur, the cases should be discussed by the radiologists involved, and an amended report or addendum to the report issued as described earlier in this document.

A record of these cases should be kept by each radiologist. These cases may then be presented at a departmental meeting as a mechanism for education and audit. It is anticipated that only a minority of cases discussed will involve major differences of opinion, and their discussion and review within the department should occur in the context of constructive educational feedback rather than criticism.

When post-operative cases are reviewed, the surgical/pathology reports should be compared to the pre-operative imaging, and significant differences recorded by the lead radiologist or deputy for discussion at the radiology department discrepancy meeting.

Standards

Differences of opinion and discrepancies in the radiological reports should be recorded, particularly if they affect patient management, and where this is the case they should be presented at the local discrepancy meeting. (See Appendix 1 for an MDTM discrepancy proforma.)

Discrepancies between the radiological opinion and the surgery/pathology reports should also be recorded.

Indicator for audit

The percentage of major discrepancies which are presented in the local discrepancy meeting. Target: 100%

5 Facilities

All MDTMs should be held in a room with adequate image projection facilities. It is imperative that the lead radiologist or deputy is able to clearly demonstrate the relevant images, both to enable appropriate clinical decision-making and also to educate all attending the MDTM. If video-conferencing is to occur, the images transmitted from outside to the base MDTM hospital should be of high quality. There should be no significant visual difference between the local and distant images reviewed.

PACS facilities should also be available to enable retrieval of relevant prior examinations. Additionally, wherever possible a Radiology Information System or Management System (RIS/RMS) should be available in the MDTM room to enable relevant prior reports to be reviewed.

Linking the MDT co-ordinator's personal computer to the projection facilities to enable display of patient demographics and to record information and decisions made at the MDTM will allow all members to view the decisions made.

Standards

1. Adequate image projection facilities must be available, and agreed by the lead radiologist or deputy.
2. Images transmitted for video-conferencing must be of sufficient quality acceptable to the lead radiologist or deputy.
3. PACS facilities, if available within the hospital, must be available within the MDTM room.
4. A RIS or RMS must be available within the MDTM room.
5. Where possible, the MDT co-ordinator should link their personal computer to the projection facilities to enable display of patient demographics and decisions made at the meeting to MDTM participants.

6 Job Planning and Appraisal

Consultant radiologists may spend a significant amount of time involved with MDTMs, reviewing images and reports prior to the meeting, perhaps helping to co-ordinate some of the cases on the MDTM list, attending the MDTM itself, providing written reports on cases not previously reviewed, discussing cases with their consultant colleagues if a difference in interpretation of an examination has arisen, and organising further examinations or biopsies of patients discussed. To enable all of this to be performed to an appropriately high standard and in a timely fashion, the time necessary must be made available in each consultant's job plan. As such, the MDTM radiology lead and deputy need to discuss the time spent involved in MDTMs with the radiology department lead clinician and this time commitment should then be recognised in their job plans.

If possible, members of the MDTM should be involved 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.

Standards

1. The role of radiology lead or deputy should be addressed in the appraisal process.
2. Where used, 360° appraisal should involve other MDTM members.

Indicator for audit

Length of time required for preparation and attendance at meeting, and for performing tasks resulting from the decisions made at the MDTM should be fully reflected in the job plan. Target to be: within 10% of time allocated on job plans over a 3-month period.

7 Education

MDTMs present an excellent opportunity for clinically relevant CME. This should be made available to all registrars within departments and, if at all possible, to consultant radiologists other than the lead and deputy, particularly in departments that are not able to sub-specialise their practice. Attendance of additional radiologists at MDTMs is not only of benefit educationally, but helps in the provision of opinions in difficult cases, and in cases that might benefit from subspecialty opinions in nuclear medicine and intervention when these subspecialties are outside the expertise of the lead radiologist or deputy.

Standards

Agree with radiology Clinical Director that from time to time other radiologists should attend the MDTMs in addition to the lead or deputy. Their attendance should be recorded.

8 Conclusion

The addition of MDTs and MDTMs to cancer patient care has provided a mechanism for both improving this care and for highlighting areas that fall short of agreed national directives aimed at improving outcomes for patients with cancer. These guidelines for radiology standards for MDTMs will hopefully act in a similar fashion. Their aim is not to increase the workload of already hard-pressed radiology consultants, but to provide a framework for the radiological component of MDTMs that will help strengthen them, and enable objective recording of areas requiring improvement.

Reference

Department of Health, *Manual for cancer service* (2004)—<http://www.dh.gov.uk/PolicyAndGuidance>.

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Appendix 1

Multidisciplinary Team Meeting Discrepancy Proforma

Tumour site: _____

Date of MDTM: ____ / ____ / ____

Radiology Lead: _____

Patient Details:

Name: _____

D o B / Unique Identifier: ____ / ____ / ____ ; _____

Clinical Details:

Scan type and date: _____; ____ / ____ / ____

Discrepancy & type:

- ▶ Radiology / Radiology difference of opinion

Details:

- ▶ Radiology / Pathology difference of opinion

Details:

- ▶ Radiology / Surgery difference of opinion

Details:

Discrepancy Character:

Major _____ Moderate _____