



Cancer multidisciplinary team meetings – standards for clinical radiologists

Second edition

Faculty of Clinical Radiology

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RCR Standards

The RCR, 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 three 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 (Appendix 1). 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.

The RCR has committed to reviewing all relevant publications in line with the recommendations of the Francis report and where appropriate applying the category of standard defined by Francis (fundamental, enhanced or developmental).¹ This document contains standards that fall within the enhanced category.

Current standards documents

Standards for Learning from Discrepancies Meetings

Standards for radiofrequency ablation (RFA), Second edition

Standards for patient confidentiality and PACS and RIS

Standards for the communication of critical, urgent and unexpected significant radiological findings, Second edition

Standards for patient consent particular to radiology, Second edition

Standards of practice and guidance for trauma radiology in severely injured patients

Standards and recommendations for the reporting and interpretation of imaging investigations by non-radiologist medically qualified practitioners and teleradiologists

Standards for the NPSA and RCR safety checklist for radiological interventions

Standards for the provision of teleradiology within the United Kingdom

Standards for the recording of second opinions or reviews in radiology departments

Standards for a results acknowledgement system

Standards for intravascular contrast agent administration to adult patients, Second edition

Standards for providing a 24-hour diagnostic radiology service

Standards for providing a 24-hour interventional radiology service

Standards for Self-assessment of Performance

Standards for the Reporting and Interpretation of Imaging investigations

Standards for Ultrasound Equipment

Foreword

This document is an update of The Royal College of Radiologists *Cancer multidisciplinary team meetings – standards for clinical radiologists* BFCR(05)9, which has now been withdrawn.

Since the first edition of this document was drafted in 2005, there has been significant recognition of the pivotal role that clinical radiologists play in the management of cancer patients.

This document therefore reflects the importance of the radiologist in cancer multidisciplinary teams (MDTs) and outlines the requirements necessary for consultant radiologists and radiology departments to maximise the benefit to patients of imaging discussed at multidisciplinary team meetings (MDTMs).

MDTMs form an essential part of the quality assurance (QA) process within a radiology service and therefore this document should be read in conjunction with two other recent RCR publications: *Standards for Learning from Discrepancies meetings and Quality assurance in radiology reporting: peer feedback*.^{2,3}

We would like to take this opportunity to thank Dr Mark Callaway, clinical radiologist, who led the review of this document with input from members of the Clinical Radiology Professional Support and Standards Board.

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Vice-President, Clinical Radiology
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Recommended standards

Standard 1

Radiologists must attend two-thirds of the MDTMs personally (without relying on cover arrangements).

Standard 2

A minimum of two radiologists should be allocated to each MDTM (one radiologist to attend the meeting, but two radiologists designated for each site-specific meeting).

Standard 3

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.

Standard 4

All of the examinations (computed tomography [CT]/magnetic resonance [MR] and so on) discussed at MDTMs should have a supplementary report. It is possible that the majority of the reports may just say 'Reviewed at MDTM – see primary report'.

Standard 5

All images discussed at MDTMs should have a supplementary report, identifying that the images have been reviewed, the histological diagnosis, TNM staging and MDTM management plan.

Standard 6

Major differences of opinion and discrepancies in the radiological reports should be recorded, particularly if they affect patient management, and should be presented at the local learning from discrepancies meeting (LDM) (see Appendix 2 for an MDTM discrepancy pro forma).

Standard 7

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

Standard 8

Adequate image projection facilities must be available, and agreed by the MDTM radiologist.

Standard 9

Images transmitted for video-conferencing must be of sufficient quality, acceptable to the MDTM radiologists.

Standard 10

Picture archiving and communication system (PACS) facilities, if available within the hospital, must be available within the MDTM room.

Standard 11

A radiology information system (RIS) or radiology management system (RMS) must be available within the MDTM room.

Standard 12

Where possible, the MDT coordinator should link their personal computer to the projection facilities to enable display of patient demographics and decisions made at the meeting to MDTM participants.

Standard 13

The role of the MDTM radiologist should be addressed in the appraisal process.⁴

Standard 14

Where used, 360° appraisal should involve other MDTM members.

Standard 15

From time to time other radiologists should attend the MDTMs in addition to the MDTM radiologists. Their attendance should be recorded. This should be agreed with the radiology clinical director.

1. Introduction

Multidisciplinary team (MDT) and clinico-radiology meetings are well established as a core component of medical care, and are mandatory within the NHS for hospitals providing cancer services. Highly specialised modern medicine requires a team of doctors and staff to manage patients effectively. MDTs are now becoming part of non-cancer specialties such as orthopaedics, rheumatology, chest diseases and inflammatory bowel disease. Although this is an example of quality care, this document focuses on the use of MDTMs in cancer care. Each MDT is responsible for all cancers within its specialty, must fulfil predetermined quality criteria and is subject to peer review on a regular basis. Each MDT has to meet regularly at an MDTM, the frequency of which varies depending on the incidence of the malignancies for which it is responsible. National standards for cancer services have been developed in each of the four UK countries (Appendix 1).

Guidelines

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.

Membership of MDTMs

The MDTMs have specific membership requirements for all relevant medical and non-medical groups. Radiologists are considered 'core' members of MDTMs. All core members are required to show a personal commitment to attending the MDTM. They are required to attend two-thirds of the MDTMs and, for radiology, a named lead radiologist and a deputy are required and should provide cross-cover. The presence of both a radiologist and a pathologist has been mandated to ensure that the meeting is quorate. While MDTMs have been shown to have a positive effect on patient care, they also have a significant impact on consultant radiologist workload,⁵ 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.⁶ Where possible, the radiology department should make use of these resources.

Principle issues for radiology involvement in MDTMs

The standards set forth in this document outline the requirements 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. The guidelines also suggest mechanisms for the recording of outcomes and how these can feed in to LDMs where necessary.²

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 involvement in MDTMs are broadly divisible into five topics:

- Time requirements
- Quality control
- Record keeping
- Facilities
- Job planning and appraisal.

2. Time requirements

The time commitment required from a consultant radiologist in providing useful input into an MDTM depends on the frequency of the meetings, their duration, the number of patients to be discussed and the complexity of the cases, and is often underestimated.⁵ The frequency of the meetings, for example, weekly or fortnightly, should be agreed with the lead radiologist and may only be increased after appropriate discussion with them and the clinical director of the radiology department.

The following aspects of time requirements need to be considered.

Attendance

Radiologists are 'core' members of cancer MDTMs as per the National cancer peer review measures (Appendix 1).⁷ All core members are required to show a personal commitment to attending two out of three of the MDTMs themselves (not relying on cover arrangements to achieve this). 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

There should be a minimum of two radiologists per MDTM to provide continuous support. Recruitment based on special interests in radiology is normal for radiology job plans.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 and physicians, and core

members in a particular MDTM will define whether more than two radiologists are required.

MDTM supplementary reports

The initial diagnostic investigation may have been performed when the cancer was not known, and hence maybe reported by a colleague who does not attend the particular 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. The supplementary report should include, where applicable, the histology (squamous cell carcinoma [SCC], adenocarcinoma [adenoCA] and so on), TNM stage, defined as 'the extent of the primary tumour, the absence or presence and extent of regional lymph node metastasis and the absence or presence of distant metastasis',⁹ as decided by the MDT, and plan for the patient management (for example, surgery with curative intent, palliative chemoradiotherapy and so on). 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. The supplementary report also helps the radiologist who may report the post-treatment imaging.

Primary reporting allocation

Radiologists attending the MDTMs should also be responsible for providing the primary report for the majority of 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, who are core members in the MDTMs, can easily be identified from the radiology

information system [RIS]. This should allow radiology managers to plan the number of radiology reporting sessions for the two 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). This is also a requirement for the peer review measures.⁷ If a scan has been reported by one of 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.³

Duration of meetings

Since 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 and time should be allocated accordingly. Most MDTMs are scheduled for 60–90 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 to exceed the allotted time regularly, or to provide inadequate time to review patients at the end of the list, then consideration should be given to increasing the time allocated. However, this time should be used efficiently with clear requirements for the availability of all imaging to be reviewed in advance of the meeting with a clear clinical question for the radiologist to answer.

Types of patients

Patients are usually divided into two categories, pretreatment and postoperative/post-treatment, although specific subcategories, such as postneoadjuvant therapy, also need to be discussed. Most MDTMs discuss additional categories of patients, such as postchemotherapy, postradiotherapy and disease relapse. These additional groups may add considerably to the time requirements.

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.

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.

Standard

Standard 1

Peer review measure: Radiologists must attend two-thirds of the MDTMs personally (without relying on cover arrangements).

Standard 2

A minimum of two radiologists should be allocated to each MDTM (one radiologist to attend the meeting, but two radiologists designated for each site-specific meeting).

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 in the MDTM. This should be considered as DCC when job planning.⁸ It is, of course, 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 Department of Health (DH) *Improving outcomes: A strategy for cancer* guidance requires the lead and deputy radiologists 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 one of them before the meeting.⁶ 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 or deputy radiologist, 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 radiologist. The opinions to be given to the MDTM 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, and should be recorded as a supplementary report on the RIS. There should be

a robust method of feeding these differences into a departmental LDM, and to the referring hospital, to provide appropriate feedback where necessary (see Appendix 2. MDTM discrepancy pro forma).^{2,3}

It is important that departmental reporting practices enable MDTM radiologists to report referrals from referring consultants who are also core members of the MDTM – as discussed above.

MDTM administration time

This is the time commitment to enable the review of images before the meeting, the issuing of supplementary reports of cases discussed and to arrange any investigations, all of which must be part of DCC.⁸ A simple formula used by many trusts to calculate the MDTM administration time is: **the duration of the MDTM divided by the number of radiologists attending**. For example, a two-hour MDTM with two radiologists should allocate each radiologist one hour of MDTM administration time, (30 minutes prior to the MDTM and 30 minutes after), within each job plan.⁸

MDTM work allocation

The DH *Improving outcomes* guidance requires the lead and deputy radiologists to have a degree of specialist expertise and, as such, many of the patients discussed at MDTMs should have been scanned or investigated by the MDTM radiologists prior to the meeting.^{6,7} To be able to provide specialist expertise in a particular radiological area, MDTM radiologists must issue the primary report on the majority of the patients referred by the core clinical consultants in the MDTM. The departmental reporting practices must support this type of work allocation to the MDTM radiologist.

Commenting on examinations that have not been reviewed in advance of 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, therefore 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. These patients may or may not be on the provided MDTM list. 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 should be audited. Opinions given on examinations without time for prior review should be recorded as such.

There is a 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 as a consequence, they may make a significant error to the detriment of patient care.

Additionally, their review would be inadequate in comparison to that of the reporting radiologist and could therefore result in litigation.

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

1. To decline to review the examinations
2. To review briefly the examinations and pass comment, but also to agree to provide a written supplementary 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 supplementary report to the referring clinician and the MDTM co-ordinator at some stage after the MDTM.

In both two and three, 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 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 patients.¹⁰

Standards

Standard 3

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.

Standard 4

All of the examinations (computed tomography [CT]/magnetic resonance [MR] and so on) discussed at MDTMs should have a supplementary report. It is possible that the majority of the reports may just say 'Reviewed at MDTM – see primary report'.

Indicator for audit

The number of reports and films available for review prior to the meeting. The target is 100%.

4. 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 a picture archiving and communication system (PACS) is not available, or a substantial number of patients that 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 has to 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.⁴

Supplementary reports/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.¹¹ A supplementary report post-MDTM must be the norm for all cases discussed at the MDTM. Differences of opinion between the previously issued report and the report to be given to the MDTM must be dealt with sensitively and professionally. Reports could begin

with 'On second review of images, and in light of histology and further clinical information ...'. It is the responsibility of the MDTM radiologist to issue an accurate supplementary report, that is recorded on the RIS, so that it is available to all clinicians who may review those images in the future on the PACS.^{2,3} This will ensure that the most up-to-date opinions are available to anyone involved in managing the patient. There should be a robust method of feeding differences in opinion between the primary reports and supplementary reports to the primary reporting radiologist and, where appropriate, 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, TNM staging and 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).^{2,3}

These cases may then be presented at a departmental LDM as a mechanism for education and audit.^{2,3} 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 postoperative cases are reviewed, the surgical/pathology reports should be compared to the preoperative imaging, and significant differences recorded by the MDTM radiologist for discussion at the radiology department LDM.²

Standards

Standard 5

All images discussed at the MDTM should have a supplementary report, identifying that the images have been reviewed, the histological diagnosis, TNM staging and MDTM management plan.

Standard 6

Major differences of opinion and discrepancies in the radiological reports should be recorded, particularly if they affect patient management, and should be presented at the local LDM (see Appendix 2 for an MDTM discrepancy pro forma).

Standard 7

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

Indicator for audit

The percentage of major discrepancies which are presented in the local LDM. Target 100%.^{2,3}

5. Facilities

All MDTMs should be held in a room with adequate image projection facilities. It is imperative that the MDTM radiologist is able to demonstrate clearly 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.

Access to previous exams for cases discussed should be the norm. Two monitors should be available in the meeting room; one of the monitors should be projected and used for images, the other, smaller monitor should display the RIS, with the primary report.

PACS facilities should also be available to enable retrieval of relevant prior examinations. Additionally, wherever possible, an RIS or radiology management system (RMS) should be available in the MDTM room so that relevant prior reports can be reviewed.

Linking the MDT 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.

Standards

Standard 8

Adequate image projection facilities must be available, and agreed by the MDTM radiologist.

Standard 9

Images transmitted for video-conferencing must be of sufficient quality acceptable to the MDTM radiologists.

Standard 10

PACS facilities, if available within the hospital, must be available within the MDTM room.

Standard 11

An RIS or RMS must be available within the MDTM room.

Standard 12

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, issuing addendum reports prior to the meeting, 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 these tasks to be performed promptly and to an appropriately high standard, time must be made available in each consultant's job plan.⁸ As such, all MDTM radiologists need to discuss the time spent involved in MDTMs with the radiology department lead. The minimum number of radiologists who participate in MDTMs should be two. Departmental clinical directors must analyse the volume of work in the specialty (referrals from the particular specialty core member referring consultants) and use calculations to define the number of MDTM radiologists required (identifying whether there is a need for more than two MDTM radiologists).

MDTM attendance and administration should be recorded as DCC for these radiologists.⁸

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.⁴

Standards

Standard 13

The role of the MDTM radiologist should be addressed in the appraisal process.⁴

Standard 14

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 radiologists' job plans. Target to be within 10% of time allocated on job plans over a three-month period.⁸

7. Education

MDTMs present an excellent opportunity for clinically relevant continuing medical education (CME).¹² This should be made available to all registrars within departments and, if at all possible, to all MDTM radiologists, particularly in departments that are not able to subspecialise 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 MDTM radiologists.

There should be a provision in the running of the MDTM to allow the registrars to prepare and present cases. This may form part of their ongoing work place assessment.¹³

Standard

Standard 15

Agree with the radiology clinical director that from time to time other radiologists should attend the MDTMs in addition to the MDTM radiologists. Their attendance should be recorded.

8. Conclusion

The MDTM has now been established as an integral and important process in the management patients with cancer. Radiologists are at the core of this meeting as they are involved in the diagnosis, staging and management of patients. A high-quality MDTM requires time; for preparation and to present. In addition, the decisions made at these meetings should be recorded in the patient's notes and on the RIS. This allows accurate follow-up and minimises potential error. It also allows quality to be reviewed and can become an established mechanism to feed into the department's LDM.²

The MDTM affords the opportunity to practise as a truly clinical radiologist, but robust mechanisms need to be in place to ensure the highest quality of patient care. These guidelines support the development of such mechanisms.

Approved by the Clinical Radiology Faculty Board: 27 June 2014

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Appendix 1. National standards for cancer services in each of 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.

Northern Ireland

http://www.dhsspsni.gov.uk/index/hss/ministerial_priorities.htm
(last accessed 13/10/2014)

Scotland

<http://www.scotland.gov.uk/About/Performance/scotPerforms/partnerstories/NHSScotlandperformance/CancerwaitingtimesStandard>
(last accessed 13/10/2014)

England

<https://www.gov.uk/government/publications/the-national-cancer-strategy>
(last accessed 13/10/2014)

Wales

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=322&pid=23968>
(last accessed 13/10/2014)

Appendix 2. MDTM discrepancy pro forma

Case to be discussed:

Name:

DOB:

Ref no:

Imaging studies:

Date of study:

Discrepancy to be discussed:

Clinical information provided at the time of request:

Is the clinical team aware of the discrepancy? Yes No

Assessment of discrepancy: learning and outcome

| Discrepancy | Reporting discrepancy | | | System discrepancy | | |
|-------------|-----------------------|-----------|-------------------------|----------------------|------------------------------|--------------------|
| | Perceptual | Cognitive | Effective communication | Clinical information | Poor imaging/patient factors | Working conditions |
| No | | | | | | |
| Yes | | | | | | |

Agreed learning points:

Agreed outcome/further action:

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