

# Victorian cancer multidisciplinary team meeting quality framework

September 2018



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# Introduction

A cancer multidisciplinary team meeting (MDM) is a deliberate, regular meeting involving a range of health professionals with expertise in diagnosing and managing cancer, with the purpose of facilitating best practice management of all patients with cancer.

The *Victorian cancer multidisciplinary team meeting quality framework* (MDM quality framework) contains an agreed set of standards, indicators and measures for all cancer MDMs in Victoria and a set of tools for monitoring their quality. Once implemented, the framework will enable greater consistency in the way cancer MDMs are conducted and monitored. It will facilitate greater awareness of the minimum requirements for MDMs within the host health service and help identify variances in practice, enabling quality improvement activities relating to MDM inputs, processes and outputs to be prioritised.

## Why the framework was developed

The Victorian Department of Health and Human Services established the Integrated Cancer Services (ICS) in 2004. There are three metropolitan ICS, five regional and one paediatric. Each ICS is a partnership between clinicians and health services within a geographic area. ICS have a responsibility to support their members to implement government policy and improve the quality of cancer service delivery and patient care. This includes the 2006 *Multidisciplinary care policy*, which is relevant to MDMs.

A significant achievement of the ICS has been establishing a large number of MDMs across Victoria. There currently are at least 180 individual MDMs operating across public and private cancer settings. The Department of Health and Human Services conducted a survey of cancer MDMs in 2014. The survey identified the growing maturity of MDMs in Victoria. It also revealed variation in how the MDMs functioned, and how quality is measured and monitored. The opportunity to develop a framework to outline standards of quality and monitoring methods to enhance and support the quality, effectiveness and consistency of these meetings was identified. In response to this recommendation, each of the ICS has provided funding to support a project to develop and support the implementation of the framework.

## How the framework was developed

The Victorian Cancer Multidisciplinary Team Meeting Quality Framework Project (MDM Quality Framework Project) was established to develop the framework. The project included the:

- MDM Quality Framework Project Steering Committee
- MDM Quality Framework Project Advisory Group
- MDM Quality Framework Project Team.

Draft standards were developed with reference to the literature, Department of Health and Human Services policy and a plan-do-study-act method incorporating surveys and peer review. Appendix 1 outlines how the framework was developed. Appendix 2 contains a summary of the literature review.

## Audience and use of the framework

The *Victorian cancer multidisciplinary team meeting quality framework* has several audiences:

- clinicians who run and participate in MDMs
- health service executives who ensure that individual MDMs are supported and managed appropriately

- the Department of Health and Human Services and quality programs that will use the framework to collectively improve MDMs across Victoria. This includes quality, risk, planning and redesign staff within health services and quality improvement programs such as the ICS and other networks.

The framework is organised into eight quality standards. Some of the standards are aspirational so as to reflect the changing nature of MDMs in Victoria. Others reflect legislative and policy requirements, which have been in place for several years.

Each standard has an associated indicator and quality measure. The majority of these relate to the processes and structure of MDMs and have been developed to be as specific and easy to measure as possible. Some of the indicators will be very simple to measure, while others will require direct feedback from MDM participants and some level of interpretation. For example, minimum terms of reference are defined, along with data that should be collected (see Appendices 3 and 4). An audit tool and MDM participant survey will provide support to implement the framework (see Appendices 5 and 6). These tools can be used to create an initial baseline for all standards and to monitor routine and improvement progress.

The frequency of monitoring against each standard will vary according to the timeframe for implementation and the extent to which the standards are routinely met. As the standards become 'business as usual' within a health service, they may not require such frequent measurement.

To facilitate the consistency of MDMs across Victoria, the framework also includes a list of the definitions used in the framework (see Appendix 7) and an appendix that maps the alignment of the quality framework with broader National Health Quality Standards (NSQHS) accreditation (Appendix 8). These are mandatory standards that all acute health services must meet. The framework aligns with 17 standards in the NSQHS across four domains, and positive audit results/improvement activities at MDMs can be used by quality units and performance management teams in higher level reporting (Appendix 8).

It is expected that the framework will be a 'living document', with opportunities to revise and expand the standards and supported measures to align with changing community expectations, policy directions and future projects.

## Looking into the future

Routinely registering patients and presentation prioritisation are two emerging areas relating to MDMs that are described in the literature but have not yet reached usual practice within Victoria. The MDM Quality Framework Project Steering Committee decided that, to address this, the framework would create an optional standard and a recommendation for the future.

### **Recommendation for the future – routine registration of patients**

It is recommended that MDM host agencies work together to identify how all patients in Victoria could be automatically registered to MDMs. This will create stronger patient datasets and reduce the likelihood of patients missing out on MDM presentation.

### **Optional standard – patient prioritisation**

MDMs have become the standard approach for cancer patient management in Victoria, but the increase in demand for MDM patient presentation has not been matched by the increased capacity to extend meetings. The growth of MDMs, the complexity of patient presentation in an ageing population and the growth in treatment options increases the pressure on meetings. Many may result in a very brief patient discussion, with insufficient consideration of patient preferences, comorbidities and suitability for clinical trials. Formal protocols for streamlining patient presentation may be suitable in some tumour streams to improve the quality of discussion, especially for more complex patients.

## Further information

For a list of people involved in developing the framework, please refer to the Acknowledgements section of this document.

Feedback on the framework is appreciated. Please [email Marita Reed](mailto:Marita.Reed@dhhs.vic.gov.au) <Marita.Reed@dhhs.vic.gov.au> should you have any feedback, questions or concerns.

# Quality standards and measures

## Quality area 1: Infrastructure and organisational support

Quality standard	Indicator	Measure	Responsible
1.1 Health service executive support underpins MDM activities.	a. MDMs are incorporated into strategic and operational plans.	a. Documented evidence that MDMs are a named activity in one of the organisation's strategic or operational plans.	Health service executives
	b. MDMs are incorporated into quality and risk management systems, including hospital audit cycles.	b. For the MDM host agency, <sup>1</sup> there is evidence that: <ul style="list-style-type: none"> <li>at least one quality change related to MDMs in the past two years has been recorded</li> <li>at least one MDM-related risk is recorded in an organisational risk log or equivalent</li> <li>a risk manager or equivalent is aware of MDMs as a source of information.</li> </ul>	Health service executives
	c. There is a financial commitment to the infrastructure, human and administrative resources for the MDMs.	c. Evidence that funds have been allocated to infrastructure, health service professionals and administrative staff to support MDMs.	Health service executives
	d. There are assigned responsibilities for measuring and monitoring MDM performance against this framework and acting on identified issues of concern.	d. Evidence of a review against this framework at least every two years for all MDMs hosted by the health service.	Health service executives

<sup>1</sup> See Appendix 7 for definition.

Quality standard	Indicator	Measure	Responsible
1.2 MDMs have a clear governance structure.	a. Quality suggestions are logged and changes are only made after proper consideration of their quality, costs and risk by a suitable governance structure.	a. Governance responsibility for MDMs can be clearly identified within terms of reference or equivalent of at least one standing committee in the host agency.  An audit can find evidence that quality changes and suggestions made at MDMs are logged.	Health service executives
	b. Governance structures incorporate key representatives from MDMs.	b. Standing committee with MDM governance responsibility includes clinicians, radiologists, pathologists, business units, executive staff, consumers and leaders within MDMs.	Health service executives
	c. There is clinical oversight of MDMs, including documentation of treatment protocols, consideration of new treatments and ensuring recommended clinicians attend.	c. Whether an appropriate standing committee with MDM governance responsibility: <ul style="list-style-type: none"> <li>receives biannual updates on changes to treatment evidence base and protocols</li> <li>monitors and audits MDM attendance against recommended membership in optimal care pathways (OCP).<sup>2</sup></li> </ul>	Health service executives
1.3 The organisation ensures MDM participation and operations are included in workforce planning.	a. Contracts and/or position descriptions for medical staff responsible for primary cancer care include the expectation that cancer patients are referred to MDMs and receive multidisciplinary care.	a. MDM participation is incorporated into the organisation's standard contract templates or standard position descriptions for medical staff.	Health service executives
	b. Clinical loads consider multidisciplinary activities undertaken by all MDM team members.	b. Audit of the past three MDMs for each tumour stream identify 80 per cent of core specialities (identified in OCPs and in Standard 3.3) attended.	Health service executives, clinicians and administrators

<sup>2</sup> OCPs describe the optimal cancer care for specific tumour types. See [Cancer Council Victoria's website](http://www.cancervic.org.au/for-health-professionals/optimal-care-pathways) <http://www.cancervic.org.au/for-health-professionals/optimal-care-pathways> for a full list.

Quality standard	Indicator	Measure	Responsible
1.4 Organisational culture recognises the teaching and training role of activities within MDMs.	a. Team members demonstrate the value of MDMs for shared learning by mutual respect – different voices are heard and have input in decision making.	a. The <i>MDM survey tool</i> in Appendix 6 shows 80 per cent of team members responded positively to questions about broad input in decision making.	Health service executives, clinicians and administrators
	b. Interns, registrars, fellows and students report they have received educational and professional development value from MDM participation.	b. The <i>MDM survey tool</i> in Appendix 6 shows at least 80 per cent of interns, registrars, fellows and students received educational and professional development value from MDM participation.	Health service executives and clinicians
1.5 All public and private patients have access to MDMs.	a. When separate MDMs for patients cannot be achieved, presentation of both public and private patients is encouraged and supported.	a. There is a process for presenting both public and private patients outside of the host agency.	Health service executives and administrators
	b. When appropriate tumour-specific MDMs for patients cannot be achieved, presentation of these patients into an MDM with appropriate expertise is encouraged and supported.	b. The <i>MDM survey tool</i> in Appendix 6 shows at least 80 per cent of participants refer to external MDMs when more specialised expertise is required.	Health service executives and administrators
1.6 Health services who participate in MDMs provide an appropriate room for MDMs.	a. MDMs are held in a room with sufficient space to accommodate all participants and enable confidential discussions.	a. The maximum number of participants can sit down at the MDM and conversation can still only be heard by participants. This includes remote attendance sites.	Health service executives and administrators
1.7 MDM participants can view the required information in real time during MDMs.	a. MDM facilities enable all off-site and on-site participants to view the following in real time: i. radiology images ii. pathology images iii. prefilled patient information and live data entry.	a. Participants in the room can view radiology, pathology, prefilled patient information and live data entry in real time.  Off-site participants can view radiology, pathology and prefilled patient information and live data entry in real time, and contribute to discussion.	Health service executives and administrators

Quality standard	Indicator	Measure	Responsible
1.8 The infrastructure to support MDMs including software and hardware is appropriate and reliable.	a. The hardware and software used to support MDMs is appropriate and reliable.	a. An audit can identify a staff member/contractor who is delegated to provide emergency technical assistance to the MDM in real time.	Health service executives and administrators
	b. Organisational contingency planning for technical faults is sufficient to support the operation of MDMs with minimum disruption.	b. The person responsible for MDM administration indicates there are no ongoing technical faults identified.	Health service executives and administrators
1.9 Information is captured across patients and MDMs to enable analysis and reporting and benchmarking of diagnostic, treatment and administrative trends.	a. MDM software captures and reports appropriate information prior to, during and after the meetings.	a. Components of the discussion that can only be captured during the meeting are captured in real time using software.	Health service executives and administrators
	b. MDM software can create reports across MDMs using patient minimum data.	b. Meeting software can report minimum data outlined in Quality standard 6.2.a across individual MDMs.	Health service executives and administrators
	c. There are processes in place to ensure MDM recommendations are placed in each patient's relevant medical records, including services outside the MDM host agency.	c. An auditor can identify how MDM recommendations are placed on the medical records in each relevant health service.	Health service executives and administrators

## Quality area 2: Meeting organisation

Quality standard	Indicator	Measure	Responsible
2.1 The MDM has terms of reference (ToRs) or equivalent that meet minimum standards.	a. The MDM has ToRs or equivalent that meet the minimum standards.	a. The MDM has an approved ToR or equivalent that incorporates the minimum standards in Appendix 3.	Health service executives
2.2 The MDM has an appointed or nominated staff member to coordinate the MDM.	a. An appointed or nominated staff member is responsible for: <ul style="list-style-type: none"> <li>i. notifying and inviting members</li> <li>ii. preparing and distributing the agenda</li> <li>iii. supporting off-site participation</li> <li>iv. documenting MDM attendance</li> </ul>	a. A responsible staff member can be identified for 80 per cent of the indicators in Standard 2.2.	Health service executives, clinicians and administrators

<b>Quality standard</b>	<b>Indicator</b>	<b>Measure</b>	<b>Responsible</b>
	v. escalating technical issues.		
2.3 A regular meeting date, time, meeting length and location are set to ensure regular attendance.	a. There is a predictable timeline, location and frequency of meetings.	a. Whether or not the past three MDMs were held at same time, location and frequency.	Administrators
2.4 Meetings occur at least fortnightly.	a. The meetings occur consistently, on a minimum of a fortnightly basis.	a. Whether there were at least three meetings held in the past six weeks.	Administrators
2.5 The agenda is distributed to give participants enough time to prepare.	a. Agendas are distributed to the MDM team a minimum of 48 hours before the meeting.	a. Whether the past three agendas were sent 48 hours before the meeting.	Administrators
	b. Late addition of MDM patients is by documented process evidencing the chair's agreement.	b. The MDM ToR or equivalent contains documented processes for the late addition of patients.	Administrators and clinicians

## Quality area 3: Membership

Quality standard	Indicator	Measure	Responsible
3.1 Every MDM has a register of attendance.	a. A register of attendance is maintained, which all MDM attendees must sign.	a. A register of attendance containing participant signatures for the past two meetings can be produced. This includes participants from remote sites.	Administrators
3.2 Patient information remains confidential and is used only for the purpose of clinical management.	a. All members have signed a confidentiality agreement on commencement of employment with any Victorian health service (as per usual). For those attendees who are not directly employed by the MDM host agency (pathologists, clinicians from other hospitals), local MDM arrangements will need to ensure a relevant confidentiality agreement has been signed.	a. Signed MDM confidentiality agreements for those attendees who are not directly employed by the host agency can be located.  MDM terms of reference or equivalent assign responsibility for maintaining signed confidentiality arrangements, covering attendees not directly employed by the MDM host agency.	Health service executives, MDM chair, clinicians and administrators
3.3 The MDM team contains appropriate core members.	a. The MDM team contains the core members listed in the relevant OCP or, if there is no OCP, as follows: <ul style="list-style-type: none"> <li>i. nurse and/or allied health practitioner</li> <li>ii. medical oncologist</li> <li>iii. radiation oncologist</li> <li>iv. pathologist</li> <li>v. diagnostic radiologist</li> <li>vi. surgeon.</li> </ul>	a. A log of the past three meetings attendance shows all core membership specialties attend 90 per cent of MDMs.	MDM chair, clinicians and administrators
3.4 Specialties beyond the defined core membership listed in the OCPs attend meetings when clinically required.	a. Lead clinicians <sup>3</sup> and MDM chairs have the option to invite health professionals whose expertise is relevant to attend the MDM (for example, palliative care specialists, dietitians, social workers, nurses with specialist expertise).	a. MDM terms of reference or equivalent include a process for inviting non-core specialties.	MDM chair, clinicians and administrators

<sup>3</sup> See Appendix 7 for definition.

Quality standard	Indicator	Measure	Responsible
3.5 There is an opportunity to involve patients' GPs in MDMs.	a. Lead clinicians and MDM chairs have the option to include GPs in the MDM for the discussion of their patients.	a. MDM terms of reference or equivalent include a process for inviting GPs.	MDM chair, clinicians and administrators

## Quality area 4: Leadership

Quality standard	Indicator	Measure	Responsible
4.1 The MDM has a designated chairperson, with a delegate/deputy nominated to cover in their absence.	a. MDMs are consistently chaired.	a. Whether the chairperson or delegate/deputy chaired the past three meetings.	Health service executives
4.2 The MDM chairperson is a specialist clinician.	a. The chairperson is a specialist clinician (not an intern or registrar).	a. Whether the chairperson was a specialist clinician at the past three meetings.	Health service executives
4.3 The chairperson takes a leadership role within the MDM to ensure that meeting discussion is rigorous and appropriate.	a. During the meeting the chairperson: <ul style="list-style-type: none"> <li>i. decides whether there is sufficient representation to discuss each case</li> <li>ii. facilitates discussion, ensuring all members have the opportunity to contribute</li> <li>iii. acts fairly and objectively so that all members are supported to raise ideas and receive peer review</li> <li>iv. mediates discussion when disagreement arises</li> <li>v. creates a culture of support for education and professional development within the MDMs.</li> </ul>	a. The <i>MDM survey tool</i> in Appendix 6 shows that 80 per cent of the surveyed participants responded positively to relevant questions about the chairperson's role in the meetings.	MDM chair
	b. During the meeting the chairperson ensures there is routine consideration of new research/trials and treatments.	b. The <i>MDM survey tool</i> in Appendix 6 shows that 80 per cent of respondents feel that the new research/trials have been adequately considered.	

Quality standard	Indicator	Measure	Responsible
4.4 The chairperson ensures that all clinically relevant information, including recommendations (and divergent recommendations), are clearly documented.	a. During the meeting the chairperson paces discussion to ensure: <ul style="list-style-type: none"> <li>i. minimum dataset in prefilled patient information and live data entry is captured for each patient</li> <li>ii. MDM recommendations are clearly documented in real time and reflect discussion and agreements</li> <li>iii. any errors or changes are recorded</li> <li>iv. all divergent treatment recommendations<sup>4</sup> are recorded, identifying the clinician(s) with divergent views.</li> </ul>	a. An audit of patient data for the past 20 patients scores 80 per cent for minimum dataset completeness.  An audit of patient data for the past 20 patients scores at least 80 per cent for the recording of treatment recommendations.	MDM chair
4.5 There are identified leaders and/or a culture of leadership, so that MDM clinical requirements for resourcing, quality and safety are represented.	a. The MDM has leaders who work with the members, host agency, chairperson and administrator to ensure: <ul style="list-style-type: none"> <li>i. issues of concern that may affect safety, sustainability and minimum standards for MDM quality are escalated</li> <li>ii. the host agency understands the role and importance of the MDM and provides appropriate resources</li> <li>iii. systems are in place for the timely communication of MDM recommendations to the patient, GP and treating team.</li> </ul>	A responsible staff member can be identified for the indicators in Standard 4.5.	Health service executives and MDM chair

<sup>4</sup> See Appendix 7 for definition.

## Quality area 5: Consent

Quality standard	Indicator	Measure	Responsible
5.1 Patients are provided appropriate information to ensure informed consent <sup>5</sup> to MDM participation.	<p>a. Verbal and/or written patient information is provided, covering the following topics:</p> <ul style="list-style-type: none"> <li>i. who will be able to view their information</li> <li>ii. how they will be informed of recommendations</li> <li>iii. how they may opt out of MDM presentation.</li> </ul>	<p>a. The <i>MDM survey tool</i> in Appendix 6 shows that 80 per cent of participants who refer patients use verbal and/or written information when informing patients about the MDM.</p> <p>Whether written patient information on the MDM includes all topics outlined in Indicator 5.1.a.</p> <p>The <i>MDM survey tool</i> in Appendix 6 shows 80 per cent of clinicians who refer patients to an MDM provide an opportunity for patients to opt out.</p>	Health service executives, clinicians who refer patients to MDMs
5.2 Patient consent is sought before their case is presented.	a. Clinicians are to ensure patients provide informed consent prior to presentation.	a. An audit of patient data for the past 20 patients scores at least 80 per cent for recording of consent.	Health service executives, clinicians who refer patients to MDMs

<sup>5</sup> See Appendix 7 for definition.

## Quality area 6: Patient referral

Quality standard	Indicator	Measure	Responsible
6.1 Clinicians refer all patients with a new or suspected cancer diagnosis to an MDM for endorsement of patient-specific treatment recommendations. To assist with the burden of demand in common tumour streams, sites that have 'agreed standardised treatment protocols' (or like) can elect to deal with referrals by exception.	a. All patients with a new or suspected diagnosis for cancer or recurrence of disease should be referred to an MDM for noting or discussion.	a. The average number of unique patients discussed at an MDM over a three-month period is 80 per cent of the patients that can be reasonably estimated for the catchment using state-level datasets. The <i>MDM survey tool</i> in Appendix 6 shows 80 per cent of MDM participants routinely refer all of their patients to an MDM.	Clinicians who refer patients to MDMs
6.2 Clinicians who refer patients to MDMs provide enough information about each patient and this is considered by the MDM.	a. Prior to patient discussion, each referring clinician should ensure their prefilled patient data contains the following: <ul style="list-style-type: none"> <li>i. a clear reason for why the patient is being discussed</li> <li>ii. the patient's demographics</li> <li>iii. relevant test results</li> <li>iv. comorbidities, supportive care requirements (including palliative care needs), performance status</li> <li>v. the patient's history and preferences</li> <li>vi. the name and contact of the referring and presenting clinician.</li> </ul>	a. An audit of patient data for the past 20 patients scores 80 per cent for completeness of minimum data.	Clinicians who refer patients to MDMs and administrators
	b. For each patient presented, there is someone present at the MDM who is adequately prepared to describe their case.	b. The <i>MDM survey tool</i> in Appendix 6 shows that 80 per cent of respondents feel presenters are adequately prepared to respond to questions during the meeting.	

Quality standard	Indicator	Measure	Responsible
6.3 Clinicians who refer patients to MDMs after the agreed cut-off time for inclusion in the agenda ensure patient information can be adequately reviewed.	a. Information about patients who have been referred after the agreed cut-off time is reviewed by relevant clinicians.	a. The <i>MDM survey tool</i> in Appendix 6 shows that 80 per cent of pathologists and radiologists think the rate of late presentation is acceptable.  There is a process for late inclusion in the agenda in the MDM terms of reference or equivalent.	MDM chair and clinicians who refer patients to MDMs

## Quality area 7: Streamlining patient discussion – for MDMs that use prioritisation (optional)

Health services should consider adopting their own formal protocols for streamlining patient discussions, particularly in heavily subscribed tumour streams with very well established treatment protocols. MDMs for tumour types for which a protocolised approach has been developed should agree and document their approach to administering protocols and regularly review them.

Quality standard	Indicator	Measure	Responsible
7.1 In MDMs that use prioritisation so that not all referred patients are routinely discussed, patient discussion is streamlined using agreed protocols.	a. MDMs participants are satisfied with the way agreed protocols are used to determine who is discussed.	a. The <i>MDM survey tool</i> in Appendix 6 shows that 80 per cent of participants are satisfied with the method chosen to present: <ul style="list-style-type: none"> <li>• routine</li> <li>• complex patients.</li> </ul>	Health service executives, clinicians and administrators
7.2 In MDMs where patient presentation is streamlined, processes to separate patients for noting versus discussion are formally defined.	a. There are agreed routine processes to separate patients that specify: <ol style="list-style-type: none"> <li>who is responsible for allocating patients for noting versus discussion</li> <li>which clinical guidelines will underpin streamlining</li> <li>how MDM members can escalate patients from noting to discussion.</li> </ol>	a. An audit can identify the agreed processes for streamlining patient discussion that meet the criteria in Indicator 7.2.	Clinicians and administrators
7.3 In MDMs where patient presentation is streamlined, when a patient is noted but not discussed, their proposed treatment recommendation is documented.	a. Patients noted on the MDM agenda but not discussed have their treatment recommendation endorsed at the MDM and entered in patient data.	a. An audit can find evidence of a process in the previous three meetings to formally endorse proposed treatment plans for noted patients.	Clinicians and administrators

## Quality area 8: MDM recommendations and communication

Quality standard	Indicator	Measure	Responsible
8.1 MDMs are a mechanism for clinicians to agree on the recommended treatment.	a. The MDM team aims for agreement on the recommended treatment.	a. The <i>MDM survey tool</i> in Appendix 6 shows: <ul style="list-style-type: none"> <li>80 per cent of participants feel that appropriate attempts to reach agreement are made in the meeting</li> <li>response rates to the above question are evenly distributed across disciplines.</li> </ul>	MDM chair and clinicians
8.2 When there is not agreement on treatment planning, divergent views on the recommended treatment are captured.	a. Divergent views are recorded in the relevant patient's treatment recommendations in patient data, identifying the clinician(s) with divergent views.	a. The <i>MDM survey tool</i> in Appendix 6 shows that 80 per cent of participants understand the importance of recording divergent treatment opinions.	Clinicians and administrators
8.3 When developing treatment recommendations, the MDM team ensures relevant information about the patient and optimal treatment are considered.	a. When developing treatment recommendations for each patient, MDM participants ensure: <ol style="list-style-type: none"> <li>the tumour has been adequately staged</li> <li>all appropriate treatment modalities are considered</li> <li>psychosocial and medical comorbidities that may influence treatment decisions are considered</li> <li>the patient's treatment preferences are known and considered</li> <li>clinical trial eligibility, availability and participation are considered</li> <li>relevant OCP timeframes are considered.</li> </ol>	a. An audit of patient data for the past 20 patients scores 80 per cent for completeness of minimum data. The <i>MDM survey tool</i> in Appendix 6 shows that 80 per cent of referring clinicians consider OCP timeframes when making recommendations.	Health service executives, MDM chair and clinicians
8.4 MDM recommendations are communicated to the patient's treatment team and GP in a timely manner.	a. Within a timely manner MDM recommendations: <ol style="list-style-type: none"> <li>should be easily available to all treating team members within 24 hours of the MDM meeting</li> </ol>	a. An audit can identify how each member of the treating team (including off-site members) could gain access to the MDM recommendations within 24 hours of the MDM meeting.	MDM chair, clinicians and administrators

Quality standard	Indicator	Measure	Responsible
	ii. must be recorded into the patient's central medical record iii. should be communicated to the patient's GP within one week of the MDM meeting.	An audit can identify how the MDM recommendations are placed on the medical records in each relevant health service. An audit can identify how MDM recommendations are sent to the patient's GP within a week of the MDM.	
8.5 MDM recommendations are communicated to the patient in a timely manner.	a. The lead (treating) clinician discusses the MDM's recommendations with the patient, and together with the patient, develops a final treatment plan.	a. The <i>MDM survey tool</i> in Appendix 6 shows: <ul style="list-style-type: none"> <li>• 80 per cent of referring participants identify their role in determining the final treatment plan for the patient after the MDM</li> <li>• 80 per cent of referring participants understand their role to present divergent MDM treatment recommendations to patients.</li> </ul>	Clinicians
8.6 Clinicians who refer patients to MDMs understand how they are responsible for patient referrals after the MDM.	a. Lead (treating) clinicians demonstrate they understand their post-MDM responsibilities for referral.	a. The <i>MDM survey tool</i> in Appendix 6 shows 80 per cent of relevant participants indicate they understand their role in actioning patient referrals after the MDM.	Administrators and clinicians who refer patients to MDMs

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The gratefully acknowledge the work of the following people.

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Michelle Pryce (Phase 2) – Gippsland Regional Integrated Cancer Services (GRICS)

Kathy Quade (Phase 2) – WCMICS

Marita Reed – Department of Health and Human Services

Sue Riches (Phase 2) – Barwon South Western Regional Integrated Cancer Service (BSWICS)

Ilana Solo (Phase 2) – LMICS

Dr Leeroy William (Phase 1) – Monash Health

## Phase 1 MDM Quality Framework Project Advisory Group

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Mirela Matthews – North Eastern Melbourne Integrated Cancer Service (NEMICS)

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## The MDM Quality Framework Project

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## Additional quality assurance

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Angela Caruso – PICS

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Lesla Stewart – St Vincent's Hospital

Ilana Solo – LMICS

Shannon Vaughan – Bendigo Health

Jane Williamson – PICS

Penny Walker – SMICS

## Peer review

Dr Benjamin Lamb – Department of Urology at  
Cambridge University Hospitals UK

Collette Chard – Queensland Health

Hirani Jayasinha – Cancer and Palliative Care  
Network, Northern Sydney Local Health District

Peter McGuire – Central Integrated Regional  
Cancer Service (CIRCS), Queensland

Barbara Page – CIRCS

Violet Platt – WA Cancer and Palliative Care  
Network

Elena Whippy – Concord Hospital and Royal  
Prince Alfred Hospital

# Appendix 1: How this framework was developed

A project structure was established incorporating the:

- MDM Quality Framework Project Steering Committee
- MDM Quality Framework Project Advisory Group
- MDM Quality Framework Project Team.

Draft standards were developed with reference to the literature, Department of Health and Human Services policy and a plan-do-study-act method incorporating surveys and peer review.

The project was enhanced by the participation of Dr Bianca Devitt, a Victorian medical oncologist, who shared her PhD research into cancer MDMs with the project team and participated actively in the project. Dr Devitt's (2016) research used a comprehensive, mixed-methods approach to iteratively develop guidelines for MDM conduct, focusing on the needs of clinicians and consumers. The project steering committee acknowledges with thanks Dr Devitt's generosity in support of this project.

The framework also incorporated input from MDM chairs and participants, Department of Health and Human Services staff, health service executives and Integrated Cancer Services staff to enable the framework to contain an appropriate mix of clinical, administrative and policy-based standards and measures. This was enhanced by a review of the literature relating to the quality and implementation of MDMs.

Development and testing of the framework was led by the MDM Quality Framework Project Steering Committee and was iterative in nature. This included:

- using Dr Devitt's thesis and MDM survey to create the initial draft
- a review by the project steering committee and advisory group
- testing of the initial measures with Integrated Cancer Services
- a review cycle incorporating Integrated Cancer Services and Department of Health and Human Services staff and the steering committee (additional administrative and policy-based measures were added)
- a survey of 98 clinicians across Victoria to establish their current level of compliance and feedback comments on the standards
- testing the use of the full framework by conducting a sample audit of eight MDMs across six regional and metropolitan health services (all audit tools were tested, including the survey of MDM participants (88 respondents); this process led to refining the audit tools and survey)
- finalising the framework and ratification by the MDM Quality Framework Implementation Steering Committee
- selected peer review with experts in Australia and overseas
- the addition of mapping to the National Safety and Quality Health Service Standards and other minor changes before final ratification by the Department of Health and Human Services.

## Appendix 2: Summary of the literature review

This summary literature review contains information about the derivations of many of the standards and measures in the framework.

### Australia

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
Evans A, Zorbas H, Keane M, et al. 2008, 'Medicolegal implications of a multidisciplinary approach to cancer care: consensus recommendations from a national workshop', <i>Medical Journal of Australia</i> 188 (7):401–404		<ul style="list-style-type: none"> <li>Criteria for which patients are discussed should be agreed and documented.</li> <li>Informed patient consent should be obtained and documented in the patient record before discussing a case at the MDM.</li> <li>Patients do not need to be de-identified during MDM discussions.</li> <li>Health professionals who contribute to a treatment recommendation within MDMs share responsibility for decisions made at meetings within their area of expertise, and could be liable if a negligence case is brought by a patient.</li> <li>Health professional liability is not influenced by whether the patient is charged for the professional's attendance at the MDM.</li> <li>The treating clinician is responsible for ensuring all relevant information relating to the patient's case is presented during the MDM.</li> <li>Dissenting views about a recommended approach to treatment should be recorded in the treatment plan.</li> </ul>	<ul style="list-style-type: none"> <li>Uncertainty on medicolegal implications of MDMs, and potential for litigation seen as a barrier.</li> <li>The introduction of greater levels of documentation may be seen as a challenge for health professionals working in a time-poor and resource-poor environment, though processes will limit liability for individuals and improve practice overall.</li> </ul> <p>The use of proformas and templates should help to streamline approaches.</p>	Workshop	1.9.a, 1.9.c, 3.1.a, 3.2.a, 4.4, 5.1.a, 5.2.a, 7.3, 8.1.a, 8.2.a, 8.4–8.6

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
		<ul style="list-style-type: none"> <li>The treating clinician is responsible for communicating treatment recommendation(s) to the patient.</li> <li>The final treatment plan, incorporating any changes due to patient preference, should be recorded in the patient record and communicated to the patient's GP.</li> </ul>			
Cockburn T, Madden B 2015, 'Questions about multidisciplinary teams', <i>Precedent</i> , 127:12–17		<ul style="list-style-type: none"> <li>Whether failure to present patients at an MDM is a breach of duty of care. Liability for breach of privacy if the patient has not consented. Potential non-delegable duty liability of host hospitals for non-employee MDM members and of private hospitals with independent contractor doctors.</li> <li>Status of the MDM as a legal entity and whether team members might be joined individually as parties in legal action.</li> <li>If not presenting a dissenting opinion to patients might result in 'failure to warn' claims.</li> <li>Whether deficient patient records leading to incorrect treatment recommendations expose members to liability.</li> <li>Risk is judged to be low.</li> </ul>	<ul style="list-style-type: none"> <li>Some legal precedent, but low volume.</li> <li>Overlapping legislation.</li> <li>Absence of a major claim against multiple multidisciplinary team (MDT) members with cross-claim issues may result in a casually structured MDM that is devoid of medicolegal risk management attention.</li> </ul>	Legal opinion	1.5.a, 1.5.b, 1.9, 3.1–3.2, 4.4.a.iv, 4.5, 5.1–5.2, 6.1–6.3, 8.2–8.3
Karas PL, Rankin N, Stone ECA 2016, <i>Medicolegal considerations in multidisciplinary lung cancer care</i> , Cancer Institute New South Wales, Sydney	Lung	<ul style="list-style-type: none"> <li>Informed consent should be obtained and documented before MDM discussion.</li> <li>MDM members who contribute share responsibility within their expertise area and could be liable. Dissenting views should be recorded.</li> <li>Members who contribute to the treatment plan should be identified and recorded, as they have a duty of care.</li> </ul>	<ul style="list-style-type: none"> <li>Australian doctors participating in MDTs may not completely understand their medicolegal obligations.</li> <li>There is limited precedent to base recommendations on.</li> </ul>	Review	1.9.a, 1.9.c, 3.1.a, 3.2.a, 4.4, 5.1.a, 5.2.a, 7.3, 8.1.a, 8.2.a, 8.4–8.6

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
		<ul style="list-style-type: none"> <li>The final treatment plan, including patient preferences, should be recorded in the patient record and given to their GP.</li> </ul>			
Brown C, Collett G, Barnes D, et al. 2017, 'Implementation and evaluation of a lung cancer multidisciplinary team (MDT) communication tool for GPs', <i>Journal of Thoracic Oncology</i> 12: S1463–S1464.	Lung	<ul style="list-style-type: none"> <li>Clinician-revised form providing information on MDT decision making to GPs filled out by registrars in MDM and sent to GPs promptly.</li> <li>Telephone survey reported 96 per cent of GPs found the form useful, relevant and would coordinate and plan treatment pathways using it.</li> </ul>		Qualitative	4.5.iii, 8.4.iii
Lin Frank PY, Pokomy A, Teng C, et al. 2016, 'Computational prediction of multidisciplinary team decision-making for adjuvant breast cancer drug therapies: a machine learning approach', <i>BMC Cancer</i> 16:929	Breast	<ul style="list-style-type: none"> <li>1,065 breast cancer cases over eight years included.</li> <li>Machine learning model to predict MDT decisions on adjuvant breast cancer treatments developed to standardise decision making.</li> <li>Computational prediction is a more accurate predictor than the application of guidelines alone.</li> </ul>	<ul style="list-style-type: none"> <li>Discrepancies between MDT and guideline-based decisions (using European Society for Medical Oncology and National Comprehensive Cancer Network cancer guidelines) imply non-clinopathological criteria such as patient preference and resource availability are factored into clinical decision making.</li> <li>Limits use of model – neither machine model nor guidelines enough.</li> </ul>	Quantitative	1.3.b, 3.3.a, 4.3.a, 4.5.a, 6.2.a
Sharma V, Stranieri A, Burstein F, et al. 2017, 'Group decision making in health care: a case study of multidisciplinary meetings', <i>Journal of Decision Systems</i> 25(1):476–485		<ul style="list-style-type: none"> <li>Study using a reasoning community model to identify the gaps and the insights from group reasoning literature to answer the drawbacks and the problems faced by the current MDM process.</li> <li>Identifying the problems in different phases facilitates the resolution of an issue at the point where it occurred.</li> <li>Strategies for re-use of collective reasoning suggested.</li> </ul>	<ul style="list-style-type: none"> <li>Very small study.</li> </ul>	Qualitative	1.7.a, 1.9.a, 6.2.a, 7.1–7.2

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
		<ul style="list-style-type: none"> <li>Regional-based study.</li> <li>More clarity in communications and decision-making protocols suggested.</li> </ul>			

### New Zealand

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
Stairmand J, Signal L, Sarfati D, et al. 2015 'Consideration of comorbidity in treatment decision making in multidisciplinary cancer team meetings: a systematic review', <i>Annals of Oncology</i> 26(7):1325–1332		<ul style="list-style-type: none"> <li>Assessing the influence of comorbidity in treatment decisions at MDMs.</li> <li>Where treatment is different from that recommended due to comorbidity, it is more conservative, despite evidence that such treatment may be tolerated and effective.</li> <li>MDMs should systematically consider the treatment of patients with comorbidity.</li> </ul>	<ul style="list-style-type: none"> <li>MDM members are likely to be unaware of the extent to which issues such as comorbidity are ignored.</li> <li>Limited evidence base from which to draw conclusions on the influence of comorbidity in MDMs – standardised information on patient comorbidities needs to be cross-referenced with evidence of treatment effectiveness.</li> </ul>	Review	6.2.a. 6.2.b
Dew K, Stubbe M, Signal L, et al. 2015, 'Cancer care decision making in multidisciplinary meetings', <i>Qualitative Health Research</i> 25(3):397–407	Breast, lung, upper gastrointestinal, colorectal	<ul style="list-style-type: none"> <li>Analysis of decision-making process at MDMs. Attending to issues of process, authority and values in MDMs has the potential to improve cancer care decision making.</li> <li>Used conversation analysis to interrogate rhetorical strategies used by participants to achieve certain goals – overtalk, exaggeration, membership categorisation.</li> <li>Role of the chairperson and the capacity of the MDM members to observe and reflect on their own processes is central to improvement.</li> </ul>	<ul style="list-style-type: none"> <li>Identified particular problems of decisions by distance – no MDM member knowing the patient or having treatment history. This might be referral from another treatment location or a clinician missing from the meeting, or changes because of the time period elapsed.</li> <li>Small study looking at communication styles across 10 MDMs at two hospitals.</li> </ul>	Qualitative	1.5.a, 1.5.b, 1.9.c, 4.3.a, 6.2.a, 6.2.b, 6.3.a

## Canada

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
Croke JM, El-Sayed S 2012, 'Multidisciplinary management of cancer patients: chasing a shadow or real value? An overview of the literature', <i>Current Oncology</i> 19(4):e232–238		<ul style="list-style-type: none"> <li>MDMs are important to case review and influence clinical decision making, but studies focus on this rather than data. They are heterogeneous and therefore inconclusive regarding improving patient outcomes.</li> <li>Most studies did not evaluate if recommendations were implemented. Traces the development of Multidisciplinary cancer conference culture worldwide.</li> <li>Discordance with patient wishes is associated with lower survival rates.</li> </ul>	<ul style="list-style-type: none"> <li>The heterogeneity and vagueness of the studies and their ill-defined endpoints and large number of confounding variables make overall conclusions difficult.</li> <li>More evidence of benefit needed.</li> </ul>	Review	1.5.a, 1.5.b, 1.9, 4.5

## Europe

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
Lamb B, Brown K, Nagpal K, et al. 2011, 'Quality of care management decisions by multidisciplinary cancer teams: a systematic review', <i>Annals of Surgical Oncology</i> 18(8):2116–2125		<ul style="list-style-type: none"> <li>Evaluating reasons for failure of decision making and implementation of recommendations at MDMs.</li> <li>Time pressure, excessive caseload, low attendance, poor teamwork and lack of leadership affect quality.</li> <li>Telemedicine used with no detriment to decision making.</li> <li>Team/social factors affect management decisions by cancer MDTs. Inclusion of time to prepare for MDTs into team members' job plans, making team and leadership skills training available to team-members, and systematic input from</li> </ul>	<ul style="list-style-type: none"> <li>Reservations about the impact of MDM on survival.</li> </ul>	Review	1.1–1.4, 4.3.a, 4.5, 8.3.a

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
		nursing personnel would address some of the current shortcomings.			
Kesson E, Allardice G, George WD, et al. 2012, 'Effects of multidisciplinary team working on breast cancer survival: retrospective, comparative, interventional cohort study of 13,722 women', <i>British Medical Journal</i> 344:e2718	Breast	<ul style="list-style-type: none"> <li>Multidisciplinary care was associated with greater improvements in breast cancer survival than expected.</li> <li>Uses an interrupted time series analysis to assess the impact of MDMs in one intervention area; demonstrates significant improvement in survival.</li> </ul>	<ul style="list-style-type: none"> <li>Selection biases or confounding factors. Low because the same selection criteria was applied to intervention and non-intervention areas.</li> </ul>	Quantitative	1.5.a, 1.5.b, 1.9.c
Brannstrom F, Bjerregaard J, Winbladh A, et al. 2014, 'Multidisciplinary team conferences promote treatment according to guidelines in rectal cancer', <i>Acta Oncologica</i> 54:447-53.	Colorectal	<ul style="list-style-type: none"> <li>Data analysis of 5,000 Swedish colorectal patients over a three-year period, examining the incidence of discussion at preoperative MDM and use of preoperative radiotherapy.</li> <li>Patients with rectal cancer treated at high-volume hospitals are more likely to be discussed at an MDM.</li> <li>MDMs are an independent predictor of the use of adjuvant radiotherapy.</li> <li>These results indirectly support the introduction into clinical practice of discussing all rectal cancer patients at MDMs, not least those being treated at low-volume hospitals.</li> </ul>	<ul style="list-style-type: none"> <li>Patients older than 79 years of age had half the chance of MDM evaluation (or of 0.60).</li> <li>Though elderly patients may have significant comorbidity that may limit the number of treatment options, no data suggests that elderly patients should not be considered for MDM evaluation, particularly in view of the fact that there are now refined treatment options with limited surgical or radiological side effects.</li> </ul>	Quantitative	6.1.a, 6.1.b
Munro AJ 2015, 'Multidisciplinary team meetings in cancer care: an idea whose time has gone?', <i>Clinical Oncology</i> . 27(12):728-731		<ul style="list-style-type: none"> <li>Opinion that cancer services have outgrown their use. Limited evidence on the value of MDM with literature focused on MDM processes.</li> <li>Suggests solution is to hold meetings less frequently, dealing specifically with patients who have particularly complex</li> </ul>	<ul style="list-style-type: none"> <li>Analysis of NHS MDM hours – high commitment for limited benefit. Too much treatment variation even with MDM.</li> <li>Bias towards fit and younger patients, with less comorbidity, in MDM presentation.</li> </ul>	Comment	4.3.a, 6.1.a, 6.2.b

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
		<p>problems and ensuring there is no discussion without adequate information.</p> <ul style="list-style-type: none"> <li>Use of modified social media platform to establish virtual MDM for other patients.</li> </ul>	<ul style="list-style-type: none"> <li>Issues of authority hierarchy, not knowing the patient, treatment delays in waiting for an MDM listing, low consideration of patient preferences and expertise of allied health staff.</li> </ul>		
Soukup T, Petrides K, Lamb B, et al. 2016, 'The anatomy of clinical decision-making in multidisciplinary cancer meetings', <i>Medicine, Baltimore</i> 95(24):e3885		<ul style="list-style-type: none"> <li>Cross-sectional observational study consisting of 1,045 patient reviews across four multidisciplinary cancer teams from 2010 to 2014.</li> <li>Used validated observational tool MDT-MODE to examine the underlying structure of decision making.</li> </ul>	<ul style="list-style-type: none"> <li>Pattern that repeats in recent studies is the skewed contribution to case reviews towards senior physicians and biomedical aspects of disease; in contrast, cancer nurses' input, patients' comorbidities, and their psychosocial circumstances are under-represented.</li> </ul>	Qualitative, quantitative	4.3.a, 6.2.a
Licitra L, Keilholz U, Tahara M, et al. 2016 'Evaluation of the benefit and use of multidisciplinary teams in the treatment of head and neck cancer', <i>Oral Oncology</i> 59:73–79	Head and neck	<ul style="list-style-type: none"> <li>Review of head and neck MDMs across 29 countries looking at a range of MDT associated improvements.</li> <li>Implementation focused.</li> <li>Reduced time to treatment.</li> <li>Changes to treatment planning from multi-modal care.</li> <li>Improvement in overall survival.</li> <li>Focus on advanced disease and complex patients at MDM.</li> <li>Recommends making use of country-specific native-language guidelines on structure and function of MDT widely available.</li> </ul>	<ul style="list-style-type: none"> <li>Little consideration of the cost of establishing an MDT.</li> <li>Poor understanding of medicolegal implications.</li> </ul>	Review	1.1.c, 1.1.d, 1.5.a, 1.5.b, 1.9.c, 6.1.a, 7.1–7.2
Basta Y, Baur O, van Dieren S, et al. 2016, 'Is there a benefit of multidisciplinary cancer team meetings for patients with gastrointestinal	Gastrointestinal	<ul style="list-style-type: none"> <li>Study assessed the number of correct diagnoses formulated by the MDT and whether MDM decisions were implemented.</li> <li>MDTs rectify 20 per cent of the referral diagnoses.</li> </ul>		Quantitative	1.5.a, 1.5.b, 3.3.a, 6.2.a, 6.2.b, 8.3.a

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
malignancies?', <i>Annals of Surgical Oncology</i> 23: 2430–2437		<ul style="list-style-type: none"> <li>The presence of the treating physician is the most important factor to ensure a correct diagnosis and adherence to the treatment plan.</li> <li>Deviations of MDT decisions occurred when a patient's wishes or physical condition were not taken into account.</li> </ul>			
Prades J, Remue E, van Hoof E, et al. 2014, 'Is it worth reorganising cancer services on the basis of multidisciplinary teams (MDTs)?: A systematic review of the objectives and organisation of MDTs and their impact on patient outcomes', <i>Health Policy</i> 119(4):464–474		<ul style="list-style-type: none"> <li>Review of literature 2005–2012.</li> <li>MDMs resulted in better clinical and process outcomes for cancer patients, with evidence of improved survival among colorectal, head and neck, breast, oesophageal and lung cancer patients in the study period.</li> <li>MDMs are associated with changes in clinical diagnostic and treatment decision making with respect to urological, pancreatic, gastro-oesophageal, breast, melanoma, bladder, colorectal, prostate, head and neck and gynaecological cancers.</li> <li>Advocates an organisational approach to coordinating clinical management via MDMs, including ensuring pathology-related decision making is MDT-oriented.</li> <li>MDM operating conditions, clinical accountability and liability on patient clinical pathway benefit from hospital management involvement.</li> </ul>	<ul style="list-style-type: none"> <li>No studies were clear about whether all patients should have an MDM or just some.</li> </ul>	Review	1.1–1.2, 1.5.a, 1.5.b, 1.9.b, 4.5
Salem A, Bayman N 2016, 'Multidisciplinary team service redesign: a step to improved quality of care for lung cancer patients',	Lung	<ul style="list-style-type: none"> <li>2012 UK lung cancer audit identified significant variation in the rate of histological confirmation and surgical resection rates between settings. MDMs were not improving this. Pooling of MDM</li> </ul>		Letter	1.1–1.2, 1.3.b, 1.9.a, 4.4–4.5, 7.1–7.2

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
<p><i>Clinical Oncology</i> 28(12):800–801</p>		<p>services, by combining single-hospital-based MDMs to form larger cross-organisational sector MDMs was undertaken to improve efficiency, drive up the quality of care and decrease variability between providers.</p> <ul style="list-style-type: none"> <li>• The following steps were involved in this process: <ul style="list-style-type: none"> <li>• Survey of existing MDM arrangements then redesign.</li> <li>• Agreement on unified sector MDM charter – sector MDM charter was drafted based on previously published recommendations. This includes guidance on effective chairing and appropriate patients for discussion to ensure no meeting lasts more than two hours.</li> <li>• Creation of task-finish groups tasked with implementing MDM redesign.</li> </ul> </li> <li>• Outcome: audit confirmed that MDM redesign, with built-in cross-cover for core members, has significantly improved consultant thoracic surgery and clinical oncology attendance.</li> </ul>			

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
<p>Van Bommel A, Spronk P, Vrancken Peeters M-J, et al. 2016, 'Clinical auditing as an instrument for quality improvement in breast cancer care in the Netherlands: the National NABON Breast Cancer Audit', <i>Journal of Surgical Oncology</i> 115(3):243–249</p>	<p>Breast</p>	<ul style="list-style-type: none"> <li>• The development of the NABON Breast Cancer Audit and the results of four years of auditing are described (data of 56,927 patients). Discusses the development of quality indicators and data usage by individual hospitals to benchmark their results against national standards.</li> <li>• The use of quality indicators embedded in a national audit providing benchmark information to participating hospitals catalyses quality improvement. Comprehensive audit outcomes have led to research into hospital variation in breast MRI use and breast reconstruction. NBCA serves as a monitor to identify variation and a database that identifies factors explaining variation and ought to catalyse guideline adjustments.</li> </ul>	<ul style="list-style-type: none"> <li>• Observed trends cannot be attributed only to the audit.</li> <li>• Improvements in breast cancer practice such as new operation techniques to reduce tumour-positive margins or awareness for immediate breast reconstructions may influence.</li> </ul>	<p>Quantitative</p>	<p>1.1–1.2, 1.5, 1.9.b, 4.5, 6.2.a, 7.1–7.3</p>
<p>Harris J, Green J SA, Sevdalis N, et al. 2017, 'Using peer observers to assess the quality of cancer multidisciplinary team meetings: a qualitative proof of concept study' <i>Journal of Multidisciplinary Healthcare</i> 7:1–9</p>		<ul style="list-style-type: none"> <li>• Investigated the feasibility of integrating observational assessment into routine clinical practice in cancer MDMs.</li> <li>• If the current workforce has the skills to provide useful feedback without being extensively trained and the capacity to undertake such assessments.</li> <li>• If MDT members find assessment/feedback from peers acceptable and useful.</li> <li>• Observational assessment by peers could be an acceptable approach that may enhance MDT performance, but the tool needs further validation.</li> </ul>	<ul style="list-style-type: none"> <li>• Small study.</li> <li>• No assessment of long-term impacts of the use of the tool, only subjective feedback.</li> <li>• Observational effect not addressed.</li> </ul>	<p>Qualitative</p>	<p>1.1.d, 1.2, 1.3.b, 1.4.a</p>

## Asia

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
Lan Y-T, Lin J-K, Jiang J-K 2015, 'Effects of a multidisciplinary team on colorectal cancer treatment', <i>Formosan Journal of Surgery</i> 5:145-150	Colorectal	<ul style="list-style-type: none"> <li>Literature survey of MDMs on clinical decision making, patient outcomes and management in complex cases.</li> <li>MDM presentation resulted in complete preoperative evaluation and higher rates of access to multimodal therapies.</li> <li>Quality of pathology reports were better. Higher rates of adjuvant chemotherapy.</li> <li>Despite controversy in interpreting survival data in relation to MDT, it is a positive enhancement in colorectal cancer care and should be used.</li> </ul>		Review	1.5.a, 1.5.b

## South America

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
Karnakis T, Gattas-Vernaglia IF, Saraiva M, et al. 2016, 'The geriatrician's perspective on practical aspects of the multidisciplinary care of older adults with cancer', <i>Journal of Geriatric Oncology</i> 5: 341-345		<ul style="list-style-type: none"> <li>Model of integration of geriatric assessment (GA) as part of MDMs.</li> <li>Setting has 6,000 cancer cases per month, 55 per cent are elderly patients.</li> <li>Explores the specific role of geriatrician in MDMs, including estimating non-cancer-related life expectancy of patients, and primary focus of maintaining patient autonomy, reducing re-hospitalisation and supportive care at home.</li> <li>Issues identified: assessment of staffing, space, timetables, health policy, cultural and socioeconomic issues essential to MDM success.</li> </ul>	<ul style="list-style-type: none"> <li>Not generally used as part of integrated cancer care in many settings. Author suggests this is culturally driven.</li> </ul>	Review	1.1–1.2, 1.5.a, 1.5.b, 3.4.a, 6.2.a, 8.3.a

Origin	Tumour stream	Themes	Barriers	Format	Relevant quality standard
		<ul style="list-style-type: none"> <li>• Role definition within MDM crucial, including delegations.</li> <li>• Screening tools to identify patients for GA before MDM are used to optimise use.</li> <li>• The weighting of the GA within the MDM setting needs to be clear to the team.</li> <li>• The role of the GA needs to be clear to the patient.</li> <li>• Using nursing staff to undertake GA is feasible.</li> </ul>			

# Appendix 3: Minimum terms of reference content

An Excel spreadsheet that allows you to audit these fields named *MDM TOR Audit Tool* is available on request to LMICS <http://www.lmics.org.au/>

## [Tumour stream] multidisciplinary team meeting (MDM)

### Terms of reference

#### 1. Purpose

The overall aim of the multidisciplinary [insert tumour stream or scope of the group] cancer meeting is to facilitate multidisciplinary input into treatment planning and ongoing management and care of patients with cancer.

The objectives of the meeting are to:

- provide an opportunity for multidisciplinary discussion of all new cases of [insert tumour stream] cancer presenting to the surgical and/or oncology team
- ensure all new patients presenting with a malignancy have their case discussed by a multidisciplinary team with access to all available information about that case
- determine, in the light of all available information and evidence, the most appropriate treatment and care plan for each individual patient
- provide education to senior and junior medical, nursing and allied health staff.

#### 2. Governance and reporting

MDM governance is overseen by [insert name of committee, for example 'Acute Executive Group']. The [insert role] shall provide meeting activity reports and statistics biannually to the committee, including updates to the treatment evidence base and meeting protocols.

The committee will ensure that MDM-related risks are recorded in the appropriate risk logs and that any quality activities are recorded appropriately.

#### 3. Meeting time and place

##### 3.1. Time of meetings

Meetings will be held on [insert the day of the week], unless otherwise notified, and will begin promptly at [insert time] and finish at [insert time].

Cancellation of meetings must be documented on a log of meeting cancellations or via the MDM software. It can be located [insert location].

Meeting timetables can be located [describe where timetables will be published, for example, 'Bendigo Health website'].

##### 3.2. Meeting venues

The meeting venue, unless otherwise notified, will be [insert hospital name and location, room number, telephone number].

Clinicians at the following sites will dial in to the meeting by telephone or video [list all of the relevant sites – for example, St John of God Pathology Ballarat, Echuca Regional Hospital].

#### 4. Roles and members

#### 4.1. Chair

The MDM chair is [insert name and contact details]. The MDM deputy chair is [insert name and contact details].

The chair/deputy chair:

- ensures the team comprises the necessary disciplines to ensure best practice
- may allow late presentation of patients
- facilitates discussion, ensuring all members have the opportunity to contribute
- mediates discussion when disagreement arises
- ensures MDM recommendations are clearly documented and reflect the issues discussed
- ensures routine consideration of appropriate research/trials and treatments.

The process for appointing the chair and deputy chair is [describe process including term of office].

#### 4.2. Meeting coordinator

The meeting is coordinated by [insert name(s) and contact details].

This role:

- notifies and invites members
- supports off-site members to participate
- prepares and distributes the agenda
- ensures all provided information is available before the meeting
- documents the attendance of MDM members and maintains the attendance log
- maintains a confidentiality process for those attendees who are not directly employed by the host agency
- [insert other roles – for example, liaises with software providers, supports video presentation].

#### 4.3. MDM scribe

During the meeting, information will be captured by the MDM scribe, who is [insert role, name(s) and contact details].

The scribe will:

- ensure that treatment recommendations, including divergent recommendations, changes and clinically relevant details are captured
- be empowered to ask the chair to slow the meeting down until they can capture all the details.

Training information for the scribe can be found at [insert details].

#### 4.4. Referring clinicians and core treatment team members

##### **Core membership**

[Remove the one that doesn't apply.]

Core membership is per the relevant [optimal care pathway](http://www.cancervic.org.au/for-health-professionals/optimal-care-pathways) <<http://www.cancervic.org.au/for-health-professionals/optimal-care-pathways>>

**or**

Surgeon

Medical oncologist

Radiation oncologist

Pathologist

Diagnostic radiologist

Nurse

Allied health practitioner

[Insert other relevant core members]

#### **Other members**

[Remove the one that doesn't apply.]

Other members of the meeting include:

[Insert non-core members as per relevant [OCP](http://www.cancervic.org.au/for-health-professionals/optimal-care-pathways) <<http://www.cancervic.org.au/for-health-professionals/optimal-care-pathways>>.]

**or**

List invited health professionals whose expertise is relevant to patient care.

GPs may be included in the MDM to discuss their patients. If a presenting clinician wishes to invite a GP to attend the MDM, they should [describe how they will invite GPs to an MDM].

A contact list of MDM members can be accessed by [insert instructions to contact list].

#### **4.5. Support roles**

The following personnel should be contacted if technical or infrastructural issues arise during the meeting:

- For IT-related issues, contact [insert IT department contact and phone number].
- For MDM IT software-related issues, contact [insert MDM IT contact and phone number].
- For projection hardware-related issues, contact [insert supplier contact and phone number].
- For videoconferencing-related issues, contact [insert supplier contact and phone number].

The MDM coordinator must document all technical and infrastructural issues on the technical and infrastructural downtime log. The log can be located at [insert file location].

### **5. Attendance/quorum**

Core membership specialties are expected to attend 90 per cent of MDMs. In the event a core member cannot attend, they should organise a representative of their discipline to attend for coverage.

The meeting chair will determine whether a quorum is present and whether there is sufficient representation to discuss each case.

A register of attendees is maintained by [insert role. Note: it is recommended that participant signatures are captured and stored].

### **6. Patient referral to an MDM**

All patients with newly diagnosed or suspected cases of [specify tumour type(s)] cancer should be referred to the [insert tumour type] MDM for endorsement of patient-specific treatment recommendations. To assist with the burden of demand in common tumour streams, sites that have 'agreed standardised treatment protocols' (or like) can elect to deal with referrals by exception. Agreed standardised treatment protocols can be found at [insert file location of treatment protocols].

The referring clinician should ensure they or their representative are present at the MDM and are adequately prepared to describe the patient(s) they have referred.

Patient consent is sought prior to presentation.

The following information must be provided to patients prior to discussion at the meeting:

- who will be able to view their clinical and supportive care information
- how they will be informed about the recommendations
- how they may opt out of the MDM presentation.

MDMs using MBS billing must also provide [insert relevant MBS billing information].

The process for referring a patient to the MDM is [insert process including software, login and how they can access a software user manual].

The process for referring a patient to the MDM after the agenda is distributed is [insert process, including evidencing chair, pathologist and radiologist agreement].

The standard of information required for late presentation of patients must be such that the MDM is able to make a recommendation. The chair has the discretion to allow or defer late presentation of patients.

The following information must be provided to the MDM about each patient who is referred:

- a clear reason why the patient is being discussed
- the patient's demographics
- relevant test results
- comorbidities, supportive care requirements including palliative care needs and performance status
- the patient's history and preferences
- the name and contact of the referring and presenting clinician(s)
- patient selection for discussion.

## 7. Meeting agenda

### 7.1. Agenda distribution

A meeting agenda will be distributed to members [insert timing (at least 48 hours before the meeting)].

If there are late additions, the updated agenda will be distributed by [insert role] at [insert timing].

### 7.2. Agenda order

Patients who require complex treatment decisions should be prioritised for discussion (both new and previously discussed patients). This will be through [describe the process used to prioritise patients].

OPTIONAL – For MDMs using formal prioritisation processes, agendas will list patients who may not require discussion ('for noting'). Such patients may include [insert patient groups].

These patients will be treated according to the following evidence-based guidelines [insert guidelines and location]. The process for listing patients for noting is [insert process].

## 8. MDM discussion

Decisions regarding the MDM recommendations should be made based on consensus opinion from team members.

When developing treatment recommendations, the MDM team must ensure:

- the tumour has been adequately staged
- all appropriate treatment modalities are considered
- psychosocial and medical comorbidities that may influence treatment decisions are considered
- the patient's treatment preferences, if known, are considered
- the recommendations are in line with the OCP timeframes (if applicable).

## 9. Meeting documentation and communication

Treatment recommendations will be documented in real time during the meeting. The following data will be recorded.

<b>Data item</b>	<b>Rationale</b>
Staging (pathological, histological, clinical)	Treatment recommendations may be influenced by staging. Required for Victorian Cancer Registry reporting.
Errors or changes associated with pathology or radiology results or other reports	Sometimes presenters in MDMs highlight errors or changes to documented reports. If this information is not captured, then treatment recommendations may not be easily understood.
Treatment recommendation	
Divergent treatment recommendations	Required for medicolegal reasons. When a consensus treatment recommendation cannot be reached, recommendations that are considered to be equivalent in benefit and intent, but differ in treatment pathway/modality, should be recorded in the treatment recommendation and communicated to the patient.
First name and surname of clinician(s) with divergent view(s)	Required for medicolegal reasons.
Recommended referrals (specialist and/or service)	
Is there a clinical trial suitable for this patient?	Helps increase clinical trial referral rates.
Name of clinical trial and special requirements	Helps increase clinical trial referral rates.

Treatment recommendations will be made available to the treatment team within 24 hours of the MDM by [describe process, for example, emailed by MDM administrator].

Treatment recommendations are placed on the medical records in each health service relevant to the patient within [insert timeframe] of the MDM meeting by [describe process, for example, printed by practice manager or placed on electronic medical record]. [Insert role] will be responsible for ensuring that MDM recommendations are placed in each patient's primary medical record.

Treatment recommendations are communicated to the patient's GP within one week of the MDM meeting. This will be done by [describe process, for example, sent by MDM coordinator or via clinician letter].

Each patient's lead clinician (or their nominee) is responsible for discussing the MDM's treatment recommendations with the patient and, together with the patient, developing a final treatment plan. The lead clinician should clearly assign responsibilities for making the subsequent patient referrals.

All patient information presented remains confidential and is only to be used for clinical management.

The arrangements for ensuring the confidentiality of patient information across the different health services are [describe arrangements, for example, MDM confidentiality agreement, pathology contract, memorandum of understanding].

## 10. MDM measurement and evaluation

The success of the MDM will be measured and reported by results from an audit against the *MDM quality framework* and [describe additional measures. For example:

- results from the MDM survey
- the percentage of patients following the MCC treatment recommendation versus another treatment plan (primary physician plan, patient wishes, etc.)

- changes in clinical trial participation rates
- MDM member satisfaction survey
- patient satisfaction survey
- goals specific to tumour stream.]

This data will be held and tracked at [insert location] and reported to [insert relevant group].

The results will be discussed at the MDM to reach a consensus on how the meeting could improve, based on the feedback. The MDM can take appropriate actions to implement the desired changes, which may include updating the terms of reference document.

## **11. Terms of reference review**

These terms of reference will be reviewed annually or as specified.

A current copy of the terms of reference can be found at [insert file location] and will be accessible to all members.

The terms of reference will be reviewed next by [insert date – maximum one year from current version].

## Appendix 4: Minimum dataset

The following table outlines the minimum fields required in clinical records for the *MDM quality framework*. Individual MDMs will need to capture additional fields to facilitate their individual workflows – for example, MBS billing and tumour-specific presentations. It is recommended that all field specifications align with the Victorian Cancer Registry (VCR) and the Victorian Admitted Episodes Dataset (VAED) or Victorian Radiotherapy Minimum Data Set (VRMDS) and any other relevant tumour registries.

An Excel spreadsheet named *Minimum data audit tool* that allows you to audit these fields against up to 50 patients is available on request to LMICS <http://www.lmics.org.au/>

### Prefilled patient data – Part 1: prior to meeting

Data item	Recommended choice if a list	Rationale or relevant standard
Lead clinician (treating doctor) – surname, first name		
Presenting clinician – surname, first name		
GP – surname, first name		
GP contact details – format depends on method MDM uses to communicate to GPs		Enables communication of treatment recommendation to GP
Date of original referral from GP or other notifying party		Without this data the optimal care pathway timeframe can't be mapped MDM is an optimal place to collect these dates, particularly for private referrers
Patient demographics – surname, first name, middle name, date of birth, gender		Enables placement of MDM recommendation on patient medical records Enables tracking of patients through MDM
Building/property name, street address, suburb, postcode, indigenous status, country of birth		
Health service – for all treating hospitals – hospital or hospital campus names, hospital campus code		Enables placement of MDM recommendation on all relevant patient medical records
Individual health identifiers – UR number for primary hospital	Yes – enter number or Not yet a patient	Enables placement of MDM recommendation on all relevant patient medical records
UR number for other treating hospitals		

<b>Data item</b>	<b>Recommended choice if a list</b>	<b>Rationale or relevant standard</b>
Patient has consented to discussion	Yes Pending	
Reason why patient is being discussed	Plan further investigations Develop new treatment recommendations Review treatment plan Other	Optional: MDMs may wish to create this structured list so, at a later time, they can analyse the different presentation reasons
The clinical question the MDM will consider		Encouraged to ask a clinical question rather than routine presentation
Investigations relevant to the diagnosis	Fields that can capture: <ul style="list-style-type: none"> <li>• histology</li> <li>• cytology</li> <li>• exploratory surgery</li> <li>• endoscopy</li> <li>• imaging, biochemistry/immunology</li> <li>• clinical only</li> <li>• other</li> </ul>	Enough information to enable pathologists and radiologists to review and present on tests
Relevant patient history	Fields that capture: <ul style="list-style-type: none"> <li>• surgery</li> <li>• radiotherapy</li> <li>• chemotherapy</li> <li>• other therapy</li> </ul>	Structured data should be considered to facilitate VCR reporting May affect treatment recommendation
Relevant comorbidities	1. Cardiovascular 2. Other cancers 3. Dementia 4. Mental health 5. Diabetes 6. Respiratory disease 7. Musculoskeletal disease 8. Kidney disease 9. Oral disease 10. Other 11. Unknown	May affect treatment recommendation
Relevant medications	Yes No Unknown	May affect treatment recommendation
Relevant supportive care requirements	1. Physical needs 2. Psychological needs 3. Social needs 4. Information needs 5. Spiritual needs	May affect treatment recommendation

<b>Data item</b>	<b>Recommended choice if a list</b>	<b>Rationale or relevant standard</b>
Patient preferences	Yes – describe Unknown	May affect treatment recommendation
Date of diagnosis and estimated date flag	Yes No Unknown	Will increase the quality of VCR data If exact date is not known, estimate the date based on known information. Estimated dates are to be used in conjunction with the estimate date flag
Family history of cancer	Yes No Unknown	May affect treatment recommendation
ECOG performance status	Yes No Unknown	May affect treatment recommendation

#### Live data entry – Part 2: during/after the meeting

<b>Data item</b>	<b>Recommended choice if a list</b>	<b>Rationale or relevant standard</b>
Staging (pathological, histological, clinical)		Treatment recommendations may be influenced by staging Validated systems should be used. Structured data should be considered to facilitate cancer registry reporting
Errors or changes associated with pathology or radiology results or other reports		Sometimes presenters in MDMs highlight errors or changes to documented reports. If this information is not captured then treatment recommendations may not be easily understood
Treatment recommendation		Recommendations must be clear enough for a clinician to be able to identify what referrals are required for this patient
Divergent treatment recommendations		Required for medicolegal reasons. Outlined in Standard 8.2.a
First name and surname of clinician with divergent view		Required for medicolegal reasons. Outlined in Standard 8.2.a
Recommended referrals	<b>Roles:</b> Surgeon Medical oncologist Radiation oncologist Haematologist Palliative care physician Geriatrician Allied health practitioner Nurse or nurse practitioner	

	<b>Services:</b> Familial cancer Palliative care Community care Survivorship Rehabilitation Geriatric evaluation Lymphodema Stomal therapy Nursing care coordination (breast, prostate, leukaemia) Other None	
Is there a clinical trial suitable for this patient?	Yes No Unknown	Outlined in standard 8.3.a.vi
Name of clinical trial and special requirements		Outlined in standard 8.3.a.vi

**Optional – for MDMs using prioritisation**

<b>Data item</b>	<b>Recommended choice if a list</b>	<b>Rationale or relevant standard</b>
Case for noting or discussion	Noting Discussion	
For noted cases – MDM presentation fields should be completed		Patient may be discussed by the MDM
For noted cases – treatment recommendation should be included. These will be based on locally agreed guidelines		Patient may have their recommended treatment endorsed by the MDM

## Appendix 5: Audit support materials

Audit tools are available on the Department of Health and Human Services website and via your local Integrated Cancer Service. The tools will support MDM teams and health services to establish the progress of their MDMs against the *MDM quality framework*. People using these tools may have been asked to perform this audit or be interested themselves in how their MDM is tracking. The tools may be used for one MDM or a group of MDMs as required.

The tools include the:

1. *MDM main audit tool*
2. *MDM quality standards terms of reference audit tool*
3. *MDM minimum data audit tool*
4. *MDM survey tool* for distribution to MDM participants.

Auditors will start with the *MDM main audit tool*. This tool has three worksheets. The first includes detailed instructions on how to undertake the audit. The second is the main tool where results are recorded. The third sheet allows you to present your results back to the MDM to identify what changes they wish to make as a result of the audit.

Establishing a time to look at results outside the normal MDM is important to the success of auditing and improvement activities. The meeting should be set as early as possible and may be expanded to include executive, quality or other relevant staff members. The overall objective of the meeting is to identify prioritised projects/steps that will be used to improve the quality of the meetings over time. Over time you may be able to compare your results from year-to-year, and statewide results may be available.

## Appendix 6: MDM survey tool

This tool is to survey MDM participants in areas that cannot be measured via data collection – perception and subjective responses are an important aspect to record in order to understand the operation of each MDM. We suggest using an online tool like SurveyMonkey to do this because it can be sent via email to participants registered for each tumour stream, or potentially this hard copy format could be filled out during an MDM.

General questions are followed by questions for clinicians, then for MDMs, which use formal prioritisation in meetings.

**Please circle your craft group or role at the MDM**

MDM chair	MDM admin	Rad onc.	Med onc.	Surgeon	Radiologist	Pathologist
Palliative care	Nurse	Allied health	ICS	Registrar	Intern	Other

**Please circle MDM tumour streams that you attend**

Breast	Colorectal	CNS	Gastrointestinal	General	Gynaecology	Haematology
Head and neck	Hepatobiliary	Hepatoma	Lung	Lymphoma	Neurological	Paediatrics and youth
Sarcoma	Skin	Thoracic	Thyroid/endocrine	Upper GI	Urogenital	Urology

### Questions for *all* participants at MDM

#### 1. Infrastructure and organisational support

To what extent do you agree or disagree with the following statements?

Statement	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1.1 Patient management is decided based on broad input from a range of participants	1	2	3	4	5	6	7
1.2 MDMs provide good opportunities for my own learning and professional development	1	2	3	4	5	6	7

## 2. Chair's role at MDMs

To what extent do you agree or disagree with the following statements?

Statement	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
2.1 The chairperson facilitates group discussion so a variety of team members contribute	1	2	3	4	5	6	7
2.2 The chairperson mediates disagreements	1	2	3	4	5	6	7
2.3 The chairperson acts fairly and objectively so all members are supported to raise ideas and receive peer review	1	2	3	4	5	6	7
2.4 The chairperson creates a culture of support for education and professional development within the MDMs	1	2	3	4	5	6	7
2.5 The chairperson ensures new research and clinical trials are considered for relevant patients	1	2	3	4	5	6	7

## 3. During MDMs

To what extent do you agree or disagree with the following statements?

Statement	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
3.1 Appropriate attempts are made to reach agreement about treatment recommendations	1	2	3	4	5	6	7
3.2 Where there is more than one treatment opinion, divergent treatment recommendations are recorded	1	2	3	4	5	6	7

3.3 Optimal care pathway timeframes are considered when making decisions about patient management	1	2	3	4	5	6	7
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## Questions for radiologists, pathologists and clinicians who refer patients to MDM

### 4. Consent

To what extent do you agree or disagree with the following statements?

Statement	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
4.1 I provide written or verbal information to patients on MDM covering the following topics prior to presenting them							
i. Who will be able to view their information	1	2	3	4	5	6	7
ii. How they will be informed of recommendations	1	2	3	4	5	6	7
4.2 I give my patients the opportunity to opt out of presentation at an MDM	1	2	3	4	5	6	7

### 5. Patient referral

To what extent do you agree or disagree with the following statements?

Statement	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
5.1 I refer all my public patients with a new or suspected diagnosis of cancer to an MDM	1	2	3	4	5	6	7
5.2 I refer all my private patients with a new or suspected diagnosis of cancer to an MDM	1	2	3	4	5	6	7

5.3 I refer relevant patients to external MDMs when more specialised expertise is required	1	2	3	4	5	6	7
5.4 Presenters are adequately prepared to answer questions about patients they are presenting at an MDM	1	2	3	4	5	6	7
5.5 The number of late presentations to MDMs is acceptable	1	2	3	4	5	6	7

## 6. MDM recommendations and communication

To what extent do you agree or disagree with the following statements?

Statement	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
6.1 I understand my role in presenting the MDM recommendation(s) to the patient, including any divergent recommendation(s)	1	2	3	4	5	6	7
6.2 I understand my role working with the patient to develop the final treatment plan after an MDM	1	2	3	4	5	6	7
6.3 I understand my role in actioning patient referrals after the final treatment plan is made, post-MDM	1	2	3	4	5	6	7

## Questions for *all* participants at MDM meetings that use prioritisation

### 7. Streamlining patient discussion: for MDMs that use prioritisation

**To what extent do you agree or disagree with the following statements?**

<b>Statement</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Slightly disagree</b>	<b>Neither agree nor disagree</b>	<b>Slightly agree</b>	<b>Agree</b>	<b>Strongly agree</b>
7.1 I am satisfied with the way routine patients are presented at MDMs	1	2	3	4	5	6	7
7.2 I am satisfied with the way complex patients are presented at MDMs	1	2	3	4	5	6	7

## Appendix 7: Definitions

**Consent** – The requirement for explicit patient consent for sharing health information is outlined in Australian privacy legislation. Find more information from the following sources:

- [Office of the Australian Information Commissioner](https://www.oaic.gov.au/agencies-and-organisations/app-guidelines/chapter-b-key-concepts#_Toc380575605) <https://www.oaic.gov.au/agencies-and-organisations/app-guidelines/chapter-b-key-concepts#\_Toc380575605>
- [Office of the Victorian Information Commissioner](https://www.cpdp.vic.gov.au/images/content/pdf/CPDP_Information_Sheet_-_Privacy_Legislation_in_Victoria.pdf) <https://www.cpdp.vic.gov.au/images/content/pdf/CPDP\_Information\_Sheet\_-\_Privacy\_Legislation\_in\_Victoria.pdf>
- [Health Complaints Commissioner](https://hcc.vic.gov.au/public/what-expect-health-service) <https://hcc.vic.gov.au/public/what-expect-health-service>.

Patient consent, either verbal or written, is necessary to obtain before presentation at an MDM because personal health information will be shared. The individual must be adequately informed before giving consent and it must be voluntary. It must be current and specific, and the patient or any person acting on their behalf must have had the capacity to provide this consent.

Both clinicians and MDM host organisations are responsible to ensure they meet all requirements of the *Privacy Act*, which include whether patient consent is obtained before health information is shared in an MDM agenda or meeting. A patient who does not consent to MDM presentation or wishes part of their information to remain confidential should be accommodated.

**Divergent treatment recommendations** – Agreement about MDM treatment recommendations is preferred but is not always possible. There should be robust discussion of all viable treatment options for the patient at the MDM, but only the treatment recommendations are recorded. This represents agreement on the best treatment options for that patient, made by clinicians in attendance at the meeting, based on the information they had at the meeting.

If any clinician at the meeting holds the view that another treatment option for the patient has equivalent clinical validity, they should ask for their divergent treatment recommendation to be recorded and assigned to them in the patient's data. The divergent opinion can then be communicated as an option for treatment to the patient by the lead clinician before the final treatment plan is decided with the patient. It is not necessary for the lead clinician to tell the patient which clinician held the divergent opinion.

Note: A treatment recommendation that has a number of options for treatment, the choice of which will be determined by the outcome of tests or procedures ordered at an MDM, is not considered a divergent opinion. In such cases, re-presentation of the patient at a future MDM is often requested.

**Host agency** – The health service that holds the MDM and is responsible for it.

**Lead clinician** – The clinician or their representative who refers the patient to the MDM.

The lead clinician has the responsibility for obtaining consent and ensuring adequate minimum data has been provided for their patients to enable a treatment recommendation to be made. They must also ensure that either themselves or a representative is present at the MDM and is prepared to describe their patient. After the MDM, it is the lead clinician who meets with the patient to present the MDM treatment recommendation and decide the final treatment plan. They should clearly assign responsibilities for making any subsequent patient referrals.

**MDM registration** – If all cancer patients in Victoria are automatically registered to MDMs, it will create stronger patient datasets and reduce the likelihood of patients missing out on MDM presentation. Patient groups who currently often miss out on referral to an MDM include patients with non-resectable tumours, patients with secondary tumours, palliative patients and surgery-only patients. Health services should work

together to identify how registration to an MDM could be routine. This work should incorporate processes for identifying which patients will not need presentation.

**Prioritisation** – Where agreed standardised treatment protocols are used to streamline patient presentation, rather than all referred patients being subject to full discussion.

**Treatment recommendation** – This is the outcome of the MDM for each patient on the agenda. For a treatment recommendation to have the best chance of implementation, it needs to include the minimum data outlined in **Standard 6** and **Appendix 4**. This includes clinical information and supportive care requirements, patient history and preferences, staging and performance status.

**Treatment plan** – This is not an outcome of an MDM. The final treatment plan is made by the lead clinician and the patient after the MDM. There are many variables that influence the making of a treatment plan, but fundamental is that it is patient-centred and made *with* the patient rather than *for* the patient. Referrals for treatment in an MDM recommendation should not be actioned until they are formalised into the treatment plan.

# Appendix 8: National Safety and Quality Health Service Standards (2nd edition) mapping

The *MDM quality framework* contains standards that, if applied, can help organisations to meet the National Safety and Quality Health Service Standards (NHQS) (2nd edition). This tool can be used to identify how they overlap.

**Note:** Only relevant NHQS Standards are displayed here, meaning numbering of lists may not be complete.

## 1. Clinical governance

### 1.1. Governance, leadership and culture

Relevant component of NSQHS Standard		Relevant MDM quality framework standards
No.	Actions	Standard/Indicator
1.1	<p>The governing body:</p> <ul style="list-style-type: none"> <li>a. provides leadership to develop a culture of safety and quality improvement and satisfies itself that this culture exists within the organisation</li> <li>c. sets priorities and strategic directions for safe and high-quality clinical care and ensures these are communicated effectively to the workforce and the community</li> <li>e. ensures roles and responsibilities are clearly defined for the governing body, management, clinicians and the workforce</li> <li>g. reviews reports and monitors the organisation's progress on safety and quality performance.</li> </ul>	<p>1.1.a. MDMs are incorporated into strategic and operational plans.</p> <p>1.1 d. There are assigned responsibilities for measuring and monitoring MDM performance against this framework and acting on identified issues of concern.</p> <p>1.2 MDMs have a clear governance structure.</p> <p>1.2.c. There is clinical oversight of MDMs including documenting treatment protocols, considering new treatments and ensuring recommended clinicians attend.</p>

### 1.2. Patient safety and quality systems

### Policies and procedures

No.	Actions	Standard/Indicator
1.7	The health service organisation uses a risk management approach to: a. set out, review and maintain the currency and effectiveness of, policies, procedures and protocols.	1.2.a. Quality suggestions are logged and changes are only made after proper consideration of their quality, costs and risk by a suitable governance structure.

### Measurement and quality improvement

No.	Actions	Standard/Indicator
1.9	The health service organisation ensures that timely reports on safety and quality systems and performance are provided to: a. the governing body b. the workforce.	1.1.b. MDMs are incorporated into quality and risk management systems, including hospital audit cycles. 4.5.a. The MDM has leaders who work with the members, host agency, chairperson and administrator to ensure: i. issues of concern that may affect safety, sustainability and minimum standards for MDM quality are escalated.

### Healthcare records

No.	Actions	Standard/Indicator
1.16	The health service organisation has healthcare record systems that:	1.9.a. MDM software captures and reports appropriate information prior to, during and after the meetings. 1.9.b. MDM software can create reports across MDMs using patient minimum data.

No.	Actions	Standard/Indicator
	<ul style="list-style-type: none"> <li>a. make the healthcare record available to clinicians at the point of care</li> <li>b. support the workforce to maintain accurate and complete healthcare records</li> <li>c. comply with security and privacy regulations</li> <li>d. support the systematic audit of clinical information</li> <li>e. integrate multiple information systems where they are used.</li> </ul>	<p>1.9.c. There are processes in place to ensure MDM recommendations are placed in each patient's relevant medical records, including at services outside the MDM host agency.</p> <p>3.2 Patient information remains confidential and is used only for the purpose of clinical management.</p> <p>4.4.a. During the meeting the chairperson paces discussion to ensure:</p> <ul style="list-style-type: none"> <li>i. minimum dataset in prefilled patient information and live data entry is captured for each patient</li> <li>ii. MDM recommendations are clearly documented in real time and reflect discussion and agreements</li> <li>iii. any errors or changes are recorded</li> <li>iv. all divergent treatment recommendations are recorded, identifying the clinician(s) with divergent views.</li> </ul> <p>6.2.a. Prior to patient discussion, each referring clinician should ensure their prefilled patient information contains the following:</p> <ul style="list-style-type: none"> <li>i. a clear reason for why patient is being discussed</li> <li>ii. the patient's demographics</li> <li>iii. relevant test results</li> <li>iv. comorbidities, supportive care requirements (including palliative care needs), performance status</li> <li>v. the patient's history and preferences</li> <li>vi. the name and contact of the referring and presenting clinician.</li> </ul> <p>8.2.a. Divergent views are recorded in the relevant patient's recommendations in patient data, identifying the clinician(s) with divergent views.</p> <p>8.4.a. Within a timely manner MDM recommendations:</p> <ul style="list-style-type: none"> <li>i. should be easily available to all treating team members within 24 hours of the MDM meeting.</li> <li>ii. must be recorded into the patient's central medical record.</li> <li>iii. should be communicated to the patient's GP within one week of MDM meeting.</li> </ul> <p>8.6.a Lead (treating) clinicians demonstrate they understand their post-MDM responsibilities for referral.</p>

### 1.3. Clinical performance and effectiveness

#### Safety and quality roles and responsibilities

No.	Actions	Standard/Indicator
1.25	The health service organisation has processes to: a. support the workforce to understand and perform their roles and responsibilities for safety and quality.	1.3.a. Contracts and/or position descriptions for medical staff responsible for primary cancer care include the expectation that cancer patients are referred to MDMs and receive multidisciplinary care. 1.3.b. Clinical loads consider multidisciplinary activities undertaken by all MDM team members. 1.4.b. Interns, registrars, fellows and students report they have received educational and professional development value from MDM participation.

#### Evidence-based care

No.	Actions	Standard/Indicator
1.27	The health service organisation has processes that: a. provide clinicians with ready access to best practice guidelines, integrated care pathways, clinical pathways and decision support tools relevant to their clinical practice b. support clinicians to use the best available evidence, including relevant clinical care standards developed by the Australian Commission on Safety and Quality in Health Care.	1.2.c. There is clinical oversight of MDM including documentation of treatment protocols, consideration of new treatments and ensuring recommended clinicians attend. 4.3.b. During the meeting the chairperson ensures there is routine consideration of new research/trials and treatments.

## 2. Partnering with consumers

### 2.1. Partnering with patients in their own care

## Healthcare rights and informed consent

No.	Actions	Standard/Indicator
2.4	The health service organisation ensures that its informed consent processes comply with legislation and best practice.	5.1.a. Patients are provided appropriate information to ensure informed consent to MDM participation. Verbal and/or written patient information is provided, covering the following topics: <ul style="list-style-type: none"> <li>i. who will be able to view their information</li> <li>ii. how they will be informed of recommendations</li> <li>iii. how they may opt-out of MDM presentation.</li> </ul> 5.2. Patient consent is sought before their case is presented. 5.2.a. Clinicians are to ensure patients provide informed consent prior to presentation.

## Sharing decisions and planning care

No.	Actions	Standard/Indicator
2.6	The health service organisation has processes for clinicians to partner with patients and/or their substitute decision-maker to plan, communicate, set goals and make decisions about their current and future care.	8.5.a. The lead (treating) clinician discusses the MDM's recommendations with the patient, and, together with the patient, develops a final treatment plan.

## 2.2. Health literacy

### Communication that supports effective partnerships

No.	Actions	Standard/Indicator
2.8	Consumers receive the information they need in a way that is appropriate for them.	5.1.a. Verbal and/or written patient information is provided, covering the following topics: <ul style="list-style-type: none"> <li>i. who will be able to view their information</li> <li>ii. how they will be informed of recommendations</li> <li>iii. how they may opt out of MDM presentation.</li> </ul>

## 2.3. Partnering with consumers in organisational design and governance

### Partnerships in healthcare governance planning, design, measurement and evaluation

No.	Actions	Standard/Indicator
2.11	The health service organisation: a. involves consumers in partnerships in the governance of, and to design, measure and evaluate, health care b. has processes so that the consumers involved in these partnerships reflect the diversity of consumers who use the service or, where relevant, the diversity of the local community.	1.2.b. Standing committee with MDM governance responsibility includes clinicians, radiologists, pathologists, business units, executive staff, consumers and leaders within MDMs.

### 3. Comprehensive care

#### 3.1. Clinical governance and quality improvement to support comprehensive care

## Designing systems to deliver comprehensive care

No.	Actions	Standard/Indicator
5.4	<p>The health service organisation has systems for comprehensive care that:</p> <ul style="list-style-type: none"> <li>a. support clinicians to develop, document and communicate comprehensive plans for patients' care and treatment</li> <li>c. ensure timely referral of patients with specialist healthcare needs to relevant services</li> <li>d. identify, at all times, the clinician with overall accountability for a patient's care.</li> </ul>	<p>1.5.a. When separate MDMs for patients cannot be achieved, presentation of both public and private patients is encouraged and supported.</p> <p>1.5.b. When appropriate tumour-specific MDMs for patients cannot be achieved, presentation of these patients into an MDM with appropriate expertise is encouraged and supported.</p> <p>3.1 The MDM team contains appropriate core members.</p> <p>3.2 Specialties beyond the defined core membership listed in the OCPs attend meetings when clinically required.</p> <p>4.4.a. During the meeting the chairperson paces discussion to ensure:</p> <ul style="list-style-type: none"> <li>i. minimum dataset in prefilled patient information and live data entry is captured for each patient</li> <li>ii. MDM recommendations are clearly documented in real time and reflect discussion and agreements.</li> </ul> <p>6.2.a. Prior to patient discussion, each referring clinician should ensure their prefilled patient data contains the following:</p> <ul style="list-style-type: none"> <li>i. a clear reason for why the patient is being discussed</li> <li>ii. the patient's demographics</li> <li>iii. relevant test results</li> <li>iv. comorbidities, supportive care requirements (including palliative care needs), performance status</li> <li>v. the patient's history and preferences</li> <li>vi. the name and contact of the referring and presenting clinician.</li> </ul> <p>6.2.b. For each patient presented, there is someone present at the MDM who is adequately prepared to describe their case.</p> <p>8.5 MDM recommendations are communicated to the patient in a timely manner.</p> <p>8.6.a The lead (treating) clinicians demonstrate they understand their post-MDM responsibilities for referral.</p>

## Collaboration and teamwork

No.	Actions	Standard/Indicator
5.5	<p>The health service organisation has processes to:</p> <ul style="list-style-type: none"> <li>a. support multidisciplinary collaboration and teamwork</li> <li>b. define the roles and responsibilities of each clinician working in a team.</li> </ul>	<p>1.3.a. Contracts and/or position descriptions for medical staff responsible for primary cancer care include the expectation that cancer patients are referred to MDMs and receive multidisciplinary care.</p> <p>4.3.a. During the meeting the chairperson:</p> <ul style="list-style-type: none"> <li>i. decides whether there is sufficient representation to discuss each case</li> <li>ii. facilitates discussion, ensuring all members have the opportunity to contribute</li> <li>iii. acts fairly and objectively so that all members are supported to raise ideas and receive peer review</li> <li>iv. mediates discussion when disagreement arises</li> <li>v. creates a culture of support for education and professional development within the MDMs.</li> </ul>
5.6	<p>Clinicians work collaboratively to plan and deliver comprehensive care.</p>	<p>1.4.a. Team members demonstrate the value of MDMs for shared learning by mutual respect – different voices are heard and have input in decision making.</p> <p>6.1.a. All patients with a new or suspected diagnosis for cancer or recurrence of disease should be referred to an MDM for noting or discussion.</p> <p>8.1 MDMs are a mechanism for clinicians to agree on the recommended treatment.</p> <p>8.1.a. The MDM team aims for agreement on the recommended treatment.</p>

## Developing the comprehensive care plan

No.	Actions	Standard/Indicator
5.13	<p>Clinicians use processes for shared decision making to develop and document a comprehensive and individualised plan that:</p> <ul style="list-style-type: none"> <li>a. addresses the significance and complexity of the patient's health issues and risks of harm</li> <li>b. identifies agreed goals and actions for the patient's treatment and care</li> <li>e. includes a plan for referral to follow-up services, if appropriate and available</li> <li>f. is consistent with best practice and evidence.</li> </ul>	<p>1.2.c. There is clinical oversight of MDMs, including documentation of treatment protocols, consideration of new treatments and ensuring recommended clinicians attend.</p> <p>1.4.a. Team members demonstrate the value of MDM for shared learning by mutual respect – different voices are heard and have input in decision making.</p> <p>6.2.b. For each patient presented, there is someone present at the MDM who is adequately prepared to describe their case.</p> <p>8.3 When developing treatment recommendations, the MDM team ensures relevant information about the patient and optimal treatment are considered.</p>

No.	Actions	Standard/Indicator
		8.6.a. The lead (treating) clinicians demonstrate they understand their post-MDM responsibilities for referral.

#### 4. Communicating for safety

##### 4.1. Clinical governance and quality improvement to support effective communication

##### Organisational processes to support effective communication

No.	Actions	Standard/Indicator
6.4	<p>The health service organisation has clinical communications processes to support effective communication when:</p> <p>b. all or part of a patient's care is transferred within the organisation, between multidisciplinary teams, between clinicians or between organisations, and on discharge.</p>	<p>1.9.c. There are processes in place to ensure MDM recommendations are placed in each patient's relevant medical records, including services outside the MDM host agency.</p> <p>4.5 There are identified leaders and/or a culture of leadership, so that MDM clinical requirements for resourcing, quality and safety are represented.</p> <p>4.5.a.iii. Systems are in place for the timely communication of MDM recommendations to the patient, GP and treating team.</p> <p>8.4.a. Within a timely manner MDM recommendations:</p> <ul style="list-style-type: none"> <li>i. should be easily available to all treating team members within 24 hours of the MDM meeting</li> <li>ii. must be recorded into the patient's central medical record</li> <li>iii. should be communicated to the patient's GP within one week of the MDM meeting.</li> </ul>

### Communicating critical information

No.	Actions	Standard/Indicator
6.9	<p>Clinicians and multidisciplinary teams use clinical communication processes to effectively communicate critical information, alerts and risks in a timely way when they emerge or change to:</p> <ul style="list-style-type: none"> <li>a. clinicians who can make decisions about care</li> <li>b. patients, carers and families, in accordance with the wishes of the patient.</li> </ul>	<p>8.4.a. Within a timely manner MDM recommendations:</p> <ul style="list-style-type: none"> <li>i. should be easily available to all treating team members within 24 hours of the MDM meeting.</li> </ul> <p>8.5 MDM recommendations are communicated to the patient in a timely manner.</p> <p>8.6 Clinicians who refer patients to MDMs understand how they are responsible for patient referrals post-MDM.</p>

### Documentation of information

No.	Actions	Standard/Indicator
6.11	<p>The health service organisation has processes to contemporaneously document information in the healthcare record including:</p> <ul style="list-style-type: none"> <li>a. critical information, alerts and risks</li> <li>b. reassessment processes and outcomes</li> <li>c. changes to the care plan.</li> </ul>	<p>1.9.a. MDM software captures and reports appropriate information prior to, during and after the meetings.</p> <p>4.4.a. During the meeting the chairperson paces discussion to ensure:</p> <ul style="list-style-type: none"> <li>i. minimum dataset in prefilled patient information and live data entry is captured for each patient</li> <li>ii. MDM recommendations are clearly documented in real time and reflect discussion and agreements</li> <li>iii. any errors or changes are recorded</li> <li>iv. all divergent treatment recommendations are recorded, identifying the clinician(s) with divergent views.</li> </ul> <p>8.3 When developing treatment recommendations, the MDM team ensures relevant information about the patient and optimal treatment are considered.</p> <p>8.4.a. Within a timely manner MDM recommendations:</p> <ul style="list-style-type: none"> <li>ii. must be recorded into the patient's central medical record.</li> </ul>

## Foundational references

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