



## Special Report

A Special Project of the Clinical Programs and  
the Program in Evidence-based Care, Cancer Care Ontario (CCO)  
Developed by the Expert Panel on Multidisciplinary Cancer Conference (MCC) Standards, CCO

## Multidisciplinary Cancer Conference Standards

*F. Wright, C. De Vito, B. Langer, A. Hunter,  
and the Expert Panel on the Multidisciplinary Cancer Conference Standards*

**Report Date: June 1, 2006**

Special Report Multidisciplinary Cancer Conference Standards will permanently stand  
as CURRENT from its original publication date.

The full MCC Standards report is comprised of 3 sections  
and is available on the CCO website (<http://www.cancercare.on.ca>)  
PEBC Collaborative Projects page at:

<http://www.cancercare.on.ca/toolbox/qualityguidelines/other-reports/collaborative-pr-ebc/>

**Section 1: Standards**

**Section 2: Evidentiary Review**

**Section 3: Standards Development and External Review - Methods and Results**

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## Special Report: Section 1

# Multidisciplinary Cancer Conference Standards

*F. Wright, C. De Vito, B. Langer, A. Hunter,  
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A Special Project of the Clinical Programs and  
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Developed by the Expert Panel on Multidisciplinary Cancer Conference Standards,  
Cancer Care Ontario

**Report Date: June 1, 2006**

### **QUESTION**

What are the standards for the structure and function of a multidisciplinary cancer conference in Ontario?

### **SCOPE OF STANDARDS**

Multidisciplinary care is the hallmark of high-quality cancer management and is demonstrated in activities such as multidisciplinary consultation and clinics, morbidity and mortality conferences, and multidisciplinary cancer conferences. The crucial element is the multidisciplinary cancer conference (or tumour board), which is defined as a regularly scheduled multidisciplinary conference. The intent of the multidisciplinary cancer conference (MCC) is to prospectively review individual cancer patients and make recommendations on best management, keeping in mind that individual physicians are responsible for making the ultimate treatment decision. All cancer patients in Ontario, independent of their geographic locale, should have the opportunity to have their case reviewed in an MCC.

Cancer Care Ontario's (CCO) Expert Panel on Multidisciplinary Cancer Conference Standards (Appendix 1, Section 3) has produced standards to guide the development of MCCs, taking into account the different circumstances in regional centres and in community hospitals of various sizes. The Standard report identifies the following components as key to the structure and function of an MCC:

#### **Protocol or Mandate**

The MCC has the following primary and secondary functions:

- **Primary function:**

- Ensure that all appropriate diagnostic tests, all suitable treatment options, and the most appropriate treatment recommendations are generated for each cancer patient discussed prospectively in a multidisciplinary forum.
- **Secondary functions:**
  - Provide a forum for the continuing education of medical staff and health professionals.
  - Contribute to patient care quality improvement activities and practice audit.
  - Contribute to the development of standardized patient management protocols.
  - Contribute to innovation, research, and participation in clinical trials.
  - Contribute to linkages among regions to ensure appropriate referrals and timely consultation and to optimize patient care.

### **MCC Cases**

- New cancer cases, inpatient and ambulatory, and the proposed treatment plan should be forwarded to the MCC Coordinator.
- Not all cases forwarded to the MCC Coordinator need to be discussed at the MCC.
- The individual physician and the MCC Chair can determine which cases are discussed in detail at the MCC.
- Other cases (e.g., recurrent or metastatic cancer) can be forwarded to the MCC Coordinator for discussion, at the discretion of the individual physician.

### **Meeting Format**

- MCC discussions should occur at regularly scheduled intervals. Depending upon the size of the centre, the MCC should meet for a minimum length of one hour and a frequency of at least every two weeks to ensure timely prospective patient case review.
- Input should be encouraged from all members of the multidisciplinary team.
- Attendance should be recorded at each meeting and can be used for continuing professional development credit.
- The confidentiality of all information disclosed at these meetings is to be maintained by all participants.

### **Team Members**

- Each MCC should have a designated Chair and a Coordinator (with designated backups) responsible for overall conference management and the individual meeting process.
- A representative from medical oncology, radiation oncology, surgery/surgical oncology, pathology, diagnostic radiology, and nursing should be present to provide the complete range of expert opinion appropriate for the disease site and appropriate for the hospital.
- An MCC meeting should be attended by clinicians and other health professionals who are directly involved in the presented patients' care.
- In those hospitals that do not have all the needed specialists in-house, linkages can be made through teleconferencing or videoconferencing so that participants from multiple hospitals and specialties can meet together in a 'virtual' MCC.
- Other MCC participants will be determined by the patient case(s) presented at a meeting and can include the primary care physician; social services, pharmacy, nuclear medicine, genetics, dentistry, nutrition therapy, physical/occupational therapy, pastoral care, pain/palliative care, mental health, clinical trials, and data management representatives; and fellows, residents, and other health care students.
- Industry representatives (or members of the general public) should not attend the MCC, in order to maintain patient confidentiality and ensure unbiased case review.

- Patients or their representatives should not attend the MCC, to ensure unbiased case review.

### **Roles & Responsibilities**

- **Individual physicians or delegate:**
  - Responsible for discussing the treatment options and conclusions, as discussed at the MCC, with the patient and making the ultimate treatment recommendations.
  - Commit to attend MCC meetings and to send new cancer cases from their practice, as well as any other cancer cases (e.g., recurrent cancer) that would benefit from discussion by the MCC.
  - Responsible for forwarding new cancer cases to the MCC Coordinator and communicating the relevant patient information, including radiology and pathology, and the specific issue to be discussed by the multidisciplinary team, prior to each meeting.
  - Responsible for presenting the patient case at the MCC (or sending a delegate to present) and maintaining patient confidentiality.
  - Responsible for providing expert opinion from their area of expertise.
  - Responsible for entering the MCC recommendations, the physician-patient discussion regarding the MCC recommendations, and the patient's final decision about their treatment into the medical record.
- **Multidisciplinary Cancer Conference Chair/Facilitator (may or may not be a physician):**
  - Accountable to the head of the hospital cancer program.
  - May delegate/rotate the running of the MCC and other responsibilities.
  - Responsible for:
    - ♦ The actual running of the MCC.
    - ♦ Ensuring that all forwarded cases that have been selected for presentation are discussed within the allotted time.
    - ♦ Encouraging the participation of all MCC members.
    - ♦ Ensuring patient confidentiality is maintained by reminding participants of privacy issues and permitting only appropriate attendance.
  - A designate should be assigned in case the Chair is unavailable.
- **Multidisciplinary Cancer Conference Coordinator (usually not a physician):**
  - The key individual who ensures the continuity of the MCCs.
  - Responsible for the administrative management and individual meeting functioning. The following roles and responsibilities include those that can be specific to the Coordinator or that can be delegated to other core members or associated support staff:
    - ♦ Meeting—preliminary organization:
      - \* Create the list of patient cases, based on the cases forwarded by individual physicians.
      - \* Book meeting, set up meeting room, and ensure availability/functioning of all necessary equipment.
      - \* Notify all core members, invite guests, and post in-hospital meeting notice.
      - \* Ensure all relevant up-to-date patient information, particularly slides and all imaging (including related electronic imaging), are entered in the computer prior to the meeting.

- \* Track minimum data requirements, such as how many cases were forwarded to and how many were discussed at the MCC by disease site.
- A designate should be assigned in case the Coordinator is unavailable.

### **Institutional Requirements**

- MCC Coordinator—an essential individual, the ‘glue’ that ensures the continuity of the MCC.
- Dedicated meeting room with adequate facilities.
- Projection equipment for displaying x-rays and pathology slides.
- Secure, interactive computer systems with:
  - Scanning, storing, and computer-generated image display capabilities.
  - Videoconferencing and teleconferencing equipment.
  - Information technology (IT) support.

### **Terms of Reference for the Multidisciplinary Cancer Conference**

Each participating institution should have in place a written protocol, encompassing the following:

- The MCC mandate specific to that institution.
- The health care professional membership, including the core members and disciplines and their roles and responsibilities.
- Meeting format, frequency, time length, and attendance.
- Communication flow.
- How patient confidentiality will be maintained in the selection and review of patient cases and the maintenance of patient case files.

### **COMMENT**

Cancer Care Ontario is aware of the substantial resource implications for implementing MCCs and recognizes that a stepwise approach to implementation will be undertaken at most centres. The regional cancer programs, based on the Local Health Integration Networks (LHINs) or established referral patterns, should use the MCCs to facilitate consultation and appropriate referral, focussing on the concept of patient-centered care so that patients can be treated close to home when such treatment is available or have timely referral to a regional centre when appropriate. The realization of that objective will be made possible by the development of regional MCCs where physicians from community hospitals can attend MCCs at regional centres or specialists from regional centres can attend MCCs in community hospitals, facilitated through the use of videoconferencing.

Different health care facilities will have a different constituent membership for their institution's MCC and may discuss patient cases with varying levels of complexity. Consequently, some MCCs may meet more frequently than others, and some may be more disease site-specific than others (e.g., a melanoma or head and neck MCC).

In addition, although not all components of an MCC, such as videoconferencing equipment or a patient database, may be in place, this fact should not be considered an impediment to establishing an MCC. As well, if an urgent case needs to be discussed in an MCC forum, a backup option such as an email discussion (with anonymous patient information) among the MCC members can be generated so that timely patient care and patient confidentiality will not be compromised.

### **DEVELOPMENT OF THE MULTIDISCIPLINARY CANCER CONFERENCE STANDARDS DOCUMENT**

Evidence about MCCs was gathered through a literature search and an environmental scan of Internet documents from organizations and hospitals with active multidisciplinary cancer conferences or multidisciplinary panels similar in structure and function to MCCs. Members of Cancer Care Ontario's Expert Panel on Multidisciplinary Cancer Conference Standards reviewed that evidence. The Expert Panel included representatives from surgical oncology, medical oncology, radiation oncology, surgical pathology, diagnostic imaging, nursing, palliative care, social work, and regional planning; a Director of Clinical Oncology Systems; Regional Vice Presidents; Cancer Care Ontario Program Coordinators and a Provincial Head, a Program Director, a Program Manager, and a Clinical Council member; and methodologists.

The Panel developed the standards, using a combination of descriptive evidence and existing recommendations from other jurisdictions, and incorporated expert opinion based on experience and consensus.

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## Special Report: Section 2

# Multidisciplinary Cancer Conference Standards: The Evidentiary Review

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**Report Date: June 1, 2006**

### QUESTION

What are the standards for the structure and function of a multidisciplinary cancer conference in Ontario?

### INTRODUCTION

Multidisciplinary care is the hallmark of high-quality cancer management, and is demonstrated in activities such as multidisciplinary consultation and clinics, morbidity and mortality conferences, and multidisciplinary case conferences. The crucial element is the multidisciplinary cancer conference (or tumour board), which is defined as a regularly scheduled multidisciplinary conference to prospectively review individual cancer patients to develop a consensus on best management. Cancer Care Ontario's (CCO) Expert Panel on Multidisciplinary Cancer Conference Standards (Appendix 1, Section 3) was convened to produce standards to guide the development of multidisciplinary cancer conferences (MCCs) in Ontario, taking into account the different circumstances in regional centres and in community hospitals of various sizes.

The North American multidisciplinary cancer conference, also known as a multidisciplinary, tumour, or case conference, board, or clinic (1-4), constitutes a multidisciplinary clinical discussion group mandated, ideally, to review cancer patient cases in order to ensure the evaluation, management, and follow-up of all cancer patients seen in a medical facility and to arrive at patient care recommendations through consensus decision making. Internationally, multidisciplinary groups or teams with mandates similar to that of the multidisciplinary cancer conference exist in the United Kingdom (UK) under the National Health

Service (NHS) (5), where the drive to improve cancer care treatment coalesced as “multidisciplinary team working” in the 1995 Calman and Hines Report (6), and in Australia, in multidisciplinary meetings (7,8).

## METHODS

### Environmental Scan

Unpublished sources were sought by contacting individuals responsible for MCCs in hospitals in Ontario and other Canadian jurisdictions, conducting an Internet search for Canadian and international health organizations providing information on their MCCs and/or related multidisciplinary structures, and through direct contact with individuals knowledgeable in the field of multidisciplinary clinical groups.

### Literature Search Strategy

A literature search for published articles relevant to the topic of MCCs focussed on MEDLINE (OVID; 1960 through November 2005, Week 3), using the following terms: “tumo\$r board\$.mp.”, “multidisciplinary conference\$.mp.”, “multidisciplinary clinic\$.mp.”, multidisciplinary team\$.mp”, and “morbidity and mortality conference\$.mp.”. One reviewer selected and reviewed relevant articles and abstracts, and the reference lists from those sources were searched for additional studies, as were the journal libraries of the Expert Panel.

### Inclusion Criteria

Both oncological and non-oncological reports were considered for inclusion in this evidence review if they provided information on the organizational structure and function of MCCs or other related multidisciplinary clinical groups and/or on the effect of those conferences or groups on patient outcomes.

### Exclusion Criteria

Articles in a language other than English were excluded from the evidence review because resources were not available for translation services.

## RESULTS

### Literature Search Report Characteristics

The published reports selected for inclusion in this document provide both descriptive and analytical evidence supporting the establishment, function, and ongoing evaluation of an MCC. Table 1 shows the categorization of the selected literature.

**Table 1: Published articles and Web sources eligible for inclusion.**

Category	Number of Reports	References
Multidisciplinary Cancer Conferences and Multidisciplinary Panels: an Emerging Quality Improvement Entity	11	(1,2,4,9-16)
Evidence for the Positive Impact of Multidisciplinary Boards on Outcomes	12	(17-28)
How a Multidisciplinary Cancer Conference Should Function	30	(3,5,7,8,18,29-53)

### Multidisciplinary Cancer Conferences and Multidisciplinary Panels: an Emerging Quality Improvement Entity

In 1975, Berman (9), in his discussion of the tumour board, identified the potential for the hospital multidisciplinary cancer conference as a strategy to improve cancer knowledge, treatment, and survival. Since then, several authors in oncology (1,2,4,11,13-16) and other disease groups (10,12) have advocated for MCCs and similar groups as valuable strategies to improve quality of care. Zorbas et al (15), stressed the value of the multidisciplinary care team, particularly for the management of early breast cancer. Although the multidisciplinary approach in oncology had been widely advocated in Australia, no one single multidisciplinary model could be applied to the geographical, and, therefore, health care, diversity of that country (a situation familiar to Ontario). The authors described the development of the five “Principles of multidisciplinary care” by the National Multidisciplinary Care Demonstration Project to meet the challenge of having effective but flexible multidisciplinary cancer management structures across Australia. The five principles, which they presented in detail, are 1) the team, 2) communication, 3) full therapeutic range, 4) standards of care, and 5) the involvement of the woman; a key point was that “each outcome is measurable.” Zorbas et al also discussed the results of an unpublished study in which 95% of a representative sample of Australian hospital clinicians agreed that the five principles were vital components of multidisciplinary care. Similarly, Kagan (4) stated, in a 2005 editorial, “multidisciplinary oncologists, committed to forming a mutual decision in an agreed time, improve cancer care.” Although the editorial focussed on the value of the multidisciplinary clinic, his comments are applicable to the MCC, especially his brief discussion of the impact that interaction styles, positive and negative, can have upon decision making within a multidisciplinary group and, ultimately, upon patient treatment management.

### **Impact of Multidisciplinary Patient Management on Outcomes**

Twelve studies emerging from the review of evidence linked outcome data with the introduction or presence of MCCs or similar groups (17-28), although an important fact to note is that none of the evidence explicitly proved a causal link. All the studies but one (24) examined outcomes in an oncological setting. All twelve studies concluded that a multidisciplinary setting resulted in positive patient outcomes, particularly in terms of diagnosis and/or treatment planning (17,21-23,25,28), survival (19,20,24,26,27), and patient satisfaction (21). In addition, one study (17) reported positive outcomes for clinicians, in terms of improved education, communication, and cooperation, as a consequence of participation in MCCs.

### **Non-Oncology**

Traynor et al (24) compared the impact of attending a multidisciplinary clinic on the prognosis for patients (n=82) with amyotrophic lateral sclerosis (ALS) with that for ALS patients (n=262) seen at nine general neurology clinics. In a five-year prospective study, they found that, compared to general clinic ALS patients, ALS patients treated in the multidisciplinary clinic lived an average 7.5 months longer and one-year mortality was 30% less. Although they could not precisely determine how attendance at the multidisciplinary ALS clinic improved survival, the authors attributed that improvement to treatment in a multidisciplinary setting.

### **Oncology**

Smith et al (17) examined the impact of implementing American College of Surgeons (ACS)-approved community cancer programs in a rural setting and based their conclusions on cancer registry data findings and physician questionnaire responses. Scholnik et al (18), Petty and Vetto (23), and Lutterbach et al (28) evaluated the influence of multidisciplinary cancer conferences (tumour boards), or related multidisciplinary case review groups, on patient care by looking at the implementation rate of board recommendations. Scholnik et al (18) conducted retrospective reviews of multidisciplinary meeting minutes and patient charts, Petty and Vetto (23) distributed questionnaires, focussed on recommendations and their implementation, to cancer registrars, and Lutterbach et al (28) conducted retrospective reviews of brain cancer

multidisciplinary board protocols to see whether or not board recommendations were implemented. Focussing on breast cancer, Gabel et al (21) conducted retrospective chart reviews, and Chang et al (22) compared outside diagnoses/treatment recommendations with subsequent multidisciplinary panel results, to look at the effect of a multidisciplinary approach on patient care. With a similar objective, Santoso et al (25) retrospectively compared initial cancer diagnoses in a gynecologic oncology department with those subsequently determined by multidisciplinary cancer board case reviews. Wong et al (27) audited discharge summaries to determine how the management of non-small cell lung cancer patients could be improved. All eight studies, while not clearly demonstrating a direct cause-and-effect association, concluded that a multidisciplinary approach, through MCCs or similar groups, resulted in improved patient outcomes, and, in Smith et al's study (17), in improved clinician outcomes.

Junor et al (19), in a retrospective analysis of case records for 479 ovarian cancer patients, reported that five factors contributed to an improved five-year survival outcome, including one new highly significant factor—the “improvement in survival with multidisciplinary management” ( $p < 0.001$ ). Sainsbury et al (20) looked at five-year survival in 12,861 breast cancer patients over 10 years, using case-registry data, and expanded upon their findings of a clear relationship between chemotherapy use and improved survival to advocate for treatment in a multidisciplinary setting. Birchall et al (26) conducted a cohort study comparing two groups of head and neck cancer patients before (1996-1997,  $n=566$ ) and after (1999-2000,  $n=727$ ) the implementation of overall improvements in patient care standards in the National Health Service (NHS), including the increased development and use of multidisciplinary clinics. An increased number of patients were seen in multidisciplinary clinics in the 1999-2000 group. Two-year survival significantly improved in that group in patients attending the multidisciplinary clinics (hazard ratio, 0.7,  $p=0.02$ ) compared to patients not referred to such clinics. The three studies provide somewhat stronger evidence in support of and motivation for a structured multidisciplinary approach to patient care management.

### **How a Multidisciplinary Cancer Conference Should Function**

The environmental scan (3,5,7,8,38,41,45,53) and the literature search (4,18,29-37,39,40,42-44,46-52) retrieved 30 studies that described MCCs, or related groups, in terms of structural components such as membership, modes of interaction, and communication, and that documented evidence for particular structures and formats. None of the studies explicitly compared and contrasted the effectiveness of the MCC as a function of any component, although two studies did examine the opinions of meeting participants who had experienced different MCC styles (50,51). Four studies dealt with the development of MCCs into videoconferences (41,42,46,51,52). The major theme common to all the studies was that such groups were multidisciplinary, the structural composition best able to coordinate the often complex treatment of cancer cases. In addition, a number of studies stressed that the decision-making process be based on discussion and on reaching a consensus of opinion, rather than dictating practitioner behaviour (4,8,29,31,35-37,45,49,50).

### ***Multidisciplinary Cancer Conference Structure and Function—Key Components***

Table 2 provides an overview of the various components of the MCC structure and function, described in detail in 18 studies (3,5,7,8,18,29-32,35-42,45,48,49,53), and those components identified as being key are reviewed in more detail below.

#### ***Protocol or Mandate***

Several studies stated that a written protocol or mandate was a necessity (5,8,48). The NHS Cancer Services requires an operational policy, distributed to all team members and reviewed annually, detailing such items as membership and contact information, roles and responsibilities, meeting structure and format, communication, and case review policies (5).

Other studies described the motivating principles for their board, or an ideal board (18,31,37,39,48), with the primary purposes being to ensure the most up-to-date treatment and follow-up for all cancer patients seen in the facility, through a multidisciplinary treatment approach, and to produce patient care recommendations based on the review of each case presented. Secondary objectives included providing continuing education for medical staff and health professionals, maintaining a cancer tumour registry, acting as a quality improvement forum, and maintaining a commitment to research and clinical trials.

### Team Members

The membership of the MCC, or a similar group, detailed in the studies reflects the multidisciplinary nature of the body and the size and structure of the hospital (3-5,8,18,29,30,32,35,37,39-42,48,49,53). Several studies recommended that there be a recognized leader (coordinator, facilitator, chair, director, and so on), ideally with a backup, with designated responsibilities (18,29,32,35,39,42,48,49), although, in a related study of the impact of NHS multidisciplinary cancer group constitution on group effectiveness, Haward et al (44) found that having a “number of leaders” was the most effective team model.

The American College of Surgeons Commission on Cancer (ACoS CoC) *Cancer Program Standards 2004* details the CoC requirements for the certification of American cancer treatment facilities (3). The 2004 *Standards* document stipulates that a multidisciplinary cancer committee oversee the structure and function of the multidisciplinary cancer conference, including designating a coordinator. Required committee members include physician representatives from diagnostic radiology, pathology, surgery, medical oncology, radiation oncology (if such services are available in the facility); the cancer program administrator; a Certified Tumor Registrar; and representatives from oncology nursing, social work, and quality management. Additional attendees required for specific situations include representatives from hospice and/or home care, pain control and/or palliative medicine, nutritional services, pastoral care, pharmacy, mental health, the public; the clinical research data manager; and specialty physicians. Several studies suggested other additional attendees, such as representatives from nuclear medicine and physical/occupational therapy; each patient’s referring or primary care physician; and other interested medical, nursing, and other health professional staff, residents, and health care students.

### Roles & Responsibilities

A majority of the studies detailed some of the expected team roles and responsibilities (see Table 2), and those that mentioned the need for a coordinator saw that individual as being responsible overall for board management and accountability and for individual meeting presentations and procedures (18,29,32,35,39,42,48,49). The responsibilities described included those that were specific to the coordinator or that could be delegated to other core members or associated support staff. The tasks detailed related to 1) the preliminary organization required for each meeting; 2) the selection of patient cases for review and the preparation of all associated up-to-date histories, radiographic imaging, and pathology slides; 3) the presentation of the cases and other information; 4) the documenting of all meeting activity and recommendations; 5) the post-meeting follow-up activities; 6) the maintaining of all related databases; and 7) ensuring the fulfillment of the educational (33,34) and research commitments of the MCC.

### Communication

Critical to the fulfillment of the roles and their associated responsibilities is the need for open communication, often through designated individuals, not only during the meeting presentation of each patient case for review but also in order to accomplish the other activities related to fulfilling the MCC protocol or mandate. Several studies saw such activities as including the

announcing of meetings; the meeting discussion of relevant educational or research topics; the distribution of meeting minutes or reports; the timely notification of relevant individuals and/or teams about meeting discussion outcomes and/or treatment recommendations; the tracking of any follow-up, including the implementation or non-implementation of the recommendations; and the distribution of any required audits or other quality management reports (5,7,8,18,29,32,35,38,39,42,48,49).

#### Data Management & Support

Data management covers not only the data feeding into and generated by the MCC meetings but also the necessary support structures. Rosenblum and Mikkelsen (49) discussed the necessity of a dedicated, fully computerized, and interactive system for the multidisciplinary meeting, a system that would permit the entering, updating, and maintaining of all information relevant to the reviewed patients, as well as the meeting procedures, and that was capable of linking to and storing all necessary imaging. In addition, the ACoS CoC (3) requires that the cancer committee oversee the quality control of cancer registry data.

Several studies discussed the need for up-to-date technological equipment, such as interactive computer systems with Web access and scanning, storing, and computer-generated image display capabilities; videoconferencing equipment; and recording equipment (5,8,37,40,42,48,49). They also stressed the need for less highly technological but very basic resources such as dedicated meeting rooms with adequate facilities and projection equipment for displaying x-rays and pathology slides.

#### Meetings

##### Type

All the studies presented in Table 2 dealt with MCC, or similar group, meetings that involved the presentation of patient cases for review. In addition, the NHS *Manual for Cancer Services* (5) required an annual meeting at which core members would discuss and make recommendations on the operational policy .

##### Format

Weekly MCC meetings on a set day and at a set time for a minimum of one hour in length seemed to be the ideal, but the opinion was that meetings should occur at least monthly in order to be effective. Vetto et al (36) concluded that a “working conference” of prospective patient case reviews was the style most beneficial to patients, practitioners, and MCC internal and external accountability, in contrast to the presentation of only “fascinating” or retrospective cases. Meeting presentations could involve new cancer cases, recurrent cases, and previously reviewed cases requiring additional follow-up, keeping in mind not only the primary objective of discussing and making recommendations on patient cases but also the educational needs of the participants (33,34).

## MCC STANDARDS IN REVIEW

Table 2. Multidisciplinary cancer conference: key components.

<i>Electronic Scan 2005</i>											
Study (Ref.) Key Component	NBCC (Aus)		NSWBCI (Aus) (7) 2003	MMS (53) 2005	NHS (UK) (5) 2004	ACoS: CoC (USA) (3) 2004	VA Puget (USA) (41) 2002*	McGill (38) 1997			
	MDM (8) 2005	NDP (45) 2005									
Protocol/Policy	X	X	X		X			X			
Team Members	X			X	X	X	X	X			
Coordinator Role	X				X						
Roles & Responsibilities	X			X	X	X	X	X			
Standards/ Guidelines	X	X		X	X	X	X	X			
Cases	X			X	X						
Resources	X	X	X		X	X	X				
Meeting Input/Output	X		X		X						
<i>Literature Scan 2005</i>											
	Rosenblum (49) 2004	De Guzman (48) 2003	Billingsley (42) 2002*	BAHNO (40) 2001	Piorkowski (39) 2001	Gray (37) 1997	Kneece (35) 1996	Kerstetter (32) 1990	Gross (30) 1987	Scholnik (18) 1986	Katterhagen (29) 1977
Mandate/ Standards	X	X	X	X	X	X	X	X	X	X	X
Team Members	X	X	X	X	X	X	X	X	X	X	X
Responsibilities	X	X	X	X	X	X	X	X	X	X	X
Communication	X	X	X	X			X	X			X
Data Management & Support	X	X	X	X		X					X
Meeting	X	X	X	X	X	X	X	X	X	X	X

ACoS: CoC – American College of Surgeons: Commission on Cancer; McGill – McGill University Health Centre; MMS – Massachusetts Medical Society; NBCC (Aus) MDM – National Breast Cancer Centre (Australia), MultiDisciplinary Meetings; NBCC (Aus) NDP – National Breast Cancer Centre (Australia), National Demonstration Project; NHS (UK) – National Health Service (United Kingdom), Department of Health; NSWBCI (Aus) – New South Wales Breast Cancer Institute (Australia); VA Puget (USA) – Veteran Affairs, Puget Sound, USA.

\* VA Puget USA (41) and Billingsley (42) report on the same study.

## **DISCUSSION**

The Expert Panel used the evidence that was available from the published literature and the environmental scan, along with their expert opinion, to reach consensus on standards for MCCs in Ontario. They also took into account the resources available to hospitals across the province.

Overall, the quality and quantity of the body of evidence on the impact of an MCC on patient outcomes, as identified in the published and unpublished literature, is limited. However, the majority opinion seemed to be that MCCs were necessary to the delivery of optimum care to cancer patients. The synthesis of the material describing the MCC, or related multidisciplinary groups, resulted in the identification of the following components as key to the structure and function of an MCC:

### **Protocol or Mandate**

The Multidisciplinary Cancer Conference (MCC) has the following primary and secondary functions:

- **Primary function:**
  - Ensure that all appropriate diagnostic tests, all suitable treatment options, and the most appropriate treatment recommendations are generated for each cancer patient discussed prospectively in a multidisciplinary forum.
- **Secondary functions:**
  - Provide a forum for the continuing education of medical staff and health professionals.
  - Contribute to patient care quality improvement activities and practice audit.
  - Contribute to the development of standardized patient management protocols.
  - Contribute to innovation, research, and participation in clinical trials.
  - Contribute to linkages among regions to ensure appropriate referrals and timely consultation and to optimize patient care.

### **MCC Cases**

- New cancer cases, inpatient and ambulatory, and the proposed treatment plan should be forwarded to the MCC Coordinator.
- Not all cases forwarded to the MCC Coordinator need to be discussed at the MCC.
- The individual physician and the MCC Chair can determine which cases are discussed in detail at the MCC.
- Other cases (e.g., recurrent or metastatic cancer) can be forwarded to the MCC Coordinator for discussion, at the discretion of the individual physician.

### **Meeting Format**

- MCC discussions should occur at regularly scheduled intervals. Depending upon the size of the centre, the MCC should meet for a minimum length of one hour and a frequency of at least every two weeks to ensure timely prospective patient case review.
- Input should be encouraged from all members of the multidisciplinary team.
- Attendance should be recorded at each meeting and can be used for continuing professional development credit.
- The confidentiality of all information disclosed at these meetings is to be maintained by all participants.

### **Team Members**

- Each MCC should have a designated Chair and a Coordinator (with designated backups) responsible for overall conference management and the individual meeting process.

- A representative from medical oncology, radiation oncology, surgery/surgical oncology, pathology, diagnostic radiology, and nursing should be present to provide the complete range of expert opinion appropriate for the disease site and appropriate for the hospital.
- An MCC meeting should be attended by clinicians and other health professionals who are directly involved in the presented patients' care.
- In those hospitals that do not have all the needed specialists in-house, linkages can be made through teleconferencing or videoconferencing so that participants from multiple hospitals and specialties can meet together in a 'virtual' MCC.
- Other MCC participants will be determined by the patient case(s) presented at a meeting and can include the primary care physician; social services, pharmacy, nuclear medicine, genetics, dentistry, nutrition therapy, physical/occupational therapy, pastoral care, pain/palliative care, mental health, clinical trials, and data management representatives; and fellows, residents, and other health care students.
- Industry representatives (or members of the general public) should not attend the MCC, in order to maintain patient confidentiality and ensure unbiased case review.
- Patients or their representatives should not attend the MCC, to ensure unbiased case review.

### **Roles & Responsibilities**

- **Individual physicians or delegate:**
  - Responsible for discussing the treatment options and conclusions, as discussed at the MCC, with the patient and making the ultimate treatment recommendations.
  - Commit to attend MCC meetings and to send new cancer cases from their practice, as well as any other cancer cases (e.g., recurrent cancer) that would benefit from discussion by the MCC.
  - Responsible for forwarding new cancer cases to the MCC Coordinator and communicating the relevant patient information, including radiology and pathology, and the specific issue to be discussed by the multidisciplinary team, prior to each meeting.
  - Responsible for presenting the patient case at the MCC (or sending a delegate to present) and maintaining patient confidentiality.
  - Responsible for providing expert opinion from their area of expertise.
  - Responsible for entering the MCC recommendations, the physician-patient discussion regarding the MCC recommendations, and the patient's final decision about their treatment into the medical record.
- **Multidisciplinary Cancer Conference Chair/Facilitator (may or may not be a physician):**
  - Accountable to the head of the hospital cancer program.
  - May delegate/rotate the running of the MCC and other responsibilities.
  - Responsible for:
    - ♦ The actual running of the MCC.
    - ♦ Ensuring that all forwarded cases that have been selected for presentation are discussed within the allotted time.
    - ♦ Encouraging the participation of all MCC members.
    - ♦ Ensuring patient confidentiality is maintained by reminding participants of privacy issues and permitting only appropriate attendance.
  - A designate should be assigned in case the Chair is unavailable.

- **Multidisciplinary Cancer Conference Coordinator (usually not a physician):**
  - The key individual who ensures the continuity of the MCCs.
  - Responsible for the administrative management and individual meeting functioning. The following roles and responsibilities include those that can be specific to the Coordinator or that can be delegated to other core members or associated support staff:
    - ♦ Meeting—preliminary organization:
      - \* Create the list of patient cases, based on the cases forwarded by individual physicians.
      - \* Book meeting, set up meeting room, and ensure availability/functioning of all necessary equipment.
      - \* Notify all core members, invite guests, and post in-hospital meeting notice.
      - \* Ensure all relevant up-to-date patient information, particularly slides and all imaging (including related electronic imaging), are entered in the computer prior to the meeting.
      - \* Track minimum data requirements, such as how many cases were forwarded to and how many were discussed at the MCC by disease site.
  - A designate should be assigned in case the Coordinator is unavailable.

### **Institutional Requirements**

- MCC Coordinator—an essential individual, the ‘glue’ that ensures the continuity of the MCC.
- Dedicated meeting room with adequate facilities.
- Projection equipment for displaying x-rays and pathology slides.
- Secure, interactive computer systems with:
  - Scanning, storing, and computer-generated image display capabilities.
  - Videoconferencing and teleconferencing equipment.
  - Information technology (IT) support.

### **Terms of Reference for the Multidisciplinary Cancer Conference**

Each participating institution should have in place a written protocol, encompassing the following:

- The MCC mandate specific to that institution.
- The health care professional membership, including the core members and disciplines and their roles and responsibilities.
- Meeting format, frequency, time length, and attendance.
- Communication flow.
- How patient confidentiality will be maintained in the selection and review of patient cases and the maintenance of patient case files.

### **COMMENT**

Cancer Care Ontario is aware of the substantial resource implications for implementing MCCs and recognizes that a stepwise approach to implementation will be undertaken at most centres. The regional cancer programs, based on the Local Health Integration Networks (LHINs) or established referral patterns, should use the MCCs to facilitate consultation and appropriate referral, focussing on the concept of patient-centered care so that patients can be treated close to home when such treatment is available or have timely referral to a regional centre when appropriate. The realization of that objective will be made possible by the development of regional MCCs where physicians from community hospitals can attend MCCs at regional centres or specialists from regional centres can attend MCCs in community hospitals, facilitated through the use of videoconferencing.

Different health care facilities will have a different constituent membership for their institution's MCC and may discuss patient cases with varying levels of complexity. Consequently, some MCCs may meet more frequently than others, and some may be more disease site-specific than others (e.g., a melanoma or head and neck MCC).

In addition, although not all components of an MCC, such as videoconferencing equipment or a patient database, may be in place, this fact should not be considered an impediment to establishing an MCC. As well, if an urgent case needs to be discussed in an MCC forum, a backup option such as an email discussion (with anonymous patient information) among the MCC members can be generated so that timely patient care and patient confidentiality will not be compromised.

**JOURNAL REFERENCE**

- Wright FC, De Vito C, Langer B, Hunter A; the Expert Panel on Multidisciplinary Cancer Conference Standards. Multidisciplinary cancer conferences: a systematic review and development of practice standards. Eur J Cancer. 2007 Apr;43(6):1002-10

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**Special Report: Section 3**

**Multidisciplinary Cancer Conference Standards: Standards Development and External Review—Methods and Results**

*F. Wright, C. De Vito, B. Langer, A. Hunter,  
and the Expert Panel on the Multidisciplinary Cancer Conference Standards*

A Special Project of the Clinical Programs and  
the Program in Evidence-based Care, Cancer Care Ontario  
Developed by the Expert Panel on Multidisciplinary Cancer Conference Standards,  
Cancer Care Ontario

**Report Date: June 1, 2006**

**THE CLINICAL PROGRAMS AND THE PROGRAM IN EVIDENCE-BASED CARE COLLABORATION**

The Clinical Programs and the Program in Evidence-based Care (PEBC) are initiatives of the Ontario provincial cancer system, Cancer Care Ontario (CCO) (1). The mandate of the Clinical Programs is to improve the delivery of cancer care in Ontario through initiatives designed to increase access to care, improve the quality of care, support knowledge transfer and evidence-based practice, and foster research and innovation. The mandate of the PEBC is to improve the lives of Ontarians affected by cancer, through the development, dissemination, implementation, and evaluation of evidence-based products designed to facilitate clinical, planning, and policy decisions about cancer care. The Clinical Programs and the PEBC have undertaken a collaboration to produce evidence-based materials relevant to the oncology community in Ontario.

As part of its quality improvement mandate, the Clinical Programs have developed expert panels for the selection of quality indicators and the development of clinical guidelines and organizational standards. The panels have been comprised of medical oncologists, radiation oncologist, surgeons, nursing, other clinicians, health care administrators, and methodologists. The expert panels are established on an as-needed basis for specific quality initiatives, such as the development of the multidisciplinary cancer conference (MCC) standards.

The PEBC is best known for producing high-quality evidence-based practice guideline reports, using the methods of the Practice Guidelines Development Cycle (1,2). A typical PEBC report consists of the comprehensive systematic review of the evidence on a specific topic, the

interpretation of and consensus agreement on that evidence, the resulting recommendations, and the results of an external review by Ontario clinicians and administrators for whom the topic is relevant. The PEBC has a formal standardized process to ensure the currency of each clinical practice guideline report, conducting routine periodic reviews and evaluations of the scientific literature and, where appropriate, integrating that literature with the original practice guideline report information.

The collaboration between the Clinical Programs and the PEBC draws on expertise from both groups in order to produce a standards document. The Clinical Programs coordinated the development of the panel, and the PEBC contributed its methodological expertise. The PEBC process and report format has been adapted for the multidisciplinary cancer conference standards document.

### **The Special Report:**

This Special Report is comprised of the following three sections:

- *Section 1: Standards:* This section contains the standards derived by the Expert Panel on Multidisciplinary Cancer Conference Standards through the interpretation of the literature review and environmental scan.
- *Section 2: Evidentiary Review:* This section presents the comprehensive review of the literature search results and the environmental scan and the conclusions reached by the Panel.
- *Section 3: Guideline Development and External Review—Methods and Results:* This section summarizes the standards development process and the results of the formal external review, by Ontario clinicians, other health care professionals, and health care administrators, of the draft version of the clinical practice guideline and evidentiary review.

## **DEVELOPMENT OF THE SPECIAL REPORT**

### **Developing the Draft Standards**

This Special Report was developed by the Expert Panel on Multidisciplinary Cancer Conference Standards (Appendix 1). The report is a convenient and up-to-date source of the best available evidence on the MCC, developed through an evidentiary review and synthesis and input from clinicians, other health care professionals, and health care administrators in Ontario. The standards were derived through the discussion of the evidence and the external review results by the members of the Expert Panel and consensus decision making on their part.

### **External Review by Ontario Clinicians and Administrators**

The draft MCC Standards document was circulated to Ontario clinicians, other health care professionals, and health care administrators for their review and feedback. Box 1 summarizes the draft standards developed by the Expert Panel.

<b>BOX 1. DRAFT STANDARDS</b> (Sent for external review March 21, 2006)
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***Protocol or Mandate***

The Multidisciplinary Cancer Conference (MCC) has the following primary and secondary functions:

- |  |
|--|
| <ul style="list-style-type: none"> <li>• <b>Primary function:</b> <ul style="list-style-type: none"> <li>▪ Ensure that all appropriate diagnostic tests, all suitable treatment options and the most appropriate treatment recommendations are generated for each cancer patient discussed in a multidisciplinary forum.</li> </ul> </li> <li>• <b>Secondary functions:</b> <ul style="list-style-type: none"> <li>▪ Provide a forum for the continuing education of medical staff and allied health professionals.</li> <li>▪ Facilitate patient care quality improvement activities and practice audit.</li> <li>▪ Facilitate the development of standardized patient management protocols.</li> </ul> </li> </ul> |
|--|

## MCC STANDARDS IN REVIEW

- Stimulate innovation, research, and participation in clinical trials.
- Promote linkages among regions to ensure appropriate referrals and timely consultation and optimize patient care.

### **Meeting Format**

- MCC discussions should occur at regularly scheduled intervals. Depending upon the size of the centre, the MCC should meet a minimum length of one hour and a frequency of at least every two weeks to ensure timely prospective patient case review.
- All new cancer cases, inpatient and ambulatory, and the proposed treatment plan should be submitted to the MCC; however, it will be left to the discretion of the individual physician and the MCC Coordinator to determine which cases are discussed in detail at the multidisciplinary forum.
- All cancer patients in Ontario, independent of their geographic locale, should have the opportunity to have their case reviewed in an MCC.
- Input should be encouraged from all members of the multidisciplinary team.
- Attendance should be recorded at each meeting and can be used for continuing professional development credit.
- The confidentiality of all information disclosed at these meetings is to be maintained by all participants.

### **Team Members**

- Each MCC should have a designated Chair and a Coordinator (with designated backups) responsible for the overall board management and the individual meeting process.
- MCCs should have a core membership, represented by medical oncology, radiation oncology, surgery/surgical oncology, pathology, diagnostic radiology, and oncology nursing, to provide the complete range of expert opinion
- An MCC meeting should be attended by clinicians and other health professionals who are directly involved in the presented patients' care.
- In those hospitals that do not have all the needed specialists in-house, linkages can be made, through teleconferencing or videoconferencing, so that participants from multiple hospitals and specialties can meet together in a 'virtual' MCC.
- Other MCC participants will be determined by the patient case(s) presented at a meeting and can include the primary care physician, social services, pharmacy, nuclear medicine, genetics, dentistry, nutrition therapy, physical/occupational therapy, representatives from clinical trials, pastoral care, pain/palliative care, mental health, data management, fellows, residents, and other health care students.
- Industry representatives (or members of the general public) should not attend the MCC, in order to maintain patient confidentiality and ensure unbiased case review.
- Patients or their representatives should not attend the MCC, to ensure unbiased case review.

### **Roles & Responsibilities**

- **Individual physicians:**
  - Commit to attend the majority of MCC meetings and to send all new cancer cases from their practice as well as any other cancer cases (e.g., recurrent cancer) that would benefit from discussion by the MCC.
  - Responsible for contacting the MCC Coordinator and communicating the relevant patient information, including radiology and pathology, and the specific issue to be discussed by the multidisciplinary team, prior to each meeting.
  - Responsible for presenting the patient case at the MCC and maintaining patient confidentiality.
  - Responsible for discussing the treatment options as discussed at the MCC with the patient and making the treatment recommendations.
  - Responsible for entering the physician–patient discussion into the medical record.
- **Multidisciplinary Cancer Conference Chair/Facilitator (may or may not be a physician):**
  - Accountable to the head of the hospital cancer program.
  - May delegate/rotate the actual running of MCC and other responsibilities
  - Responsible for:

<ul style="list-style-type: none"> <li>◆ The actual running of the MCC.</li> <li>◆ Ensuring that all submitted cases that have been selected for presentation are discussed within the allotted time.</li> <li>◆ Encouraging participation of all MCC members.</li> <li>◆ Ensuring patient confidentiality is maintained by reminding participants of privacy issues and permitting only appropriate attendance.</li> <li>◆ Recording any minutes that pertain to treatment policies discussed at the MCC.</li> <li>◆ Responsible for the timely dictation of the MCC recommendations into the medical record for each patient discussed at the MCC.</li> </ul> <ul style="list-style-type: none"> <li>▪ A designate should be assigned in case the Chair is unavailable.</li> </ul> <ul style="list-style-type: none"> <li>● <b>Multidisciplinary Cancer Conference Coordinator (usually not a physician):</b> <ul style="list-style-type: none"> <li>▪ Responsible for the administrative management and individual meeting functioning. The following roles and responsibilities include those that can be specific to the Coordinator or that can be delegated to other core members or associated support staff:           <ul style="list-style-type: none"> <li>◆ Meeting—preliminary organization:               <ul style="list-style-type: none"> <li>* Book meeting, set up meeting room, and ensure availability/functioning of all necessary equipment.</li> <li>* Notify all core members, invite any guests, and post in-hospital meeting notice.</li> <li>* Ensure all relevant up-to-date patient information, particularly slides and all imaging (including related electronic imaging) entered in the computer prior to the meeting.</li> </ul> </li> <li>◆ Record attendance.</li> </ul> </li> <li>▪ A designate should be assigned in case the Coordinator is unavailable.</li> </ul> </li> </ul>
<p><b><i>Institutional Requirements</i></b></p> <ul style="list-style-type: none"> <li>● MCC Coordinator—an essential individual, the ‘glue’ that ensures the continuity of the MCC.</li> <li>● Dedicated meeting room with adequate facilities.</li> <li>● Projection equipment for displaying x-rays and pathology slides.</li> <li>● Secure, interactive computer systems with:</li> <li>● Scanning, storing, and computer-generated image display capabilities.</li> <li>● Videoconferencing equipment.</li> <li>● Teleconferencing equipment.</li> <li>● Information technology (IT) support.</li> </ul>
<p><b><i>Terms of Reference for the Multidisciplinary Cancer Conference</i></b></p> <p>Each participating institution should have in place a written protocol, annually reviewed, encompassing the following:</p> <ul style="list-style-type: none"> <li>● The MCC mandate specific to that institution.</li> <li>● The health care professional membership, including the core members and disciplines and their roles and responsibilities.</li> <li>● Meeting format, frequency, time length, and attendance.</li> <li>● Communication flow for the MCC minutes and reports.</li> <li>● How patient confidentiality will be maintained in the selection and review of patient cases and maintenance of patient case files</li> </ul>
<p><b><i>COMMENT</i></b></p> <p>The regional cancer networks, based on the Local Health Integration Networks (LHINs) or established referral patterns, should use the MCCs to facilitate consultation and appropriate referral, focussing on the concept of patient-centered care so that patients can be treated close to home when such treatment is available or have timely referral to a regional centre when appropriate. The realization of that objective will be made possible by the development of regional MCCs where physicians from community hospitals can attend MCCs at cancer centres or specialists from cancer centres can attend MCCs in community hospitals, facilitated through the use of videoconferencing.</p> <p>Different health care facilities will have a different constituent membership for their institution’s MCC and may discuss patient cases with varying levels of complexity. Consequently, some MCCs may meet more frequently than others, and some may be more site-specific than others (e.g., a melanoma or head and neck MCC).</p> <p>In addition, although not all components of an MCC, such as videoconferencing equipment or a</p>

patient database may be in place when the MCC is initiated, this fact should not be considered an impediment to establishing an MCC. As well, if an urgent case needs to be discussed in an MCC forum, a backup option such as an email discussion among the MCC members can be generated so that timely patient care and patient confidentiality will not be compromised.

### Methods

Practitioner and community feedback was obtained through a mailed survey of 206 individuals in Ontario, including 146 (71%) clinicians and other health care professionals (medical oncology – 19, radiation oncology – 19, surgery – 51, pathology – 19, medical imaging – 10, palliative and supportive – 11, and nursing – 17). In addition, the surveys were mailed to 60 (29%) health care clinician and non-clinician administrators (Chiefs/Heads of Staff/Surgery – 28, Hospital (CEO) – 18, Local Health Integration Network CEOs – 6, Regional Vice Presidents – 5, medical school administration – 2, and regional planning – 1).

The survey consisted of items evaluating the methods, results, and interpretive summary used to inform the draft standards and whether the draft standards should be approved. Written comments were invited. The practitioner feedback survey was mailed out on March 21, 2006. Follow-up reminders were sent at two weeks (postcard) and four weeks (complete package mailed again). The Expert Panel on Multidisciplinary Cancer Conference Standards reviewed the results of the survey.

### Results

Eighty-nine participants responded to the external review request (43.2% response rate) as of May 18, 2006, predominantly by mail but also by fax and email; approximately 65% were clinicians and other health care professionals, and 35% were clinician and non-clinician administrators. Of the 86 respondents (41.7%) who returned survey questionnaires, 77 (37.4%) indicated that the Standards report was relevant to their clinical practice.

Table 1 provides data on the responses of the 77 participants who indicated the report was relevant (89.5% of the 86 returned questionnaires). Seventy-nine percent of the 77 agreed or strongly agreed that there was a need for a standards document on this topic, and 80% agreed that appropriate methodologies were used to develop the document. As well, slightly over 80% agreed with the draft standards as stated, that they were clear and would provide benefits for patients. Eighty-eight percent of respondents would feel comfortable if patients received the care recommended in the standards document. Questions concerning the implementation of the draft standards (e.g., service reorganization, technical challenges, and/or peer response) produced more divergence in responses. This feedback will be extremely important in informing the post-review discussion of the standards and eventually, the implementation strategy. Finally, 66% of the 77 respondents for whom the report was relevant agreed that the draft standards should be approved and indicated they would likely or very likely apply them in their clinical or administrative decision making.

**Table 1. Participant responses to external feedback survey questions (n = 19).**

	Yes	Unsure	No
1. Are you responsible in some way for the care of patients diagnosed with cancer? This may include direct clinical care or the organization/management of services to provide care to these patients.	77 (89.5%)	0	9 (10.5%)
	<b>Strongly Agree/ Agree</b>	<b>Neither Agree nor Disagree</b>	<b>Strongly Disagree or Disagree</b>
	(% of Q#1 = YES, n = 77)*		
2. There is a need for a standards document on this topic.	61 (79.2%)	14 (18.2%)	2 (2.6%)
3. The evidence (literature search and environmental scan) is relevant and complete (e.g., no key	56 (72.8)	19 (24.7)	1 (1.3)

## MCC STANDARDS IN REVIEW

information sources or studies missed nor any included that should not have been).			
4. I agree with the methodology used to summarize the evidence.	66 (85.7)	8 (10.4)	2 (2.6)
5. The draft standards are in agreement with my understanding of the evidence.	62 (80.5)	11 (14.3)	3 (3.9)
6. The draft standards in this report are clear.	69 (89.6)	7 (9.1)	1 (1.3)
7. I agree with the draft standards as stated.	58 (75.4)	13 (16.9)	5 (6.5)
8. The draft standards are suitable for the Ontario context.	49 (63.7)	18 (23.4)	9 (11.7)
9. The draft standards are too rigid to apply in the Ontario context.	22 (28.6)	24 (31.2)	29 (37.7)
10. When applied, the draft standards will produce more benefits for patients than harms.	62 (80.5)	10 (13.0)	4 (5.2)
11. The draft standards report presents a series of options that can be implemented.	51 (66.3)	21 (27.3)	4 (5.2)
12. To apply the draft standards will require reorganization of services/care in my practice setting.	47 (61.0)	12 (15.6)	18 (23.4)
13. The standards will be associated with more appropriate utilization of health care resources.	51 (66.2)	22 (28.6)	4 (5.2)
14. The draft standards in this report are achievable.	46 (59.7)	22 (28.6)	9 (11.7)
15. The draft report presents standards that are likely to be supported by a majority of my colleagues.	40 (52.0)	27 (35.1)	9 (11.7)
16. The draft standards reflect a more desirable system for improving the quality of patient care than current practice.	59 (76.6)	17 (22.1)	1 (1.3)
17. I would feel comfortable if patients received the care recommended in these draft standards.	68 (88.3)	6 (7.8)	3 (3.9)
18. These draft standards should be formally approved.	51 (66.2)	19 (24.7)	7 (9.1)
	<b>Likely/Very Likely</b>	<b>Unsure</b>	<b>Not at All/Not Likely</b>
19. If these draft standards were to be approved and endorsed, how likely would you be to apply the recommendations to the clinical care or organizational and/or administrative decisions for which you are professionally responsible?	51 (66.3)	16 (20.8)	9 (11.7)

\* Where percentages total <100%—practitioner response(s) missing, n < 77.

### **Summary of Written Comments and Expert Panel Responses**

Forty-one respondents provided written comments as part of their completed questionnaires. Overall, the comments emphasized support for the idea of MCCs, and six respondents stated that MCCs or tumour boards were already in operation in their hospitals or regional centres.

Issues or concerns raised in the written comments dealt with perceived difficulties around either the implementation or the functioning of MCCs and included the following points:

- **Resource Constraints**

Several respondents cited resource barriers to implementing successful MCCs, such as a) participant time constraints, because of current responsibilities, on attending another meeting; b) not having enough specialists in some hospitals/regions to attend each of the meetings; c) having no Coordinator available for meeting preparation; d) a lack of information technology (i.e., videoconferencing) availability; and e) the need for one-hour twice-monthly meetings.

**Discussion and Changes:** MCCs have the potential to save time for health care providers as cases can be discussed at a pre-arranged time and place. A minimum meeting schedule of every two weeks was suggested in the document so that patient care would not be unduly delayed awaiting an MCC discussion. The hope is that the publication of this Standards document will encourage institutions to provide the personnel and resources needed for an MCC to function, such as coordinators and videoconferencing equipment. No changes to the Standards were deemed necessary.

- **Cases to Be Reviewed**

A few respondents had concerns with what cases are to be reviewed at the MCC meetings and understood the Standards to mean that all cases needed to be discussed at the MCC.

**Discussion and Changes:** In order to clarify that, although new cancer cases were to be forwarded to the MCC, not all cases were to be reviewed, the following key component was added to the Standards:

**MCC Cases**

- New cancer cases, inpatient and ambulatory, and the proposed treatment plan should be forwarded to the MCC Coordinator.
- Not all cases forwarded to the MCC Coordinator need to be discussed at the MCC.
- The individual physician and the MCC Chair can determine which cases are discussed in detail at the multidisciplinary forum.
- Other cases (e.g., recurrent or metastatic cancer) can be forwarded to the MCC Coordinator for discussion, at the discretion of the individual physician.

- **Financial Compensation**

Several respondents commented that there is a need for financial compensation to encourage MCC participation.

**Discussion and Changes:** In addition to the benefit to patients, the MCC can provide Continuing Professional Development (CPD) credits for participants and may qualify for Maintenance of Certification (MOC) credits in some circumstances. There is currently no mechanism through the Ontario Health Insurance Plan (OHIP), or otherwise, to specifically reimburse physicians for attending MCCs. No changes to the Standards were deemed necessary.

- **Community Hospitals**

Several respondents noted that the unique needs of community hospitals call attention to the need for more flexible standards.

**Discussion and Changes:** The second bullet of the *Team Members* component of the Standards has been reworded (underlined below) to reflect the unique nature of each hospital MCC and now reads as:

- A representative from medical oncology, radiation oncology, surgery/surgical oncology, pathology, diagnostic radiology, and nursing should be present to provide the complete range of expert opinion appropriate for the disease site and appropriate for the hospital.

## MCC STANDARDS IN REVIEW

Overall, many of the changes to the document after the external review have been to increase the flexibility available for structuring an MCC appropriate for the disease site and hospital setting.

- **Legal Concerns**

Several respondents discussed the proposal that MCC recommendations be entered in the patient record, and there was both support for and definite disagreement with such a practice.

**Discussion and Changes:** The individual physician is responsible for discussing the MCC treatment options and conclusions with the patient, making the ultimate treatment recommendations, and entering that discussion and the final treatment plan into the medical record. The *Roles & Responsibilities: Individual physicians or delegate* component has been updated to include:

- Responsible for entering the MCC recommendations, the physician-patient discussion regarding the MCC recommendations, and the patient's final decision about their treatment into the medical record.

- **Attendance**

One respondent felt that the presence of non-physicians at the MCC would limit medical discussions of patient cases.

**Discussion and Changes:** The primary function of the MCC is to ensure that all appropriate tests, treatment options, and recommendations are considered for the individual patient. The non-physicians listed make up an important part of the oncology team. No changes to the Standards were deemed necessary.

In addition to the above issues, the Panel addressed the following miscellaneous comments made by respondents:

- “[A]llied health professionals” should be changed to “medical staff and health professionals” to be better representative.  
**Response:** The term “allied” was removed from the text.
- The MCC primary function statement should include a statement (examples provided) acknowledging the need to meet the psychosocial needs of patients.  
**Response:** The Panel felt that this aspect of patient care was best addressed in multi-disciplinary clinics rather than an MCC.
- Non-English language publications should also be reviewed.  
**Response:** A statement was added to the *Exclusion Criteria* that resources were not available for translation services.
- Data on the compliance with the standards in community and teaching hospitals would be useful.  
**Response:** Cancer Care Ontario will be developing quality indicators to measure compliance with MCC standards.
- The diagnostic quality monitoring function of the MCC was not addressed.  
**Response:** MCCs are expected to keep track of the number of cases forwarded to the MCC and the number of cases discussed per disease site. The MCC Coordinator was given the added responsibility to “[t]rack minimum data requirements, such as how many cases were forwarded to and how many were discussed at the MCC by disease site.”
- MCC case presentations should also be done by non-clinicians such as nurses or social workers.  
**Response:** The Panel decided that individual physicians or their delegates would be ultimately responsible for presenting patient cases, as well as dictating the case into the medical record and discussing the MCC recommendations with the patient.

- Individual physician responsibilities should include providing their expert opinion on MCC cases.

**Response:** A bullet was added to the *Roles & Responsibilities: Individual physicians or delegate* component to state that the physician was “[r]esponsible for providing expert opinion from their area of expertise.”

### Report Approval Panel

The PEBC Report Approval Panel (RAP) reviewed the draft Standards document in an advisory capacity in March 2006. The RAP consists of two members, including an oncologist, with expertise in clinical and methodology issues. The following are summarized key RAP comments and the Expert Panel responses:

- Insufficient separation of MCCs from broader activities on local disease site groups.  
**Response:** The Expert Panel has more clearly delineated the primary and secondary functions of the MCC in order that they not overlap with the disease site group role.
- Very specific, prescriptive.  
**Response:** The Panel has made the document more flexible with regard to role, team members, and roles and responsibilities and adaptable to difference local circumstances.
- Document should reference substantial resource implications.  
**Response:** A statement has been added to the *Comments* concerning resource implications and the anticipated stepwise adoption of the MCC standards
- Surprised email distribution suggested.  
**Response:** A number of Panel members stated they had found email an effective tool when they needed a rapid response from MCC members. A statement that this type of discussion must protect patient confidentiality has been added to the *Comments*.
- Oncology nursing role not defined.  
**Response:** The term “oncology” has been removed from the phrase “oncology nursing” in the *Team Members* list.

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### Appendix 1. Expert Panel on Multidisciplinary Cancer Conference Standards, Cancer Care Ontario.

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