

Multidisciplinary cancer treatment – a guide to the MDT Conference

February 15, 2016

Content

Foreword - guide to the MDT Conference.....	3
Background	4
Introduction.....	4
Follow-up.....	4
1.1. Conference participants	5
1.2. Participation	5
1.3. Management	5
1.4. Tasks and interaction of MDT Conference participants	7
1.5. Personal development and training	7
2.1. Physical framework of the MDT Conference.....	8
2.2. Technology and equipment (availability and use).....	8
3.1. Conference frequency	9
3.2. Preparing for the MDT Conference	9
3.3. Organization and administration during the MDT Conference.....	10
3.4. Coordination after the MDT Conference.....	10
4.1. Organisation support.....	11
4.2. Data collection, analysis, and audit on outcomes	11
4.3. Overall monitoring and development	11
4.4. Education perspective	11
Next steps/the future.....	12
More information	12
Bibliography	13
MDT Conference Guideline Working Group:	17

Foreword - guide to the MDT Conference

In connection with the description of cancer packages under the auspices of the Danish Health Authority in Cancer Plan II in June 2005 and followed-up in October 2007, multidisciplinary team (MDT) conferences are recommended as an essential element in the preparation and implementation of the individual patient pathway. The final decision on treatment is often taken at the MDT Conference.

https://sundhedsstyrelsen.dk/da/sundhed/folkesygdomme/kraeft/national_plans

Conferences of this type have always been held in connection with cancer investigations and treatment. However, there is no guide in Denmark on how such a conference should be conducted, who should participate, how the presentation and reporting of the conference should be organized or how the conference decision should be conveyed to the patient.

There are several derived procedures for the MDT Conference, such as meeting structure and infrastructure, logistics and clinical decision-making, which require a national decision, consensus, and guidelines. It is also important to consider the training and role of junior doctors at the MDT Conference.

At the Danish Multidisciplinary Cancer Group (DMCG.dk) board of representatives meeting on 29 August 2014, there was a session with four presentations on the MDT Conference, and this resulted in a request for a national guideline. The group in charge of the session was invited to proceed with this work, chaired by Lene Lundvall. The group has been expanded to include a relevant number of participants to ensure broad professional and geographical representation.

The national UK guide "The Characteristics of an Effective Multidisciplinary Team (MDT)", 2010, National Cancer Action Team (NHS), UK was chosen by the group as a starting point for further adaptation and development to fit the Danish setting.

The aim of this work has been to develop a generic model for the MDT Conference and all derived procedures. It is the intention of the working group that the generic model can be adapted to local conditions and all specialties.

Danish Regions, The Danish Clinical Quality Development Program – National Clinical Registries (RKKP), DMCG.dk and the Danish Health Authority have requested that the guide should be strongly rooted in clinical practice, as well as support Danish law and existing cancer plans.

We thank the Danish Cancer Society for contributing to the literature search and RKKP for financially supporting the project.

On behalf of the working group

Lene Lundvall

Background

This document describes and elaborates on the characteristics of an effective MDT Conference as set out in Cancer Plan II and Memo on the Task Force for Cancer from the Danish Health Authority of 13 February 2008. The document is inspired by the UK National Cancer Action Teams (NHS) guideline for MDTs: "The Characteristics of an Effective Multi Disciplinary Team (MDT)" and prepared by a working group of Danish Multidisciplinary Cancer Groups (DMCG) to provide guidance on effective organization and conduct of MDT conferences. The composition of the working group is shown in Appendix 1.

Introduction

The MDT Conference has been an important part of Danish cancer treatment since Cancer Plan II (2005), which emphasizes the multidisciplinary team as a driving force for the cancer package processes.

The MDT Conference will bring together a group of participants with the necessary knowledge, expertise, and experience to ensure a high quality in diagnostics, treatment, and care. The goal of the MDT Conference is to treat the patient from a holistic perspective, including the patient's views, preferences and general life condition when deciding on treatment options.

An MDT Conference results in decisions that are communicated as recommendations. The recommendations are never better than the information available at the conference. As a rule, the recommendation of the conference decision should be followed and deviations should be argued for at least in the patient record, in accordance with section 4.3.1.

The final decision must be made between the patient and the relevant clinician.

The aim is to encourage the participation and involvement of junior doctors in the MDT Conference as a part of their specialist training.

Effective MDT work should result in:

- Diagnostics, treatment, and pathway are assessed by specialists with relevant knowledge, skills, and experience within the specific type of cancer
- Compliance with national and local clinical guidelines
- Safe transitions between specialties and departments, as well as between hospitals and regions
- Compliance with cancer package pathways and treatment guarantees
<http://sundhedsstyrelsen.dk/da/sygdom-og-behandling/kraeft>
- Consistency in investigation, diagnostics, treatment, and follow-up
- All patients having the opportunity to participate in relevant clinical trials
- Higher patient safety
- Targeted data collection for the benefit of the individual and for quality assurance and research purposes
- Strengthened cooperation between the specialists involved and increase their job satisfaction
- Professional development of MDT participants and observers, including junior doctors
- Optimized use of resources.

Follow-up

It is expected that DMCG.dk will provide a regular update of this guide.

1. The Team

1.1. Conference participants

- 1.1.1. All relevant medical specialties necessary to ensure optimal decision-making. Both permanent and ad hoc participants are represented at the MDT Conference. Participants must be sufficiently qualified in terms of expertise and specialization needed for the MDT Conference in question. Each MDT Conference must outline its need for relevant clinical competences.
- 1.1.2. The aim is to include several specialists from each clinical specialty.
- 1.1.3. The course coordination function should be represented at the MDT conferences to ensure continuity of patient care.
- 1.1.4. Qualified delegates are appointed in advance to cover scheduled/unplanned absences among permanent MDT participants. Scheduled absences should be notified to ensure substitute replacement.
- 1.1.5. Ad hoc participants include specialists from other relevant clinical specialties.
- 1.1.6. Observers are welcome at the conference but are not counted as participants and have no decision-making responsibility. Observers could be junior doctors in training.
- 1.1.4. The patient may be present to participate in the discussion of? his or her own case if this is considered appropriate and logistically possible.

1.2. Participation

- 1.2.1. Time is allocated in the work schedule for MDT participants (permanent and ad hoc) to take part in the MDT Conference.
- 1.2.2. Participation includes, for the specialists and coordinators, time for preparation and follow-up.
- 1.2.3. Permanent participants are present at the discussion of all patient cases where their contributions are needed.
- 1.2.4. Participation must be documented. In the case of partial participation, it should be noted which part of the conference was attended and which cases were discussed during the attendance of the participant in question.
- 1.2.5. Ad hoc participants are involved in discussion of relevant cases.
- 1.2.6. All participants attending the MDT Conference should be presented by name, title, and department.

1.3. Management

- 1.3.1. A senior person responsible for the overall MDT work (the senior MDT Responsible person) must be appointed, as well as a leader of the specific MDT Conference. The senior MDT responsible person and the leader of the specific MDT do not have to be the same person.

The MDT Conference Leader

1.3.2. The head of the specific MDT Conference is responsible for the conduct of this specific MDT Conference.

1.3.3. The MDT leader has competences in the following areas:

- Chairing of meetings
- Facilitation skills for achieving consensus in clinical decision-making
- Time management

1.3.4. The MDT Conference Leader's task is to:

- Prepare and/or approve the list of presentations of clinical cases and ensure that the MDT Conference is able to make decisions and act if decisions are not made
- Ensure that all cases are discussed and prioritized if necessary
- Ensure that all relevant MDT participants are included in the discussion
- Ensure that the discussion is focused and relevant
- Ensure good communication in a discussion-friendly environment
- Promote evidence-based and patient-centred decisions/recommendations
- Ensure that appropriateness of relevant clinical protocols is considered
- Ensure that the current discussion and decision/recommendation regarding the treatment plan is completed before a new case is discussed
- Ensure that relevant data (demographic and clinical data) are documented in the patient record
- Ensure that the decision is clearly summarized, documented in the patient record and that plans are made how to inform the patient within the decided time frame
- Ensure that it is clear who will take action after the meeting and that this decision is recorded.

The senior MDT Responsible person

1.3.5. Responsibility for the running of the MDT Conference must be placed unequivocally. The senior MDT Responsible has the overall responsibility for the execution of MDT conferences in general and beyond the specific conference.

He/she is responsible for:

- Management of and setting clear objectives for the conference work
- Ensuring that others in the organization understand the importance and role of the MDT Conference in the treatment of patients and why this is important in cancer treatment
- Negotiating the resources needed locally for the MDT Conference
- Reporting to the management system on conditions that may affect the safety of the MDT Conference, decisions, etc.
- Noting lack of attendance and contact the leader of the non-attendant if non-attendance affects the quality work/decisions/recommendations of the MDT Conference
- Initiating an evaluation of the MDT Conference efficiency and process at least once a year as referred to in 4.3.4.

1.4. Tasks and interaction of MDT Conference participants

1.4.1. All MDT Conference participants have and are aware of their clearly defined roles and responsibilities, which are registered as a part of their clinical function.

- The team has agreed on what is defined as acceptable behaviour including mutual respect and trust
- All opinions have the same weight - different opinions are appreciated
- Solutions to conflicts among participants
- Call for constructive discussions/debates
- Absence of a personal agenda
- Possibility to request and obtain further detailed information in case of unclear information.

1.4.2. MDT participants play a role in sharing learning and best clinical practice experiences with colleagues.

1.5. Personal development and training

1.5.1. MDT participants acknowledge the need for continued learning and each participant is supported to achieve the necessary knowledge and skills required to fulfil their roles and responsibilities at the MDT Conference. Support is available, if necessary, at the MDT Conference, within the organization and nationally, and team participants pursue the necessary personal professional development.

1.5.2. There are opportunities for networking to share learning and experiences with other MDT groups, both locally and nationally.

1.5.3. If necessary, training options should be available to support the individual roles at the MDT Conference in areas such as:

- Leadership
- Conference management
- Communication skills, including listening and communicating orally or in writing
- Time management
- Authority and personal clout
- Use of information technology (IT) equipment for e.g., video conferences
- Knowledge of anatomy, oncology, radiology, and pathology (if participants themselves are not experts within the field in question).

1.5.4. The MDT Conference has an inbuilt teaching and learning role both within (evaluation of patient cases that have previously been discussed at the conference) and outside the MDT team (students/fellows etc.)

2. Conference infrastructure

2.1. Physical framework of the MDT Conference

- 2.1.1. A permanent room must be assigned for the MDT Conference. The room should be appropriately (quietly) located as well as soundproof, if necessary, to ensure confidentiality of the MDT discussions.
- 2.1.2. The room should be of a physically sufficient size allowing all MDT participants to have a seat and possibly table space for computer or notes, etc. Moreover, participants should be able to see and hear each other as well as able to see all the data presented (e.g., diagnostic images), both at their own location and across other (hospitals/regions).

2.2. Technology and equipment (availability and use)

- 2.2.1. The location of the MDT Conference should have:
 - Access to equipment capable of projecting and displaying radiological images, including previous examinations
 - If necessary, equipment/facilities that can project and display pathological preparations (biopsies/specimens), including accessibility to older pathology descriptions
 - Connection to PAS (patient administrative systems)
 - Access to patient records / databases or forms where it is possible to document MDT decisions in real time
 - When needed, projection opportunities that allow MDT participants to view and evaluate MDT decisions while they are dictated/written
 - If necessary, facilities to view and talk to participants who are outside the MDT room (video conference). All information (radiological images, pathology descriptions) should be displayed and shared between participants.
- 2.2.2. There should be support/funding from all stakeholders to ensure the availability of the necessary technology and equipment (including video conferencing equipment) of good and functional quality, at least up to a minimum of network specifications, which consider the following aspects:
 - Data transfer standards
 - Picture and sound quality
 - Band width and speed for up-loading of images [should be high], speech time lag (i.e., discussions) [should be minimal]
 - Inter-hospital compatibility /across locations, regions etc.

These specifications must be kept up to date in relation to usability and future technological advances.
- 2.2.3. Relevant technical support for the organization of MDT conferences (during the conference) must be available if there are any problems with IT systems, video conferencing equipment or various connections to remote locations during the conference.

3. Conference organization and logistics

3.1. Conference frequency

- 3.1.1. MDT conferences are held regularly on fixed days and times (e.g., once a week) observing compliance with the time limits in cancer packages. For rare cancer diagnoses, the conference may be held ad hoc, provided that the conference is announced enabling the presence of relevant participants.
- 3.1.2. MDT conferences are held during normal working hours, and work is organized and coordinated with the involved departments, enabling the presence of all participants at the conference.

3.2. Preparing for the MDT Conference

- 3.2.1. Routines must be in place to ensure that all relevant patients diagnosed with cancer are assessed at an MDT Conference (see Danish Health Authority's guidelines for cancer package pathways as well as national guidelines).
- 3.2.2. The deadline for referral of patients to an MDT Conference must be set and should be respected.
- 3.2.3. A structured patient list is distributed beforehand to conference participants.
- 3.2.4. The list is organised logically in relation to the participants' involvement. When attendance from individual specialties is no longer necessary, these participants may leave the conference.
- 3.2.5. Sufficient time must be allocated to discuss complex cases. This may limit the number of patients who can be discussed at the MDT Conference. If the number of patients is exceeded, routines must be established to inform the referring departments about this.
- 3.2.6. The form and content of the presentations at the conference is decided locally (unless national guidelines are available). A presentation at the conference must contain relevant clinical information, including anamnesis, psychosocial conditions, comorbidity status, general condition, performance status, studies conducted and planned, patient preferences and palliation needs. If available, TNM classifications must be provided. In case of information specific to the specialty, this must be determined.
- 3.2.7. The form and content of the reporting from the conference is decided locally. However, a report must include at least the basis of the recommendations, treatment plan, indication of who is carrying out the plan and informing the patient.
- 3.2.8. It is expected that the conference participants (see section 1.1) are professionally competent and know national and international guidelines within their respective specialties. It is also expected that the participants will meet well prepared for the MDT Conference.

3.3. Organization and administration during the MDT Conference

- 3.3.1. It must be clear who referred the patient and which issue to be discussed at the conference.
- 3.3.2. A locally decided presentation in accordance with 3.2.6. is made.
- 3.3.3. The conference must have the necessary online access to relevant information (cf. 2.2).
- 3.3.4. A conference note must be made for each patient. This note must include rationale for recommending treatment, information on uncertainties and disagreements between conference parties.
- 3.3.5. If possible during the meeting, data can be entered directly into relevant clinical databases.
- 3.3.6. Coordination and running of the conference is efficient.
- 3.3.7. Conference decisions must be available as soon as possible after the conference.

3.4. Coordination after the MDT Conference

- 3.4.1. Routines have been established to ensure:
 - That the patient is informed of the conference decision and his/her further pathway by a health professional who can assess and meet the patient's need for information
 - That the framework for feedback is agreed with the patient prior to the conference regarding time, place, and department/person
 - That the patient contact in connection with follow-up on the decisions from the MDT Conference is planned as a part of the work schedule
 - That if no decision can be taken due to incomplete information or where new information appears at a later stage, the patient must be discussed at a new MDT Conference
 - That a decision can be postponed if there is a need to involve other experts
 - That the MDT Conference is informed if major changes to recommendations on treatment or care are made
 - That patients are referred to another MDT Conference (another department or other hospital) if necessary.

4. Quality assurance of the MDT Conference

4.1. Organisation support

- 4.1.1. There must be sufficient resources in terms of people, time, equipment, and facilities to conduct effective MDT conferences (in accordance with the current document).
- 4.1.2. There must be sufficient resources to follow up on conference decisions.

4.2. Data collection, analysis, and audit on outcomes

- 4.2.1. Collection and entry of data into clinical databases is conducted under the auspices of the MDT Conference. The MDT Conference must record its own activity.
- 4.2.2. The MDT Conference participates in internal and external audits on the MDT process, the outcome of the conference and the review of audit data (e.g., whether the treatment decision is in line with the best specialist standard and considering whether there is a basis for conducting a study/research project) to see if action needs to be taken to change practices, if indicated or necessary.
- 4.2.3. Issues important to the MDT Conference should be included in patient questionnaires to benefit from patient feedback and implement improvements if relevant.

4.3. Overall monitoring and development

- 4.3.1. The purpose and expected outcome of the MDT Conference is defined locally. There must be management support of the conference. The decision of the multidisciplinary conference cannot be overturned by a unidisciplinary conference decision without informing the MDT Conference of the background for this. A reversal of the conference decision must be argued for in the patient record and should result in the patient being discussed at a new MDT Conference.
- 4.3.2. MDT policies, guides and protocols are updated as guidelines are revised.
- 4.3.3. The MDT Conference should at least once a year consider whether there are differences in the treatment options available to patients in different parts of the country. This is to ensure that all patients regardless of geographical residence are entitled to the same treatment options.
- 4.3.4. The MDT Responsible person ensures that the efficiency and process of the MDT Conference is evaluated at least once a year. When possible, similar MDT conferences can be benchmarked by creating cancer peer review processes and/or using other national tools. The MDT Conference itself or the employer (the regions) will take the results into consideration.

4.4. Education perspective

- 4.4.1. It is important to consider the training and role of junior doctors at the MDT Conference. As a part of their training, junior doctors should participate in the MDT Conference and contribute actively with e.g., presentation of cases. This is also to ensure continuous availability of the necessary expertise.

Next steps/the future

The characteristics described in this document for an effective MDT Conference should be seen within the framework of the Danish Health Authority's Cancer Plan II and III. For further optimization, the following is recommended:

- Establishment of an internal and external audit system
- Pilot projects should be conducted to show ways for the MDT Conference to carry out 'self-assessment and feedback' in areas less suited for peer review, such as teamwork and leadership
- Identification of development potentials and support functions for the MDT Conference
- Consider how web-based training could support MDT work
- Development of a catalogue of ideas to share well-functioning local practices in connection with the different characteristics of the efficient MDT Conference
- On-line access to national clinical guidelines for decision support
- Establishment of online access to clinical databases for direct data entry
- Consider setting up national MDT conferences for second opinion evaluations
- Incorporation of MDT modules when developing new patient administrative systems.

More information

For the results of the survey on which the UK guideline is based, please see [the www.ncin.org.uk/mdt](http://www.ncin.org.uk/mdt)

Bibliography

- (1) Hong NJ, Wright FC, Gagliardi AR, Paszat LF. Examining the potential relationship between multidisciplinary cancer care and patient survival: an international literature review. *J Surg Oncol* 2010 Aug 1;102(2):125-34.
- (2) Lamb BW, Jalil RT, Sevdalis N, Vincent C, Green JS. Strategies to improve the efficiency and utility of multidisciplinary team meetings in urology cancer care: a survey study. *BMC Health Serv Res* 2014;14:377.
- (3) Prades J, Borrás JM. Shifting sands: adapting the multidisciplinary team model to technologically and organizational innovations in cancer care. *Future Oncol* 2014 Oct;10(13):1995-8.
- (4) Wille-Jorgensen P, Sparre P, Glenthoj A, Holck S, Norgaard PL, Harling H, et al. Result of the implementation of multidisciplinary teams in rectal cancer. *Colorectal Dis* 2013 Apr;15(4):410-3.
- (5) Danish medicines agency. Cancer Plan II - The Danish Health and Medicines Authority's recommendations for improvements in cancer efforts. Copenhagen: Danish Health and Medicines Authority; 2005.
- (6) Task force for cancer. Emergency action and clear message: General framework for the introduction of package pathways for cancer patients. Copenhagen: Danish Health and Medicines Authority; 2008.
- (7) Lehmann Knudsen J, Ellegaard Christensen M, Hansen B. Regulation of quality in the Danish healthcare system. Copenhagen: New Nordic Publisher; 2008.
- (8) Danish medicines agency. Strengthened action in the field of cancer - a health professional paper. Copenhagen: Danish Health and Medicines Authority; 2010.
- (9) DMCG.dk. Cancer surgery - more than a craft. Presentation of the results of a survey on the status of cancer surgery in 2012. Copenhagen, Denmark; 2014.
- (10) Boxer MM, Vinod SK, Shafiq J, Duggan KJ. Do multidisciplinary team meetings make a difference in the management of lung cancer? *Cancer* 2011 Nov 15;117(22):5112-20.
- (11) National Cancer Action Team. The Characteristics of an Effective Multidisciplinary Team(MDT). England: National Health Service (NHS); 2010.
- (12) Taylor C, Munro AJ, Glynne-Jones R, Griffith C, Trevatt P, Richards M, et al. Multidisciplinary team working in cancer: what is the evidence? *BMJ* 2010;340:c951.
- (13) Stae of Victoria DoH. Multidisciplinary cancer care - Literature review. Australia: Department of Health - State Government Victoria; 2012.
- (14) Brannstrom F, Bjerregaard JK, Winbladh A, Nilbert M, Revhaug A, Wagenius G, et al. Multidisciplinary team conferences promote treatment according to guidelines in rectal cancer. *Acta Oncol* 2015 Apr;54(4):447-53.

- (15) Fleissig A, Jenkins V, Catt S, Fallowfield L. Multidisciplinary teams in cancer care: are they effective in the UK? *Lancet Oncol* 2006 Nov;7(11):935-43.
- (16) Patkar V, Acosta D, Davidson T, Jones A, Fox J, Keshtgar M. Cancer multidisciplinary team meetings: evidence, challenges, and the role of clinical decision support technology. *Int J Breast Cancer* 2011;2011:831605.
- (17) Croke JM, El-Sayed S. Multidisciplinary management of cancer patients: chasing a shadow or real value? An overview of the literature. *Curr Oncol* 2012 Aug;19(4):e232-e238.
- (18) Lamb BW, Sevdalis N, Benn J, Vincent C, Green JS. Multidisciplinary cancer team meeting structure and treatment decisions: a prospective correlational study. *Ann Surg Oncol* 2013 Mar;20(3):715-22.
- (19) van HJ, de ML, Otter R, de VJ, Siesling S. Quality improvement by implementing an integrated oncological care pathway for breast cancer patients. *Breast* 2014 Feb 25.
- (20) MacDermid E, Hooton G, MacDonald M, McKay G, Grose D, Mohammed N, et al. Improving patient survival with the colorectal cancer multi-disciplinary team. *Colorectal Dis* 2009 Mar;11(3):291-5.
- (21) Brown G. Specialist multidisciplinary team working in the treatment of cancer. *BMJ* 2012;344:e2780.
- (22) Coory M, Gkolia P, Yang IA, Bowman RV, Fong KM. Systematic review of multidisciplinary teams in the management of lung cancer. *Lung Cancer* 2008 Apr;60(1):14-21.
- (23) Abdulrahman GO, Jr. The effect of multidisciplinary team care on cancer management. *Pan Afr Med J* 2011;9:20.
- (24) Kane B, Luz S. "Do no harm": fortifying MDT collaboration in changing technological times. *Int J Med Inform* 2013 Jul;82(7):613-25.
- (25) Ruhstaller T, Roe H, Thurlimann B, Nicoll JJ. The multidisciplinary meeting: An indispensable aid to communication between different specialties. *Eur J Cancer* 2006 Oct;42(15):2459-62.
- (26) Kee F, Owen T, Leathem R. Decision making in a multidisciplinary cancer team: does team discussion result in better quality decisions? *Med Decis Making* 2004 Nov;24(6):602-13.
- (27) Jalil R, Ahmed M, Green JS, Sevdalis N. Factors that can make an impact on decision-making and decision implementation in cancer multidisciplinary teams: an interview study of the provider perspective. *Int J Surg* 2013;11(5):389-94.
- (28) Raine R, Wallace I, Nic a' BC, Xanthopoulou P, Lanceley A, Clarke A, et al. Improving the effectiveness of multidisciplinary team meetings for patients with chronic diseases: a prospective observational study. Southampton (UK): NIHR Journals Library; 2014 Oct Health Services and Delivery Research 2014 Jan 1.
- (29) Stephens MR, Lewis WG, Brewster AE, Lord I, Blackshaw GR, Hodzovic I, et al. Multidisciplinary team management is associated with improved outcomes after surgery for esophageal cancer. *Dis Esophagus* 2006;19(3):164-71.

- (30) Birchall M, Bailey D, King P. Effect of process standards on survival of patients with head and neck cancer in the south and west of England. *Br J Cancer* 2004 Oct 18;91(8):1477-81.
- (31) Kesson EM, Allardice GM, George WD, Burns HJ, Morrison DS. Effects of multidisciplinary team working on breast cancer survival: retrospective, comparative, interventional cohort study of 13,722 women. *BMJ* 2012;344:e2718.
- (32) Ruiz-Casado A, Ortega MJ, Soria A, Cebolla H. Clinical audit of multidisciplinary care at a medium-sized hospital in Spain. *World J Surg Oncol* 2014;12:53.
- (33) Lamb BW, Sevdalis N, Arora S, Pinto A, Vincent C, Green JS. Teamwork and team decision-making at multidisciplinary cancer conferences: barriers, facilitators, and opportunities for improvement. *World J Surg* 2011 Sep;35(9):1970-6.
- (34) Taylor C, Shewbridge A, Harris J, Green JS. Benefits of multidisciplinary teamwork in the management of breast cancer. *Breast Cancer (Dove Med Press)* 2013;5:79-85.
- (35) Taylor C, Ramirez AJ. Multidisciplinary team members' views about MDT working: Results from a survey commissioned by the National Cancer Action Team. National Cancer Action Team MDT Development Programme; 2009.
- (36) Sharma A, Sharp DM, Walker LG, Monson JR. Colorectal MDTs: the team's perspective. *Colorectal Dis* 2008 Jan;10(1):63-8.
- (37) Lanceley A, Savage J, Menon U, Jacobs I. Influences on multidisciplinary team decision-making. *Int J Gynecol Cancer* 2008 Mar;18(2):215-22.
- (38) Chinai N, Bintcliffe F, Armstrong EM, Teape J, Jones BM, Hosie KB. Does every patient need to be discussed at a multidisciplinary team meeting? *Clin Radiol* 2013 Aug;68(8):780-4.
- (39) Simcock R, Heaford A. Costs of multidisciplinary teams in cancer are small in relation to benefits. *BMJ* 2012;344:e3700.
- (40) Westin T, Stalfors J. Tumour boards/multidisciplinary head and neck cancer meetings: are they of value to patients, treating staff or a political additional drain on healthcare resources? *Curr Opin Otolaryngol Head Neck Surg* 2008 Apr;16(2):103-7.
- (41) Ke KM, Blazeby JM, Strong S, Carroll FE, Ness AR, Hollingworth W. Are multidisciplinary teams in secondary care cost-effective? A systematic review of the literature. *Cost Eff Resour Alloc* 2013;11(1):7.
- (42) Shah S, Arora S, Atkin G, Glynne-Jones R, Mathur P, Darzi A, et al. Decision-making in Colorectal Cancer Tumor Board meetings: results of a prospective observational assessment. *Surg Endosc* 2014 Oct;28(10):2783-8.
- (43) Taylor C, Atkins L, Richardson A, Tarrant R, Ramirez AJ. Measuring the quality of MDT working: an observational approach. *BMC Cancer* 2012;12:202.
- (44) Tattersall MH. Multidisciplinary team meetings: where is the value? *Lancet Oncol* 2006 Nov;7(11):886-8.

- (45) Wright FC, Lookhong N, Urbach D, Davis D, McLeod RS, Gagliardi AR. Multidisciplinary cancer conferences: identifying opportunities to promote implementation. *Ann Surg Oncol* 2009 Oct;16(10):2731-7.
- (46) Lamb BW, Brown KF, Nagpal K, Vincent C, Green JS, Sevdalis N. Quality of care management decisions by multidisciplinary cancer teams: a systematic review. *Ann Surg Oncol* 2011 Aug;18(8):2116-25.
- (47) Ryan J, Faragher I. Not all patients need to be discussed in a colorectal cancer MDT meeting. *Colorectal Dis* 2014 Feb 7.
- (48) Taylor C, Finnegan-John J, Green JS. "No decision about me without me" in the context of cancer multidisciplinary team meetings: a qualitative interview study. *BMC Health Serv Res* 2014;14:488.
- (49) Krüger B: Meeting management. Børsens forlag.
- (50) Bale C, Fink A, Hildebrandt S, Petersen G. Atmosphere at meetings – ideas for more energy, interaction, and renewal. Danish Industry Working Environment Councils.

Appendix 1

MDT Conference Guideline Working Group:

Lene Lundvall, Consultant, Clinic Manager, Gynecological Clinic, Rigshospitalet (Chairman)

Jens Hillingsø, Consultant, Clinic Manager, Surgical Gastroenterology and Transplantation Clinic, Rigshospitalet.

Lone Nørgaard Petersen, Consultant, Oncology Clinic, Rigshospitalet

Hanne Nellemann, Consultant, Department of Radiology, Aarhus University Hospital

Jon Thor Asmussen, Consultant, Oncoradiology, Radiological Department, Odense University Hospital

Søren Høyer, Consultant, Department of Pathology, Aarhus University Hospital

Rikke Hjarnø Hagemann-Madsen, Consultant, Clinical Pathology, Vejle Hospital

Henrik Lajer, Consultant, Gynecological Clinic, Rigshospitalet

Torben Rasmussen, Consultant, Department of Respiratory Diseases and Allergy, Aarhus University Hospital

Michael Borre, Professor, Consultant, Department of Urology, Aarhus University Hospital, Chairman of DMCG

Pernille Dehn (secretary)