NATIONAL BREAST
AND OVARIAN
CANCER CENTRE

MULTIDISCIPLINARY CANCER CARE IN AUSTRALIA: A NATIONAL AUDIT 2006

PREPARED BY NATIONAL BREAST AND OVARIAN CANCER CENTRE

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Multidisciplinary cancer care in Australia: a national audit 2006

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CONTENTS

Executive summary 5
Introduction 9
Methodology 12
Results – overview 16
Results – detail 24
Discussion 81
Conclusion and recommendations 89
Appendix A Steering committee members 91
Appendix B NBOCC survey tool 92
Appendix C Cancer Institute NSW survey tool 101
Appendix D Department of Human Services survey tool 115
Appendix E NBOCC sample: discipline of interviewees 118
Appendix F NBOCC sample: routine attendance 120
Appendix G Core and non-core team membership 121
Appendix H NSW sample: routine attendance 123
Appendix I Victorian sample: routine attendance 124
References 126

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EXECUTIVE SUMMARY

INTRODUCTION

Multidisciplinary care (MDC) is recognised as best practice in treatment planning and care for patients with cancer.[1–4] National Breast Cancer Centre (now National Breast and Ovarian Cancer Centre, NBOCC[i]) developed the Principles of Multidisciplinary Care[5] to provide a flexible framework for implementation of MDC in Australia. The Principles emphasise the need for:

- a team approach involving core disciplines integral to the provision of good care, including general practice, with input from other specialities as required
- communication among team members regarding treatment planning
- access to the full therapeutic range for all patients, regardless of geographical remoteness or size of institution
- provision of care in accordance with nationally agreed standards
- involvement of patients in decisions about their care.

New Medicare Benefits Schedule (MBS) item numbers to support attendance by specialists at multidisciplinary treatment (MDT) planning meetings were introduced on 1 November 2006. During 2006, NBOCC conducted a national audit to investigate the implementation of MDC across five cancer types: breast, colorectal, gynaecological, lung and prostate. The aims of the national audit were to:

- investigate the implementation of MDC across a range of cancer types and service delivery settings
- provide information about the level of MDC before the introduction of the new MBS items against which any impact of the introduction can be measured
- identify areas where MDC needs to be further developed and supported.

METHODOLOGY

A multidisciplinary steering committee was established at the outset of the audit to oversee and provide expert advice on the methodology and final report.

A sampling plan was developed to select a representative sample of hospitals that would give a national picture of MDC activity across Australia. Hospitals were stratified by state, location (metropolitan or regional) and type (public or private).

Collaboration with state-based cancer organisations in New South Wales (NSW) and Victoria led to different methodological approaches in these two states. This resulted in three samples (a NSW sample, a Victorian sample and a sample of the remaining states and territories

[i] In February 2008 the National Breast Cancer Centre incorporating the ovarian cancer program (NBCC) became National Breast and Ovarian Cancer Centre (NBOCC).

coordinated by NBOCC, referred to as the 'NBOCC sample' in this report), which were analysed separately.

A survey tool was developed, and representatives from hospitals completed the survey via telephone, online or by fax. All data were entered and analysed in Microsoft Excel and SPSS for Windows. Cancer type was used as the main variable and further bivariate analyses were undertaken using hospital location and hospital type. Following analysis of the results, recommendations to improve the uptake and implementation of MDC in Australia were developed.

KEY RESULTS

Despite methodological differences between the three samples (NSW sample, Victorian sample and NBOCC sample), the responses showed similarities, suggesting that regardless of methodological approach, jurisdiction or health service, there are areas of congruence across Australia in the implementation of MDC for cancer treatment planning.

- Randomly sampled hospitals were invited to participate in the audit. Surveys providing information on MDC meetings were received from 123 hospitals in the NBOCC sample (520 surveys), 17 hospitals in NSW (49 surveys) and 15 hospitals in Victoria (42 surveys). Each survey provided information on one MDC meeting in one of the five cancer types.
- 30% to 34% of respondents reported an MDC team for at least one of the five cancer types in the audit. Irrespective of cancer type or hospital setting, between 60% and 70% of hospitals indicated they did not have multidisciplinary cancer teams in any of the five cancer types. More respondents from metropolitan hospitals reported an identified team than those from regional hospitals.
- Almost all MDC meetings held did not have the minimum core team members (core members are cancer specific) regularly attending MDT planning meetings.
- Fewer than half of all meetings were held weekly or fortnightly. Most meetings were held face to face, but between 10% and 30% used teleconferencing (mostly in regional areas).
- 77% to 85% of respondents reported that patients were informed that their case would be discussed by an MDT – however, formal consent was not always obtained in these cases, and where it was obtained, in most cases verbal consent was sought.
- A treatment plan was not recorded in the patient notes for up to a quarter of cancer patients whose cases were discussed by MDC teams.
- Specialists were most frequently identified as the health professionals responsible for communicating the outcome of the MDT meeting to the patient.
- 33% to 78% of hospitals had links to palliative care, but most had no links to some key services. For example, links to psychology and psychiatry were not established in more than two-third of the NBOCC and Victorian samples (limited results were available in NSW). In addition, links to specific services (where relevant), such as stomal therapy, erectile dysfunction services, genetic counselling, lymphoedema services and plastic surgery, were not established in most meetings.
- Up to one third of meetings did not communicate treatment plans to GPs.
- There appears to be very wide variability in the approach to encouraging patient input

into treatment plans.

- Many teams did not collect data systematically. Of those that did collect data, few had an organised system for review.
- The most commonly reported barriers to implementing MDC were time (lack of time, coordination of time), staffing resources, a small case load and funding.

RECOMMENDATIONS

Based on the results of the audit, recommendations to improve the uptake and implementation of MDC are presented below.

STRATEGIC AND NATIONAL LEVELS

1. **Resourcing:** The adequate allocation of staff and time in order to implement MDC should be promoted in national and state cancer plans and frameworks as important factors to consider in workforce planning.
2. **Networks:** National, state and regional networks should be established and promoted for the exchange of knowledge and expertise between centres with larger and smaller case loads to support the implementation of MDC. A comprehensive strategy to support multidisciplinary care for cancer treatment planning in regional and country areas, including resources to support increased use of telemedicine, is required.
3. **Incentives:** Services and governments should determine appropriate incentives, such as funding, to specifically implement multidisciplinary cancer care.
4. **Education and promotion:** Further national education and promotion strategies regarding MDC should be developed. To target health services, education and promotion strategies at national and state levels should emphasise NBOCC's Principles of Multidisciplinary Care[5], and specifically highlight the importance of:
    - core membership of the multidisciplinary team (cancer specific)
    - resource and workforce planning
    - links to the full therapeutic range of services
    - processes for MDT data collection and review
    - communication with GPs and continuity of care
    - patient consent
    - patient involvement in treatment planning.
5. **Follow-up study:** A further investigation of MDC after the introduction of the MBS items should be undertaken to compare uptake with the current audit findings.

HEALTH SERVICES LEVEL

6. **Core team:** Core membership of the cancer-specific teams should be established and known. Although it may be difficult to ensure attendance by certain disciplines owing to workforce or resource impediments, time to attend MDC meetings should be factored into workforce planning. To increase full core team attendance, scheduling of meetings should take into account the timing of visiting specialists. Teleconferencing and videoconferencing facilities should be used to ensure that all core disciplines are represented at meetings, for example linking larger treating centres and clinicians located off-site.

7. **Regular meetings:** The importance of having regular, scheduled meetings should be promoted. NBOCC's *Multidisciplinary Meetings for Cancer Care: A Guide for Health Service Providers*[6] provides practical tools and guidance on setting up regular MDC meetings.
8. **Links to the full range of services:** Health services need to review workforce availability and implement specific strategies to improve linkages with non-core specialities. All cancer services should ensure adequate links to the full range of general and cancer-specific services for all cancer patients.
9. **Data collection:** Health services should allocate resources to implementing data collection and reviewing systems to facilitate quality improvement and benchmarking.
10. **Professional development:** Health services should support and acknowledge the importance of training for cancer health professionals such as communication skills training to improve interactions with patients and within teams.

MULTIDISCIPLINARY TEAM LEVEL

11. **Patient consent:** Multidisciplinary teams (in conjunction with health services) should implement processes to ensure that all cancer patients are informed when their case is to be discussed by an MDT. All teams should aim to obtain informed patient consent to discuss cases at team meetings. All teams should aim to provide patients with written information about the members of their team, what and how information is shared between team members, and the treatment planning process.
12. **Communication with GPs and continuity of care:** Teams need to implement systems to ensure that communication with GPs on treatment plans is timely and adequate, given that coordination of care between hospital and community sectors is essential for good patient care. GPs are ideally placed to assist in providing continuity of care.
13. **Recording of treatment plans:** Multidisciplinary teams should develop processes for ensuring that the outcomes of MDT planning meetings are routinely recorded in patients' notes.
14. **Involvement of the patient in treatment planning:** The treating clinician should discuss the recommendations of the MDT planning meeting with the patient and use effective communication techniques to ensure that patients understand their options and have as much input into their treatment plan as they wish. MDC teams should implement processes to ensure that there is an agreed approach to dealing with and recording changes to the treatment plan following discussion with the patient.

INTRODUCTION

Multidisciplinary care (MDC) is recognised as best practice in treatment planning and care for patients with cancer both in Australia and internationally. In Australia, the importance of a multidisciplinary approach to cancer care is promoted through inclusion in national[7] and state or territory[1-4] cancer plans and cancer treatment guidelines.[8]

In acknowledgment of the importance of a multidisciplinary approach to cancer care, two new Medicare Benefits Schedule (MBS) item numbers to support attendance by specialists at multidisciplinary treatment (MDT) planning meetings were introduced on 1 November 2006, one each for clinicians participating in and one for clinicians leading MDT planning meetings.

Despite recognition of the importance of a team approach to the management of patients with cancer, limited data are available about the extent to which MDC has been implemented in Australia. In 2000, the National Breast Cancer Centre (now National Breast and Ovarian Cancer Centre, NBOCC[ii]) conducted the *National Profile Study of Multidisciplinary Care* to assess the organisation of services for women with breast cancer across Australia in relation to the Principles of Multidisciplinary Care,[5] and surveyed clinicians' views about MDC at 60 hospitals across Australia with high, medium and low breast cancer caseloads. Despite support for the concept of MDC by senior clinicians, many opportunities for improvement in uptake were highlighted. Most clinicians surveyed considered the key components of the Principles of Multidisciplinary Care to be either essential or preferable for the provision of MDC.

Irrespective of caseload, most hospitals had implemented at least some aspects of MDC, although provision of MDC services was generally lower in low-caseload hospitals. A disparity was seen in attitudes towards implementation of MDC. While 95% of respondents agreed that it is essential for clinicians to communicate about the care of women with breast cancer, 30% of high-caseload hospitals did not have regular MDT planning meetings, and even fewer medium- and low-caseload hospitals had meetings.

All respondents agreed that it is either essential or preferable that women with breast cancer have access to all relevant treatment and support services. However, 27% had no protocols for the management of women with breast cancer, 12% did not provide 'core' supportive care services, and 15% had no established referral links for reconstructive surgery or psychiatric care.

A report published in 2006 by the Clinical Oncological Society of Australia (COSA)[9] provided a snapshot of regional and rural cancer treatment services across Australia. Although the focus of the report was the provision of chemotherapy services, access to MDC was also reported. Of the 157 hospitals surveyed, 43% held 'multidisciplinary clinics'; as rurality increased, the number of hospitals with multidisciplinary clinics decreased. It is not clear from the report whether the term 'clinic' refers specifically to treatment planning meetings or a broader definition encompassing a

[ii] In February 2008 the National Breast Cancer Centre incorporating the ovarian cancer program (NBCC) became National Breast and Ovarian Cancer Centre (NBOCC).

range of approaches to MDC. Multidisciplinary clinics were more common in regional and rural areas of NSW (56%) and Victoria (50%) and rarest in SA (9%) and WA (5%). They were most likely to be found in principal referring hospitals (93%), private hospitals (71%) and large rural hospitals (66%). Medium and small acute-treatment hospitals were the least likely (10%) to have multidisciplinary clinics, and remote hospitals had none. Multidisciplinary clinics were reported mostly for breast, head and neck, gynaecological, prostate and gastrointestinal cancers.

MULTIDISCIPLINARY CANCER CARE IN AUSTRALIA: A NATIONAL AUDIT

In 2006, NBOCC initiated a project to determine the extent to which MDC is implemented across Australia. The aims of the audit were to:

- investigate the implementation of MDC across a range of cancer types and service delivery settings
- provide information about the level of MDC before the introduction of the new MBS items against which any impact of the introduction can be measured
- identify areas where MDC needs to be further developed and supported.

The five cancer types selected for inclusion in the audit – breast, gynaecological, lung, prostate and colorectal – were chosen on the basis of incidence and requirement for input from a range of disciplines.

BACKGROUND

NBOCC defines MDC as 'an integrated team approach to health care in which medical and allied health care professionals consider all relevant treatment options and develop collaboratively an individual treatment plan for each patient'.

NBOCC developed the Principles of Multidisciplinary Care[5] to provide a flexible framework for implementation. The Principles emphasise the need for:

- a team approach involving core disciplines integral to the provision of good care, including general practice, with input from other specialities as required
- communication among team members regarding treatment planning
- access to the full therapeutic range for all patients, regardless of geographical remoteness or size of institution
- provision of care in accordance with nationally agreed standards
- involvement of patients in decisions about their care.

NBOCC has taken a lead role in developing, evaluating and promoting the uptake of MDC in Australia. A brief update of initiatives to date is summarised below.

MULTIDISCIPLINARY CARE DEMONSTRATION PROJECT

During 2000 to 2003, NBCC carried out the National Multidisciplinary Care Demonstration Project,[10] supported by the National Profile Study of Multidisciplinary Care and the Observational Study of Multidisciplinary Care.

The Demonstration Project investigated the impact, cost and acceptability of implementing MDC for women with breast cancer in three multi-facility sites. Each site implemented locally relevant strategies based on the Principles of Multidisciplinary Care.[5]

The Profile Study, conducted in 2000, described the organisation of services for women with breast cancer across Australia in relation to the Principles of Multidisciplinary Care[5] and surveyed clinicians' views about MDC.

The Observational Study explored current 'best practice' in the conduct of multidisciplinary case conference meetings to discuss the treatment of breast cancer in Australia. Four models of case conferences perceived to be successful were observed and then described in terms of commonalities and differences.

A follow-up study, the Sustainability of Multidisciplinary Cancer Care Study,[11] was conducted in 2004, 19 months after completion of data collection for the Demonstration Project. It indicated that with adequate resources, the strategies implemented in the Demonstration Project were sustainable, and a flow-on effect to the treatment of other cancers was achieved.

A GUIDE FOR MULTIDISCIPLINARY MEETINGS FOR CANCER CARE

In 2005, NBCC published a guide for health service providers on how to implement multidisciplinary meetings for cancer treatment planning, based on findings from the Demonstration Project, Observational Study and Sustainability Study. The meeting guide was promoted through a national series of forums (see next paragraph).

'MAKING MULTIDISCIPLINARY CARE A REALITY' FORUM SERIES

In 2005, NBCC conducted a national series of forums to promote the uptake of multidisciplinary cancer care. The forums were designed to promote multidisciplinary teams for treatment of all cancers and provided practical advice for both new and existing teams. Health professionals and health service administrators from urban and rural hospitals and from public and private hospitals and state and territory government representatives attended. A total of 14 forums were held across Australia, with over 900 attendants.

INFORMATION ABOUT MEDICARE BENEFITS SCHEDULE ITEMS

On 1 November 2006, two new MBS items were introduced, providing rebates for participation by medical practitioners in MDT planning meetings for patients with cancer. NBCC developed information to help multidisciplinary teams make use of the items.

MULTIDISCIPLINARY CARE – MEDICOLEGAL WORKSHOP

In March 2007, NBCC held a workshop to formulate consensus advice about medicolegal aspects of multidisciplinary approaches to cancer care. Individuals representing medical, legal, ethical and consumer perspectives developed recommendations for health services, teams and individuals. The recommendations focus on achieving best outcomes for patients while also providing appropriate protection for multidisciplinary team members and health services.

METHODOLOGY

RATIONALE

The aim of the national audit of multidisciplinary cancer care was to quantify the extent to which MDC is implemented nationally for five cancer types: breast, gynaecological, lung, prostate and colorectal. The audit aimed to measure activity before 1 November 2006, the date of introduction of the MBS items to support attendance by specialists at MDT planning meetings.

A multidisciplinary steering committee was established at the outset of the audit to oversee and provide expert advice on the methodology and final report. The steering committee included cancer clinicians with expertise in each of the five cancer types, together with consumers and experts in government and policy from across the country. Members of the steering committee are listed in Appendix A.

SAMPLE SIZE AND STRATIFICATION

A sampling plan was developed to select a representative sample of hospitals that would give a national picture of MDC activity across Australia. Hospitals were stratified by state, location (metropolitan versus regional) and type (public versus private). Further stratification (for example, by caseload) was not possible owing to the small sample sizes that would have resulted and the limited usefulness of these results. The overall sample was weighted so that the number of hospitals in each of the strata reflected the national distribution of hospitals in Australia. It is important to note that hospitals were stratified on the basis of distribution in each state or territory, not the location of hospitals in which cancer is treated.

A sample size of 350 was calculated to give a confidence interval of 95%. Assuming a non-response rate of 25% (based on similar work undertaken by NBOCC in the past), 451 hospitals were sampled to provide an effective sample size of 350.

The sampling frame was the *Hospital and Health Services Yearbook*.[12] The yearbook is produced by JPN Media Pty Ltd and is a database of over 5700 hospitals, aged care facilities and health care establishments in Australia and New Zealand ranging from public and private hospitals to community care.

Once rehabilitation, psychiatric, children's and non-Australian hospitals were removed, 1026 hospitals constituted the sampling frame. Each hospital was categorised as metropolitan or regional according to the Accessibility/Remoteness Index of Australia (ARIA).[13] Any hospital with an ARIA code of 0–1.84 was classified as metropolitan, and any with an ARIA code of >1.84 was classified as regional. A numbered list of hospitals was stratified by state, location (metropolitan versus regional) and type (public versus private).

Hospitals to be included in the sample were then selected by using a table of random numbers from the stratified lists until quotas were filled. Where the sample size of a particular stratum was less than 10, the entire stratum was included.

SURVEY TOOL

The audit survey tool was adapted from the survey used in NBOCC's National Profile Study of Multidisciplinary Care.[10] Development of the survey tool was overseen by the steering committee. The survey consisted of 21 questions focused on multidisciplinary team meetings, and covered

meeting format, attendance and processes, communication with general practitioners (GPs) and patients, data collection, and barriers to improvement or implementation of MDC. The majority of survey questions were multiple-choice, closed questions. Two open-ended questions were included at the end to allow respondents to provide further information about their service. The survey tool used for data collection in the ACT, the Northern Territory, Queensland, Tasmania, South Australia and Western Australia appears in Appendix B. The data set collected from this demographic is referred to in this report as the 'NBOCC sample'.

In NSW and Victoria, similar projects were already under way or planned. To avoid duplication of effort, NBOCC collaborated with state-based cancer bodies to collect information on the current status of MDC, using a modified version of the audit (see below).

All survey respondents were asked to provide information on MDC activity before 1 November 2006, when the MBS items were introduced.

NSW

The survey was administered in NSW on behalf of NBOCC by the Cancer Institute NSW as part of a statewide project. The Cancer Institute NSW developed a 48-question survey tool incorporating questions from the NBOCC survey, some of which were modified to meet the needs of the Cancer Institute NSW. Data were collected on 12 cancer types and optional additional types. The survey tool appears in Appendix C.

VICTORIA

In Victoria, the Department of Human Services had already initiated a process for mapping MDC activity in relation to 10 cancer types through the statewide Integrated Cancer Services (ICS). The Department developed a 20-point questionnaire incorporating questions from the NBOCC survey. The questionnaire appears in Appendix D.

DATA COLLECTION

NBOCC SAMPLE

NBOCC sent an invitation to participate in the audit by facsimile to the selected hospitals. State health department co-signatories were invited in all states and were included on the invitation in Western Australia, South Australia and Queensland. The facsimile was personally addressed to the hospital chief executive officer (CEO) or equivalent. CEOs were asked to nominate staff members (clinicians, cancer care coordinators or other relevant staff) to participate in a 15- to 20-minute telephone survey on MDC for each of the cancer types treated at the hospital. If appropriate, a staff member could be nominated to answer the survey for more than one cancer type. Thus, in the NBOCC sample, hospitals were included in the survey if they treated one or more of the five audit cancer types.

In the event of no response from the CEO, a maximum of three follow-ups were undertaken by email and telephone, approximately 7, 14 and 18 days following the initial contact before 'no response' was recorded. Where respondents reported that none of the five cancer types were treated at the hospital, the hospital was deemed ineligible for the audit. No replacement hospitals were sought to replace ineligible hospitals.

Staff members nominated by the CEO or designate were sent a letter, an information sheet and a copy of the survey and advised that a trained interviewer would contact them to conduct the survey. Staff members were encouraged to consult with colleagues to ensure the accuracy of

answers. A trained interviewer then contacted the staff member to arrange a time to conduct the survey. The interviewers made up to three attempts to arrange an interview time. If this was unsuccessful, staff members were offered the option of completing the survey in writing.

Nominees were contacted at the appointed time, and the survey was conducted by interviewers from the consultant organisation *Extending the Capacity of Healthcare Organisations* (ECHO). NBOCC provided ECHO with a script to be used when introducing the aims of the audit and a list of answers to frequently asked questions, to ensure consistency in approach. ECHO trained its interviewers and instructed them to collect qualitative data where needed to clarify survey responses. Data were recorded on paper and then collated electronically.

NSW

The methodology used in NSW was different from that used for the NBOCC sample. The Cancer Institute NSW collected data as part of a statewide project. It aimed to collect information from all hospitals within NSW to identify multidisciplinary cancer care teams (including palliative care and general cancer teams) across 12 cancer types. Contacts in many hospitals had been identified through previous work conducted by the Institute. These hospital staff members were contacted by email to request information about whether MDC was provided at their hospital for one or more of the five audit cancer types. Non-responses were followed up by telephone. Hospitals that did not have a multidisciplinary team for any of the five cancer types did not go on to complete the NSW audit survey – that is, hospitals were included in the survey if they had a multidisciplinary team for any of the five cancer types rather than on the basis of treating a particular cancer type. All respondents who confirmed that MDC was provided were sent a further invitation by email to participate in the audit. The email contained information on the purpose of the audit and included links to an online survey. Non-respondents were contacted to encourage completion of the online survey. Once collected, raw data from the NSW hospitals in NBOCC's original sample and the five audit cancer types were forwarded to ECHO for analysis.

VICTORIA

The methodology used in Victoria was different from that used for the NBOCC and NSW samples. Data collection had already been initiated as part of a statewide MDC project before NBOCC's national audit, and was supplemented on behalf of NBOCC by the Department of Human Services Victoria. A questionnaire (including instructions) was distributed to the eight ICS across Victoria to collect information on 10 cancer types. The questionnaire was then distributed to each multidisciplinary team and meeting in each ICS. Hospitals were included in the Victorian survey if they had a multidisciplinary meeting for one or more of the cancer types. Where possible, information relating to the NBOCC survey questions was collated for the Victorian hospitals in NBOCC's original sample and the five audit cancer types. All data were collated electronically by the Department of Human Services Victoria and forwarded to ECHO for analysis.

DATA ANALYSIS

ECHO entered and analysed data from all three samples in Microsoft Excel and SPSS for Windows. Cancer type was used as the main variable, and further bivariate analyses were undertaken using hospital location and type. Response rates were recorded and analysed. Responses for each survey question were collated into data frequency tables.

DEVELOPMENT OF RECOMMENDATIONS

To determine recommendations for future initiatives and promotion of MDC, the steering committee reviewed the key findings and the full analysis of all three data sets (NBOCC sample, NSW sample and Victoria sample). Members met in person and via teleconferencing to discuss and finalise the recommendations to improve MDC uptake in Australia.

RESULTS – OVERVIEW

This section provides an overview of key results from the audit of breast, gynaecological, lung, colorectal and prostate cancers. Detailed results are provided from page 24 onwards.

SAMPLES

Because of differences in methodology, results are reported separately for the NBOCC sample (Queensland, Tasmania, Western Australia, Northern Territory, ACT and South Australia), the NSW sample and the Victorian sample.

In the NBOCC sample (pages 24–26):

- 221 hospitals were approached
- 123 hospitals reported that they treated one or more of the five audit cancer types and provided contacts for inclusion in the survey (56% response)
- each hospital could nominate up to five individuals to participate – one for each of the five audit cancer types treated at the hospital
- 520 surveys were completed by the 123 hospitals; respondents came from a range of disciplines, the most common being nursing (69%)
- the location and type of hospitals matched the intended stratification for these states and territories, and the number of surveys completed was equivalent across the five audit cancer types.

In the NSW sample (page 26):

- 139 hospitals were approached
- 57 hospitals responded to the first phase of the survey (41% response)
- 17 of these 57 hospitals completed 49 surveys; most responses came from public hospitals (77%), more from metropolitan (67%) than regional (33%); information about the discipline of respondents is not available.

In the Victorian sample (page 27):

- information on 91 hospitals was sought
- 50 hospitals were identified as treating cancer (55% response)
- information was provided relating to 42 multidisciplinary teams within 15 of the 50 hospitals most teams were in metropolitan (74%) and public (72%) hospitals; respondents were mainly administrative or project staff within the ICS.

MULTIDISCIPLINARY TEAMS

In the NBOCC sample (pages 27–28):

- 34% of 520 respondents reported an identified multidisciplinary team for one or more of the five audit cancer types
- more respondents reported an identified team for breast cancer than for other cancers (41% vs 31%–32%)
- more respondents from metropolitan hospitals reported an identified team than those from regional hospitals (41% vs 30%)

- the proportion of respondents reporting an identified team was similar in public and private hospitals (34% vs 35%).

In the NSW sample (page 28):

- 23 of 57 hospitals (40%) reported having at least one identified team or meeting for one of the five audit cancer types; 6 hospitals were excluded as they provided only palliative care or are rural/regional sites that did not treat cancer, so information from 17 hospitals (30%) was analysed
- more teams managed breast cancer than other cancers (33% vs 8%–22%)
- more of the respondents that reported an identified team came from metropolitan hospitals than from regional hospitals (61% vs 39%)
- most respondents that reported an identified team came from public hospitals (98%); it is therefore not possible to report on differences by hospital type in the NSW sample.

In the Victorian sample (page 29):

- 15 of 50 hospitals that treated cancer (30%) reported at least one team or meeting for one or more of the five audit cancer types
- more teams managed breast cancer than other cancers (31% vs 12%–21%)
- most teams came from metropolitan (98%) and public (87%) hospitals; it is therefore not possible to report on differences by location or hospital type in the Victorian sample.

MULTIDISCIPLINARY MEETINGS

In the NBOCC sample (pages 30–33):

- 41% of 515 respondents reported multidisciplinary meetings, 20% 'regularly' and 21% 'occasionally'
- there was little difference in reported meetings or frequency by cancer type
- more respondents from metropolitan hospitals reported 'regular' meetings than those from regional hospitals (27% vs 16%)
- the proportion of respondents reporting regular meetings was similar in public and private hospitals (20% vs 22%)
- 38% of the 213 respondents who reported meetings held meetings weekly or fortnightly
- more respondents from metropolitan hospitals reported weekly or fortnightly meetings than those from regional hospitals (74% vs 22%), but proportions were similar in public and private hospitals (37% vs 39%)
- 69% of the 213 respondents who reported meetings held meetings face to face
- there was little difference in the format of meetings by cancer type
- most respondents from metropolitan hospitals (88%) and private hospitals (83%) reported face-to-face meetings; more respondents from regional hospitals used teleconferencing than those from metropolitan hospitals (39% vs 12%), and more respondents from public hospitals used teleconferencing than those from private hospitals (34% vs 17%); where teleconferencing was used (n = 40), more respondents from metropolitan and public hospitals reported being the host site.

In the NSW sample (pages 34–35):

- 80% of 49 respondents reported weekly or fortnightly meetings; there was little difference between metropolitan and regional hospitals
- numbers are too small to make comparisons by cancer type
- most meetings (78%) were held face to face; more respondents from regional hospitals used teleconferencing than those from metropolitan hospitals (31% vs 17%); numbers are too small to comment on host vs satellite sites for teleconferencing.

In the Victorian sample (pages 35–36):

- 73% of 41 meetings were weekly or fortnightly
- numbers are too small to make comparisons by cancer type
- most meetings (90%) were held face to face, and 10% used videoconferencing.

MEETING ATTENDANCE

In the NBOCC sample (pages 36–38):

- nursing staff were reported most commonly as routinely attending meetings (89%), followed by allied health professionals (57%) and specialists (48%)
- 45% of respondents reported that GPs regularly attended meetings; the vast majority of these responses came from regional hospitals
- only 4% of breast cancer teams and no teams for other cancers reported routine attendance at meetings by all core team members.

In the NSW sample (pages 39–41):

- specialists were reported most commonly as routinely attending meetings (37%), followed by nursing staff (31%) and allied health professionals (17%)
- only 1% of meetings included regular attendance by GPs
- no teams reported routine attendance by all core team members.

In the Victorian sample (pages 41–43):

- specialists were reported most commonly as routinely attending meetings (57%),followed by nursing staff (18%) and ‘other’ (15%)
- only 1% of meetings included regular attendance by GPs
- no teams reported routine attendance by all core team members.

LINKS TO OTHER SERVICES

In the NBOCC sample (pages 44–46):

- 93% of 213 respondents reported established links to other specialities; most reported links to palliative care (78%) and community nursing (63%), whereas fewer than a third reported links to psychology (24%) or psychiatric services (28%)
- there was no difference in the number of respondents reporting established links by cancer type, location or hospital type
- some differences were apparent in the services to which links were reported – for example, more respondents from regional hospitals reported links to palliative care than those from metropolitan hospitals (53% vs 25%); more respondents from public hospitals identified links than those from private hospitals.

In the NSW sample (page 47):

- only limited information was available on links to other specialities and allied health services.

In the Victorian sample (pages 47–48):

- 94% of 29 teams reported links to other services; 33% reported links to palliative care services, 19% to counselling and 4% to psychiatry.

COMMUNICATION WITH GENERAL PRACTITIONERS

In the NBOCC sample (pages 48–50):

- 71% of 213 respondents reported that treatment plans were always communicated to GPs, and 7% that plans were rarely or never communicated
- respondents from gynaecological teams (82%) and colorectal teams (79%) were most likely to report that plans were always communicated to GPs
- more respondents from regional hospitals reported that plans were always communicated to GPs than those from metropolitan hospitals (80% vs 49%)
- the proportion of respondents reporting that plans were always communicated to GPs was similar in public and private hospitals (71% vs 69%)
- 45% of the 204 respondents who reported that plans were communicated to GPs indicated that this happened in person at meetings
- there was no difference in methods of communicating with GPs by cancer type
- the most common approach to communicating with GPs in metropolitan hospitals and private hospitals was through individualised letter (72% and 78%, respectively), whereas in regional hospitals and public hospitals it was ‘in person through meetings’ (64% and 48%, respectively).

In the NSW sample (pages 51–52):

- 22% of 49 respondents reported that treatment plans were always communicated to GPs, 29% that treatment plans were communicated some of the time, and 33% that plans were never communicated
- the most common approach to communicating with GPs in metropolitan hospitals was via individualised letter (55%), whereas in regional hospitals it was ‘indirectly through clinician’ (60%).

In the Victorian sample (pages 52–53):

- 66% of 32 teams reported that treatment plans were always communicated to GPs, and only 1 team (3%) reported that plans were never communicated; there was little difference in response by cancer type
- the most common approach to communicating with GPs was via letter (65%).

COMMUNICATION WITH PATIENTS

In the NBOCC sample (pages 53–55):

- 77% of 213 respondents reported that patients were routinely informed that their case would be discussed by the team; of these, 16% reported that this was done in writing
- there was no difference relating to informing patients between cancer types

- more respondents from regional and public hospitals reported that patients were informed that their case would be discussed than those from metropolitan and private hospitals (regional 84% vs metropolitan 63%; public 81% vs private 58%)
- 64% of 213 respondents reported that patient consent for the case to be discussed was sought; of these, 43% reported that consent was obtained in writing
- there was no difference in obtaining consent between cancer types
- more respondents from regional hospitals reported that consent was sought than those from metropolitan hospitals (78% vs 31%); of these, more respondents from regional hospitals reported that consent was sought in writing (47% vs 20%)
- more respondents from public hospitals reported that consent was sought than those from private hospitals (69% vs 36%); of these, there was no difference in whether or not consent was obtained in writing (43% vs 46%).

In the NSW sample (pages 56–57):

- 27% of 49 respondents reported that patients were always informed, and 37% that patients were usually informed that their case would be discussed by the team; information about whether patients were informed verbally or in writing is not available
- more respondents from metropolitan hospitals reported that patients were always informed than those from regional hospitals (37% vs 11%)
- 56% of 41 respondents reported that patient consent for the case to be discussed was sought; most respondents (87%) reported that consent was obtained verbally; the 3 respondents who reported that consent was obtained in writing came from metropolitan hospitals.

In the Victorian sample (pages 57–58):

- 85% of 27 teams reported that patients were informed that their case would be discussed by the team; all of these teams reported that patients were informed verbally
- 52% of 21 teams reported that patients were asked to consent to their case being discussed; all of these teams reported that consent was obtained verbally.

RECORDING THE TREATMENT PLAN

In the NBOCC sample (pages 58–59):

- 54% of 213 respondents reported that treatment plans were always recorded in the patient's notes, and 23% that treatment plans were almost always recorded; 5% reported that treatment plans were never recorded in the patient's notes
- respondents from breast cancer teams were most likely to report that treatment plans were always recorded in the patient's notes (64% vs 49%–55%); there was little difference in responses by hospital location or type.

In the NSW sample (page 59):

- 24% of 21 respondents reported that treatment plans were always recorded in the patient's notes, and 38% that treatment plans were usually recorded; 19% reported that treatment plans were never recorded in the patient's notes
- 19 of the respondents to this question came from metropolitan hospitals; owing to the small numbers it is not possible to report differences by cancer type or location.

In the Victorian sample (pages 59–60):

- 65% of 34 teams reported that the treatment plan was always recorded in the patient's notes, and 24% that treatment plans were never recorded in the patient's notes
- owing to the small numbers it is not possible to report differences by cancer type.

COMMUNICATING THE TREATMENT PLAN TO PATIENTS

In the NBOCC sample (page 60–61):

- 58% of 213 respondents reported that specialists were responsible for communicating the outcomes of the meeting to the patient
- there were no differences between cancer types in who was responsible for communicating outcomes to patients
- more respondents from metropolitan hospitals identified specialists as being responsible for communicating outcomes to the patient than those from regional hospitals (91% vs 44%); in regional hospitals, GPs (47%) and nurses (51%) were nominated equally as having responsibility
- more respondents from private hospitals identified specialists as being responsible for communicating outcomes to the patient than those from public hospitals (83% vs 53%); in public hospitals, GPs (35%) and nurses (42%) were also nominated as having responsibility.

In the NSW sample (pages 61–62):

- 43% of 49 respondents reported that a 'referring specialist' was responsible for communicating the outcomes of the meeting to the patient
- more respondents from metropolitan hospitals identified the referring specialist as responsible for communicating the outcomes to the patient than those from regional hospitals (53% vs 26%).

In the Victorian sample (page 62):

- a range of disciplines were responsible for communicating the treatment plan to the patient, the most common being the presenting clinician (38%), managing consultant (28%) and outpatient clinician (24%)
- owing to the small numbers it is not possible to compare results by cancer type.

INPUT BY PATIENTS INTO THE TREATMENT PLAN

In the NBOCC sample (pages 62–64):

- 58% of 213 respondents reported that patients were always encouraged to provide input into their treatment plan, and 17% that patients were almost always encouraged; 5% reported that patients were never encouraged to provide input
- respondents from lung cancer teams were most likely to report patients being encouraged to provide input (67% vs 52%–58%)
- more respondents from regional and private hospitals reported that patients were encouraged to provide input into their treatment plan than those from metropolitan and public hospitals (regional 66% vs metropolitan 40%; private 69% vs public 56%)
- the most common approach to dealing with changes to the plan following discussion with the patient was that the plan is changed and the reason is noted (69%)

- 20% of 213 respondents reported that patients were always offered a written copy of the treatment plan; more respondents from metropolitan and public hospitals reported that patients were never offered a written copy (metropolitan 48% vs regional 30%; public 38% vs private 19%).

In the NSW sample (pages 66–67):

- 5% of 41 respondents reported that patients were always encouraged to provide input into their treatment plan, and 56% that this never happened
- the most common approach to dealing with changes to the plan following discussion with the patient was that the team discusses the different plan at the next meeting (43%)
- more respondents from regional hospitals reported that patients were never encouraged to provide input into their treatment plan than from metropolitan hospitals (93% vs 35%)
- information on whether patients were offered a written copy of the treatment plan was not directly available.

In the Victorian sample (pages 67–68):

- 69% of 32 teams reported that patients were encouraged to provide input into their treatment plan
- of 20 teams, 45% did not know how changes to the plan were dealt with following discussion with the patient
- only 1 team out of 30 (3%) reported that patients were always offered a written copy of the treatment plan, and 77% reported that patients were never offered a written copy.

PROCEDURES AND PROTOCOLS

In the NBOCC sample (pages 69–70 and 72–73):

- 55% of 204 respondents reported that all patients were considered for discussion by the team; 15% reported that difficult cases were considered, and 22% that there were no criteria to determine which patients were discussed.
- there was little difference between cancer types in relation to which patients were considered, although respondents from colorectal cancer teams were most likely to indicate that all patients were considered by the team
- there was no difference by location in relation to which patients were considered; however, more respondents from public hospitals reported that all patients were considered for discussion than those from private hospitals (60% vs 28%)
- 43% of 207 respondents reported that the team had established protocols covering multiple aspects of patient care
- there was little difference between cancer types in relation to protocols for patient care; more respondents from metropolitan hospitals and private hospitals reported having protocols in place (metropolitan 69% vs regional 32%; private 61% vs public 40%)
- 78% of 115 respondents who stated that they had protocols had written protocols
- there was no difference by cancer type or location in whether or not protocols were written; however, more respondents from private hospitals reported that protocols were written than those from public hospitals (91% vs 75%).

In the NSW sample (pages 70–72 and 74–75):

- 65% of 49 respondents reported that difficult cases were considered by the team, 51% that all cases were considered and 29% that there was no protocol to determine which patients were discussed (multiple answers allowed)
- there were some differences between metropolitan and regional sites; for example, more respondents from regional hospitals reported that recurrent cases were considered than did those from metropolitan hospitals (79% vs 40%)
- 63% of 49 respondents reported agreed protocols for patient care; information on whether protocols covered multiple or single aspects of care was not collected
- more respondents from metropolitan hospitals reported agreed protocols than those from regional hospitals (70% vs 53%).

Victorian sample (pages 72 and 75):

- 58% of 36 teams reported that all new patients were considered for discussion by the team, 31% that difficult cases were considered and 25% that there was no protocol to determine which cases were discussed
- 73% of 30 teams reported having protocols for patient care; information on whether protocols cover single or multiple aspects of care was not collected.

DATA COLLECTION

In the NBOCC sample (pages 75–77):

- 33% of 495 respondents reported that the hospital had a central process for data collection in relation to the management of cancer patients; however, only 14% reported a central process for the team to review the data
- 27% of respondents reported no processes for data collection – either centrally or by individual clinicians; respondents from regional hospitals were more likely to report no processes than those from metropolitan hospitals (33% vs 18%)
- 10% of respondents did not know the process for data collection and review.

In the NSW sample (pages 77–78):

- 36% of 49 respondents reported that the hospital had a central process for data collection; however, only 14% reported a central process for the team to review the data
- all of the respondents who reported a central process for data collection and review came from metropolitan hospitals
- 18% of respondents reported that there were no processes for data collection
- 37% of respondents did not know the process for data collection and review.

No information regarding data collection was obtained from the Victorian sample.

BARRIERS

A range of barriers to the implementation of MDC were identified in all samples (pages 78–80):

- By far the most common barriers related to lack of time or resources. In the NBOCC sample, 73% of respondents identified barriers relating to workforce and caseload, and 24% identified time. In the NSW sample, coordination of time (19%), lack of staff (16%) and lack of time (13%) were nominated. Time was commonly nominated in the Victorian sample.
- Funding was nominated as a barrier by nearly a quarter (23%) of respondents in the NBOCC survey, but by only 5% of respondents in the NSW survey.

RESULTS – DETAIL

Results are presented separately by sample: NBOCC sample (Queensland, Tasmania, Western Australia, Northern Territory, ACT and South Australia), NSW sample and Victorian sample. Any commonalities or differences are highlighted.

SAMPLE AND RESPONSE RATES

NBOCC SAMPLE

The original NBOCC sample comprised 221 hospitals across Queensland, Tasmania, Western Australia, the Northern Territory, the ACT and South Australia. Of those 221 hospitals, 123 reported that they treated one or more of the cancer types and agreed to participate (56% participation rate). Each hospital could nominate up to five individuals to participate in the survey – one for each of the five cancer types that were treated in the hospital (breast, colorectal, gynaecological, prostate and lung). Alternatively, one individual could be nominated to complete multiple surveys. A total of 520 surveys were completed: 510 by telephone and 10 by fax.

Stratification by state or territory, location (metropolitan or regional) and hospital type (public or private) reflected the intended stratification of the original random sample (Tables 1–3). The number of surveys completed was similar across all five cancer types (Table 4).

Table 1: NBOCC sample: number of hospitals contacted (*n* = 221) and number of surveys completed by state or territory (*n* = 520)

	State or territory						
	WA	Tas	SA	NT	ACT	Qld	Total
Hospitals							
Hospitals contacted (% of total contacted)	55 (25%)	18 (8%)	49 (22%)	6 (3%)	5 (2%)	88 (40%)	221 (100%)
Hospitals participated (% of total participated)	28 (23%)	10 (8%)	29 (23%)	3 (2%)	2 (2%)	51 (41%)	123 (100%)
Surveys							
Number of surveys completed	114	40	109	15	10	232	520
Proportion of surveys by state or territory	23%	8%	24%	2%	2%	41%	100%

Table 2: NBOCC sample: profile of hospitals and surveys by location

	Location		Total
	Metropolitan (ARIA 0–1.84)	Regional (ARIA > 1.84)	
Hospitals			
Hospitals contacted (% of total contacted)	89 (40%)	132 (60%)	221 (100%)
Hospitals participated (% of total participated)	52 (42%)	71 (58%)	123 (100%)
Surveys			
Number of surveys completed (% of total surveys)	195 (37.5%)	325 (62.5%)	520 (100%)

Table 3: NBOCC sample: profile of hospitals and surveys by hospital type

	Hospital type		Total
	Public	Private	
Hospitals			
Hospitals contacted (% of total contacted)	155 (70%)	66 (30%)	221 (100%)
Hospitals participated (% of total participated)	90 (73%)	33 (27%)	123 (100%)
Surveys			
Number of surveys completed (% of total surveys)	390 (75%)	130 (25%)	520 (100%)

Table 4: NBOCC sample: survey responses completed by cancer type (*n* = 520)

	Cancer type					
	Breast	Lung	Gynaecological	Colorectal	Prostate	Total
Surveys						
Number of surveys completed	111	108	98	101	102	520
Spread of surveys by cancer type	21%	21%	19%	19%	20%	100%

Interviewee roles

A large proportion of respondents (69%) had a nursing background (Table 5). A more detailed breakdown of the disciplines of respondents is shown in Appendix E. The most reported occupations were director of nursing (17%), nursing unit manager (8%) and clinical nurse manager (5%). The most reported specialities were general surgeon (1.3%), radiation oncologist (0.6%) and consultant (0.4%).

Table 5: NBOCC sample: disciplines of respondents (*n* = 520)

Interviewee role	*n*	% of total
Nursing	361	69%
Other	87	17%
Specialists	72	14%
GPs	0	0%
Allied health	0	0%
Total	520	100%

NSW SAMPLE

The original NSW sample consisted of 139 hospitals. Information on 57 hospitals or health services that responded to the first phase of the survey was provided (a response rate of 41%) (Tables 6 and 7). Of these, 23 (40%) reported having at least one identified multidisciplinary team or meeting for one or more of the five audit cancer types. Six hospitals were excluded as they provided only palliative care or were rural/regional sites that did not treat cancer, so data from 17 hospitals (30%) were analysed. A total of 49 surveys were completed. (See section on multidisciplinary meetings for more details.)

Table 6: NSW sample: profile of hospitals contacted (*n* = 139) and hospitals that responded (*n* = 57) by location

	Location		Total
	Metropolitan (ARIA 0–1.84)	Regional (ARIA > 1.84)	
Hospitals contacted (% of total contacted)	79 (57%)	60 (43%)	139 (100%)
Hospitals responded (% of total responded)	38 (67%)	19 (33%)	57 (100%)

Table 7: NSW sample: profile of hospitals contacted (*n* = 139) and hospitals that responded (*n* = 57) by hospital type

	Hospital type		Total
	Public	Private	
Hospitals contacted (% of total contacted)	104 (70%)	35 (30%)	139 (100%)
Hospitals participated (% of total responded)	44 (77%)	13 (23%)	57 (100%)

Interviewee roles

Information about the discipline of respondents in the NSW sample is not available.

VICTORIAN SAMPLE

The original Victorian sample consisted of 91 hospitals. The Department of Human Services Victoria provided NBOCC information on 50 cancer-treating hospitals or health services (a response rate of 55%) (Tables 8 and 9). Information was provided on 42 multidisciplinary teams (see section on multidisciplinary meetings for more details). Of the 50 cancer-treating hospitals or health services, 15 held multidisciplinary team meetings.

Table 8: Victorian sample: profile of hospitals contacted (*n* = 91) and hospitals that treat cancer (*n* = 50) by location

	Location		Total
	Metropolitan (ARIA 0–1.84)	Regional (ARIA > 1.84)	
Hospitals in original sample (% of original sample)	62 (68%)	29 (31%)	91 (100%)
Hospitals that treat cancer (% of total responded)	37 (74%)	13 (26%)	50 (100%)
Hospitals that treat cancer that held an MDC team meeting (% of total responded)	14 (93%)	1 (7%)	15 (100%)

Table 9: Victorian sample: profile of hospitals contacted (*n* = 91) and hospitals that treat cancer (*n* = 50) by hospital type

	Hospital type		Total
	Public	Private	
Hospitals in original sample (% of original sample)	62 (68%)	29 (31%)	91 (100%)
Hospitals participated (% of total responded)	36 (72%)	14 (28%)	50 (100%)
Hospitals that treat cancer that held an MDC team meeting(% of total responded)	13 (87%)	2 (13%)	15 (100%)

Interviewee roles

Information about the discipline of respondents in the Victorian sample is not available.

SURVEY DATA

IDENTIFICATION OF MULTIDISCIPLINARY TEAMS

NBOCC sample

A total of 34% of the 520 respondents reported an identified multidisciplinary team. More respondents reported a team for breast cancer than for the other cancer types (41% vs 31%–32%) (Table 10). More respondents from metropolitan hospitals reported an identified team than those from regional hospitals (41% vs 30%) (Table 11). The proportion of respondents identifying a multidisciplinary team was similar in public and private hospitals (34% vs 35%) (Table 12).

Table 10: NBOCC sample: presence of a multidisciplinary team by cancer type (*n* = 520)

Is there an identified MDC team?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Identified team	46 (41%)	33 (32%)	32 (32%)	34 (31%)	33 (32%)	178 (34%)
No identified team	62 (55%)	65 (63%)	63 (63%)	71 (65%)	66 (63%)	327 (63%)
Don't know	3 (4%)	3 (5%)	3 (5%)	3 (4%)	3 (5%)	15 (3%)
Total	111 (100%)	101 (100%)	98 (100%)	108 (100%)	102 (100%)	520 (100%)

Table 11: NBOCC sample: presence of a multidisciplinary team by location (*n* = 520)

Is there an identified MDC team?	Location		Total
	Metropolitan	Regional	
Identified team	79 (41%)	99 (30%)	178 (34%)
No identified team	116 (59%)	211 (65%)	327 (63%)
Don't know	0 (0%)	15 (3%)	15 (3%)
Total	195 (100%)	325 (100%)	520 (100%)

Table 12: NBOCC sample: presence of a multidisciplinary team by hospital type (*n* = 520)

Is there an identified MDC team?	Hospital type		Total
	Public	Private	
Identified team	132 (34%)	46 (35%)	178 (34%)
No identified team	243 (62%)	84 (65%)	327 (63%)
Don't know	15 (4%)	0 (0%)	15 (3%)
Total	390 (100%)	130 (100%)	520 (100%)

NSW sample

Seventeen eligible hospitals (see page 17 for more detail) from the 57 that responded to the first phase of the survey (30%) reported that they had at least one identified multidisciplinary team responsible for treatment planning for one or more of the five audit cancer types (Table 13). A total of 49 surveys were completed. The most common teams managed breast cancer (33% vs 8%–22%) (Table 14). More respondents reporting identified teams came from metropolitan hospitals than from regional hospitals (61% vs 39%), and most came from public hospitals (98%) (Table 15). It is therefore not possible to report on differences by hospital type in the NSW sample.

Table 13: NSW sample: survey responses (*n* = 49)

	Number of responses	% of total responses
Number of hospitals that responded to the survey	57	100%
Number of hospitals that identified a multidisciplinary team	17	30%

Table 14: NSW sample: survey responses by cancer type (*n* = 49)

Is there an identified MDC team?	Cancer type					
	Breast	Lung	Gynaecological	Colorectal	Prostate	Total
Identified team (% of total survey responses)	16 (33%)	10 (21%)	4 (8%)	11 (22%)	8 (16%)	49 (100%)

Table 15: NSW sample: profile of survey responses by location and hospital type (*n* = 49)

	Number of survey responses	% of total survey responses
Location		
Metropolitan	30	61%
Regional	19	39%
Hospital type		
Public	48	98%
Private	1	2%
Total	49	100%

Victorian sample

Fifteen hospitals from the 50 that treated cancer (30%) held one or more multidisciplinary meetings for one or more the five audit cancer types. A total of 42 team meetings were identified, including four linked meetings at which more than one hospital or health service participated. More of the teams managed breast cancer than the other cancer types (31% vs 12%–21%) (Table 16). Most team meetings were held at metropolitan sites (98%) (Table 17). It is therefore not possible to report on differences in the Victorian sample by hospital location.

Table 16: Victorian sample: identified multidisciplinary teams by cancer type (*n* = 42)

	Cancer type					
	Breast	Lung	Gynaecological	Colorectal	Prostate	Total
Number of meetings (% of total meetings reported)	13* (31%)	9 (21%)	5 (12%)	8 (19%)	7 (17%)	42 (100%)

* One hospital or health service had a linked meeting. One hospital or health service had two meetings for planning breast cancer treatment (one for early cancers and one for advanced).

Table 17: Victorian sample: profile of meetings by location (*n* = 42)

Location	Number of survey responses	% of total survey responses
Metropolitan	41	98%
Regional	1	2%

It is not possible to provide a clear breakdown by public and private services owing to overlaps between meetings within these categories. For example, two public hospitals and one private hospital held one breast meeting.

MULTIDISCIPLINARY MEETINGS

NBOCC sample

Overall, 41% of 515 respondents held multidisciplinary meetings, 20% 'regularly' and 21% 'occasionally'. There was little difference in reported meetings or frequency by cancer type (Table 18). Of the 58% of respondents who reported that multidisciplinary meetings were not held, 11% reported that meetings were held informally, 31% that meetings were held for individual cases and 16% that there was little or no discussion about cases (Table 18).

More respondents from metropolitan hospitals reported 'regular' meetings than those from regional hospitals (27% vs 16%) (Table 19); the proportion of respondents reporting 'regular' meetings was similar in public and private hospitals (20% vs 22%) (Table 20).

Table 18: NBOCC sample: occurrence of multidisciplinary meetings by cancer type (*n* = 515)

Are MDC meetings held?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes – regularly	26 (24%)	22 (22%)	19 (20%)	20 (19%)	18 (18%)	105 (20%)
Yes – occasionally	24 (22%)	20 (20%)	19 (20%)	22 (21%)	23 (23%)	108 (21%)
Total – Yes	50 (46%)	42 (42%)	38 (39%)	42 (39%)	41 (41%)	213 (41%)
No – informal only	11 (10%)	10 (10%)	11 (11%)	11 (10%)	13 (13%)	56 (11%)
No – individual cases only	31 (28%)	34 (34%)	29 (30%)	37 (35%)	31 (31%)	162 (31%)
No – little or no discussion	18 (16%)	14 (14%)	19 (20%)	15 (14%)	16 (16%)	82 (16%)
Total – No	60 (54%)	58 (58%)	59 (61%)	63 (59%)	60 (59%)	300 (58%)
Don't know	0 (0%)	0 (0%)	0 (0%)	2 (2%)	0 (0%)	2 (0.4%)
Overall total	110 (100%)	100 (100%)	97 (100%)	107 (100%)	101 (100%)	515 (100%)

Table 19: NBOCC sample: occurrence of multidisciplinary meetings by location (*n* = 515)

Are MDC meetings held at your hospital?	Location		Total
	Metropolitan	Regional	
Yes – regularly	53 (27%)	52 (16%)	105 (20%)
Yes – occasionally	12 (6%)	96 (30%)	108 (21%)
Total – Yes	65 (33%)	148 (46%)	213 (41%)
No – informal only	20 (10%)	36 (11%)	56 (11%)
No – individual cases only	80 (41%)	82 (26%)	162 (31%)
No – little or no discussion	30 (15%)	52 (16%)	82 (16%)
Total – No	130 (67%)	170 (53%)	300 (58%)
Don't know	0	2	2
Total	195 (100%)	320 (100%)	515 (100%)

Table 20: NBOCC sample: occurrence of multidisciplinary meetings by hospital type (*n* = 515)

Are MDC meetings held at your hospital?	Hospital type		Total
	Public	Private	
Yes – regularly	76 (20%)	29 (22%)	105 (20%)
Yes – occasionally	101 (26%)	7 (5%)	108 (21%)
Total – Yes	177 (46%)	36 (27%)	213 (41%)
No – informal only	37 (10%)	19 (15%)	56 (11%)
No – individual cases only	109 (28%)	53 (41%)	162 (31%)
No – little/no discussion	60 (16%)	22 (17%)	82 (16%)
Total – No	206 (54%)	94 (72%)	300 (58%)
Don't know	2 (<1%)	0 (0%)	2 (<1%)
Total	385 (100%)	130 (100%)	515 (100%)

NSW and Victorian samples

Information relating to multidisciplinary meetings in the NSW and Victorian samples is covered in the previous section, 'Identification of Multidisciplinary Teams'.

FREQUENCY OF MEETINGS AND MEETING FORMAT

NBOCC sample

Of the 213 respondents who reported that MDC meetings were held, 28% reported weekly meetings, 10% reported fortnightly meetings, 14% reported monthly meetings and 48% reported holding meetings 'as required' (Table 21). More respondents from metropolitan hospitals reported weekly or fortnightly meetings than those from regional sites (74% vs 22%) (Table 22). The proportion of respondents reporting weekly or fortnightly meetings was similar in public and private hospitals (37% vs 39%) (Table 23).

Table 21: NBOCC sample: frequency of multidisciplinary meetings by cancer type (*n* = 213)

How often are MDC meetings held?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Weekly	11 (22%)	14 (33%)	12 (32%)	11 (26%)	11 (27%)	59 (28%)
Fortnightly	5 (10%)	4 (10%)	3 (8%)	5 (12%)	4 (10%)	21 (10%)
Monthly	10 (20%)	5 (12%)	4 (11%)	5 (12%)	6 (15%)	30 (14%)
As required	24 (48%)	19 (45%)	19 (50%)	21 (50%)	20 (49%)	103 (48%)
Total	50 (100%)	42 (100%)	38 (100%)	42 (100%)	41 (100%)	213 (100%)

Table 22: NBOCC sample: frequency of multidisciplinary meetings by location (*n* = 213)

How often are MDC meetings held?	Location		Total
	Metropolitan	Regional	
Weekly	33 (51%)	26 (18%)	59 (28%)
Fortnightly	15 (23%)	6 (4%)	21 (10%)
Monthly	12 (18%)	18 (12%)	30 (14%)
As required	5 (8%)	98 (66%)	103 (48%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 23: NBOCC sample: frequency of multidisciplinary meetings by hospital type (*n* = 213)

How often are MDC meetings held?	Hospital type		Total
	Public	Private	
Weekly	51 (29%)	8 (22%)	59 (28%)
Fortnightly	15 (8%)	6 (17%)	21 (10%)
Monthly	15 (8%)	15 (42%)	30 (14%)
As required	96 (54%)	7 (19%)	103 (48%)
Total	177 (100%)	36 (100%)	213 (100%)

Of the 213 respondents who reported that meetings were held, 69% held meetings face to face, 1% via teleconferencing and 30% using a combination of these methods. There was little difference in responses by cancer type (Table 24). A greater proportion of metropolitan hospitals held face-to-face meetings than regional hospitals (88% vs 61%), and more regional hospitals used combined methods than did metropolitan hospitals (38% vs 11%) (Table 25). More private hospitals held face-to-face meetings (83%) than public hospitals (66%), and more public hospitals used teleconferencing than private hospitals (34% vs 17%) (Table 26).

Table 24: NBOCC sample: method of multidisciplinary meetings by cancer type (*n* = 213)

How are MDC meetings conducted?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Face-to-face	32 (64%)	29 (69%)	27 (71%)	29 (69%)	30 (73%)	147 (69%)
Via teleconference	2 (4%)	0 (0%)	0 (0%)	1 (2%)	0 (0%)	3 (1%)
Combination	16 (32%)	13 (31%)	11 (29%)	12 (29%)	11 (27%)	63 (30%)
Total	50 (100%)	42 (100%)	38 (100%)	42 (100%)	41 (100%)	213 (100%)

Table 25: NBOCC sample: method of multidisciplinary meetings by location (*n* = 213)

How are MDC meetings conducted?	Location		Total
	Metropolitan	Regional	
Face-to-face	57 (88%)	90 (61%)	147 (69%)
Via teleconference	1 (1%)	2 (1%)	3 (1%)
Combination	7 (11%)	56 (38%)	63 (30%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 26: NBOCC sample: method of multidisciplinary meetings by hospital type (*n* = 213)

How are MDC meetings conducted?	Hospital type		Total
	Public	Private	
Face-to-face	117 (66%)	30 (83%)	147 (69%)
Via teleconference	3 (2%)	0 (0%)	3 (1%)
Combination	57 (32%)	6 (17%)	63 (30%)
Total	177 (100%)	36 (100%)	213 (100%)

Information was available for 40 respondents that reported using teleconferencing. Of these, 16 reported they were the host site and 24 a satellite site (Table 27). Metropolitan (Table 28) and public (Table 29) hospitals were more likely to indicate that they were the host site than regional and private hospitals. Numbers are too small to determine differences by cancer type.

Table 27: NBOCC sample: host site of multidisciplinary meetings held via teleconference by cancer type (*n* = 40)

Is your hospital the host or satellite site?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Host site	6	3	2	3	2	16
Satellite site	6	5	4	4	5	24
Total	12	8	6	7	7	40

Table 28: NBOCC sample: host site of multidisciplinary meetings held via teleconference by location (*n* = 40)

Is your hospital the host or satellite site?	Location		Total
	Metropolitan	Regional	
Host site	6	10	16
Satellite site	1	23	24
Total	7	33	40

Table 29: NBOCC sample: host site of multidisciplinary meetings held via teleconference by hospital type (*n* = 40)

Is your hospital the host or satellite site?	Hospital type		Total
	Public	Private	
Host site	16	0	16
Satellite site	21	3	24
Total	37	3	40

NSW sample

Of the 49 respondents, 33% reported weekly meetings and 47% reported fortnightly meetings (Table 30). Numbers are too small to make comparisons by cancer type. There was little difference between metropolitan and regional hospitals reporting weekly or fortnightly meetings (83% vs 73%) (Table 31).

Table 30: NSW sample: frequency of multidisciplinary meetings by cancer type (*n* = 49)

How often are MDC meetings held?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Once a week	7	4	0	3	2	16 (33%)
Once a fortnight	7	4	4	4	4	23 (47%)
Once a month	1	2	0	3	2	8 (16%)
Less than once a month	1	0	0	1	0	2 (4%)
Total	16	10	4	11	8	49 (100%)

Table 31: NSW sample: frequency of multidisciplinary meetings by location (*n* = 49)

How often are MDC meetings held?	Location		Total
	Metropolitan	Regional	
Once a week	7 (23%)	9 (47%)	16 (33%)
Once a fortnight	18 (60%)	5 (26%)	23 (47%)
Once a month	3 (10%)	5 (26%)	8 (16%)
Less than once a month	2 (7%)	0 (0%)	2 (4%)
Total	30 (100%)	19 (100%)	49 (100%)

Of the 49 respondents, 78% held face-to-face meetings and 22% used teleconferencing (Table 32); 5 respondents (10%) held meetings via teleconferencing, and 6 (12%) used a combination of both formats. Numbers were too small to make comparisons by cancer type. All five teleconference-only meetings were reported by regional hospitals. Five of the six combination meetings involved metropolitan sites (Table 33). Numbers are too small to comment on differences between host and satellite sites (Tables 34 and 35).

Table 32: NSW sample: method of multidisciplinary meetings by cancer type (*n* = 49)

How are MDC meetings conducted?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Face-to-face	12	7	4	10	5	38 (78%)
Via teleconference	1	1	0	1	2	5 (10%)
Combination	3	2	0	0	1	6 (12%)
Total	16	10	4	11	8	49

Table 33: NSW sample: method of multidisciplinary meetings by location (*n* = 49)

How are MDC meetings conducted?	Location		Total
	Metropolitan	Regional	
Face-to-face	25 (83%)	13 (68%)	38 (78%)
Via teleconference	0 (0%)	5 (26%)	5 (10%)
Combination	5 (17%)	1 (5%)	6 (12%)
Total	30 (100%)	19 (100%)	49 (100%)

Table 34: NSW sample: host site of multidisciplinary meetings held via teleconference by cancer type (*n* = 11)

Is your hospital the host or satellite site?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Host site	3	1	0	0	2	6
Satellite site	1	2	0	1	1	5
Total	4	3	0	1	3	11

Table 35: NSW sample: host site of multidisciplinary meetings held via teleconference by location (*n* = 11)

Is your hospital the host or satellite site?	Location		Total
	Metropolitan	Regional	
Host site	4	2	6
Satellite site	1	4	5
Total	5	6	11

Victorian sample

Information on meeting frequency was available from 41 of the 42 MDC meetings reported from Victoria. Of these, 49% were weekly and 24% as fortnightly (Table 36). Numbers are too small to comment on differences by cancer type.

Table 36: Victorian sample: frequency of multidisciplinary meetings by cancer type (*n* = 41)

How often are MDC meetings held?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Weekly	5	4	3	4	4	20 (49%)
Fortnightly	5	1	1	1	2	10 (24%)
Monthly	3	3	0	3	1	10 (24%)
Bi-weekly	0	0	1	0	0	1 (3%)
Total	13	8	5	8	7	41 (100%)

Information on meeting format was available from 41 of the 42 MDC meetings reported from Victoria. Of these, 90% were held face to face, and 10% used videoconferencing (Table 37). Information on teleconferencing was not reported.

Table 37: Victorian sample: method of multidisciplinary meetings by cancer type (*n* = 41)

How are MDC meetings conducted?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Face-to-face	11 (85%)	8 (100%)	5 (100%)	7 (87.5%)	6 (86%)	37 (90%)
Videoconferencing	1 (7.5%)	0	0	0	0	1 (2%)
Combination	1 (7.5%)	0	0	1 (12.5%)	1 (14%)	3 (8%)
Total	13	8	5	8	7	41 (100%)

MEETING ATTENDANCE

NBOCC sample

Disciplines reported to be routinely represented at meetings by 213 respondents in the NBOCC sample were nursing staff (89%), other health professionals (62%), allied health professionals (57%), specialists (48%) and GPs (45%) (Table 38).

There were no apparent differences between cancer types (Table 39).

More respondents from metropolitan hospitals reported that specialists routinely attended meetings than those from regional hospitals (92% vs 28%) (Table 40). By far the majority of respondents indicating that GPs routinely attended meetings came from regional hospitals (62% vs 5%). More respondents from private hospitals reported that specialists routinely attended meetings than those from public hospitals (83% vs 41%) (Table 41).

A full list of disciplines attending meetings is shown in Appendix F.

Table 38: NBOCC sample: overall attendance at meetings by each discipline (*n* = 213)

Does discipline routinely attend MDC meeting?	Yes	No	Total	% Yes
Specialists	102	111	213	48%*
Nursing	189	24	213	89%*
Allied health	121	92	213	57%*
GPs	95	118	213	45%*
Other health professionals	131	82	213	62%*

* Multiple answers given, so percentages do not add up to 100%.

Table 39: NBOCC sample: disciplines routinely present at meetings by cancer type (*n* = 213)

Who routinely attends MDC meetings?	Cancer type					Total
	Breast (*n* = 50)	Lung (*n* = 42)	Gynaecological (*n* = 38)	Colorectal (*n* = 42)	Prostate (*n* = 41)	
Specialists	27 (54%)	20 (48%)	17 (45%)	19 (45%)	19 (46%)	102 (48%)*
Nursing	47 (94%)	35 (83%)	33 (87%)	37 (88%)	37 (90%)	189 (89%)*
Allied health	31 (62%)	21 (50%)	22 (58%)	23 (55%)	24 (59%)	121 (57%)*
GPs	22 (44%)	18 (43%)	18 (47%)	19 (45%)	18 (44%)	95 (45%)*
Other	31 (62%)	26 (62%)	23 (61%)	26 (62%)	25 (61%)	131 (61%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 40: NBOCC sample: disciplines routinely present at meetings by location (*n* = 213, regional *n* = 90, metropolitan *n* = 41)

Who routinely attends MDC meetings?	Location		Total
	Metropolitan	Regional	
Specialists	60 (92%)*	42 (28%)*	102 (48%)*
Nursing	52 (80%)*	137 (92%)*	189 (89%)*
Allied health	35 (54%)*	86 (58%)*	121 (57%)*
GPs	3 (5%)*	92 (62%)*	95 (45%)*
Other	41 (63%)*	90 (61%)*	131 (61%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 41: NBOCC sample: disciplines routinely present at meetings by hospital type (*n* = 213, public *n* = 177, private *n* = 36)

Who routinely attends MDC meetings?	Hospital type		Total
	Public	Private	
Specialists	72 (41%)*	30 (83%)*	102 (48%)*
Nursing	158 (89%)*	31 (86%)*	189 (89%)*
Allied health	106 (60%)*	15 (42%)*	121 (57%)*
GPs	85 (48%)*	10 (28%)*	95 (45%)*
Other	111 (63%)*	20 (55%)*	131 (61%)*

* Multiple answers given, so percentages do not add up to 100%.

These results were further analysed to examine attendance by core team members. (Core team members for each cancer type were determined with input from the steering committee and are provided in Appendix G.)

Of 50 breast cancer teams, only 2 (4%) reported attendance by all core team members (Table 42). No teams for lung, gynaecological, colorectal or prostate cancer types fulfilled the core team requirements. Most team members attending meetings for all cancer types did not come from what are considered core disciplines (Table 43).

Table 42: NBOCC sample: number of team members missing from core teams by cancer types (*n* = 213)

Core team composition	Breast (*n* = 50)	Lung (*n* = 42)	Gynaecological (*n* = 38)	Colorectal (*n* = 42)	Prostate (*n* = 41)
Full core teams	2 (4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Teams with 1 member missing	3 (6%)	0 (0%)	4 (11%)	0 (0%)	2 (5%)
Teams with 2 members missing	8 (16%)	1 (2%)	3 (8%)	2 (5%)	1 (2.5%)
Teams with 3 members missing	4 (8%)	3 (7%)	2 (5%)	1 (2%)	3 (7%)
Teams with 4 members missing	5 (10%)	2 (5%)	5 (13%)	3 (7%)	3 (7%)
Teams with 5 members missing	14 (28%)	2 (5%)	19 (50%)	2 (5%)	3 (7%)
Teams with 6 members missing	12 (24%)	3 (7%)	–	4 (9.5%)	20 (49%)
Teams with 7 members missing	–	2 (5%)	–	10 (24%)	–
Teams with 8 members missing	–	8 (19%)	–	16 (38%)	–
Teams with 9 members missing	–	16 (38%)	–	–	–
Teams with no core members	2 (4%)	5 (12%)	5 (13%)	4 (9.5%)	9 (22%)

Table 43: NBOCC sample: number of core disciplines as routine attendants by cancer type

Core team composition for breast (*n* = 50 meetings)		Core team composition for lung (*n* = 42 meetings)		Core team composition for gynaecological (*n* = 38 meetings)	
Surgery	24 (48%)	Specialist surgery	9 (21%)		
Radiologist	9 (18%)	Radiologist	6 (14%)		
Medical oncologist	18 (36%)	Medical oncologist	14 (33%)	Medical oncologist	13 (34%)
Radiation oncologist	17 (34%)	Radiation oncologist	11 (26%)	Radiation oncologist	10 (26%)
Pathologist	13 (26%)	Pathologist	6 (14%)	Pathologist	6 (16%)
GP	22 (44%)	GP	18 (43%)	GP	18 (47%)
		Palliative care	12 (28%)		
		Nuclear physician	3 (7%)		
		Respiratory physician	8 (19%)	Gynaecological oncologist	6 (16%)
Specialist/oncology nurse	40 (80%)	Specialist/oncology nurse	14 (33%)	Specialist/oncology nurse	14 (37%)

Core team composition for colorectal (*n* = 42 meetings)		Core team composition for prostate (*n* = 41 meetings)	
Surgery	15 (36%)		
Radiologist	3 (7%)	Radiologist	3 (7%)
Medical oncologist	13 (31%)	Medical oncologist	13 (31%)
Radiation oncologist	10 (24%)	Radiation oncologist	10 (24%)
Pathologist	6 (14%)	Pathologist	5 (12%)
GP	19 (45%)	GP	18 (44%)
Dietician	10 (24%)	Urology	2 (5%)
Specialist/oncology nurse	12 (28%)	Specialist/oncology nurse	13 (32%)

NSW sample

The disciplines attending MDC meetings in NSW were reported differently from those in the NBOCC sample. Individuals were reported in NSW, whereas collective attendance by specific disciplines was reported in the NBOCC sample.

Across the 49 MDC meetings reported in NSW, 309 health professionals routinely attended meetings. Of these, 37% were specialists and 31% were nurses. Only 1% of all routine attendants were GPs. Breast cancer meetings had the most routine attendants (*n* = 117) (Table 44). The proportion of routine attendants that were specialists was higher in metropolitan hospitals than in regional hospitals (46% vs 14%) (Table 45). Differences in attendance in public and private hospitals were minimal (Table 46).

A full list of disciplines attending meetings is shown in Appendix H.

Table 44: NSW sample: disciplines routinely present at meetings by cancer type (*n* = 309)

Who routinely attends MDC meetings?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Specialists	48	22	5	22	18	115 (37%)
Nursing	33	18	10	19	17	97 (31%)
Allied health	21	7	9	8	7	52 (17%)
Other	14	9	4	8	8	43 (14%)
GPs	1	0	0	1	0	2 (1%)
Total	117	56	28	58	50	309 (100%)

Table 45: NSW sample: disciplines routinely present at meetings by location (*n* = 309, regional *n* = 84, metropolitan *n* = 225)

Who routinely attends MDC meetings?	Location		Total
	Metropolitan	Regional	
Specialists	103 (46%)	12 (14%)	115 (37%)
Nursing	53 (24%)	44 (52%)	97 (31%)
Other	26 (12%)	17 (20%)	52 (17%)
Allied health	41 (18%)	11 (13%)	43 (14%)
GPs	2 (<1%)	0 (0%)	2 (<1%)
Total	225 (100%)	84 (100%)	309 (100%)

Table 46: NSW sample: disciplines routinely present at meetings by hospital type (*n* = 309, public *n* = 302, private *n* = 7)

Who routinely attends MDC meetings?	Hospital type		Total
	Public	Private	
Specialists	95 (31%)	2 (29%)	97 (31%)*
Nursing	42 (14%)	1 (14%)	52 (17%)*
Allied health	50 (17%)	2 (29%)	43 (14%)*
GPs	113 (37%)	2 (29%)	115 (37%)*
Other	2 (<1%)	0 (0%)	2 (1%)*
Total	302	7	309 (100%)

* Percentages are calculated from total number of attendants.

No teams reported all core team members routinely attending meetings (Tables 47, 48). These results were further analysed to examine attendance by core team members (Table 49). Six breast cancer teams and two prostate cancer teams had one or two core team members missing from routine attendance. The remaining teams had two or more core team members missing.

Table 47: NSW sample: number of team members missing from core teams by cancer types (*n* = 44)

Core team composition	Breast (*n* = 15)	Lung (*n* = 9)	Gynaecological (*n* = 3)	Colorectal (*n* = 10)	Prostate (*n* = 7)
Full core teams	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Teams with 1 member missing	1 (7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Teams with 2 members missing	5 (33%)	0 (0%)	1 (33%)	0 (0%)	2 (28%)

Table 48: NSW sample: number of core team disciplines who are not routine attendants by cancer type (*n* = 44)

Core team composition	Breast (*n* = 15)	Lung (*n* = 9)	Gynaecological (*n* = 3)	Colorectal (*n* = 10)	Prostate (*n* = 7)
Full core teams	0	0	0	0	0
Teams with 1 member missing	1	0	0	0	0
Teams with 2 members missing	5	0	1	0	2
Teams with 3 members missing	2	1	0	1	0
Teams with 4 members missing	2	1	0	0	0
Teams with 5 members missing	2	0	1	3	0
Teams with 6 members missing	1	1	–	2	3
Teams with 7 members missing	–	1	–	2	–
Teams with 8 members missing	–	2	–	1	–
Teams with 9 members missing	–	2	–	–	–
Teams with no core members	2	1	1	1	2

Table 49: NSW sample: number of core disciplines as routine attendants by cancer type

Core team composition for breast (*n* = 15 meetings)		Core team composition for lung (*n* = 9 meetings)		Core team composition for gynaecological (*n* = 3 meetings)	
Surgery	11 (73%)	Specialist surgery	2 (22%)		
Radiologist	5 (33%)	Radiologist	2 (22%)		
Medical oncologist	12 (80%)	Medical oncologist	5 (55.5%)	Medical oncologist	1 (33%)
Radiation oncologist	9 (60%)	Radiation oncologist	4 (44.5%)	Radiation oncologist	1 (33%)
Pathologist	7 (47%)	Pathologist	3 (33%)	Pathologist	1 (33%)
GP	1 (6.5%)	GP	1 (11%)	GP	0 (0%)
		Palliative care	0 (0%)		
		Nuclear physician	1 (11%)		
		Respiratory physician	3 (33%)	Gynaecological oncologist	1 (33%)
Supportive care	5 (33%)	Supportive care	3 (33%)	Supportive care	1 (33%)

Core team composition for colorectal (*n* = 10 meetings)		Core team composition for prostate (*n* = 7 meetings)	
Surgery	5 (50%)		
Radiologist	3 (30%)	Radiologist	2 (28.5%)
Medical oncologist	6 (60%)	Medical oncologist	3 (43%)
Radiation oncologist	4 (40%)	Radiation oncologist	2 (28.5%)
Pathologist	1 (10%)	Pathologist	2 (28.5%)
GP	1 (10%)	GP	0 (0%)
Palliative care physician	4 (40%)	Urology	2 (28.5%)
Stomal therapy nurse	1 (10%)		
Supportive care	4 (40%)	Supportive care	2 (28.5%)

Victorian sample

In Victoria the disciplines attending MDC meetings were recorded differently from those in the NBOCC sample. Individuals were reported in Victoria, whereas specialists, nurses, allied health professionals, GPs or others attending meetings were reported collectively in the NBOCC sample.

Across the 41 MDC meetings reported, 341 staff routinely attended meetings. Of these, 57% were specialists and 18% were nurses. Only 1% of routine attendants were reported to be GPs (Table 50). As most information came from metropolitan and public hospitals, it is not possible to report a breakdown by location or hospital type (Table 51).

A full list of disciplines attending meetings is shown in Appendix I.

Table 50: Victorian sample: disciplines routinely present at meetings by cancer type (*n* = 341)

Who **routinely** attends MDC meetings?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Specialists	59	42	22	38	32	193 (57%)*
Nursing	25	4	6	14	12	61 (18%)*
Other	17	11	3	8	12	51 (15%)*
Allied health	15	3	3	4	6	31 (9%)*
GPs	3	0	0	1	1	5 (1%)*
Total	19	60	34	65	63	341 (100%)

* Percentages are calculated from total number of attendants.

Table 51: Victorian sample: disciplines routinely present at meetings by location (*n* = 341)

Who **routinely** attends MDC meetings?	Location		Total
	Metropolitan	Regional	
Specialists	189	4	193 (57%)
Nursing	58	3	61 (18%)
Other	50	1	51 (15%)
Allied health	28	3	31 (9%)
GPs	4	1	5 (1%)
Total	329	12	341 (100%)

No teams reported that all recommended core team members routinely attend meetings (Table 52). Seven breast cancer teams and two prostate cancer teams had one core team member missing from routine meeting attendants. The remaining teams had two or more core team members missing (Table 53). These results were further analysed to examine attendance by core team members (Table 54).

Table 52: Victorian sample: number of team members missing from core teams by cancer type (*n* = 42)

Core team composition	Breast (*n* = 13)	Lung (*n* = 9)	Gynaecological (*n* = 5)	Colorectal (*n* = 8)	Prostate (*n* = 7)
Full core teams	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Teams with 1 member missing	7 (53%)	0 (0%)	0 (0%)	0 (0%)	2 (28.5%)
Teams with 2 members missing	2 (16.5%)	0 (0%)	1 (20%)	1 (12.5%)	2 (28.5%)

Table 53: Victorian sample: number of core team disciplines who are not routine attendants by cancer type (*n* = 42)

Core team composition	Breast (*n* = 13)	Lung (*n* = 9)	Gynaecological (*n* = 5)	Colorectal (*n* = 8)	Prostate (*n* = 7)
Full core teams	0	0	0	0	0
Teams with 1 member missing	7	0	0	0	2
Teams with 2 members missing	2	1	1	1	2
Teams with 3 members missing	3	0	1	4	2
Teams with 4 members missing	1	3	2	1	1
Teams with 5 members missing	0	2	1	2	0
Teams with 6 members missing	0	1		0	0
Teams with 7 members missing	–	1		0	
Teams with 8 members missing	–	0		0	
Teams with 9 members missing	–	0			
Teams with no core members	0	1	0	0	0

Table 54: Victorian sample: number of core disciplines as routine attendants by cancer type

Core team composition for breast (*n* = 12)		Core team composition for lung (*n* = 9)		Core team composition for gynaecological (*n* = 5)	
Surgeon	11 (91.5%)	Specialist surgeon	4 (44.5%)		
Radiologist	7 (58%)	Radiologist	6 (66.5%)		
Medical oncologist	11 (91.5%)	Medical oncologist	8 (89%)	Medical oncologist	4 (80%)
Radiation oncologist	11 (91.5%)	Radiation oncologist	7 (87.5%)	Radiation oncologist	4 (80%)
Pathologist	10 (83%)	Pathologist	3 (33%)	Pathologist	3 (60%)
GP	0 (0%)	GP	0 (0%)	GP	0 (0%)
		Palliative care	4 (44.5%)		
		Nuclear physician	1 (11%)		
		Respiratory physician	8 (89%)	Gynaecological oncologist	1 (20%)
Supportive care	11 (91.5%)	Supportive care	1 (11%)	Supportive care	
Core team composition for breast regional (*n* = 1)		**Core team composition for colorectal (*n* = 8)**		**Core team composition for prostate (*n* = 7)**	
Surgeon	1 (100%)	Surgeon	8 (100%)		
Radiologist	0 (0%)	Radiologist	7 (87.5%)	Radiologist	7 (100%)
Medical oncologist	1 (100%)	Medical oncologist	8 (100%)	Medical oncologist	7 (100%)
Radiation oncologist	1 (100%)	Radiation oncologist	8 (100%)	Radiation oncologist	6 (86%)
Pathologist	1 (100%)	Pathologist	4 (50%)	Pathologist	6 (86%)
GP	1 (100%)	GP	0 (0%)	GP	0 (0%)
		Palliative care physician	1 (12.5%)	Urologist	4 (57%)
		Stomal therapy nurse	6 (75%)		
Supportive care	1 (100%)	Supportive care	2 (25%)	Supportive care	3 (43%)

LINKS TO OTHER SERVICES

NBOCC sample

Of the 213 respondents who reported MDC meetings, 93% reported links to other specialities and allied health, 5% reported no links and 2% did not know (Table 55). There was no difference between cancer types (Table 55), hospital location (Table 56) or hospital type (Table 57) in the proportion of respondents reporting links to other services.

Table 55: NBOCC sample: established links to other specialities by cancer type (*n* = 213)

Does the team have links to other specialities?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes	47 (94%)	38 (90%)	34 (89%)	40 (95%)	39 (95%)	198 (93%)
No	3 (6%)	3 (7%)	2 (5%)	2 (5%)	2 (5%)	12 (5%)
Don't know	0 (0%)	1 (2%)	2 (5%)	0 (0%)	0 (0%)	3 (2%)
Total	50 (100%)	42 (100%)	38 (100%)	42 (100%)	41 (100%)	213 (100%)

Table 56: NBOCC sample: established links to other specialities by location (*n* = 213)

Does the team have links to other specialities?	Location		Total
	Metropolitan	Regional	
Yes	62 (95%)	136 (92%)	198 (93%)
No	2 (3%)	10 (7%)	12 (5%)
Don't know	1 (1.5%)	2 (1%)	3 (2%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 57: NBOCC sample: established links to other specialities by hospital type (*n* = 213)

Does the team have links to other specialities?	Hospital type		Total
	Public	Private	
Yes	162 (91%)	36 (100%)	198 (93%)
No	12 (7%)	0 (0%)	12 (5%)
Don't know	3 (2%)	0 (0%)	3 (2%)
Total	177 (100%)	36 (100%)	213 (100%)

Of the 198 respondents who reported links to other specialities, 197 provided further details: 78% reported links to palliative care, 63% to community nursing services, 52% to occupational therapy, 49% to dietetics, 44% to pain clinics, 44% to social work, 28% to psychiatry and 24% to psychology (Table 58). There were no apparent differences in links by cancer type (Table 59).

Eight per cent of respondents in metropolitan areas reported links to psychiatric services, compared with 20% in regional areas. Links to psychology services were similar at 13% in metropolitan areas and 12% in regional areas. Sixteen per cent of respondents in metropolitan areas reported links to genetic/hereditary counselling services, compared with 12% in regional areas (Table 60). Respondents reported links to psychiatric services more frequently in public hospitals than in private hospitals (26% vs 2%). This trend was reported also in links to psychology services (15% vs 9%) (Table 61).

Table 58: NBOCC sample: team links to services and specialities (*n* = 197)

Does the team have links to these services?	Yes	No	Total	Percentage of teams with links to each service
Palliative care	154	43	197	78%
Community nursing services	124	73	197	63%
Occupational therapy	102	95	197	52%
Dietetics	97	100	197	49%
Pain clinic	86	111	197	44%
Social work	86	111	197	44%
Lymphoedema services	68	129	197	35%
Pastoral care	70	127	197	35%
Other	63	128	191	33%
Stomal therapy	64	133	197	32%
Continence/erectile dysfunc. serv.	57	140	197	30%
Genetic/hereditary counselling	56	141	197	28%
Psychiatry	55	142	197	28%
Plastic surgery	52	145	197	26%
Nuclear medicine	51	146	197	26%
Psychology	48	149	197	24%

Table 59: NBOCC sample: team links to services and specialities by cancer type (*n* = 197)

What services or specialities does the team have links with?	Cancer type					Total
	Breast (*n* = 47)	Lung (*n* = 38)	Gynaecological (*n* = 33)	Colorectal (*n* = 40)	Prostate (*n* = 39)	
Genetic/hereditary couns.	18 (38%)	9 (23%)	9 (27%)	11 (28%)	9 (23%)	56 (28%)*
Dietetics	21 (45%)	19 (50%)	18 (55%)	21 (53%)	18 (46%)	97 (49%)*
Psychiatry	15 (32%)	10 (26%)	11 (33%)	9 (23%)	10 (26%)	55 (28%)*
Psychology	14 (30%)	10 (26%)	9 (27%)	7 (18%)	8 (21%)	48 (24%)*
Lymphoedema services	24 (51%)	11 (29%)	11 (33%)	11 (28%)	11 (28%)	68 (34%)*
Palliative care	33 (70%)	30 (79%)	28 (85%)	31 (76%)	32 (82%)	154 (78%)*
Pain clinic	19 (40%)	17 (45%)	15 (45%)	17 (43%)	18 (46%)	86 (44%)*
Community nursing services	30 (64%)	24 (63%)	21 (64%)	25 (63%)	24 (62%)	124 (63%)*
Occupational therapy	24 (51%)	20 (53%)	19 (58%)	19 (48%)	20 (51%)	102 (52%)*
Continence/erectile dysfunc.	10 (21%)	9 (23%)	11 (33%)	11 (28%)	16 (41%)	57 (29%)*
Social work	18 (38%)	17 (45%)	15 (45%)	18 (45%)	18 (46%)	86 (44%)*
Plastic surgery	17 (36%)	9 (23%)	9 (27%)	8 (20%)	9 (23%)	52 (26%)*
Nuclear medicine	12 (26%)	9 (23%)	9 (27%)	9 (23%)	12 (31%)	51 (26%)*
Stomal therapy	12 (26%)	12 (32%)	11 (33%)	16 (40%)	13 (33%)	64 (32%)*
Pastoral care	15 (32%)	14 (37%)	13 (39%)	14 (35%)	14 (36%)	70 (35%)*
Other†	15 (32%)	14 (37%)	10 (30%)	14 (35%)	10 (26%)	63 (32%)*

* Multiple answers given, so percentages do not add up to 100%

† Other services include a range of community organisations and allied health services.

Table 60: NBOCC sample: team links to services and specialities by location (*n* = 197)

What services or specialities does the team have links with?	Location		Total
	Metropolitan	Regional	
Genetic/hereditary counselling	32 (16%)	24 (12%)	56 (28%)*
Dietetics	30 (15%)	67 (34%)	97 (49%)*
Psychiatry	15 (8%)	40 (20%)	55 (28%)*
Psychology	25 (13%)	23 (12%)	48 (24%)*
Lymphoedema services	34 (17%)	34 (17%)	68 (34%)*
Palliative care	50 (25%)	104 (53%)	154 (78%)*
Pain clinic	37 (19%)	49 (25%)	86 (44%)*
Community nursing services	37 (19%)	87 (44%)	124 (63%)*
Occupational therapy	34 (17%)	68 (35%)	102 (52%)*
Continence/erectile dysfunc. serv.	15 (8%)	42 (21%)	57 (29%)*
Social work	29 (15%)	57 (29%)	86 (44%)*
Plastic surgery	27 (14%)	25 (13%)	52 (26%)*
Nuclear medicine	27 (14%)	24 (12%)	51 (26%)*
Stomal therapy	19 (10%)	45 (23%)	64 (32%)*
Pastoral care	29 (15%)	41 (21%)	70 (35%)*
Other†	20 (10%)	43 (22%)	63 (32%)*

* Multiple answers given, so percentages do not add up to 100%.
† Other services include a range of community organisations and allied health services.

Table 61: NBOCC sample: team links to services and specialities by hospital type (*n* = 197)

What services or specialities does the team have links with?	Hospital type		Total
	Public	Private	
Genetic/hereditary counselling	42 (21%)	14 (7%)	56 (28%)*
Dietetics	66 (33%)	31 (16%)	97 (49%)*
Psychiatry	51 (26%)	4 (2%)	55 (28%)*
Psychology	30 (15%)	18 (9%)	48 (24%)*
Lymphoedema services	48 (24%)	20 (10%)	68 (34%)*
Palliative care	123 (62%)	31 (16%)	154 (78%)*
Pain clinic	69 (35%)	17 (9%)	86 (44%)*
Community nursing services	94 (48%)	30 (15%)	124 (63%)*
Occupational therapy	79 (40%)	23 (12%)	102 (52%)*
Continence/erectile dysfunc. serv.	48 (24%)	9 (4%)	57 (29%)*
Social work	71 (36%)	15 (8%)	86 (44%)*
Plastic surgery	36 (18%)	16 (8%)	52 (26%)*
Nuclear medicine	42 (21%)	9 (4%)	51 (26%)*
Stomal therapy	51 (26%)	13 (6%)	64 (32%)*
Pastoral care	41 (21%)	29 (15%)	70 (35%)*
Other†	55 (28%)	8 (4%)	63 (32%)*

* Multiple answers given, so percentages do not add up to 100%.

† Other services include a range of community organisations and allied health services.

NSW sample

Information about links to other specialities was available only for four of the meetings reported in NSW owing to how the survey question was asked. It is difficult to draw any conclusions from these data given the small numbers.

Victorian sample

Information about links to other specialities or allied health services was reported for 29 of the multidisciplinary teams in Victoria, of which 27 (94%) reported links (Table 62). The most common links reported were to palliative care (33%), familial cancer centres (30%), counselling services (19%) and lymphoma services (19%) (Table 63). Only 1 team (4%) reported links to psychiatric or psychosocial services.

Table 62: Victorian sample: established links to other services and specialities by cancer type (*n* = 29)

Does the team have links to other specialities?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes	10	6	2	5	4	27 (94%)
No	0	0	0	0	1	1 (3%)
Don't know	0	1	0	0	0	1 (3%)
Total	10	7	2	5	5	29

Table 63: Victorian sample: established links to other services and specialities by cancer type (*n* = 27)

What services or specialities does the team have links with?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Palliative care	3	3	0	2	1	9 (33%)*
Familial cancer centre (including genetic counselling and genetic services)	7	0	0	1	0	8 (30%)*
Counselling	2	0	0	2	1	5 (19%)*
Lymphoma services	3	0	0	1	1	5 (19%)*
Dietetics	2	1	0	1	0	4 (15%)*
Primary/community care	1	0	0	1	1	3 (11%)*
Plastic surgery	2	0	0	0	0	2 (7%)*
Radiation oncology	2	0	0	0	0	2 (7%)*
Stomal therapist	0	0	0	1	1	2 (7%)*
Peter McCallum Cancer Centre	0	0	1	0	0	1 (4%)*
Continence management	0	0	0	0	1	1 (4%)*
Psychiatry	1	0	0	0	0	1 (4%)*
Other allied health	1	0	0	0	0	1 (4%)*
Psychosocial services	1	0	0	0	0	1 (4%)*

What services or specialities does the team have links with?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Tissue bank	1	0	0	0	0	1 (4%)*
BreastScreen	1	0	0	0	0	1 (4%)*
Gynaecological oncologist	0	0	1	0	0	1 (4%)*
Medical oncologist	0	0	0	1	0	1 (4%)*
Cardiothoracic surgeon	0	1	0	0	0	1 (4%)*
Cancer support nurse	0	0	0	1	0	1 (4%)*
(Other) Colorectal surgeon	0	0	0	1	0	1 (4%)*
(Other) Urologist	0	0	0	0	1	1 (4%)*

* Multiple answers given, so percentages do not add up to 100%.

COMMUNICATION WITH GENERAL PRACTITIONERS

NBOCC SAMPLE

Of the 213 respondents who held MDC meetings, 71% reported that treatment plans were always communicated to the patient's GP, and 7% that they were rarely or never communicated (Table 64). Respondents from gynaecological teams (82%) and colorectal teams (79%) were most likely to report that plans were always communicated (Table 64). More respondents from regional hospitals reported that treatment plans were always communicated to GPs than did those from metropolitan hospitals (80% vs 49%) (Table 65). The proportion of respondents who reported that treatment plans were communicated was similar in public and private hospitals in all categories (Table 66).

Table 64: NBOCC sample: level of communication of treatment plans to GPs by cancer type (*n* = 213)

Are treatment plans communicated to GPs?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	34 (68%)	28 (67%)	31 (82%)	29 (79%)	29 (71%)	151 (71%)
Almost always	5 (10%)	5 (12%)	0 (0%)	3 (7%)	3 (7%)	16 (8%)
Mostly	5 (10%)	4 (10%)	5 (13%)	3 (7%)	4 (10%)	21 (10%)
Sometimes	3 (6%)	2 (5%)	1 (3%)	3 (7%)	2 (5%)	11 (5%)
Rarely	1 (2%)	1 (2%)	1 (3%)	1 (2%)	2 (5%)	6 (3%)
Never	2 (4%)	2 (5%)	0 (0%)	3 (7%)	1 (2%)	9 (4%)
Total	50 (100%)	42 (100%)	38 (100%)	42 (100%)	41 (100%)	213 (100%)

Table 65: NBOCC sample: level of communication of treatment plans to GPs by location (*n* = 213)

Are treatment plans communicated to GPs?	Location		Total
	Metropolitan	Regional	
Always	32 (49%)	119 (80%)	151 (71%)
Almost always	8 (12%)	8 (5%)	16 (8%)
Mostly	9 (14%)	12 (8%)	21 (10%)
Sometimes	5 (8%)	6 (4%)	11 (5%)
Rarely	5 (8%)	1 (0.7%)	6 (3%)
Never	6 (9%)	2 (1.3%)	9 (4%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 66: NBOCC sample: level of communication of treatment plans to GPs by hospital type (*n* = 213)

Are treatment plans communicated to GPs?	Hospital type		Total
	Public	Private	
Always	126 (71%)	25 (69%)	151 (71%)
Almost always	11 (6%)	5 (14%)	16 (8%)
Mostly	16 (9%)	5 (14%)	21 (10%)
Sometimes	11 (6%)	0 (0%)	11 (5%)
Rarely	5 (3%)	1 (3%)	6 (3%)
Never	8 (5%)	0 (0%)	9 (4%)
Total	177 (100%)	36 (100%)	213 (100%)

Of the 204 respondents who reported that treatment plans are communicated to GPs, 45% reported that this is done in person at meetings (Table 67). There was no difference in methods for communicating with GPs by cancer type (Table 68).

The most common approach to communicating with GPs in metropolitan hospitals and private hospitals was through individualised letter (72% and 78%, respectively) (Tables 69, 70), whereas in regional hospitals and public hospitals it was 'in person through meetings' (64% and 48%).

Table 67: NBOCC sample: type of communication used with GPs (*n* = 204)

How are treatment plans communicated to GPs?	Yes	No	Total	Percentage that use these communication methods
In person through meetings	93	111	204	45%*
Telephone	54	150	204	26%*
Individualised letter	93	111	204	45%*
Standard letter	24	180	204	12%*
Facsimile	27	177	204	13%*
Email	20	184	204	10%*
Only indirectly though clinician	9	189	198†	5%*

* Multiple answers given, so percentages do not add up to 100%.

† Six respondents did not answer this question.

Table 68: NBOCC sample: type of communication used with GPs by cancer type (*n* = 204)

How are treatment plans communicated to GPs?	Cancer type					Total
	Breast (*n* = 47)	Lung (*n* = 40)	Gynaecological (*n* = 38)	Colorectal (*n* = 39)	Prostate (*n* = 40)	
In person through meetings	20 (43%)	17 (43%)	19 (50%)	18 (46%)	19 (48%)	93 (45%)*
Telephone	12 (26%)	11 (28%)	10 (26%)	10 (26%)	11 (28%)	54 (26%)*
Individualised letter	23 (49%)	18 (45%)	18 (47%)	16 (41%)	18 (45%)	93 (45%)*
Standard letter	6 (13%)	4 (10%)	4 (11%)	5 (13%)	5 (13%)	24 (12%)*
Facsimile	6 (13%)	6 (15%)	5 (13%)	5 (13%)	5 (13%)	27 (13%)*
Email	4 (9%)	4 (10%)	4 (11%)	4 (10%)	4 (10%)	20 (10%)*
Only indirectly though clinician	2 (4%)	2 (5%)	2 (5%)	2 (5%)	1 (3%)	9 (5%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 69: NBOCC sample: type of communication used with GPs by location (*n* = 204, metropolitan *n* = 61, regional *n* = 143)

How are treatment plans communicated to GPs?	Location		Total
	Metropolitan	Regional	
In person through meetings	2 (3%)*	91 (64%)*	93 (45%)*
Telephone	15 (24%)*	39 (27%)*	54 (26%)*
Individualised letter	44 (72%)*	49 (34%)*	93 (45%)*
Standard letter	4 (6%)*	20 (14%)*	24 (12%)*
Facsimile	3 (5%)*	24 (17%)*	27 (13%)*
Email	5 (8%)*	15 (10%)*	20 (10%)*
Only indirectly though clinician	8 (13%)*	1 (1%)*	9 (5%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 70: NBOCC sample: type of communication used with GPs by hospital type (*n* = 204, public *n* = 172, private *n* = 32)

How are treatment plans communicated to GPs?	Hospital type		Total
	Public	Private	
In person through meetings	83 (48%)*	10 (31%)*	93 (45%)*
Telephone	49 (28%)*	5 (16%)*	54 (26%)*
Individualised letter	68 (39%)*	25 (78%)*	93 (45%)*
Standard letter	23 (13%)*	1 (3%)*	24 (12%)*
Facsimile	18 (10%)*	9 (28%)*	27 (13%)*
Email	10 (6%)*	10 (31%)*	20 (10%)*
Only indirectly though clinician	4 (2%)*	5 (16%)*	9 (5%)*

* Multiple answers given, so percentages do not add up to 100%.

NSW sample

Of the 49 respondents, 22% reported that treatment plans developed at multidisciplinary meetings were always communicated to GPs, 29% that plans were sometimes communicated, and 33% that plans were never communicated (Table 71). There were no differences by hospital location (Table 72). The most common approach to communicating with GPs was 'directly through clinician' (52%), followed by 'indirectly through clinician' (45%) (Table 73).

Numbers are too small to comment on differences by cancer type (Table 74). The most common approach to communicating with GPs in metropolitan hospitals was via individualised letter (55%), whereas in regional hospitals it was 'indirectly through clinician' (60%) (Table 75).

Table 71: NSW sample: level of communication of treatment plans to GPs by cancer type (*n* = 49)

Are treatment plans communicated to GPs?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
All of the time	4	2	1	3	1	11 (22%)
Some of the time	6	3	1	2	2	14 (29%)
Patient specific	2	1	0	3	2	8 (16%)
Never	4	4	2	3	3	16 (33%)
Total	16	10	4	11	8	49 (100%)

Table 72: NSW sample: level of communication of treatment plans to GPs by location (*n* = 49 metropolitan *n* = 30, regional *n* = 19)

Are treatment plans communicated to GPs?	Location		Total
	Metropolitan	Regional	
All of the time	6 (20%)*	5 (26%)*	11 (22%)
Some of the time	9 (30%)*	5 (26%)*	14 (29%)
Patient specific	3 (10%)*	5 (26%)*	8 (16%)
Never	12 (40%)*	4 (21%)*	16 (33%)
Total	30	19	49 (100%)

Table 73: NSW sample: type of communication used with GPs (*n* = 33)

How are treatment plans communicated to GPs?	Yes	No	Total	Percentage that use these communication methods
Email	4	29	33	12%
Individualised letter	11	22	33	33%
Standardised letter	3	30	33	9%
Written treatment plan	6	27	33	18%
Attendance at meeting	7	26	33	21%
Verbally/telephone (directly through clinician)	17	16	33	52%
Indirectly through clinician	15	18	33	45%
Other	1	32	33	3%

Table 74: NSW sample: type of communication used with GPs by cancer type (*n* = 33)

How are treatment plans communicated to GPs?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Email	1	1	0	1	1	4 (12%)*
Individualised letter	6	1	1	2	1	11 (33%)*
Standardised letter	1	1	0	0	1	3 (9%)*
Written treatment plan	4	1	0	1	0	6 (18%)*
Attendance at meeting	3	1	0	2	1	7 (21%)*
Verbally/telephone (directly through clinician)	6	3	1	4	3	17 (52%)*
Indirectly through clinician	4	3	0	5	3	15 (45%)*
Other	1	0	0	0	0	1 (3%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 75: NSW sample: type of communication used with GPs by location (*n* = 33, metropolitan *n* = 18, regional *n* = 15)

How are treatment plans communicated to GPs?	Location		Total
	Metropolitan	Regional	
Email	0 (0%)*	4 (33%)	4 (12%)*
Individualised letter	10 (55%)*	1 (8%)	11 (33%)*
Standardised letter	3 (17%)*	0 (0%)	3 (9%)*
Written treatment plan	5 (28%)*	1 (8%)	6 (18%)*
Attendance at meeting	2 (11%)*	5 (33%)	7 (21%)*
Verbally/telephone (directly through clinician)	3 (17%)*	14 (42%)	17 (51%)*
Indirectly through clinician	6 (33%)*	9 (60%)	15 (45%)*
Other	1 (5%)*	0 (0%)	1 (3%)*

* Multiple answers given, so percentages do not add up to 100%.

Victorian sample

Information on communication with GPs was available from 32 of the teams in Victoria. Of these, 66% reported that treatment plans were always communicated to GPs and 13% that plans were sometimes communicated (Table 76). Only 1 team (3%) reported that plans were never communicated. The most common approach was via letter (65%) (Table 77).

Table 76: Victorian sample: level of communication of treatment plans to GPs by cancer type (*n* = 32)

Are treatment plans communicated to GPs?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	7	3	3	5	3	21 (66%)
Almost always	1	0	0	0	0	1 (3%)
Sometimes	3	1	0	0	0	4 (13%)
Never	0	0	0	0	1	1 (3%)
Don't know	0	2	0	2	1	5 (16%)
Total	11	6	2	7	5	32 (100%)

Table 77: Victorian sample: type of communication used with GPs by cancer type (*n* = 29)

How are treatment plans communicated to GPs?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
In person at meetings	2	0	0	1	1	4 (15%)*
Telephone	1	0	0	0	0	1 (4%)*
Letter	6	2	3	4	2	17 (65%)*
Facsimile	1	0	0	0	0	1 (4%)*
Email	0	0	0	0	0	0 (0%)*
Indirectly through the clinician	3	2	0	1	0	6 (23%)*
Total	13	4	3	6	3	29 (100%)

* Multiple answers given, so percentages do not add up to 100%.

INFORMING PATIENTS ABOUT MEETINGS AND GAINING CONSENT

NBOCC sample

Of the 213 respondents who reported an MDC meeting, 77% reported that patients were routinely informed that their case would be discussed by the multidisciplinary team; 23% reported that they did not routinely inform patients (Table 78). Of the respondents who reported that patients were informed, 16% informed patients in writing and 84% informed them verbally.

There was no difference by cancer type (Table 78).

More respondents from regional hospitals reported that patients were informed that their case would be discussed than those from metropolitan hospitals (84% vs 63%) (Table 79). More respondents from public hospitals reported that they routinely informed their patients that their case would be discussed than those from private hospitals (81% vs 58%) (Table 80).

Table 78: NBOCC sample: patients informed their case is to be discussed at a multidisciplinary meeting by cancer type (*n* = 213)

Are patients routinely informed that their case is discussed at MDC meeting?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes – written (% of total Yes)	6 (15%)	5 (16%)	5 (16%)	5 (16%)	5 (16%)	26 (16%)
Yes – verbal (% of total Yes)	33 (85%)	27 (84%)	26 (84%)	26 (84%)	27 (84%)	139 (84%)
Total Yes (% of overall total)	39 (78%)	32 (76%)	31 (82%)	31 (74%)	32 (78%)	165 (77%)
Total No (% of overall total)	11 (22%)	10 (24%)	7 (18%)	11 (26%)	9 (22%)	48 (23%)
Overall total	50 (100%)	42 (100%)	38 (100%)	42 (100%)	41 (100%)	213 (100%)

Table 79: NBOCC sample: patients informed their case is to be discussed at a multidisciplinary meeting by location (*n* = 213)

Are patients routinely informed that their case is discussed at MDC meeting?	Location		Total
	Metropolitan	Regional	
Yes – written (% of total Yes)	1 (2%)	25 (20%)	26 (16%)
Yes – verbal (% of total Yes)	40 (97%)	99 (80%)	139 (84%)
Total Yes (% of overall total)	41 (63%)	124 (84%)	165 (77%)
Total No (% of overall total)	24 (37%)	24 (16%)	48 (23%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 80 NBOCC sample: patients informed their case is to be discussed at a multidisciplinary meeting by hospital type (*n* = 213)

Are patients routinely informed that their case discussed at MDC meeting?	Hospital type		Total
	Public	Private	
Yes – written (% of total Yes)	21 (15%)	5 (24%)	26 (16%)
Yes – verbal (% of total Yes)	123 (85%)	16 (76%)	139 (84%)
Total – Yes (% of overall total)	144 (81%)	21 (58%)	165 (77%)
Total – No (% of overall total)	33 (19%)	15 (42%)	48 (22%)
Total	177	36	213 (100%)

Of the 213 respondents who reported an MDC meeting, 136 (64%) asked patients to consent to their case being discussed. Of these, 43% gained consent in writing and 57% verbally (Table 81). There was no difference in the process for obtaining consent by cancer type (Table 81). More

respondents from regional hospitals reported that patients were asked to consent than those from metropolitan hospitals (78% vs 31%) (Table 82). Of these, more respondents from regional hospitals obtained consent in writing (47% vs 20%). More respondents from public hospitals sought consent than those from private hospitals (69% vs 36%) (Table 83). Of these, there was no difference in whether or not consent was obtained in writing (43% vs 46%).

Table 81: NBOCC sample: patients asked to consent to their case being discussed at a multidisciplinary meeting by cancer type (*n* = 213)

Are patients routinely informed that their case is discussed at MDC meeting?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes – written (% of total Yes)	14	11	11	12	11	59 (43%)
Yes – verbal (% of total Yes)	18	16	13	13	17	77 (57%)
Total Yes (% of overall total)	32	27	24	25	28	136 (64%)
Total No (% of overall total)	18	15	14	17	13	77 (36%)
Overall total	50	42	38	42	41	213 (100%)

Table 82: NBOCC sample: patients asked to consent to their case to be discussed at a multidisciplinary meeting by location (*n* = 213, metropolitan *n* = 65, regional *n* = 148)

Are patients asked to consent to their case being discussed at MDC meeting?	Location		Total
	Metropolitan	Regional	
Yes – written (% of total yes)	4 (20%)	55 (47%)	59 (43%)
Yes – verbal (% of total yes)	16 (80%)	61 (53%)	77 (57%)
Total Yes (% of overall total)	20 (31%)	116 (78%)	136 (64%)
Total No (% of overall total)	45 (69%)	32 (22%)	77 (36%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 83: NBOCC sample: patients asked to consent to their case being discussed at a multidisciplinary meeting by hospital type (*n* = 213, public *n* = 177, private *n* = 36)

Are patients asked to consent to their case being discussed at MDC meeting?	Hospital type		Total
	Public	Private	
Yes – written (% of total yes)	53 (43%)	6 (46%)	59 (43%)
Yes – verbal (% of total yes)	70 (57%)	7 (54%)	77 (57%)
Total Yes (% of overall total)	123 (69%)	13 (36%)	136 (64%)
Total No (% of overall total)	54 (30%)	23 (64%)	77 (36%)
Total	177 (100%)	36 (100%)	213 (100%)

NSW sample

Of the 49 respondents who reported a multidisciplinary meeting, 27% reported that patients were always informed that their case would be discussed, and 37% that patients were usually informed (Table 84). Eight respondents (16%) reported that patients were never informed. Information was not available about whether patients were informed verbally or in writing. More respondents from metropolitan hospitals reported that patients were always (37% vs 11%) or usually informed (43% vs 26%) than those from regional hospitals (Table 85).

Table 84: NSW sample: patients informed their case is to be discussed at a multidisciplinary meeting by cancer type (*n* = 49)

Are patients routinely informed that their case is discussed at MDC meeting?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	5	2	1	3	2	13 (27%)
Usually	7	4	2	3	2	18 (37%)
Sometimes	3	2	0	3	2	10 (20%)
Rarely	0	0	0	0	0	0 (0%)
Never	1	2	1	2	2	8 (16%)
Total	16	10	4	11	8	49 (100%)

Table 85: NSW sample: patients informed their case is to be discussed at a multidisciplinary meeting by location (*n* = 49, metropolitan *n* = 30, regional *n* = 19)

Are patients routinely informed that their case is discussed at MDC meeting?	Location		Total
	Metropolitan	Regional	
Always	11 (37%)	2 (11%)	13 (27%)
Usually	13 (43%)	5 (26%)	18 (37%)
Sometimes	2 (7%)	8 (42%)	10 (20%)
Rarely	0 (0%)	0 (0%)	0 (0%)
Never	4 (13%)	4 (21%)	8 (16%)
Total	30 (100%)	19 (100%)	49 (100%)

Of the 41 respondents who reported that patients were informed that their case would be discussed, 56% sought consent. Most respondents obtained consent verbally (87%) (Table 86). The 3 respondents who obtained consent in writing came from metropolitan hospitals (Table 87).

Table 86: NSW sample: patients asked to consent to their case being discussed at a multidisciplinary meeting by cancer type (*n* = 41)

Are patients asked to consent to their case being discussed at MDC meeting?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes – verbal consent (% of total Yes)	7	4	2	4	3	20 (87%)
Yes – written consent (% of total Yes)	3	0	0	0	0	3 (13%)
Total Yes (% of overall total)	10 (67%)	4 (50%)	2 (67%)	4 (44%)	3 (50%)	23 (56%)
No (% of overall total)	5	4	1	5	3	18 (44%)
Total	15	8	3	9	6	41 (100%)

Table 87: NSW sample: patients asked to consent to their case being discussed at a multidisciplinary meeting by location (*n* = 41)

Are patients asked to consent to their case being discussed at MDC meeting?	Location		Total
	Metropolitan	Regional	
Yes – verbal consent (% of total Yes)	13 (81%)	7 (100%)	20 (87%)
Yes – written consent (% of total Yes)	3 (19%)	0 (0%)	3 (13%)
Total yes (% of overall total)	16 (62%)	7 (47%)	23 (56%)
No (% of overall total)	10 (38%)	8 (53%)	18 (44%)
Total	26 (100%)	15 (100%)	41 (100%)

Victorian sample

Information on informing patients about multidisciplinary meetings was available from 27 of the teams in Victoria. Of these, 85% reported that patients were routinely informed that their case would be discussed at a multidisciplinary meeting; all of these did so verbally (Table 88). The remaining 4 teams did not know whether patients were informed.

Table 88: Victorian sample: patients informed their case is to be discussed at a multidisciplinary meeting by cancer type (*n* = 27)

Are patients routinely informed that their case discussed at MDC meeting?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes – verbal (% of total Yes)	11	2	3	3	4	23 (100%)
Yes – written (% of total Yes)	0	0	0	0	0	0 (0%)
Total Yes (% of overall total)	11 (100%)	2 (50%)	3 (100%)	3 (60%)	4 (100%)	23 (85%)
No (% of overall total)	0	0	0	0	0	0 (0%)
Don't know (% of overall total)	0	2	0	2	0	4 (15%)
Total	**11**	**4**	**3**	**5**	**4**	27 (100%)

Of the 21 teams that answered whether patient consent was obtained for a case to be discussed, about half (52%) reported that consent was obtained; all of these teams obtained consent verbally (Table 89). Numbers are too small to determine differences by cancer type.

Table 89: Victorian sample: patients asked to consent to their case being discussed at a multidisciplinary meeting by cancer type (*n* = 21)

Are patients asked to consent to their case being discussed at MDC meeting?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes – verbal (% of total Yes)	6	3	0	0	2	11 (100%)
Yes – written (% of total Yes)	0	0	0	0	0	0 (0%)
Total Yes (% of overall total)	6 (86%)	3 (60%)	0 (0%)	0 (0%)	2 (67%)	11 (52%)
No (% of overall total)	1	1	1	3	1	7 (34%)
Don't know (% of overall total)	0	1	2	0	0	3 (14%)
Total	7	5	3	3	3	21 (100%)

RECORDING OF TREATMENT PLAN IN PATIENT'S NOTES

NBOCC sample

Of the 213 respondents who reported an MDC meeting, 54% reported that treatment plans were always recorded in patient notes and 23% that plans were almost always recorded; 5% reported that treatment plans were never recorded (Table 90).

Respondents from breast cancer teams were most likely to report that treatment plans were always recorded in the patient's notes (64% vs 49%–55% for other cancer types) (Table 90).

There were few differences by hospital location (Table 91) or hospital type (Table 92).

Table 90: NBOCC sample: treatment plan recorded in patient notes by cancer type (*n* = 213)

Is the proposed treatment plan recorded in notes?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	32 (64%)	22 (52%)	21 (55%)	21 (50%)	20 (49%)	116 (54%)
Almost always	9 (18%)	11 (26%)	10 (26%)	10 (24%)	9 (22%)	49 (23%)
Mostly	3 (6%)	2 (5%)	3 (8%)	5 (12%)	3 (7%)	16 (7.5%)
Sometimes	4 (8%)	3 (7%)	2 (5%)	3 (7%)	4 (10%)	16 (7.5%)
Rarely	1 (2%)	1 (2%)	1 (3%)	1 (2%)	2 (5%)	6 (3%)
Never	1 (2%)	3 (7%)	1 (3%)	2 (5%)	3 (7%)	10 (5%)
Total	50 (100%)	42 (100%)	38 (100%)	42 (100%)	41 (100%)	213 (100%)

Table 91: NBOCC sample: treatment plan recorded in patient notes by location (*n* = 213)

Is the proposed treatment plan recorded in patient notes?	Location		Total
	Metropolitan	Regional	
Always	35 (54%)	81 (51%)	116 (54%)
Almost always	9 (14%)	40 (27%)	49 (23%)
Mostly	5 (8%)	11 (7%)	16 (7.5%)
Sometimes	3 (5%)	13 (9%)	16 (7.5%)
Rarely	4 (6%)	2 (1%)	6 (3%)
Never	9 (14%)	1 (1%)	10 (5%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 92: NBOCC sample: treatment plan recorded in patient notes by hospital type (*n* = 213)

Is the proposed treatment plan recorded in patient notes?	Hospital type		Total
	Public	Private	
Always	96 (54%)	20 (56%)	116 (54%)
Almost always	42 (24%)	7 (19%)	49 (23%)
Mostly	13 (7%)	3 (8%)	16 (7.5%)
Sometimes	16 (9%)	0 (0%)	16 (7.5%)
Rarely	5 (3%)	1 (3%)	6 (3%)
Never	5 (3%)	5 (14%)	10 (5%)
Total	177 (100%)	36 (100%)	213 (100%)

NSW sample

Information about recording of the treatment plan was available from 21 respondents from NSW. Of these, 24% reported that the treatment plan was always recorded in the patient's notes and 38% that it was usually recorded (Table 93). Four respondents (19%) reported that the plan was never recorded in the notes. Nineteen of the respondents came from metropolitan hospitals (Table 94). Owing to the small numbers it is not possible to report differences by cancer type.

Table 93: NSW sample: treatment plan recorded in patient notes by cancer type (*n* = 21)

Is the proposed treatment plan recorded in patient notes?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	2	1	0	1	1	5 (24%)
Usually	5	2	1	0	0	8 (38%)
Sometimes	0	0	0	0	0	0 (0%)
Rarely	1	1	0	1	1	4 (19%)
Never	2	0	0	2	0	4 (19%)
Total	10	4	1	4	2	21 (100%)

Table 94: NSW sample: treatment plan recorded in patient notes by location (*n* = 21)

	Location		Total
	Metropolitan	Regional	
Number of respondents who reported on proposed treatment plans (% of total)	19 (90%)	2 (10%)	21 (100%)

Victorian sample

Information about recording the treatment plan was available from 34 of the teams in Victoria. Of these, 65% reported that the treatment plan was always recorded in the patient's notes, and 24% that it was never recorded in the notes (Table 95). Owing to the small numbers it is not possible to report differences by cancer type.

Table 95: Victorian sample: treatment plan recorded in patient notes by cancer type (*n* = 34)

Is the proposed treatment plan recorded in patient notes?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	11	3	1	3	4	22 (65%)
Almost always	0	0	0	0	0	0 (0%)
Sometimes	1	2	0	0	0	3 (9%)
Rarely	0	0	0	0	0	0 (0%)
Never	1	1	3	3	0	8 (24%)
Don't know	0	0	0	1	0	1 (3%)
Total	**13**	**6**	**4**	**7**	**4**	34 (100%)

COMMUNICATING TREATMENT PLANS TO PATIENTS

NBOCC sample

Of the 213 respondents who reported holding MDC meetings, 58% reported that specialists were responsible for communicating treatment plans to patients (Table 96); other disciplines were nursing (42%), GPs (33%), other health professionals (22%) and allied health professionals (3%).

There were no differences between cancer types in who was responsible for communicating plans to patients (Table 96). In metropolitan hospitals, specialists were most frequently identified as being responsible for communicating the treatment plan (91%), whereas in regional hospitals responsibility was shared evenly between GPs (47%), specialists (44%) and nursing staff (51%) (Table 97). Specialists were identified most frequently as being responsible for communicating the treatment plan in private hospitals (83%), compared with only 53% in public hospitals (Table 98). GPs (35%) were reported as being responsible for communicating outcomes of meetings in public hospitals. Nurses were reported as being responsible in 42% of both public and private hospitals (Table 98).

Table 96: NBOCC sample: discipline responsible for communicating the outcome of the multidisciplinary meeting to patient by cancer type (*n* = 213)

Who is responsible for communicating MDC meeting outcomes to patients?	Cancer type					Total
	Breast (*n* = 50)	Lung (*n* = 42)	Gynaecological (*n* = 38)	Colorectal (*n* = 42)	Prostate (*n* = 41)	
Specialists	31	26	21	24	22	124 (58%)*
Nursing	19	15	18	18	19	89 (42%)*
Allied health	1	1	1	2	2	7 (3%)*
GPs	15	13	14	14	14	70 (33%)*
Other	9	8	9	9	11	46 (22%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 97: NBOCC sample: discipline responsible for communicating the outcome of the multidisciplinary meeting to patient by location (*n* = 213, regional *n* = 148, metropolitan *n* = 65)

Who is responsible for communicating MDC meeting outcomes to patients?	Location		Total
	Metropolitan	Regional	
Specialists	59 (91%)*	65 (44%)*	124 (58%)*
Nursing	14 (21%)*	75 (51%)*	89 (42%)*
Allied health	2 (3%)*	5 (1%)*	7 (3%)*
GPs	0 (0%)	70 (47%)*	70 (33%)*
Other	15 (23%)*	31 (21%)*	46 (22%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 98: NBOCC sample: discipline responsible for communicating the outcome of the multidisciplinary meeting to patient by hospital type (*n* = 213, public *n* = 177, private *n* = 36)

Who is responsible for communicating MDC meeting outcomes to patients?	Hospital type		Total
	Public	Private	
Specialists	94 (53%)*	30 (83%)*	124 (58%)*
Nursing	74 (42%)*	15 (42%)*	89 (42%)*
Allied health	7 (3%)*	0 (0%)*	7 (3%)*
GPs	63 (35%)*	7 (19%)*	70 (33%)*
Other	46 (26%)*	0 (0%)*	46 (22%)*

* Multiple answers given, so percentages do not add up to 100%.

NSW sample

Of the 49 respondents, 43% reported that the 'referring specialist' is responsible for communicating the meeting outcome to the patient (Table 99). More respondents from metropolitan hospitals identified the referring specialist as responsible than those from regional hospitals (53% vs 26%) (Table 100). In regional hospitals, the discipline most commonly nominated as being responsible was 'other' (63%). Owing to the small numbers involved it is not possible to determine differences between cancer types.

Table 99: NSW sample: discipline responsible for communicating the outcome of the multidisciplinary meeting to patient by cancer type (*n* = 49)

Who is responsible for communicating MDC meeting outcomes to patients?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Referring specialist	10	3	0	5	3	21 (43%)*
Referring specialist team member	2	2	1	0	0	5 (10%)*
Designated team member	3	2	3	3	2	13 (27%)*
Other	4	4	1	5	4	18 (37%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 100: NSW sample: discipline responsible for communicating the outcome of the multidisciplinary meeting to patient by location (*n* = 49, metropolitan *n* = 30, regional *n* = 19)

Who is responsible for communicating MDC meeting outcomes to patients?	Location		Total
	Metropolitan	Regional	
Referring specialist	16 (53%)*	5 (26%)*	21 (43%)*
Referring specialist team member	5 (17%)*	0 (0%)*	5 (10%)*
Designated team member	7 (23%)*	6 (32%)*	13 (26%)*
Other	6 (20%)*	12 (63%)*	18 (37%)*

* Multiple answers given, so percentages do not add up to 100%.

Victorian sample

Information about who was responsible for communicating the treatment plan to the patient was available from 29 of the teams in Victoria. The most common response was that the person who brought the case to the meeting was responsible (38%), followed by the managing consultant (28%) and the outpatient clinician (24%) (Table 101). Owing to the small numbers it is not possible to comment on differences between cancer types.

Table 101: Victorian sample: discipline responsible for communicating the outcome of the multidisciplinary meeting to the patient by cancer type (*n* = 29)

Who is responsible for communicating MDC meeting outcomes to patients?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Presenting clinician	7	2	0	0	2	11 (38%)*
(Managing) Consultant	2	4	2	0	0	8 (28%)*
Outpatients clinician	0	2	1	3	1	7 (24%)*
Specialist nurse	4	0	0	0	0	4 (14%)*
Surgeon	1	0	0	0	0	1 (3%)*
Medical oncologist	1	0	0	0	0	1 (3%)*
Medical staff	1	0	0	0	0	1 (3%)*
Senior registrar	0	0	1	0	0	1 (3%)*

* Multiple answers given, so percentages do not add up to 100%.

INPUT BY PATIENT INTO TREATMENT PLAN

NBOCC sample

Of the 213 respondents who reported an MDC meeting, 58% reported that patients were always encouraged to provide input into their treatment plans (Table 102). Respondents from lung cancer teams were most likely to report that patients were encouraged to provide input (67% vs 52%–58%) (Table 102).

More respondents from regional hospitals reported that patient involvement was always encouraged than those from metropolitan hospitals (66% vs 40%) (Table 103), and more respondents from private hospitals reported the same than those from public hospitals (69% vs 56%) (Table 104).

Table 102: NBOCC sample: patients encouraged to provide input into their treatment plan by cancer type (*n* = 213)

Are patients encouraged to provide input into treatment plan?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	29 (58%)	28 (67%)	22 (58%)	22 (52%)	23 (56%)	124 (58%)
Almost always	9 (18%)	7 (17%)	7 (18%)	7 (17%)	6 (15%)	36 (17%)
Mostly	7 (14%)	3 (7%)	6 (16%)	7 (17%)	6 (5%)	29 (14%)
Sometimes	2 (4%)	3 (7%)	2 (5%)	3 (7%)	3 (7%)	13 (6%)
Rarely	1 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.5%)
Never	2 (4%)	1 (2%)	1 (3%)	3 (7%)	3 (7%)	10 (5%)
Total	50 (100%)	42 (100%)	38 (100%)	42 (100%)	41 (100%)	213 (100%)

Table 103: NBOCC sample: patients encouraged to provide input into their treatment plan by location (*n* = 213)

Are patients encouraged to provide input into treatment plans?	Location		Total
	Metropolitan	Regional	
Always	26 (40%)	98 (66%)	124 (58%)
Almost always	11 (17%)	25 (17%)	36 (17%)
Mostly	10 (15%)	19 (13%)	29 (14%)
Sometimes	7 (11%)	6 (4%)	13 (6%)
Rarely	1 (2%)	0 (0%)	1 (0.5%)
Never	10 (15%)	0 (0%)	10 (5%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 104: NBOCC sample: patients encouraged to provide input into their treatment plan by hospital type (*n* = 213)

Are patients encouraged to provide input into treatment plans?	Hospital type		Total
	Public	Private	
Always	99 (56%)	25 (69%)	124 (58%)
Almost always	35 (20%)	1 (3%)	36 (17%)
Mostly	28 (16%)	1 (3%)	29 (14%)
Sometimes	8 (5%)	5 (14%)	13 (6%)
Rarely	1 (1%)	0 (0%)	1 (0.5%)
Never	6 (3%)	4 (11%)	10 (5%)
Total	177 (100%)	36 (100%)	213 (100%)

Information about how changes to treatment plans were made following discussion with patients was available from 203 respondents. The most common approach reported was ‘plan changed and reason noted’ (69%), and the least reported approaches were ‘patient strongly encouraged to accept proposed plan’ (7%) and ‘clinician consults with another team member before changing plan’ (6%) (Table 105). Similar responses for each option were given by metropolitan and regional hospitals (Table 106) and by public and private hospitals (Table 107).

Table 105: NBOCC sample: method for dealing with changes to treatment plan or decisions after discussion with patients by cancer type (*n* = 203)

After patient discussion, how are any treatment plan changes dealt with?	Cancer type					Total
	Breast (*n* = 48)	Lung (*n* = 41)	Gynaecological (*n* = 37)	Colorectal (*n* = 39)	Prostate (*n* = 38)	
Plan changed and reason noted	32 (66%)	27 (65%)	27 (73%)	26 (66%)	28 (74%)	140 (69%)*
Plan changed and team informed at next meeting	12 (25%)	12 (29%)	11 (30%)	10 (26%)	10 (26%)	55 (27%)*
Clinician consults with another team member before changing plan	4 (8%)	2 (5%)	3 (8%)	2 (5%)	2 (5%)	13 (6%)*
Team discusses different plans at next meeting	11 (23%)	6 (15%)	8 (22%)	7 (18%)	8 (21%)	40 (20%)*
Patient strongly encouraged to accept proposed plan	4 (8%)	2 (5%)	3 (8%)	3 (8%)	3 (8%)	15 (7%)*
Other	5 (10%)	6 (15%)	5 (14%)	5 (13%)	4 (11%)	25 (12%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 106: NBOCC sample: method for dealing with changes to treatment plan or decisions after discussion with patients by location (*n* = 203, regional *n* = 148, metropolitan *n* = 55)

After patient discussion, how are any treatment plan changes dealt with?	Location		Total
	Metropolitan	Regional	
Plan changed and reason noted	42 (76%)*	98 (66%)*	140 (69%)*
Plan changed and team informed at next meeting	14 (25%)*	41 (28%)*	55 (27%)*
Clinician consults with another team member before changing plan	5 (9%)*	8 (5%)*	13 (6%)*
Team discusses different plans at next meeting	12 (22%)*	28 (19%)*	40 (20%)*
Patient strongly encouraged to accept proposed plan	4 (7%)*	11 (7%)*	15 (7%)*
Other	3 (5%)*	22 (15%)*	25 (12%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 107: NBOCC sample: method for dealing with changes to treatment plan or decisions after discussion with patients by hospital type (*n* = 203, public *n* = 171, private *n* = 32)

After patient discussion, how are any treatment plan changes dealt with?	Hospital type		Total
	Public	Private	
Plan changed and reason noted	117 (68%)*	23 (72%)*	140 (69%)*
Plan changed and team informed at next meeting	43 (25%)*	12 (37%)*	55 (27%)*
Clinician consults with another team member before changing plan	9 (5%)*	4 (13%)*	13 (6%)*
Team discusses different plans at next meeting	28 (16%)*	12 (37%)*	40 (20%)*
Patient strongly encouraged to accept proposed plan	11 (6%)*	4 (13%)*	15 (7%)*
Other	25 (15%)*	0 (0%)*	25 (12%)*

* Multiple answers given, so percentages do not add up to 100%.

Twenty per cent of the 213 respondents reported that patients were always offered a written treatment plan, and 35% reported that a written treatment plan was never offered (Table 108). Never offering patients a written treatment plan was the most common response from both metropolitan (48%) and regional (30%) hospitals (Table 109).

More respondents from regional hospitals reported that patients were always or almost always offered a copy of the treatment plan than those from metropolitan (30% vs 9%) (Table 109).

The most frequent response from public hospitals was that patients were never offered a treatment plan (38%), and that from private hospitals was that patients were sometimes offered a treatment plan (39%) (Table 110).

Table 108: NBOCC sample: patients offered a copy of treatment plan by cancer type (*n* = 213)

Are patients offered a written treatment plan created by the MDC team meeting?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	9 (18%)	8 (19%)	8 (21%)	8 (19%)	9 (22%)	42 (20%)
Almost always	2 (4%)	2 (5%)	2 (5%)	1 (2%)	2 (5%)	9 (4%)
Mostly	2 (4%)	1 (2%)	1 (3%)	1 (2%)	2 (5%)	7 (3%)
Sometimes	14 (28%)	11 (26%)	11 (29%)	13 (31%)	9 (22%)	58 (27%)
Rarely	6 (12%)	3 (7%)	4 (11%)	5 (12%)	4 (10%)	22 (10%)
Never	17 (34%)	17 (40%)	12 (32%)	14 (33%)	15 (37%)	75 (35%)
Overall total	50	42	38	42	41	213 (100%)

Table 109: NBOCC sample: Patients offered a copy of treatment plan by location (*n* = 213)

Are patients offered a written treatment plan created by the MDC team meeting?	Location		Total
	Metropolitan	Regional	
Always	6 (9%)	36 (24%)	42 (20%)
Almost always	0 (0%)	9 (6%)	9 (4%)
Mostly	2 (3%)	5 (3%)	7 (3%)
Sometimes	23 (35%)	35 (24%)	58 (27%)
Rarely	3 (5%)	19 (13%)	22 (10%)
Never	31 (48%)	44 (30%)	75 (35%)
Total	65 (100%)	148 (100%)	213 (100%)

Table 110: NBOCC sample: Patients offered a copy of treatment plan by hospital type (*n* = 213)

Are patients offered a written treatment plan created by the MDC team meeting?	Hospital type		Total
	Public	Private	
Always	37 (21%)	5 (14%)	42 (20%)
Almost always	0 (0%)	9 (25%)	9 (4%)
Mostly	7 (4%)	0 (0%)	7 (3%)
Sometimes	44 (25%)	14 (39%)	58 (27%)
Rarely	21 (12%)	1 (3%)	22 (10%)
Never	68 (38%)	7 (19%)	75 (35%)
Total	177 (100%)	36 (100%)	213 (100%)

NSW sample

Information about encouraging patients to provide input into the treatment plan was available from 41 respondents from NSW. Of these, only 5% reported that patients were always encouraged to provide input, and 56% that patients were never encouraged to provide input (Table 111). Never encouraging patients to provide input was more likely in regional hospitals than in metropolitan hospitals (Table 112).

Table 111: NSW sample: patients encouraged to provide input into their treatment plan by cancer type (*n* = 41)

Are patients encouraged to provide input into treatment plan?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	2	0	0	0	0	2 (5%)
Usually	0	0	0	1	0	1 (2%)
Sometimes	1	1	0	0	0	2 (5%)
Rarely	2	2	2	3	2	11 (27%)
Never	8	5	1	5	4	23 (56%)
Specific decisions	2	0	0	0	0	2 (5%)
Total	15	8	3	9	6	41 (100%)

Table 112: NSW sample: patients encouraged to provide input into their treatment plan (*n* = 41)

Are patients encouraged to provide input into treatment plans?	Location		Total
	Metropolitan	Regional	
Always	1	1	2 (5%)
Usually	1	0	1 (2%)
Sometimes	2	0	2 (5%)
Rarely	11	0	11 (27%)
Never	9	14	23 (56%)
Specific decisions	2	0	2 (5%)
Total	26	15	41 (100%)

Of the 49 respondents in NSW, 43% reported that changes to the treatment plan following patient discussion were discussed at the next MDC meeting (43%) (Table 113). This response was more common from respondents from metropolitan hospitals than from those from regional hospitals (50% vs 31%). Respondents from regional hospitals were more likely than those from metropolitan hospitals to report that following patient discussion, the clinician consulted with another team member before changing the treatment plan (42% vs 10%) (Table 114). Owing to the small numbers it is not possible to comment on differences by cancer type.

Table 113: NSW sample: method for dealing with changes to treatment plan or decisions after discussion with patients by cancer type (*n* = 49)

After patient discussion, how are any treatment plan changes dealt with?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Clinician consults with another team member before changing plan	3	2	1	3	2	11 (22%)*
Team discusses different treatment plans at next meeting	5	5	3	5	3	21 (43%)*
Patient strongly encouraged to accept proposed plan (no alternatives discussed)	0	0	0	0	0	0 (0%)*
Plan changed and reason noted	6	2	1	1	1	11 (22%)*
Plan changed and team informed at next meeting	1	3	0	0	1	5 (10%)*
Other	2	1	0	1	1	5 (10%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 114: NSW sample: method for dealing with changes to treatment plan or decisions after discussion with patients by location (*n* = 49, metropolitan *n* = 30, regional *n* = 19)

After patient discussion, how are any treatment plan changes dealt with?	Location		Total
	Metropolitan	Regional	
Clinician consults with another individual team member before changing plan	3 (10%)	8 (42%)	11 (22%)
Team discusses different treatment plans at next meeting	15 (50%)	6 (31%)	21 (43%)
Patient strongly encouraged to accept proposed plan (no alternatives discussed)	0 (0%)	0 (0%)	0 (0%)
Plan changed and reason noted	9 (30%)	2 (11%)	11 (22%)
Plan changed and team informed at next meeting	5 (17%)	0 (0%)	5 (10%)
Other	0 (0%)	5 (26%)	5 (10%)

* Multiple answers given, so percentages do not add up to 100%.

Information was not directly available from the NSW sample about whether patients were offered a written treatment plan. Respondents reported that patients were informed of recommendations of MDT meetings via face-to-face communication (*n* = 43), telephone (20), GP (4), their specialist (2) or their surgeon (1). Four respondents indicated that recommendations were not reported back to the patient.

Victorian sample

Information about encouraging patients to provide input to the treatment plan was available from 32 of the teams in Victoria. Of these, 69% reported that patients were encouraged to provide input into treatment plans (Table 115). Because of the small numbers it is not possible to comment on differences by cancer type.

Table 115: Victorian sample: patients encouraged to provide input into their treatment plan by cancer type (*n* = 32)

Are patients encouraged to provide input into treatment plan?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes	7	4	3	5	3	22 (69%)
No	2	0	0	1	0	3 (9%)
Don't know	2	2	0	2	1	7 (22%)
Total	11	6	4	7	4	32 (100%)

Information about making changes to the treatment plan following patient discussion was available from 20 of the teams in Victoria. Of these, around half (45%) did not know how changes to the plan were made after discussion with the patient (Table 116). Five teams changed the plan after discussion with the patient and noted the reason, and four teams reported that the presenting clinician dealt with any changes to the plan following patient discussion.

Table 116: Victorian sample: method for dealing with changes to treatment plan or decisions after discussion with patients by cancer type (*n* = 20)

After patient discussion, how are any treatment plan changes dealt with?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Plan changed and reason noted	3	2	0	0	0	5 (25%)
Team discusses different treatment plans at next meeting	1	0	0	0	0	1 (5%)
Dealt with by presenting clinician	1	0	0	2	1	4 (20%)
Varies according to unit	0	0	0	0	1	1 (5%)
Don't know	4	2	0	2	1	9 (45%)
Total	9	4	0	4	3	20 (100%)

Information about whether patients were offered a written copy of the treatment plan was available from 30 of the teams in Victoria. Most teams (77%) reported that patients were never offered a written treatment plan created at the MDC team meeting (Table 117). Owing to the small numbers it is not possible to comment on differences by cancer type or hospital type.

Table 117: Victorian sample: patients offered a copy of treatment plan by cancer type (*n* = 30)

Are patients offered a written treatment plan created by the MDC team meeting?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Always	1	0	0	0	0	1 (3%)
Almost always	0	0	0	0	0	0 (0%)
Sometimes	0	0	0	1	1	2 (7%)
Rarely	0	0	0	0	0	0 (0%)
Never	9	4	3	5	2	23 (77%)
Don't know	1	1	0	1	1	4 (13%)
Total	11	5	3	7	4	30 (100%)

PROTOCOL REGARDING PATIENTS FOR CONSIDERATION AT MEETINGS

NBOCC sample

Information about which patients were considered by the multidisciplinary teams was available from 204 respondents in the NBOCC sample. Of these, 55% considered all patients, and 22% had no protocol: individual clinicians chose which patients were discussed (Table 118). Respondents from colorectal cancer teams were most likely to consider all patients for discussion (64% vs 49%–58% for other cancer types) (Table 119).

There were no apparent differences between metropolitan and regional hospitals in protocols for choosing which patients were discussed (Table 120). However, more respondents from public hospitals discussed all patients than those from private hospitals (60% vs 28%) (Table 121).

Table 118: NBOCC sample: patient criteria for meeting discussion (*n* = 204)

Criterion used to decide which patients discussed at meetings	Yes	No	Total	Percentage of meetings that used this criterion
All patients	112	92	204	55%
Suspected cases	11	193	204	5%
All newly diagnosed early cases	35	169	204	17%
All newly diagnosed advanced cases	24	180	204	12%
Recurrent cases	32	172	204	16%
Difficult cases	31	173	204	15%
Screen detected cancers	3	201	204	1%
Cases referred for a second opinion	15	189	204	7%
No protocol, individual clinician choice	45	159	204	22%

Table 119: NBOCC sample: patient criteria for meeting discussion by cancer type (*n* = 204)

Criterion used to decide which patients discussed at meetings	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
All patients	24 (49%)	21 (53%)	22 (58%)	25 (64%)	20 (50%)	112 (55%)*
Suspected cases	2 (4%)	2 (5%)	2 (5%)	2 (5%)	3 (8%)	11 (5%)*
All newly diagnosed early cases	11 (22%)	8 (2%)	5 (13%)	4 (10%)	7 (18%)	35 (17%)*
All newly diagnosed advanced cases	6 (12%)	6 (15%)	4 (11%)	3 (8%)	5 (13%)	24 (12%)*
Recurrent cases	10 (20%)	6 (15%)	5 (13%)	6 (15%)	5 (13%)	32 (16%)*
Difficult cases	10 (20%)	5 (13%)	4 (11%)	5 (13%)	7 (18%)	31 (15%)*
Screen detected cancers	1 (2%)	0	1 (3%)	1 (3%)	0	3 (1%)*
Cases referred for a second opinion	4 (8%)	4 (10%)	3 (8%)	1 (3%)	3 (8%)	15 (7%)*
No protocol, individual clinician choice	11 (22%)	9 (23%)	8 (21%)	9 (23%)	8 (20%)	45 (22%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 120: NBOCC sample: patient criteria for meeting discussion by location (*n* = 204, regional *n* = 143, metropolitan *n* = 61)

Criterion used to decide which patients discussed at meetings	Location		Total
	Metropolitan	Regional	
All patients	30 (49%)*	82 (57%)*	112 (55%)*
Suspected cases	9 (15%)*	2 (1%)*	11 (5%)*
All newly diagnosed early cases	21 (34%)*	14 (10%)*	35 (17%)*
All newly diagnosed advanced cases	9 (15%)*	15 (10%)*	24 (12%)*
Recurrent cases	12 (20%)*	20 (14%)*	32 (16%)*
Difficult cases	15 (24%)*	16 (11%)*	31 (15%)*
Screen detected cancers	0 (0%)*	3 (2%)*	3 (1%)*
Cases referred for a second opinion	11 (18%)*	4 (3%)*	15 (7%)*
No protocol, individual clinician choice	13 (21%)*	32 (22%)*	45 (22%)*

* Multiple answers given, so percentages do not add to 100%.

Table 121: NBOCC sample: patient criteria for meeting discussion by hospital type (*n* = 204, public *n* = 172, private *n* = 32)

Criterion used to decide which patients discussed at meetings	Hospital type		Total
	Public	Private	
All patients	103 (60%)*	9 (28%)*	112 (55%)*
Suspected cases	10 (6%)*	1 (3%)*	11 (5%)*
All newly diagnosed early cases	18 (10%)*	17 (53%)*	35 (17%)*
All newly diagnosed advanced cases	18 (10%)*	6 (19%)*	24 (12%)*
Recurrent cases	28 (16%)*	4 (13%)*	32 (16%)*
Difficult cases	19 (11%)*	12 (38%)*	31 (15%)*
Screen detected cancers	0 (0%)*	3 (9%)*	3 (1%)*
Cases referred for a second opinion	10 (6%)*	5 (16%)*	15 (7%)*
No protocol, individual clinician choice	40 (23%)*	5 (16%)*	45 (22%)*

* Multiple answers given, so percentages do not add up to 100%.

NSW sample

Information about which patients were discussed at meetings was available from all 49 respondents in the NSW sample. Of these, 65% reported that difficult cases were considered for discussion by the MDC team, 51% that all patients were considered, and 29% that there was no protocol, and individual clinicians chose which patients were discussed (Table 122). Numbers are too small to make distinctions by cancer type (Table 123).

More regional respondents reported that recurrent cases (79% vs 40%) and difficult cases were discussed (79% vs 57%) than did metropolitan respondents (Table 124). More regional respondents had no protocol: individual clinicians chose which patients were discussed (42% vs 20%) (Table 124).

Table 122: NSW sample: patient criteria for meeting discussion (*n* = 49)

Criterion used to decide which patients discussed at meetings	Yes	No	Total	Percentage of meetings that used this criterion
All patients (diagnosed with relevant cancer)	25	24	49	51%
Suspected cases	11	38	49	22%
All newly diagnosed early cases	24	25	49	49%
All newly diagnosed advanced cases	22	27	49	45%
Recurrent cases	28	21	49	57%
Difficult cases	32	17	49	65%
Screen detected cancers	11	38	49	22%
Cases referred for a second opinion	8	41	49	16%
No protocol, individual clinician choice	14	35	49	29%
Other	11	38	49	22%

* Multiple answers given, so percentages do not add up to 100%.

Table 123: NSW sample: patient criteria for meeting discussion by cancer type (*n* = 49)

Criterion used to decide which patients discussed at meetings	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
All patients (diagnosed with the relevant type of cancer)	9	5	2	6	3	25 (51%)*
Suspected cases	4	3	1	2	1	11 (22%)*
All newly diagnosed early cases	9	4	3	4	4	24 (49%)*
All newly diagnosed advanced cases	8	4	3	4	3	22 (45%)*
Recurrent cases	10	6	3	4	5	28 (57%)*
Difficult cases	12	5	3	7	5	32 (65%)*
Screen detected cancers	6	1	2	1	1	11 (22%)*
Cases referred for a second opinion	4	1	1	1	1	8 (16%)*
No protocol, individual clinician choice	4	4	0	3	3	14 (28%)*
Other	4	2	1	2	2	11 (22%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 124: NSW sample: patient criteria for meeting discussion by location (*n* = 49, metropolitan *n* = 30, regional *n* = 19)

Criterion used to decide which patients discussed at meetings	Location		Total
	Metropolitan	Regional	
All patients (diagnosed with relevant cancer)	16 (53%)*	9 (47%)*	25 (51%)*
Suspected cases	6 (20%)*	5 (26%)*	11 (22%)*
All newly diagnosed early cases	13 (43%)*	11 (58%)*	24 (49%)*
All newly diagnosed advanced cases	12 (40%)*	10 (53%)*	22 (45%)*
Recurrent cases	13 (40%)*	15 (79%)*	28 (57%)*
Difficult cases	17 (57%)*	15 (79%)*	32 (65%)*
Screen detected cancers	10 (33%)*	1 (5%)*	11 (22%)*
Cases referred for a second opinion	6 (20%)*	2 (10%)*	8 (16%)*
No protocol, individual clinician choice	6 (20%)*	8 (42%)*	14 (29%)*
Other	7 (23%)*	4 (21%)*	11 (22%)*

* Multiple answers given, so percentages do not add up to 100%.

Victorian sample

Information about which patients were considered for discussion at multidisciplinary meetings was available from 36 of the teams in Victoria. Of these, 58% reported that all new cases were presented for discussion at MDC meetings. Six teams reported that all cases were presented, and two teams presented advanced cases for discussion (Table 125). Because of the small numbers it is not possible to comment on differences by cancer type.

Table 125: Victorian sample: patient criteria for meeting discussion by cancer type (*n* = 36)

Criteria used to decide which patients discussed at meetings	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
All new patients	7	3	3	5	3	21 (58%)*
Difficult or complex cases	4	3	0	2	2	11 (31%)*
Clinician's choice	3	1	1	2	2	9 (25%)*
Patients for review	3	3	0	2	1	9 (25%)*
All patients	2	3	1	0	0	6 (17%)*
Recurrent cases	2	2	0	1	1	6 (17%)*
All inpatients	0	0	1	3	1	5 (14%)*
Advanced cases	1	1	0	0	0	2 (6%)*

* Multiple answers given, so percentages do not add up to 100%.

PROTOCOLS FOR CANCER CARE

NBOCC sample

Information about the availability of protocols to guide cancer care was available from 207 of the respondents in the NBOCC sample. Of these, 77% reported agreed protocols covering multiple aspects of care, and 23% reported protocols covering few or isolated aspects of care (Table

126). There was little difference in responses by cancer type (Table 126).

More respondents from metropolitan hospitals reported protocols covering multiple aspects of care than those from regional hospitals (69% vs 32%), and more from regional hospitals reported no protocols than those from metropolitan hospitals (49% vs 23%) (Table 127).

More respondents from private hospitals reported protocols covering multiple aspects of care than those from public hospitals (61% vs 40%) (Table 128).

Table 126: NBOCC sample: established protocols for care by cancer type (*n* = 207)

Does team have agreed protocols for cancer care?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes – covering multiple aspects of care (% of Yes)	23 (47%)	16 (39%)	15 (41%)	17 (41%)	19 (49%)	90 (43%)
Yes – covering few or isolated aspects of care (% of Yes)	6 (12%)	5 (12%)	6 (16%)	5 (12%)	5 (13%)	27 (13%)
Total Yes	29 (59%)	21 (51%)	21 (57%)	22 (54%)	24 (62%)	117 (57%)
No protocols	19 (39%)	19 (46%)	15 (41%)	18 (44%)	14 (36%)	85 (41%)
Don't know	1 (2%)	1 (2%)	1 (3%)	1 (2%)	1 (3%)	5 (2%)
Total	49 (100%)	41 (100%)	37 (100%)	41 (100%)	39 (100%)	207 (100%)

Table 127: NBOCC sample: established protocols for care by location (*n* = 207)

Does team have agreed protocols for cancer care?	Location		Total
	Metropolitan	Regional	
Yes – covering multiple aspects of care (% of Yes)	45 (69%)	45 (32%)	90 (43%)
Yes – covering few or isolated aspects of care (% of Yes)	5 (8%)	22 (15%)	27 (13%)
Total Yes	95 (56%)	22 (61%)	117 (57%)
No protocols	15 (23%)	70 (49%)	85 (41%)
Don't know	0 (0%)	5 (4%)	5 (2%)
Overall total	65 (100%)	142 (100%)	207 (100%)

Table 128: NBOCC sample: established protocols for care by hospital type (*n* = 207)

Does team have agreed protocols for cancer care?	Hospital type		Total
	Public	Private	
Yes – covering multiple aspects of care (% of Yes)	68 (40%)	22 (61%)	90 (43%)
Yes – covering few or isolated aspects of care (% of Yes)	27 (16%)	0 (0%)	27 (13%)
Total Yes	95 (56%)	22 (61%)	117 (57%)
No protocols	71 (41%)	14 (39%)	85 (41%)
Don't know	5 (3%)	0 (0%)	5 (2%)
Overall total	171 (100%)	36 (100%)	207 (100%)

Of the 117 respondents in the NBOCC sample who had protocols, 78% had written protocols, 18% had no written protocols and 3% did not know whether protocols were written (Table 129). Respondents from gynaecological teams were most likely to have written protocols (Table 129).

There was no difference in responses by location (Table 130).

More respondents from private hospitals reported written protocols (91%) than those from public hospitals (75%), but numbers are too low for comparison (*n* = 22 vs *n* = 93) (Table 131).

Table 129: NBOCC sample: written protocol by cancer type (*n* = 115)

Are these protocols written protocols?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes	20 (69%)	16 (80%)	18 (86%)	17 (77%)	19 (83%)	90 (78%)
No	6 (21%)	4 (20%)	3 (14%)	4 (18%)	4 (17%)	21 (18%)
Don't know	3 (10%)	0 (0%)	0 (0%)	1 (4%)	0 (0%)	4 (3%)
Total	29 (100%)	20 (100%)	21 (100%)	22 (100%)	23 (100%)	115 (100%)

Table 130: NBOCC sample: written protocol by location (*n* = 115)

Are these protocols written protocols?	Location		Total
	Metropolitan	Regional	
Yes	38 (79%)	52 (78%)	90 (78%)
No	8 (17%)	13 (19%)	21 (18%)
Don't know	2 (4%)	2 (3%)	4 (3%)
Total	48 (100%)	67 (100%)	115 (100%)

Table 131: NBOCC sample: written protocol by hospital type (*n* = 115)

Are these protocols written protocols?	Hospital type		Total
	Public	Private	
Yes	70 (75%)	20 (91%)	90 (78%)
No	20 (22%)	1 (5%)	21 (18%)
Don't know	3 (3%)	1 (5%)	4 (3%)
Total	93 (100%)	22 (100%)	115 (100%)

NSW sample

Information on protocols for cancer care was available from 49 respondents in the NSW sample. Of these, 63% had agreed protocols for cancer care (Table 132). More respondents from metropolitan hospitals reported that they had protocols for cancer care than those from regional hospitals (70% vs 53%) (Table 133). Information is not available about whether protocols covered multiple aspects of care, or whether these protocols were written.

Table 132: NSW sample: established protocols for care by cancer type (*n* = 49)

Does team have agreed protocols for cancer care?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes	13	5	2	6	5	31 (63%)
No	3	5	2	5	3	18 (37%)
Total	16	10	4	11	8	49 (100%)

Table 133: NSW sample: established protocols for care by location (*n* = 49)

Does team have agreed protocols for cancer care?	Location		Total
	Metropolitan	Regional	
Yes	21 (70%)	10 (53%)	31 (63%)
No	9 (30%)	9 (47%)	18 (37%)
Total	30 (100%)	19 (100%)	49 (100%)

Victorian sample

Information regarding the availability of protocols for cancer care was available from 30 of the teams in Victoria. Of these, most (73%) had established protocols (Table 134). Because of the small numbers involved it is not possible to comment on differences by cancer type.

Table 134: Victorian sample: established protocols for care by cancer type (*n* = 30)

Does team have agreed protocols for cancer care?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Yes	8	4	1	4	5	22 (73%)
No	2	2	1	2	0	7 (23%)
Don’t know	1	0	0	0	0	1 (3%)
Total	11	6	2	6	5	30 (100%)

DATA COLLECTION

NBOCC sample

From the total sample of 520 respondents, 495 provided information about approaches to collection of data about the management of patients with cancer for the purposes of audit. One-third of respondents (33%) reported that their hospital had a central process for data collection (Table 135); however, only 14% had a central process for data review. Twenty-eight per cent of respondents had no processes for data collection, and 10% did not know whether there was a process for data collection or review. There was little difference in the number of respondents indicating central processes for data collection and review across cancer types (Table 136).

More respondents from regional hospitals had no process for data collection (33% vs 18%) (Table 137), and more respondents from public hospitals had no process (31% vs 18%) (Table 138).

Table 135: NBOCC sample: collection and review data (*n* = 495)

Is there a system for collection and review of data?	*n*	%
Yes – central hospital data collection and process for review	69	14%
Yes – central hospital data collection but no process for review	92	19%
No central data collection – individuals contribute to professional college	39	8%
No central data collection – individuals collect own practice data	121	24%
No data collection either centrally or by clinician	137	28%
Don't know	50	10%

* Multiple answers given, so percentages do not add up to 100%.

Table 136: NBOCC sample: collection and review of data by cancer type (*n* = 495)

Is there a system for collection and review of data?	Cancer type					Total
	Breast (*n* = 105)	Lung (*n* = 97)	Gynaecological (*n* = 93)	Colorectal (*n* = 102)	Prostate (*n* = 98)	
Yes – central collection and process for review	16 (15%)	15 (15%)	15 (16%)	12 (12%)	11 (11%)	69 (14%)*
Yes – central collection, no process for review	18 (17%)	20 (21%)	17 (18%)	17 (17%)	20 (20%)	92 (18%)*
No central collection – individuals contribute to professional college	10 (10%)	8 (8%)	6 (6%)	8 (8%)	7 (7%)	39 (8%)*
No central collection – individuals collect own practice data	28 (27%)	22 (23%)	19 (20%)	29 (28%)	23 (23%)	121 (24%)*
No data collection either centrally or by clinician	27 (26%)	24 (25%)	28 (30%)	29 (28%)	29 (30%)	137 (27%)*
Don't know	9 (9%)	10 (10%)	10 (11%)	10 (10%)	11 (11%)	50 (10%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 137: NBOCC sample: collection and review of data system by location (*n* = 495, metropolitan *n* = 186, regional *n* = 309)

Is there a system for collection and review of data?	Location		Total
	Metropolitan	Regional	
Yes – central collection and process for review	38 (20%)*	31 (10%)*	69 (14%)*
Yes – central collection, no process for review	28 (15%)*	64 (21%)*	92 (18%)*
No central collection – individuals contribute to professional college	16 (9%)*	23 (7%)*	39 (8%)*
No central collection – individuals collect own practice data	60 (32%)*	61 (20%)*	121 (24%)*
No data collection either centrally or by clinician	34 (18%)*	103 (33%)*	137 (27%)*
Don't know	14 (7%)*	36 (12%)*	50 (10%)*

* Multiple answers given, so percentages do not add up to 100%.

Table 138: NBOCC sample: collection and review of data system by hospital type (*n* = 495, public *n* = 370, private *n* = 125)

Is there a system for collection and review of data?	Hospital type		Total
	Public	Private	
Yes – central collection and process for review	44 (12%)*	25 (20%)*	69 (14%)*
Yes – central collection, no process for review	76 (20%)*	16 (13%)*	92 (18%)*
No central collection – individuals contribute to professional college	30 (8%)*	9 (7%)*	39 (8%)*
No central collection – individuals collect own practice data	81 (22%)*	40 (32%)*	121 (24%)*
No data collection either centrally or by clinician	115 (31%)*	22 (18%)*	137 (27%)*
Don't know	35 (9%)*	15 (12%)*	50 (10%)*

* Multiple answers given, so percentages do not add up to 100%.

NSW sample

Information on processes for data collection was available from all 49 respondents in the NSW sample. Of these, 14% reported a central process for data collection and review, 22% reported that data were collected centrally but that there was no review process, 18% had no process for data collection, and 37% did not know whether there was a system for collection and review of data (Table 139). All 7 respondents who reported a central process for data collection and review came from metropolitan hospitals (Table 140).

Table 139: NSW sample: collection and review of data system by cancer type (*n* = 49)

Is there a system for collection and review of data?	Cancer type					Total
	Breast	Lung	Gynaecological	Colorectal	Prostate	
Central data collection and review process	3	3	0	0	1	7 (14%)
Central data collection but no review process	6	1	1	3	0	11 (22%)
No central data collection – individual clinician collection	1	1	0	1	1	4 (8%)
No data collection (centrally or by clinician)	2	2	1	2	2	9 (18%)
Don't know	4	3	2	5	4	18 (37%)
Total	16	10	4	11	8	49 (100%)

Table 140: NSW sample: collection and review of data system by location (*n* = 49)

Is there a system for collection and review of data?	Location		Total
	Metropolitan	Regional	
Central data collection and review process	7 (23%)	0 (0%)	7 (14%)
Central data collection but no review process	10 (33%)	1 (5%)	11 (22%)
No central data collection – individual clinician collection	0 (0%)	4 (21%)	4 (8%)
No data collection (centrally or by clinician)	5 (17%)	4 (21%)	9 (18%)
Don't know	8 (27%)	10 (53%)	18 (37%)
Total	30 (100%)	19 (100%)	49 (100%)

Victorian sample

No information on data collection was obtained from the Victorian sample.

OPPORTUNITIES AND CHALLENGES

NBOCC sample

Qualitative responses from 516 respondents regarding identified barriers to the implementation of MDC were collated and grouped thematically. A summary of responses, grouped by theme areas, is presented in Table 141.

Table 141: NBOCC sample: identified barriers to multidisciplinary care (*n* = 516)

Barrier	Responses (*n*)	%
Communication issues	129	25%*
Coordination	51	9%*
Resistance to change	24	5%*
Sustainability	10	2%*
Culture	13	2.5%*
Workforce and caseload	377	73%*
Resources	61	12%*
Funding	119	23%*
Geography	226	44%*
Population – socially disadvantaged groups	2	0.3%*
Relationships	4	0.7%*
Nature of hospital	37	7%
Relationships	4	0.7%*
Time	124	24%*

* Multiple answers given, so percentages do not add up to 100%.

Other qualitative comments were also given:

- Respondents from small, rural or regional hospitals did not necessarily see hospital size or location as a problem, but believed that it was perceived as a barrier from outside the service.
- Respondents from small, rural or regional hospitals suggested that being a small or regional service per se was not necessarily a barrier, but associated factors such as small case load posed a barrier.
- Some respondents referred to the 'nature of the hospital', many from private hospitals.
- Lack of telemedicine or IT services and support was often reported under 'lack of equipment and services'.
- Eighty-one respondents reported no barriers to the implementation or improvement of MDC.
- No specific enablers were identified; most commentary was centred on good communication and good team work.

Final comments from survey respondents: NBOCC sample

- Some respondents requested feedback from NBOCC about the audit.
- Some respondents emphasised that their hospital provided only specific components of care such as surgery, chemotherapy or palliation.
- Some respondents emphasised their team's collaborative approach to care and the provision of the continuum of care to cancer patients in their area.
- Respondents expressed a general feeling that MDC is a good thing, and would like to see it at their hospital.
- Where MDC was implemented, respondents believed it was evolving and improving.
- Some commentary reiterated barriers such as small caseload and low demand for MDC.
- Many regional hospitals reported that they were covering large areas or populations.
- Many hospitals reiterated that they were palliation hospitals or predominantly provided palliative care.
- Some respondents reiterated the provision of only certain components of care (e.g. end-stage care, surgery, chemotherapy).
- Some respondents felt that regional areas were neglected in terms of communication about patients and in professional support.
- Many regional services mentioned having links to larger hospitals.
- Many hospitals reported good community links and relationships (such as outpatient, in-home or community care support and referrals).
- Overwhelmingly, respondents talked about the models of care or the way they facilitated the continuum of care for cancer patients in their hospital and area. Commentary centred on collaborative approaches or informal liaison between staff members – often with limited resources.

Barriers: NSW sample

The issues in Table 142 were identified by respondents as challenges and barriers to the implementation of multidisciplinary care in NSW.

Table 142: NSW sample: identified barriers to multidisciplinary care (*n* = 108)

Barrier (n=37)	Responses (*n*)	% of response/ total responses
Coordination of time	21	(19%)
Specialists not on site	18	(17%)
Lack of staff	17	(16%)
Lack of time	14	(13%)
Lack of specialist time to attend	6	(6%)
Distance	5	(5%)
Lack of money	5	(5%)
Motivation, commitment	4	(4%)
IT, software systems	4	(4%)
Engagement of staff, specialists	4	(4%)
Services not on site	3	(3%)
Clinical workloads	2	(2%)
Lack of services available	1	(1%)
Lack of infrastructure	1	(1%)
Lack of teleconferencing technology	1	(1%)
Private/public communication issues	1	(1%)
Rural service	1	(1%)
Total	108	100%

Victorian sample

In 2006 the Department of Human Services Victoria held an MDC forum with representatives from the eight ICS (five metropolitan and three regional). The most commonly reported barriers included:

- lack of time
- technology and access to technology (including computers and other IT) and infrastructure (including meeting rooms and space)
- administration support
- communication and documentation associated with meetings
- availability of staff (especially specialists and GPs)
- engagement of staff.

DISCUSSION

MULTIDISCIPLINARY CARE IN AUSTRALIA

The importance of MDC is emphasised and promoted through its inclusion in national cancer improvement frameworks,[7] state and territory cancer plans[1–4] and clinical practice guidelines.[8] In 2004, the National Service Improvement Framework for Cancer,[7] a joint initiative of the Australian Government and states and territories, identified that 'a more coordinated approach is required which enables networked integrated services to be provided within a patient-centred and multidisciplinary framework.'

Australia has a complex health system, in which patients are treated in both the public and private sectors at a range of geographical locations. Cancer care is delivered in a variety of health care settings and involves a range of diagnostic, treatment, rehabilitation, palliative care, supportive care and end-of-life services. Australian cancer care must often overcome problems of distance and remoteness in regions where treatment centres, dedicated clinics and specialists may not be as centralised or as accessible as in metropolitan areas.[6,8] Because of this diversity, it is not appropriate to take a fixed approach to implementing MDC.[5] Although multidisciplinary care in Australia can be challenging, NBOCC's Principles of Multidisciplinary Care[5] provide guidance for a flexible approach to implementation.

In addition to the incorporation of MDC into the cancer plans of most states and territories, a substantial amount of work has been done at the national level by NBOCC[8] and at the state level, particularly in NSW,[1] Western Australia,[2] Victoria[3] and South Australia,[4] to support the implementation of MDC. The new MBS items introduced in November 2006 to encourage specialists to attend MDC meetings demonstrate Government support for national implementation.

NBOCC NATIONAL AUDIT

NBOCC's national audit of multidisciplinary cancer care provides an Australia-wide snapshot of MDC activity across five common cancers and across different hospital settings.

Points to note when interpreting the audit results are outlined below:

- The results report on activity up to 1 November 2006, the date of introduction of the two new MBS items to support attendance by specialists at MDT planning meetings.
- The audit reports on three samples, separating the results from NSW and Victoria from those from the other states and territories (the NBOCC sample) on account of differences in methodology and rationale resulting from collaborative approaches with state-based cancer organisations in NSW and Victoria. Despite these differences, there are areas of congruence in the results across all three samples, giving a national picture.
- In each of the three samples, around 50% of the hospitals provided information.
- The audit results relate to hospitals that provide some form of care or treatment for cancer patients. In some of the smaller regional hospitals, it is likely that the care reported on relates to certain components of care, such as palliative care, rather than to cancer treatment planning. Although such hospitals were excluded from the Victorian and NSW samples, they were included in the NBOCC sample. This is an important

consideration in the interpretation of results.

- The results show some differences between metropolitan and regional hospitals and between public and private hospitals.
- Little difference was apparent between cancer types. The original sample was set up to measure differences by cancer type, assuming a response rate of 75%. However, because the final response rate was lower than expected (around 50%), a larger sample may be required to look for differences between these groups.

STUDY LIMITATIONS

As a national organisation, NBOCC set out to report information on MDC across Australia, in collaboration with state-based cancer organisations. Working collaboratively with state and territory governments and cancer organisations is integral to ensuring the relevance and acceptability of NBOCC's work and to avoiding duplication of effort. This collaboration led to differences between the three samples.

SAMPLING

The original sampling plan was developed to provide a representative national picture of MDC activity across metropolitan and regional hospitals and across public and private hospitals. Although the number of hospitals surveyed was smaller than originally planned, the spread of hospitals across metropolitan and regional sites and across public and private sectors within the NBOCC sample reflected the original random sampling plan. In NSW, more responses were obtained from public hospitals than from private hospitals, and some of the main metropolitan teaching hospitals were not included. In Victoria, most information came from metropolitan public hospitals. Regardless, information came from a range of hospital locations and types, providing an opportunity to examine differences in service delivery and health care jurisdictions according to a range of factors.

METHODOLOGY

Methodological differences were partly due to the variation in the organisation and structure of health services in the difference jurisdictions. Differences included:

- the way that hospitals were approached to participate in the audit
- the method of conducting the survey
- the inclusion criteria for the audit.

Although there were variations in the survey tool across the three samples, the core questions explored the same topics and, where possible, were worded consistently.

RECALL BIAS

The audit includes input from a range of respondents, including cancer care coordinators, surgeons, nurses and GPs, as nominated by the hospital CEO or equivalent. Although this provides a broad cross-section of responses, the responses depend on the knowledge of the individual respondents and may be influenced by the respondent's role within the team and by recall bias. Analysis of the respondent role has been reported in this national audit.

MULTIDISCIPLINARY TEAMS

Overall, the results indicate that around a third of hospitals treating cancer patients across Australia have one or more established multidisciplinary teams. Perhaps not surprisingly, more respondents from metropolitan hospitals reported a team than those from regional hospitals. In comparison, a survey conducted in 2006 by the Clinical Oncological Society of Australia (COSA) reported that 43% of regional hospitals administering chemotherapy held multidisciplinary clinics, and that the likelihood of holding a clinic decreased with increasing rurality.[9]

Further analysis of the audit data shows that although a third of the hospitals reported identified teams, MDC was not implemented in line with NBOCC's Principles of Multidisciplinary Care.[5]

CORE TEAM MEMBERS

One key finding supporting the above statement that MDC is not being implemented according to best practice is that only 4% of teams in the NBOCC sample and none of the teams in NSW or Victoria had the full core membership (for each particular cancer) in regular attendance at MDC meetings. Regardless of location or hospital type, attendance at multidisciplinary meetings does not appear to be optimal. These findings have important implications for good - quality MDC and warrants further examination.

Low attendance of core team members or specialists may be explained in part by the possibility that some of the meetings included in the audit were not treatment planning meetings (some meetings in regional areas appear to have been held to discuss plans for palliative care or discharge). In regional areas, low attendance could be explained by the COSA finding that the availability of oncology services diminished as geographical isolation increased.[14]

Regardless of geographical location, some specialities were in short supply; for example, thoracic surgeons. While the availability of some specialities has practical implications for MDC meetings, it should not reduce the importance of their attendance at MDC meetings.

State-based programs to support and develop multidisciplinary teams and meeting attendance have been developed, but both programs detailed below are still in their early stages, which may explain the reason for lack of attendance by core team members.

- In Victoria, the Department of Human Services has created initiatives to support the development and improvement of multidisciplinary teams through the ICS. The mapping of current practice started in mid to late 2005, and team meetings were to be developed in 2006 for three priority cancer types.[15]
- In NSW in 2006, the Cancer Institute NSW awarded funding grants in order to provide personnel and equipment to support the establishment or enhancement of multidisciplinary teams in metropolitan and rural health services. Funding has been extended until mid 2008 to continue the development of these teams.[16]

FUTURE DIRECTIONS

Consideration of the barriers to MDC identified in this audit and in previous projects[10] will be important in identifying strategies to increase attendance by core team members.

In addition to supporting the formation of new teams, it will be important to examine existing teams and identify ways to encourage attendance by all relevant specialities. Further investigation is needed to see whether the introduction of the MBS item numbers in November 2006 has encouraged greater participation in meetings.

MULTIDISCIPLINARY MEETINGS

REGIONAL HOSPITALS

The audit finding that more regional hospitals reported holding multidisciplinary meetings than metropolitan hospitals in the NBOCC sample appears to be at odds with expectations. However, closer examination of the results suggests that some regional meetings were been held for purposes other than treatment planning, for example, palliative care or discharge planning. This finding highlights differences in understandings and perceptions of what 'multidisciplinary care' for cancer patients entails.

The lower frequency of meetings at regional hospitals than at metropolitan hospitals may also reflect the availability of core team members who may be visiting specialists. Telemedicine, such as through the use of teleconference facilities, has been identified as a flexible model for reducing the barrier of distance[14] and provides a way of linking regional hospitals with each other and with metropolitan centres.

Regional hospitals reported more irregular meetings than metropolitan hospitals. Monitoring of state-based initiatives to help build effective links between regional MDC teams and larger hospitals will be required in order to establish whether improvements are made in MDC in regional areas.

FREQUENCY AND FORMAT

Across all three samples, most metropolitan hospitals reported regular face-to-face meetings, whereas regional hospitals were more likely to report holding meetings 'as required'. It is likely that meeting frequency reflects the caseload within a hospital. In 2000, NBOCC conducted the National Profile Study of Multidisciplinary Care[10] and found that irrespective of caseload, most of the 60 hospitals surveyed had implemented some aspects of MDC for breast cancer, but the provision of MDC was generally lower in hospitals with lower caseloads.[10]

MEETINGS IN PUBLIC AND PRIVATE HOSPITALS

Feedback from previous projects[10] exploring barriers to MDC indicated that there may be some resistance to holding multidisciplinary meetings in private hospitals owing to the lack of remuneration for staff. This suggestion is supported by the audit finding in the NBOCC sample that respondents from public hospitals were more likely than those from private hospitals to report holding multidisciplinary meetings.

Further investigation is required to explore whether the number of multidisciplinary meetings in private hospitals increases as a result of the introduction of the MBS items, although remuneration may not be the only driver necessary to encourage changes in clinical practice. Resistance to change has been previously identified as an important barrier.[10,17]

WHICH PATIENTS ARE DISCUSSED?

An ongoing question for multidisciplinary teams relates to which patients the team should discuss. The optimal situation, promoted by NBOCC in its Principles of Multidisciplinary Care[5] and the Indicators for Multidisciplinary Cancer Care[iii], is that the team should discuss all patients with a new diagnosis. Only about half of respondents in the audit reported that the team considered all patients.

At a workshop convened by NBOCC to consider medicolegal issues associated with MDC, one recommendation was that teams follow an agreed protocol on which patients they consider for discussion.[18]

For newly formed teams, the decision may be made to discuss only complex cases. However, it is important for teams to document the criteria by which such decisions are made and to revisit their protocols at intervals to ensure currency and opportunities for a broader approach. One of the barriers often raised to explain why not all patients are considered is the lack of time available, particularly in large centres with high patient numbers. The use of pro-formas and templates may assist in reducing the time required for each case. Furthermore, work conducted by NBOCC suggests that as teams become better established, the number of cases that can be discussed at each meeting increases.[10]

LINKS TO OTHER SERVICES

NBOCC's Principles of Multidisciplinary Care[5] identifies the importance of access to all therapeutic options, regardless of location. In addition to assessing routine meeting attendants, the audit explored referral links from the team to other speciality groups. Links to supportive care, including psychology and psychiatric services, were consistently low: fewer than a third of respondents reported established referral links. The survey conducted by COSA reported that only 29% of regional hospitals administering chemotherapy offered counselling services, and 30% gave access to psychologists.[9]

Access to supportive care, psychology services and psychiatric services has previously been identified as a gap in service provision in state cancer plans, and initiatives have been proposed to resolve this problem. In addition, the COSA report on rural and regional oncology services highlights that investment and improved innovation in delivering psychosocial support services are required.[9]

COMMUNICATION WITH GENERAL PRACTITIONERS

NBOCC's Principles of Multidisciplinary Care[5] recommends that the GP should be part of the multidisciplinary team. Although having GPs attend every meeting at which their patients are discussed is impractical, clear and established communication channels should be in place to ensure that GPs are informed of decisions made by the team. The audit findings show that treatment plans were not communicated to GPs in up to a third of meetings.

[iii] The Indicators for Multidisciplinary Care were being piloted at the time of publication of this report

GENERAL PRACTITIONERS IN REGIONAL AREAS

Unexpectedly, in the NBOCC sample, 45% of respondents (mostly from regional areas) reported that GPs attended meetings routinely. Furthermore, 28% of regional hospitals nominated GPs as being responsible for communicating meeting outcomes to patients. Although GPs may play a greater role in the multidisciplinary team at some regional hospitals, these results reinforce the suggestion that some of the meetings reported by regional respondents may not have been treatment planning meetings, possibly indicating a misinterpretation of the established definition of MDC.

Obtaining further information about these meetings to identify how GP input is invited would be valuable, and could help encourage wider input into MDT planning meetings by GPs in metropolitan areas.

COMMUNICATION WITH PATIENTS

General guidelines for medical practitioners on how to provide information to patients have been published by the National Health and Medical Research Council (NHMRC). They emphasise the importance of an open exchange between doctors and patients and of allowing opportunities for discussion.[19]

INFORMED CONSENT

Patient consent is understood in a variety of ways. It is important that patients understand that the MDC process means that their case may be discussed by clinicians whom they have not yet met. A case in the NSW courts in 2004, highlighed the importance of informed consent to the disclosure of health information in a multidisciplinary setting.[20]

Consumer and health professional expectations on the sharing of patient information have been shown to vary.[21] NBOCC has identified informed patient consent and the importance of seeking and documenting patient consent for a case to be discussed at an MDC meeting as an area for consideration by MDC teams.[18] Patient consent is also a criterion for specialists who bill against the new MBS items to support attendance by specialists at MDT planning meetings.

Responses across the three samples indicated that patient consent was sought for discussion at a multidisciplinary meeting in 52% to 64% of cases, although verbal consent was typically obtained. Documentation of the consent process has been suggested as an appropriate method to reduce the likelihood of medicolegal issues.[18] Further public debate about the understanding of patient consent is needed in order to ensure a consensus between what the general public expect and what health professionals provide.

WHO IS RESPONSIBLE FOR COMMUNICATING THE TREATMENT PLAN TO THE PATIENT?

Overall, specialists were identified most commonly as the discipline responsible for communicating the outcome of the MDT planning meeting to the patient. The importance of a specialist conveying the treatment recommendations to the patient and being available to discuss the options with the patient cannot be underestimated.

A formal written plan is an important record of the outcome of collective decision-making by the MDC team. A template for recording of treatment plans by teams is available from NBOCC.[6] The higher prevalence of plan recording in patient notes among breast cancer teams could be attributed to the promotion of supporting resources developed by NBOCC in recent years.

PATIENT INPUT INTO THE TREATMENT PLAN

NBOCC's Principles of Multidisciplinary Care[5] emphasises the importance of patient involvement in decisions about their treatment. In addition, the desire for involvement in treatment decisions will vary between patients[22] and at different stages of the cancer journey. Exploration of patient attendance at multidisciplinary case discussions found patient advocates significantly more in favour of involving women in breast cancer MDT planning meetings than were medical staff, including surgeons, medical specialists and radiation oncologists.[23]

Around three-quarters of audit respondents in the NBOCC and Victorian samples reported that patients were usually encouraged to contribute to their treatment plan. Some patients may not want a high level of involvement, but there should be an opportunity for patients to consider the options available and to state their preferences.

Only a quarter of respondents in the NBOCC sample reported that patients were offered a written copy of their treatment plan, despite evidence that providing patients with written information in addition to verbal information can assist in their understanding of their disease and treatment options.[24]

Palliative care health professionals may more often be members of lung cancer teams, as this disease has a poorer prognosis than some other cancers. The finding that lung cancer teams were more likely than other cancer teams to encourage patient input may indicate that teams consider patient input more appropriate to palliative care.

PATIENT- INITIATED CHANGES TO THE TREATMENT PLAN

Variability was found in how changes to the treatment plan were made following patient discussion. Although this variability may indicate a wide range in practice, the survey respondents in administrative roles may not have been fully aware of practices. Notably, 45% of respondents from Victoria indicated a lack of awareness about how changes were made.

Patients appear to be infrequently offered a written treatment plan, although it is known that provision of individualised information increases a patient's recall, and appropriate detailed information promotes understanding and increases the psychological wellbeing of patients with cancer.[25]

FUTURE DIRECTIONS

Improving communication between health professionals and patients is part of the movement towards encouraging patient self-management. Self-management in chronic diseases is gaining recognition as an area where the use of health professionals' time could be used more efficiently and self-care skills can be enhanced.[26] Cancer is increasingly being regarded as a chronic condition, and a self-management approach relies on good communication between health professionals and patients.

DATA COLLECTION AND REVIEW

A key gap was identified in data collection and review. Measurement of quality and safety is recognised as playing a fundamental role in improving health care delivery.[26] The review of data against national benchmarks is an important process in ensuring continual improvement in the quality of services and achieving best practice, as highlighted by NBOCC's Principles of Multidisciplinary Care.[5] NBOCC's National Multidisciplinary Care Demonstration Project in 2000 to 2003 highlighted the need for improvement in data collection, as a high proportion of hospitals reported no data collection systems in place.[10]

FUTURE DIRECTIONS

While data can be collected outside a multidisciplinary team, the contribution of team members to a joint data collection and audit process provides opportunities for ongoing quality improvement and for reflection on team and service delivery approaches. COSA has recommended that investment in clinical data systems to audit, monitor and plan oncology services as a useful measure to help reduce inequities in treatment outcomes.[14]

A clinical cancer registry project being piloted in five area health services in NSW aims to collect additional information about cancer treatment and outcomes such as tumour staging; access to surgery, radiotherapy and medical oncology; and psychosocial and multidisciplinary team referrals.[27] As this project is currently in the pilot phase, it will take some time for evaluation and rollout to all area health services in NSW, which may explain the lack of data collection reported in the audit results.

Although state-based initiatives have been identified, the results suggest that problems in data collection are still being addressed. The provision of designated resources and the promotion of the importance of data collection and benchmarking provide an opportunity to improve care.

BARRIERS

The barriers to implementing MDC reported in the audit confirm previous findings that the following areas are key obstacles:

- time
- workforce resources
- small caseloads
- funding.

NBOCC's National Multidisciplinary Care Demonstration Project[10] found that lack of time and payment for attendance at meetings were considered barriers to the implementation of MDC. In Victoria, similar barriers have been previously identified, including lack of workforce, caseload, geographical distance and physical infrastructure.[28]

Interestingly, funding was reported as a barrier in only 5% of hospitals in NSW, where state-based funding has been provided to support the establishment of multidisciplinary teams.

The regional survey conducted by COSA in 2006 points out that while rural or visiting oncologists and nurses provide a vital service, they are stretched beyond their capacity, indicating that time and workforce resources are commonly reported barriers.[14] In addition, strategies to improve links to core services not provided in regional areas were identified as a need in NBOCC's National Multidisciplinary Care Demonstration Project.[10]

The need for specific resources to implement MDC has been reported widely. One of the key findings of a study investigating the implementation of MDC in breast cancer teams in England was that most units found that having a team coordinator was essential to organising and running MDC meetings. It was recommended that those teams without a specific coordinator would benefit from having a person in this role.[29]

FUTURE DIRECTIONS

Strategies to remove these barriers have been well documented by a range of organisations. Further recommendations for resources and workforce planning have been made in this report (see Executive Summary and Conclusion).

CONCLUSION AND RECOMMENDATIONS

This audit has identified major impediments to the national uptake of MDC for cancer treatment planning. Although most hospitals participating in the audit were aware of the importance of MDC, and some had high-functioning MDC teams and meetings, it is evident that MDC is not implemented in line with NBOCC's Principles of Multidisciplinary Care[5] in most hospitals.

Based on the results of the audit, recommendations to improve the uptake and implementation of MDC are presented below.

STRATEGIC AND NATIONAL LEVELS

1. **Resourcing:** The adequate allocation of staff and time in order to implement MDC should be promoted in national and state cancer plans and frameworks as important factors in workforce planning.
2. **Networks:** National, state and regional networks should be established and promoted for the exchange of knowledge and expertise between centres with larger and smaller case loads to support the implementation of MDC. A comprehensive strategy is needed to support MDC for cancer treatment planning in regional and country areas, including resources to support the increased use of telemedicine.
3. **Incentives:** Services and governments should determine appropriate incentives, such as funding, to specifically implement multidisciplinary cancer care.
4. **Education and promotion:** Further national education and promotion strategies regarding MDC should be developed. To target health services, education and promotion strategies at national and state levels should emphasise NBOCC's Principles of Multidisciplinary Care,[5] and specifically highlight the importance of:
    - core membership of the multidisciplinary team (cancer specific)
    - resource and workforce planning
    - links to the full therapeutic range of services
    - processes for MDT data collection and review
    - communication with GPs and continuity of care
    - patient consent
    - patient involvement in treatment planning.
5. **Follow-up study:** A further investigation of MDC after the introduction of the MBS items should be undertaken to compare uptake with the current audit findings.

HEALTH SERVICES LEVEL

6. **Core team:** Core membership of the cancer-specific teams should be established and known. Although it may be difficult to ensure attendance by certain disciplines owing to workforce or resource impediments, time to attend MDC meetings should be factored into workforce planning. To increase full core team attendance, scheduling of meetings should take into account the timing of visiting specialists. Teleconferencing and videoconferencing facilities should be used to ensure that all core disciplines are represented at the meetings, such as by linking larger treating centres and clinicians located off-site.

7. **Regular meetings:** The importance of having regular scheduled meetings should be promoted. NBOCC's *Multidisciplinary Meetings for Cancer Care: A Guide for Health Service Providers*[6] provides practical tools and guidance on setting up regular MDC meetings.
8. **Links to the full range of services:** Health services need to review workforce availability and implement specific strategies to improve linkages with non-core specialities. All cancer services should ensure adequate links to the full range of general and cancer-specific services for all cancer patients.
9. **Data collection:** Health services should allocate resources to implementing data collection and reviewing systems in order to facilitate quality improvement and benchmarking.
10. **Professional development:** Health services should support and acknowledge the importance of training for cancer health professionals, such as communication skills training to improve interactions with patients and within teams.

MULTIDISCIPLINARY TEAM LEVEL

11. **Patient consent:** Multidisciplinary teams (in conjunction with health services) should implement processes to ensure that all cancer patients are informed when their case is to be discussed by an MDC team. All teams should aim to obtain informed patient consent to discuss cases at team meetings. All teams should aim to provide patients with written information about the members of their team, what and how information is shared between team members, and the treatment planning process.
12. **Communication with GPs and continuity of care:** Teams need to implement systems to ensure that communication with GPs on treatment plans is timely and adequate, given that coordination of care between hospital and community sectors is essential for good patient care. GPs are ideally placed to provide continuity of care.
13. **Recording of treatment plans:** MDTs should develop processes for ensuring that the outcomes of MDT planning meetings are routinely recorded in patients' notes.
14. **Involvement of the patient in treatment planning:** The treating clinician should discuss the recommendations of the MDT planning meeting with the patient and use effective communication techniques to ensure that patients understand their options and have as much input into their treatment plan as they wish. MDC teams should implement processes to ensure that there is an agreed approach to dealing with and recording changes to the treatment plan following discussion with the patient.

APPENDIX A – STEERING COMMITTEE MEMBERS

Dr Helen Zorbas (Chair)	National Breast and Ovarian Cancer Centre, Director
Associate Professor David Ball	Peter MacCallum Cancer Centre
Mr Don Baumber	Gold Coast Prostate Cancer Support & Information Network
Associate Professor Peter Grant	Mercy Hospital for Women
Associate Professor Rosemary Knight	University of NSW
Ms Rebecca James	Research Australia
Mrs Lesley McQuire	National Breast and Ovarian Cancer Centre Board Member
Professor Villis Marshall	Royal Adelaide Hospital
Professor Christobel Saunders	University of Western Australia
Professor Michael Solomon	Royal Prince Alfred Hospital Medical Centre

APPENDIX B
NBOCC SURVEY TOOL

NATIONAL BREAST CANCER CENTRE
Incorporating the
Ovarian Cancer Program

NATIONAL BREAST CANCER CENTRE MULTIDISCIPLINARY CARE AUDIT

SURVEY

Hospital ID	
Cancer type (prostate, gynaecological, colorectal, breast, lung,)	
Interviewee role	
Date and time of interview	

Thank you for agreeing to participate in the National Breast Cancer Centre's audit of multidisciplinary care.

You have been provided with an information sheet that provides further information about the audit and interview process. Please refer to this document if you have any questions.

You will be contacted in the next few days by a trained consultant to arrange a convenient time to complete the survey over the telephone. The interview should take 15–20 minutes.

Before the survey begins, please read the definition of multidisciplinary care below.

> *Multidisciplinary care is an integrated team approach to health care in which medical and allied health care professionals consider all relevant treatment options and develop collaboratively an individual treatment plan for each patient.*

Throughout the survey, '*multidisciplinary care meetings*' refers to designated meetings for the purpose of treatment planning.

Multidisciplinary care team

We would like to explore the ways in which care for [*insert cancer type(s)*] patients is provided at your hospital.

1. Is there an identified team for treatment planning for [*insert cancer type(s)*]?

- ☐ Yes
- ☐ No
- ☐ Don't know

Additional notes: By 'team' we mean a designated group of health professionals who undertake collaboratively the treatment planning process.

Multidisciplinary care meetings

2. Are multidisciplinary meetings held at your hospital between clinicians to develop a treatment plan?

- ☐ Yes - regular multidisciplinary meetings are held for treatment planning
- ☐ Yes - occasional/irregular multidisciplinary meetings are held depending on caseload or need
- ☐ No - there are no designated multidisciplinary meetings for the purpose of treatment planning; informal meetings only
- ☐ No - there are no multidisciplinary meetings for the purpose of treatment planning; clinicians communicate on an individual basis as required
- ☐ No - there are no multidisciplinary meetings for the purpose of treatment planning; and there is little or no discussion between clinicians
- ☐ Don't know

→If 'No' or 'Don't know', go to Question 19

Additional notes: 'Regular' means that the meetings occur at a designated time. This may be weekly, fortnightly or monthly (see next question).

3. How often are multidisciplinary treatment planning meetings held?

- ☐ Weekly
- ☐ Fortnightly
- ☐ Monthly
- ☐ As needed

4. How are multidisciplinary treatment planning meetings conducted?

- ☐ Face to face
- ☐ Via teleconference or video link
- ☐ Combination

If via teleconference or video link, is your hospital a

- ☐ Main host site (hub)
- ☐ Satellite site (spoke)

5. Who ROUTINELY attends multidisciplinary treatment planning meetings?

- ☐ Surgeon ○ General ○ Specialist
- ☐ Radiologist
- ☐ Medical Oncologist
- ☐ Radiation Oncologist
- ☐ Pathologist
- ☐ General Practitioner
- ☐ Cancer Care Coordinator
- ☐ Oncology Nurse
- ☐ Other Specialist Nurse, please specify_____
- ☐ Radiation therapist
- ☐ Social Worker
- ☐ Psychologist
- ☐ Genetic Counsellor
- ☐ Dietician
- ☐ Respiratory Physician
- ☐ Gynaecological Oncologist
- ☐ Palliative Care Physician
- ☐ Nuclear Medicine Physician
- ☐ Patient Advocate/Hospital Ethicist
- ☐ Psychiatrist
- ☐ Occupational Therapist
- ☐ Stomal Therapy Nurse
- ☐ Pastoral Care Representative
- ☐ Data Manager
- ☐ Research staff
- ☐ Other, please specify _____

Additional notes: Please list all of the people who attend all or most meetings.

6. Are there other health professionals who OCCASIONALLY attend, if relevant to the individual patient discussion?

- ☐ Yes
- ☐ No → *go to Question 7*
- ☐ Don't know

Additional notes: By this we mean people who are not involved in every meeting but may be invited to participate if required.

Please indicate who attends:

- ☐ Surgeon ○ General ○ Specialist
- ☐ Radiologist
- ☐ Medical Oncologist
- ☐ Radiation Oncologist
- ☐ Pathologist
- ☐ General Practitioner
- ☐ Cancer Care Coordinator
- ☐ Oncology Nurse
- ☐ Other Specialist Nurse, please specify_____
- ☐ Radiation therapist
- ☐ Social Worker
- ☐ Psychologist
- ☐ Genetic Counsellor
- ☐ Dietician
- ☐ Respiratory Physician
- ☐ Gynaecological Oncologist
- ☐ Palliative Care Physician
- ☐ Nuclear Medicine Physician
- ☐ Patient Advocate/Hospital Ethicist
- ☐ Psychiatrist
- ☐ Occupational Therapist
- ☐ Stomal Therapy Nurse
- ☐ Pastoral Care Representative
- ☐ Data Manager
- ☐ Research staff
- ☐ Other, please specify

7. Does the team have established links to other specialities/ allied health services?

- ☐ Yes
- ☐ No
- ☐ Don't know

If yes, which services are there links to?

- ☐ Genetic/hereditary Counselling
- ☐ Dietetics
- ☐ Psychiatry
- ☐ Psychology
- ☐ Lymphoedema Services
- ☐ Palliative Care
- ☐ Pain Clinic
- ☐ Community Nursing Services
- ☐ Occupational Therapy
- ☐ Continence/Erectile dysfunction services
- ☐ Social Work
- ☐ Plastic Surgery
- ☐ Nuclear Medicine
- ☐ Stomal Therapy
- ☐ Pastoral Care
- ☐ Other, please specify _____

Additional notes: By 'established' we mean links that are known and functional.

8. What criteria are used to decide which patients are discussed at meetings? *(Note: multiple answers may be given)*

- ☐ All patients
- ☐ Suspected cases
- ☐ All newly diagnosed early cases
- ☐ All newly diagnosed advanced cases
- ☐ Recurrent cases
- ☐ Difficult cases only
- ☐ Screen detected cancers only
  (*give this option for breast, gynaecological (cervical), colorectal (bowel) only*)
- ☐ Cases referred for a second opinion
- ☐ No protocol, individual clinical choice

Comments:

_____

_____

_____

Additional notes: If 'All patients' is selected, please be clear that this refers to all current cases being treated within the hospital/service.

9. Does your team have agreed protocols based on best practice guidelines for care of patients with [insert cancer type]?

- ☐ Yes - covering multiple aspects of care
- ☐ Yes - covering few or isolated aspects of care
- ☐ No - there are no protocols
- ☐ Don't know if there are any protocols

→If yes, are these written protocols?

- ☐ Yes
- ☐ No
- ☐ Don't know

Communication with general practitioners

10. Are treatment plans made in multidisciplinary treatment planning meetings communicated to general practitioners?

- ☐ Always
- ☐ Almost always
- ☐ Mostly
- ☐ Sometimes
- ☐ Rarely
- ☐ Never

Comments:

_____

_____

_____

→ If never, go to question 12

Additional notes: Some interviewees may say that plans are communicated to GPs only where the patient has a nominated GP.

11. How are treatment plans communicated to General Practitioners?

- ☐ In person through meetings
- ☐ Telephone
- ☐ Individualised letter
- ☐ Standardised letter
- ☐ Facsimile
- ☐ Email
- ☐ Only indirectly through clinician

Additional notes: If more than one approach is used, eg by telephone with a follow-up letter, more than one response can be given.

Communication with patients

12. Are patients routinely informed that their case will be discussed at a multidisciplinary treatment planning meeting?

- ☐ Yes - written
- ☐ Yes - verbal
- ☐ No

13. Are patients asked to consent to their case being discussed at multidisciplinary treatment planning meetings?

- ☐ Yes - written
- ☐ Yes - verbal
- ☐ No

14. Who is responsible for communicating the outcome of the multidisciplinary treatment planning meeting to the patient?

- ☐ Surgeon ○ General ○ Specialist
- ☐ Radiologist
- ☐ Medical Oncologist
- ☐ Radiation Oncologist
- ☐ Pathologist
- ☐ General Practitioner
- ☐ Cancer Care Coordinator
- ☐ Oncology Nurse
- ☐ Other Specialist Nurse, please specify_____
- ☐ Radiation therapist
- ☐ Social Worker
- ☐ Psychologist
- ☐ Genetic Counsellor
- ☐ Dietician
- ☐ Respiratory Physician
- ☐ Gynaecological Oncologist
- ☐ Palliative Care Physician
- ☐ Nuclear Medicine Physician
- ☐ Patient Advocate/Hospital Ethicist
- ☐ Psychiatrist
- ☐ Occupational Therapist
- ☐ Stomal Therapy Nurse
- ☐ Pastoral Care Representative
- ☐ Data Manager
- ☐ Research staff
- ☐ Other, please specify _____ (e.g the person who brought the case to the meeting)

Additional notes: Please indicate the most common process used by the team.

15. Is the proposed treatment plan resulting from the multidisciplinary treatment planning meeting recorded in patient case notes?

- ☐ Always
- ☐ Almost always
- ☐ Mostly
- ☐ Sometimes
- ☐ Rarely
- ☐ Never

16. Are patients encouraged to provide input into their treatment plan?

- Always
- Almost always
- Mostly
- Sometimes
- Rarely
- Never

→ If never, go to question 18

17. After discussion with patients, how are any changes to the treatment plan or decisions dealt with? *(Note: multiple answers may be indicated)*

- Plan changed and reason noted
- Plan changed and team informed at next meeting
- Clinician consults with another individual team member before changing plan
- Team discusses different treatment plans at next meeting
- Patient strongly encouraged to accept proposed plan (no alternatives discussed)
- Other, please specify

_____

18. Are patients offered a written treatment plan created by the multidisciplinary team meeting?

- Always
- Almost always
- Mostly
- Sometimes
- Rarely
- Never
- Only if requested by patient

Data collection

19. Does your team have a system for the collection and review of data for the management of patients with cancer for the purpose of audit? *(Note: multiple answers may be indicated)*

- ☐ Yes - there is a central hospital data collection and a process for the team to review this data
- ☐ Yes - there is a central hospital data collection but no process for the team to review this data
- ☐ There is no central data collection, individuals contribute to audit coordinated by professional college
- ☐ There is no central data collection, however some individual clinicians collect data about their practice
- ☐ There is no data collection at your hospital either centrally or by individual clinicians
- ☐ Don't know

Comments:

_____

_____

General comments

20. Do you feel there are any barriers to the implementation/improvement of multidisciplinary care in your hospital?

_____

_____

_____

21. Any final comments?

_____

_____

_____

Thank you for your assistance with this survey.

APPENDIX C CANCER INSTITUTE NSW SURVEY TOOL

Multidisciplinary Team Profile **Cancer type** _____ **Clinical lead or convener** _____	

Contact Person Details for Survey					
Name (title, first name, surname)					
Department		Institution			
Address					
City/Suburb		State		Post code	
Telephone		Fax			
Email					
Date of Interview					

Thank you for taking the time to complete the survey on multidisciplinary teams.

A Multidisciplinary Team (MDT) is a group of health professionals who meet to discuss all relevant treatment options and develop an individual treatment plan for each cancer patient.

Please ensure that all relevant contact details have been provided and that all questions in the survey have been completed.

Purpose

This survey of multidisciplinary teams (MDTs) will enable the Cancer Institute NSW and the National Breast Cancer Centre (NBCC) to:

- provide people with a cancer diagnosis, their carers and families as well as health professionals with information on MDT across the state via the NSW Directory of Cancer Services;
- plan future MDT initiatives by identifying gaps in the current situation;
- develop indicators to measure the success of future MDT initiatives.

Multidisciplinary Team Communication

1. How often does the multidisciplinary team meet?

☐ Once a week

☐ Once a fortnight

☐ Once a month

☐ Irregularly

☐ Other: _____

2. On what day does the multidisciplinary team meet?

☐ Monday ☐ Thursday

☐ Tuesday ☐ Friday

☐ Wednesday

3. At what time do meetings take place?

_____

4. Where are meetings held?

_____

5. a) How are multidisciplinary team meetings conducted?

☐ Face to Face

☐ Via teleconference or video link, If yes, go to question 5 b)

☐ Combination

b) Is your centre a

☐ Main host site (hub)

☐ Satellite site (spoke)

6. a) Are there established criteria for the referral of the patient to the multidisciplinary team meeting?

☐ Yes If yes, go to **question 6 b)**

☐ No Go to **question 7**

b) List the referral criteria below (or attach to survey)

_____

_____

_____

_____

_____

_____

_____

_____

7. Is meeting attendance recorded?

☐ Yes If yes, please attach a sample

☐ No

Team Membership and Referral Links

8. Is patient management discussed at one or several points along the treatment pathway?

- ☐ One point
- ☐ Several points

9. At which point/s along the treatment pathway is patient management discussed?

Tick any that apply

- ☐ Initial diagnosis and referral
- ☐ Determination of treatment
- ☐ At the time treatment is changed e.g relapse
- ☐ Treatment
- ☐ Follow-up care
- ☐ At each hospital admission
- ☐ End of life care

10. Identify the core disciplines represented in this specific team.

Tick any that apply.

- ☐ Surgeon
- ☐ Thoracic Surgeon
- ☐ ENT/HN Surgeon
- ☐ Reconstructive Surgeon
- ☐ Breast Surgeon
- ☐ Plastic Surgeon
- ☐ Neuro Surgeon
- ☐ General Practitioner
- ☐ Other medical specialities:

_____

_____

_____

- ☐ Radiation oncologist
- ☐ Medical oncologist
- ☐ Gynaecological oncologist
- ☐ Neuro oncologist
- ☐ Respiratory physician
- ☐ Fertility physician
- ☐ Dermatologist
- ☐ Gynaecologist
- ☐ Urologist
- ☐ Clinical Haematologist
- ☐ Palliative Care

☐ Pathologist
☐ Neuro pathologist
☐ Radiologist
☐ Neuro radiologist
☐ Endoscopist
☐ Nurse
☐ Nurse coordinator
☐ Psychologist
☐ Social worker
☐ Pharmacist
☐ Dietitian
☐ Other:
_____
_____

11. a) Do other disciplines attend team meetings as relevant to specific patients? ☐ Yes **If yes, go to question 11b)**

☐ No

b) If yes, which disciplines?

_____
_____
_____
_____

12. a) Does the team have links with non-core disciplines

☐ Yes **If yes, go to question 12b)**

☐ No

b) If yes, which disciplines?

13. Which discipline is responsible for this meeting?

_____

14. Are medical, nursing or allied health trainees present at multidisciplinary team meetings?

☐ Yes

☐ No

15. How is a patient's general practitioner informed of MDT clinical management decisions?

Tick any that apply

☐ Email

☐ Letter

☐ Written treatment plan

☐ Attendance at meeting

☐ Verbally

☐ General practitioners are not informed

☐ Other _____

_____

16. a) Have referral links been established with non-core team specialist services? E.g cancer genetics, fertility, rehabilitation, psychiatry

☐ Yes If yes, go to **question 16 b)**

☐ No Go to **question 17**

b) Which specialist services have established links and what is this mechanism?

_____

_____

_____

_____

17. a) Is clinical trial eligibility discussed or determined at the time the patient is discussed at the meeting ?

☐ Yes If yes, go to **question 17 b) and 17c)**

☐ No Go to **question 18**

b) If yes, what is the mechanism for ensuring all eligible patients could be entered into a trial?

_____

_____

_____

_____

c) Are open clinical trials known to all key members of the multidisciplinary team?

☐ Yes

☐ No

18. a) Is there a process at the MDT meeting for identifying patients who need a referral for a psycho-oncology consultation?

☐ Yes If yes, go to **question 18 b)**

☐ No Go to **question 19**

b) If yes, what is that process?

_____

_____

_____

_____

19. a) Is there a process at the MDT for identifying patients who need a referral to other allied health service(s)?

☐ Yes If yes, go to **question 19 b)**

☐ No Go to **question 20**

b) If yes, what is that process?

_____

_____

_____

_____

20. Which of the following data and statistics are recorded by the MDT?

Tick all that apply

☐ No data recorded

☐ MDT agreed treatment plans recorded in the patient notes

☐ Team present at each meeting

☐ Number of patients discussed at each meeting

☐ Number of patients discussed at each meeting by week, month or year

☐ Number of patients discussed as proportion of total patients treated for tumour type in AHS

☐ Proportion of patients managed according to agreed protocols

☐ Patient mortality

☐ Patient morbidity: Specify what is discussed

_____

_____

_____

_____

☐ Patient survival

How is this data collected and recorded?

_____

_____

_____

_____

21. What quality activity occurs in the multidisciplinary team meeting?

☐ None

☐ None – occur elsewhere

☐ Relevance on guideline development and compliance

☐ Review of patient outcomes

☐ Review of unexpected morbidity or mortality

Standards of Care

22. a) Does the team utilise Clinical Practice Guidelines or Standard Treatment Protocols relevant to the patients diagnosis, treatment and psychosocial care?

☐ Yes If yes, go to **question 22b**)

☐ No Go to **question 22c)**

b) If yes, please describe how these are accessed and utilised

_____

_____

_____

_____

_____

c) If no, what treatment plans are used and how are they devised?

_____

_____

_____

_____

_____

23. How often are patient preferences discussed in meetings?

☐ All the time ☐ Usually ☐ Never

☐ Sometimes ☐ Rarely ☐ Other

24. Are all relevant test results, reports and films available at team meetings?

☐ All the time ☐ Usually ☐ Never

☐ Sometimes ☐ Rarely ☐ Other

25. What is the mechanism for recording clinical management decisions made at the MDT meeting?

_____

_____

_____

_____

_____

26. a) Does the team have established links with other cancer specialists or multidisciplinary teams in regional / rural areas?

☐ Yes If yes, go to **question 26 b).**

☐ No Go to **question 27**

b) Describe how these links were established and are maintained

_____

_____

_____

_____

_____

_____

_____

_____

27. What professional development activities for the MDT are held regularly?

- ☐ Journal club
- ☐ Case studies
- ☐ Guest speaker
- ☐ In- service
- ☐ Recent research results discussed/presented
- ☐ Reports from medical or scientific meetings
- ☐ Other: _____

_____

28. How is this activity held?

- ☐ Weekly
- ☐ Monthly
- ☐ Quarterly
- ☐ No discussed

Patient Involvement in the Multidisciplinary Team

29. Are patients encouraged to be involved in the MDT decision making process?

☐ All the time ☐ Usually ☐ Never

☐ For specific aspects: _____

☐ Sometimes ☐ Rarely ☐ Other _____

30. Are patients informed that they are to be discussed in a multidisciplinary forum?

☐ All the time ☐ Usually ☐ Never

☐ Sometimes ☐ Rarely ☐ Other

31. Is patient consent obtained for this discussion prior to the team discussion according to a local protocol?

☐ Yes – verbal

☐ Yes – written - please attach consent form/protocol

☐ No

32. How are patients informed of clinical management recommendations made at Multidisciplinary team meetings? Tick any that apply.

☐ Verbal information ☐ Telephone

☐ Written treatment plan ☐ Not informed of decisions

☐ Hand held patient record ☐ Other: _____

33. Who is responsible for informing the patient of the clinical management recommendations? _____

34. Are only consensus recommendations given to the patient or are dissenting or alternative views of the meeting given at the same time?

- ☐ Consensus
- ☐ Consensus and alternative views
- ☐ None given

35. Are patents supportive care social, financial or other needs discussed?

☐ All the time ☐ Usually ☐ Never

☐ Sometimes ☐ Rarely ☐ Other

36. Do patients supportive care needs impact on treatment decisions that are recommended?

☐ All the time ☐ Usually ☐ Never

☐ Sometimes ☐ Rarely ☐ Other

37. Are patients informed of who is part of the multidisciplinary team and who the leader is?

- ☐ Yes
- ☐ No

Enablers and Barriers

38. List the key factors which must be present to support the functioning of the multidisciplinary team.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

39. List any important barriers that hinder the functioning of the multidisciplinary team. Please describe any strategies or solutions that have been implemented.

Barriers

_____

_____

_____

_____

_____

Solutions

_____

_____

_____

_____

_____

Thank you for taking the time to complete this survey.

APPENDIX D DEPARTMENT OF HUMAN SERVICES VICTORIA SURVEY TOOL

Integrated Cancer Services multidisciplinary team questionnaire

Please use a separate questionnaire for EACH multidisciplinary team in your Integrated Cancer Service

Title of multidisciplinary team (tumour stream/s) _____ in _____ ICS

QUESTION	RESPONSE	COMMENT
The frequency of the meeting	E.g. weekly, fortnightly, monthly, ad hoc etc.	
Conduct of meetings	E.g. face to face, teleconference, videoconference, combination etc.	
Teleconference/videoconference linkage	With what teams/clinicians does the team link?	
Team members who ROUTINELY attend meetings	E.g. pathology, radiology, surgery, medical oncology, radiation oncology, nursing, general practice, social work, psychology, genetic counselling, respiratory medicine, gynaecology oncology, urology, palliative care etc.	
Team members who attend occasionally or are invited for a specific reason		

Linkages formed with other specialities	E.g. genetic counselling, dietetics, speech pathology, psychiatry, psychology, lymphoedema services, palliative care, continence management, plastic surgery, pastoral care etc.	
Criteria used to place patients on the agenda	E.g. all patients, all newly diagnosed patients, patients needing review, patients with a recurrence or with advanced cancer, difficult/complex cases only, clinician choice etc.	
Team protocols: please provide an example of any team protocols that have been developed	Please list protocols.	
Treatment protocols: please provide an example	Please list protocols.	
Communication of recommendations from the multidisciplinary meeting to the general practitioner	Are recommendations communicated to the general practitioner? Always, almost always, mostly, sometimes, rarely, never.	
Communication of treatment plans to the general practitioner	Are treatment plans communicated to the general practitioner? In person by attending the meeting, telephone, letter, fax, email, indirectly through the clinician etc.	
Patient information about the multidisciplinary team processes and meetings and consent	Are patients provided with information about multidisciplinary care? Yes: pamphlet, explanation, both No	
	Is the patient's consent sought before their case is discussed? Yes – verbal, written, recorded in medical record by clinician etc. No	

Communication of meeting recommendations to the patient	Who communicates the meeting recommendations to the patient? E.g. presenting clinician, the team member with whom the patient next has an appointment, the general practitioner, the surgeon, the medical oncologist etc.	
Recording of recommendations	Are the recommendations of the meeting recorded in the patient's medical record? Yes – how and by whom No	
Patient input to treatment plan	Do patients provide input to their treatment plan? Yes: how and when? No	
Changes to treatment plan	Should changes be made to the treatment plan, how is this dealt with? E.g. plan changed and reason noted in medical record, plan changed and team informed at next meeting etc.	
Written treatment plans for patients	Are patients routinely given a written treatment plan? Yes No	
What data is collected at team meetings?	E.g. attendees, who has input to team discussion, team recommendations etc.	

Department of Human Services
July 2006

APPENDIX E – NBOCC SAMPLE: DISCIPLINE OF INTERVIEWEES

Discipline	Responses (*n*)	Responses / total (%)	Discipline	Responses (*n*)	Responses / total (%)
Director of nursing	89	17%	Public health officer	5	1%
Nurse unit manager	44	8%	Site manager	5	1%
Clinical nurse manager	26	5%	Senior medical officer – staff physician	5	1%
Registered nurse	17	3%	Unit manager	5	1%
Clinical nurse consultant	16	3%	Unit nurse manager	5	1%
Medical superintendent	14	3%	Chemotherapy nurse	4	1%
Medical oncologist	11	2%	Clinical nurse specialist, surgery	4	1%
CEO	10	2%	Clinical nurse, oncology	4	1%
Nursing director	10	2%	Director of medical services	4	1%
Nursing support officer	10	2%	Oncology area manager	4	1%
Acting director of nursing	8	1.5%	Case manager	3	0.6%
Clinical manager	8	1.5%	Radiation oncologist	3	0.6%
Clinical nurse	7	1.3%	Clinical manager, oncology unit	2	0.4%
General surgeon	7	1.3%	Consultant	2	0.4%
Acting director	5	1%	Consultant surgeon	2	0.4%
Admission/discharge coordinator	5	1%	Director of cancer support services	2	0.4%
Breast care nurse	5	1%	Director of surgery	2	0.4%
Cancer care coordinator	5	1%	Director of urology	2	0.4%
Cancer support coordinator	5	1%	Head, medical oncology	2	0.4%
Haemotherapy clinical nurse	5	1%	Resident general surgeon	2	0.4%
Child health	5	1%	Staff respiratory physician	2	0.4%
Clinical nurse consultant, oncology	5	1%	Breast surgeon	1	0.2%
Clinical nurse consultant, chemotherapy	5	1%	Chair of gynaecology oncology clinic	1	0.2%
Clinical nurse manager, oncology/medial	5	1%	Chairperson	1	0.2%
Community nursing coordinator	5	1%	Clinical director	1	0.2%
Day care oncology nurse	5	1%	Consultant oncologist	1	0.2%
Director of nursing and	5	1%	Consultant, urology	1	0.2%

Discipline	Responses (*n*)	Responses / total (%)	Discipline	Responses (*n*)	Responses / total (%)
midwifery					
Director of nursing care	5	1%	Director of gynaecology	1	0.2%
Director of nursing / health services manager	5	1%	Director of radiation oncology	1	0.2%
Executive officer	5	1%	Enrolled nurse, out-patient colposcopy clinic	1	0.2%
Head of cancer services	5	1%	General/breast surgeon	1	0.2%
Hospice coordinator	5	1%	Gynaecologist	1	0.2%
Nursing unit manager, palliative care	5	1%	Information manager	1	0.2%
Nursing unit manager, day oncology unit	5	1%	Medical director	1	0.2%
Nursing unit manager, oncology	5	1%	Nursing services coordinator	1	0.2%
Nurse	5	1%	Obstetrician and gynaecologist	1	0.2%
Nurse consultant	5	1%	Professor of surgery	1	0.2%
Nurse practice coordinator	5	1%	Unit head, general surgery	1	0.2%
Oncology nurse	5	1%	Urologist	1	0.2%
Oncology registered nurse	5	1%	Role not stated	21	4%
Palliative care nurse	5	1%			
Total	520				

APPENDIX F – NBOCC SAMPLE: ROUTINE ATTENDANCE

Who routinely attends MDC meetings?	Cancer type					
	Breast (*n* = 50)	Lung (*n* = 42)	Gynaecological (*n* = 38)	Colorectal (*n* = 42)	Prostate (*n* = 41)	Total (*n* = 213)
General surgeon	16 (32%)	8 (19%)	6 (16%)	9 (21%)	7 (17%)	46 (22%)
Specialist surgeon	11 (22%)	8 (19%)	3 (8%)	7 (17%)	6 (15%)	35 (16%)
Radiologist	9 (18%)	7 (17%)	1 (3%)	3 (7%)	3 (7%)	23 (11%)
Medical oncologist	18 (36%)	14 (33%)	13 (34%)	13 (31%)	13 (32%)	71 (33%)
Radiation oncologist	17 (34%)	11 (26%)	10 (26%)	10 (24%)	10 (24%)	58 (27%)
Pathologist	14 (28%)	7 (17%)	7 (18%)	7 (17%)	6 (15%)	41 (19%)
GP	22 (44%)	18 (43%)	18 (47%)	19 (45%)	18 (44%)	95 (45%)
Cancer care coordinator	11 (22%)	7 (17%)	7 (18%)	6 (14%)	7 (17%)	38 (18%)
Oncology nurse	17 (34%)	12 (29%)	14 (37%)	11 (26%)	12 (29%)	66 (31%)
Other specialist nurse	31 (62%)	22 (52%)	19 (50%)	21 (50%)	24 (59%)	117 (55%)
Radiation therapist	5 (10%)	1 (2%)	1 (3%)	1 (2%)	1 (2%)	9 (4%)
Social worker	16 (32%)	13 (31%)	13 (34%)	12 (29%)	15 (37%)	69 (32%)
Psychologist	5 (10%)	4 (10%)	5 (13%)	4 (10%)	4 (10%)	22 (10%)
Genetic counsellor	1 (2%)	0 (0%)	1 (3%)	0 (0%)	0 (0%)	2 (1%)
Dietitian	10 (34%)	9 (34%)	9 (34%)	10 (34%)	11 (34%)	49 (23%)
Respiratory physician	1 (2%)	8 (19%)	1 (3%)	0 (0%)	1 (2%)	11 (5%)
Gynaecological oncologist	1 (2%)	1 (2%)	6 (16%)	1 (2%)	2 (5%)	11 (5%)
Palliative care physician	5 (10%)	8 (19%)	6 (16%)	3 (7%)	5 (12%)	27 (13%)
Nuclear medicine physician	2 (4%)	3 (7%)	0 (0%)	0 (0%)	0 (0%)	5 (2%)
Patient advocate / hospital ethicist	3 (6%)	1 (2%)	1 (3%)	1 (2%)	1 (2%)	7 (3%)
Psychiatrist	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Occupational therapist	12 (34%)	11 (34%)	11 (34%)	12 (34%)	13 (34%)	59 (28%)
Stomal therapy nurse	0 (0%)	0 (0%)	0 (0%)	6 (14%)	1 (2%)	7 (3%)
Pastoral care representative	2 (4%)	1 (2%)	2 (5%)	0 (0%)	1 (2%)	6 (3%)
Data manager	6 (12%)	4 (10%)	2 (5%)	2 (5%)	0 (0%)	14 (7%)
Research staff	4 (8%)	2 (5%)	3 (8%)	1 (2%)	2 (5%)	12 (6%)
Other	39 (78%)	29 (69%)	28 (74%)	33 (79%)	28 (68%)	157 (74%)

APPENDIX G – CORE AND NON-CORE TEAM MEMBERSHIP

Core team members	Non-core team members
Breast cancer	
Surgery Medical oncology Radiation oncology Pathology Radiology Oncology nursing / breast care nursing General practice	Genetic/hereditary counselling Physiotherapy Psychiatry/psychology Nuclear medicine Social work Plastic surgery Palliative care
Lung cancer	
Respiratory medicine Cardiothoracic surgery Medical oncology Radiation oncology Pathology Radiology Oncology nursing / specialist nursing General practice Palliative care Nuclear medicine / positron emission tomography	Physiotherapy Psychiatry/psychology Nuclear medicine Social work Occupational therapy Dietetics
Colorectal cancer	
Surgery Medical oncology Radiation oncology Pathology Radiology Oncology nursing / specialist nursing General practice Dietetics	Physiotherapy Psychiatry/psychology Nuclear medicine Social work Stomal therapy Sexual health counselling Palliative care
Gynaecological cancer	
Gynaecological oncology Medical oncology Radiation oncology Oncology nursing / specialist nursing General practice	Genetic/hereditary counselling Physiotherapy Psychiatry/psychology Nuclear medicine Social work Radiology Urology Pharmacy Occupational therapy Dietetics Sexual health counselling Palliative care

Core team members	Non-core team members
Prostate cancer	
Urology	Physiotherapy
Medical oncology	Psychiatry/psychology
Radiation oncology	Social work
Radiology	Nuclear medicine
Supportive care (oncology nursing / specialist nursing)	Palliative care
General practice	Sexual health counselling

APPENDIX H – NSW SAMPLE: ROUTINE ATTENDANCE

Discipline	Cancer type					
	Breast (*n* = 16)	Lung (*n* = 10)	Gynaecological (*n* = 4)	Colorectal (*n* = 11)	Prostate (*n* = 8)	Total
Nurse coordinator	16	9	3	9	7	44
Nursing – general	11	6	4	7	7	35
Medical oncologist	12	5	1	6	3	27
Radiation oncologist	9	4	1	4	2	20
Palliative care	4	5	2	4	4	19
Social work	8	2	2	3	2	17
Surgery – general	6	1	0	5	1	13
Breast surgeon	9	1	0	2	1	13
Radiologist	5	2	0	3	3	13
Pathologist	7	1	1	1	2	12
Medical trainee	5	2	0	2	2	11
Dietitian	2	2	3	2	2	11
Genetic counsellor	3	1	1	1	1	7
Allied health trainee	2	1	1	1	1	6
Occupational therapist	1	1	1	1	1	5
Stomal therapist	1	1	1	1	1	5
Community nurse	1	1	1	1	1	5
Hostel supervisor	1	1	1	1	1	5
Home and community care services coordinator	1	1	1	1	1	5
Nursing trainee	1	1	1	1	1	5
Psychologist	3	0	1	0	0	4
Respiratory physician	0	3	0	0	1	4
Thoracic surgeon	0	2	0	0	1	3
Urologist	0	1	0	0	2	3
Neurological surgeon	0	1	0	0	1	2
Clinical haematologist	0	1	0	0	1	2
GP	1	0	0	1	0	2
Physiotherapist	2	0	0	0	0	2
Breast cancer nurse	2	0	0	0	0	2
Gynaecological oncologist	0	0	1	0	0	1
Gynaecologist	0	0	1	0	0	1
Endoscopist	0	0	0	1	0	1
Pharmacist	1	0	0	0	0	1
BreastScreen representative	1	0	0	0	0	1
Clinical trials nurse	1	0	0	0	0	1
Multidisciplinary team coordinator	1	0	0	0	0	1
Total	117	56	28	58	50	309

APPENDIX I – VICTORIAN SAMPLE: ROUTINE ATTENDANCE

Discipline	Cancer type					
	Breast (*n* = 13)	Lung (*n* = 9)	Gynaecological (*n* = 5)	Colorectal (*n* = 8)	Prostate (*n* = 7)	Total
Medical oncologist	13	8	4	8	7	40
Radiation oncologist	12	7	4	8	7	38
Radiologist	7	7	4	8	7	33
Pathologist	11	3	4	5	6	29
Surgeon – general	6	5	4	3	4	22
Cancer-specific nurse – breast care, stomal therapy, urology	10	0	0	3	4	17
Social worker	6	2	2	3	3	16
Nurse – general	1	2	5	3	3	14
Cancer-specific surgeon	6	2	0	5	1	14
Registrar – general	2	2	1	1	3	9
Respiratory specialist	0	8	0	0	0	8
Palliative care	0	4	0	1	1	6
Clinical nurse coordinator	1	1	1	1	2	6
Research nurse	5	0	0	0	1	6
Radiology oncology registrar	0	1	1	1	2	5
Stomal therapist	1	0	0	4	0	5
GP	3	0	0	1	1	5
Radiology oncology fellow	0	1	1	1	1	4
Radiation therapist	0	1	1	1	1	4
Resident	1	1	0	0	2	4
Physiotherapist	4	0	0	0	0	4
Cancer coordinator	2	0	0	1	1	4
Administrator	2	0	0	1	1	4
Cancer support nurse	1	1	0	1	0	3
Day oncology nurse / nursing unit manager	2	0	0	1	0	3
Palliative care physician	3	0	0	0	0	3
Surgical fellow	0	0	0	2	0	2
Gynaecological oncologist	0	0	2	0	0	2
Nuclear medicine specialist	0	1	0	1	0	2
Data manager	2	0	0	0	0	2
Occupational therapist	2	0	0	0	0	2
Clinical trials manager	2	0	0	0	0	2
Liaison nurse (cancer-specific)	0	0	0	1	1	2
Surgical registrar	0	1	0	0	0	1
Cardiothoracic surgeon	0	1	0	0	0	1
Genetic counsellor	0	0	0	0	1	1

Discipline	Cancer type					
	Breast (*n* = 13)	Lung (*n* = 9)	Gynaecological (*n* = 5)	Colorectal (*n* = 8)	Prostate (*n* = 7)	Total
Psychologist	0	0	0	0	1	1
Fellow	0	0	0	0	1	1
Inpatient ward nursing unit manager	0	0	0	0	1	1
Medicine	0	1	0	0	0	1
Manager (radiation oncology)	1	0	0	0	0	1
Breast care nurse	1	0	0	0	0	1
Cancer care nurse	1	0	0	0	0	1
Medical students	1	0	0	0	0	1
Palliative care nurse	1	0	0	0	0	1
Community palliative care nurse	1	0	0	0	0	1
Counsellor	1	0	0	0	0	1
Familial cancer care rep	1	0	0	0	0	1
Psychologist	1	0	0	0	0	1
Dietitian	1	0	0	0	0	1
Tissue bank coordinator	1	0	0	0	0	1
BreastScreen representative	1	0	0	0	0	1
Familial cancer oncologist	1	0	0	0	0	1
Familial cancer nurse	1	0	0	0	0	1
	119	60	34	65	63	341

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