



MULTIDISCIPLINARY CANCER CARE: A NATIONAL AUDIT 2006 SUMMARY REPORT

PREPARED BY NATIONAL BREAST AND OVARIAN CANCER CENTRE

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CONTENTS

- Contents** 3
- Acknowledgments**..... 5
- Executive summary**..... 5
- Introduction 6
- Methodology 6
- Key results 6
- Recommendations 8
- Introduction**..... 10
- Multidisciplinary cancer care in Australia: a national audit 10
- Background 10
- Methodology** 12
- Rationale 12
- Sample size and stratification 12
- Survey tool..... 12
- Data collection 13
- Data analysis 14
- Development of recommendations 14
- Results**..... 15
- Multidisciplinary teams 15
- Multidisciplinary meetings (frequency and format) 16
- Meeting attendance 17
- Links to other services..... 18
- Communication with general practitioners 19
- Communication and involvement with patients..... 21
- Recording the treatment plan 22
- Communicating with patients about meeting outcomes 22
- Input by patients into treatment plan 23
- Procedures and protocols 23
- Data collection 23
- Barriers 24
- Discussion** 25
- Multidisciplinary care in Australia 25
- NBOCC national audit 25
- Study limitations 26
- Multidisciplinary teams 27
- Multidisciplinary meetings 28

Links to other services.....	29
Communication with general practitioners	29
Communication with patients	30
Data collection and review	31
Barriers	32
Conclusion and recommendations.....	33
Strategic and national levels	33
Health services level	33
Multidisciplinary team level.....	34
Appendix A	35
References	36

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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, NBOCCⁱ) 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 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 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 type. Following analysis of the results, recommendations to improve the uptake and implementation of MDC in Australia were developed.

ⁱ In February 2008 the National Breast Cancer Centre (NBCC) incorporating the Ovarian Cancer Program (NBCC) became National Breast and Ovarian Cancer Centre (NBOCC).

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% hospitals surveyed 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).
- 64% to 85% of respondents reported that patients were informed that their case would be discussed by a 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 a 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 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 national⁷ and state or territory¹⁻⁵ cancer plans and cancer treatment guidelines.⁸

In acknowledgment of the importance of a multidisciplinary approach to cancer care, two new MBS item numbers to support attendance by specialists at MDT planning meetings were introduced on 1 November 2006, one 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.

MULTIDISCIPLINARY CANCER CARE IN AUSTRALIA: A NATIONAL AUDIT

In 2006, National Breast and Ovarian Cancer Centre (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 a baseline level of MDC implementation against which to benchmark the new MBS item usage
- 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.

At July 2007, a total of 2472 claims had been submitted nationally for both MBS items (957 for attending the meeting and 1515 for leading the meeting).

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’.⁵

Evidence shows that MDC improves patient outcomes and offers benefits and incentives to clinicians.⁵ Evidence indicates that a team approach to cancer care can reduce mortality and improve quality of life for the patient.⁹⁻¹¹ There is also evidence that decisions made by a multidisciplinary team are more likely to follow evidence-based guidelines than those made by individual clinicians.⁹ Furthermore, patient satisfaction with treatment and the mental well-being of clinicians in a multidisciplinary team have been shown to be improved by a multidisciplinary approach to care.^{12,13}

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 (see Appendix A).¹⁴

In 2005, NBOCC published a guide for health service providers⁶ on how to implement multidisciplinary meetings for cancer treatment planning. The meeting guide was promoted through a national series of forums with over 900 attendants.¹⁵

NBOCC has also developed information to help multidisciplinary teams to use two new MBS items providing rebates for participation by medical practitioners in MDT planning meetings for cancer patients.¹⁶

In March 2007ⁱⁱ, NBOCC held a workshop to formulate consensus advice about medicolegal aspects of multidisciplinary approaches to cancer care. The recommendations focus on achieving best outcomes for patients while also providing appropriate protection for multidisciplinary team members and health services.¹⁷

NBOCC is currently developing *Indicators for Multidisciplinary Cancer Care* to be used by service providers as a quality improvement tool to assess whether their multidisciplinary teams are functioning in line with the *Principles of Multidisciplinary Care*.⁵

ⁱⁱ In February 2008 the National Breast Cancer Centre (NBCC) incorporating the Ovarian Cancer Program (NBCC) became National Breast and Ovarian Cancer Centre (NBOCC).

METHODOLOGY

RATIONALE

The aim of NBOCC's national audit of multidisciplinary cancer care was to identify the extent to which MDC is implemented nationally for five cancer types: breast, gynaecological, lung, prostate and colorectal. The audit measured 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. The steering committee members are listed in the Acknowledgments section on page 4.

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 status (public versus private). The 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 the distribution of hospitals in each state or territory, not the location of hospitals in which cancer is treated.

From a sampling frame of 1026 hospitals from the *Hospital and Health Services Yearbook*,¹⁸ 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.

Each hospital was categorised as metropolitan or regional according to the Accessibility/Remoteness Index of Australia (ARIA).¹⁹ ARIA quantifies accessibility or remoteness from the distance of populated localities to the nearest of each category of service centre by road. ARIA is the Commonwealth Department of Health and Ageing's official standard for assessing remoteness. A numbered list of hospitals was stratified by state, location and status. 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 units, 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*.¹⁴ 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 GPs and patients, data collection, and barriers to improvement or implementation of MDC. The survey tool used for data collection in the ACT, Northern Territory, Queensland, Tasmania, South Australia and Western Australia appears in the full report of the audit.²⁰ The data set collected from this demographic is referred to as the 'NBOCC sample'.

In NSW and Victoria, similar projects were already under way or planned by the Cancer Institute NSW and the Department of Human Services Victoria. To avoid duplication of effort, NBOCC collaborated with the state-based cancer bodies to collect information on the current status of MDC, using a modified version of the audit survey (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 audit survey was administered in NSW on behalf of NBOCC by the Cancer Institute NSW as part of a state-wide project to establish a directory of MDC in NSW hospitals and services. The Cancer Institute developed a 39-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 the full report.²⁰

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 state-wide Integrated Cancer Services (ICS). The Department developed a 20-point questionnaire incorporating questions from the NBOCC survey. The questionnaire appears in the full report.²⁰

DATA COLLECTION

NATIONAL BREAST AND OVARIAN CANCER CENTRE SAMPLE

NBOCC sent an invitation to participate in the audit 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. Hospital 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. The survey did not use any patient information, and responses from participants were de-identified. The survey focused on describing the organisation and practice of multidisciplinary cancer care teams and meetings.

If no response was received, a maximum of three follow-ups were undertaken. Where respondents reported that none of the five cancer types were treated at the hospital, the hospital was deemed ineligible for the audit.

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 from the consultancy *Extending the Capacity of Healthcare Organisations* (ECHO) then contacted the staff member to arrange a time to conduct the survey. The interviewers telephoned at the appointed time to. Data were recorded on paper format 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 state-wide 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 Cancer Institute NSW. These contacts were approached to complete the survey for each cancer type treated at their hospital. Hospitals that did not have a multidisciplinary team for one of the identified cancer types did not go on to complete the NSW audit survey – i.e. hospitals were included in the survey if they had a multidisciplinary team for one of the twelve tumour streams rather than on the basis of treating a particular tumour stream (with or without a multidisciplinary care team). All respondents who confirmed that an MDC team was established were sent a further invitation by email to participate in the audit, and links to an online survey. Once collected, raw data from the NSW hospitals were forwarded to NBOCC 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 state-wide 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 NBOCC 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 status. 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 key findings and full analysis of all three data sets (NBOCC sample, NSW sample and Victoria sample) were presented to the steering committee. Members met in person and via teleconferencing to discuss and finalise the recommendations to improve MDC uptake in Australia.

RESULTS

This section provides an overview of key results from NBOCC's national audit of breast, gynaecological, lung, colorectal and prostate cancers. Table 1 lists the parameters of the three samples. Detailed results are provided in the full report.²⁰

Table 1: Parameters of the three survey samples

Sample	Number of surveys or meetings	Number of hospitals
NBOCC	520 surveys	123
NSW	49 surveys	17
Victoria	42 meetings	15

The audit was designed to investigate any differences between:

- cancer types
- public and private hospitals
- metropolitan and regional hospitals.

Overall notable differences were not found between cancer types or public and private hospitals, and results regarding these stratifications have been reported only where they may be of relevance.

The results are divided into:

- an outline of the relevant NBOCC guidance
- a summary of the key findings
- any issues identified.

MULTIDISCIPLINARY TEAMS

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Principles of Multidisciplinary Care*⁵ recommend that the core team involved in MDC of patients with cancer be established and known.

SUMMARY OF FINDINGS

- Across all three samples, between 30% and 34% respondents reported having a multidisciplinary team in at least one of the five cancer types.
- Even for breast cancer, in which teams were most commonly identified, fewer than half (31%–41%) of all respondents in each sample reported a multidisciplinary team.
- More respondents reported teams in metropolitan than regional hospitals in both the NBOCC and NSW samples. As 98% of the Victorian sample came from metropolitan hospitals, differences are difficult to report.
- Although it is not possible to report on the NSW and Victorian samples by hospital type (public or private) on account of low numbers and overlapping responses, the proportion reporting a multidisciplinary team was similar in both public and private hospitals in the NBOCC sample.

ISSUES IDENTIFIED

Irrespective of cancer type or hospital setting, between 60% and 70% of treating hospitals did not have multidisciplinary teams. More teams treated breast cancer than other cancers, and proportionally more were in metropolitan hospitals than in regional hospitals in all samples.

MULTIDISCIPLINARY MEETINGS (FREQUENCY AND FORMAT)

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Multidisciplinary Meetings for Cancer Care: A Guide for Health Service Providers*⁶ recommends that MDC meetings should be held regularly. The duration will be determined by the size of the institution and the numbers of cases requiring discussion. The issue of distance may be overcome by using teleconferencing or videoconferencing.

SUMMARY OF FINDINGS

In the NBOCC sample:

- Only 20% of respondents reported that multidisciplinary meetings were held 'regularly'. Of these, 28% reported weekly meetings and 10% fortnightly (see Table 2).
- More respondents from metropolitan hospitals reported regular weekly or fortnightly meetings than those from regional hospitals (74% vs 22%).
- The proportion of respondents reporting regular meetings was similar in public and private hospitals.
- 69% of multidisciplinary meetings were held face-to-face only, 1% via teleconference only and 30% using a combination of these methods. There was little difference in responses by cancer type.
- Regional hospitals used a combination of face-to-face meetings and teleconferencing more often than did metropolitan hospitals (38% vs 11%).

Of the 49 respondents in the NSW sample:

- 33% reported weekly meetings and 47% reported fortnightly meetings. Numbers are too small to make comparisons by cancer type.
- There was little difference between metropolitan hospitals and regional hospitals reporting weekly or fortnightly meetings (83% vs 73%).
- Face-to-face-only meetings were reported by 78% of respondents, 10% used teleconferencing only and 12% used a combination.
- All five teleconference-only meetings were reported by regional hospitals, and five of the six combination meetings involved metropolitan hospitals.

Of 41 MDC meetings reported in Victoria:

- 49% were reported as weekly and 24% as fortnightly.
- Face-to-face-only meetings were reported by 90% of respondents, 2% used videoconferencing only and 8% used a combination.
- Only one meeting used videoconferencing. Numbers are too small to comment on differences by cancer type.

Across the three samples, fewer than half of all meetings were held weekly or fortnightly (Table 2). The NBOCC sample showed more metropolitan hospitals reporting weekly or fortnightly meetings than regional hospitals; this difference was not seen in the NSW sample. Frequency of meetings did not differ between public and private hospitals in the NBOCC sample.

Table 2: Proportions of regular meetings

Sample	Weekly/fortnightly meetings	Metropolitan meetings held weekly/fortnightly	Regional meetings held weekly/fortnightly
NBOCC 20% total	28% weekly 10% fortnightly	74%	22%
NSW	33% weekly 47% fortnightly	83%	73%
Victoria	49% weekly 24% fortnightly	Not applicable: 93% of Victorian sample was metropolitan	

Teleconferencing or combination methods were more commonly used in regional hospitals in the NBOCC and NSW samples. The proportion of hospitals which use teleconferencing in Victoria is likely to be higher than reported, as 93% of the Victorian sample was metropolitan.

ISSUES IDENTIFIED

Variation exists in the regularity with which multidisciplinary care meetings are held.
Teleconferencing in regional areas is essential to conducting regular MDC meetings.

MEETING ATTENDANCE

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Principles of Multidisciplinary Care*⁵ recommends that the disciplines represented by the core team should include at least surgery, oncology (radiation and medical), pathology, radiology and supportive care. The individual patient's GP will be part of the team. NBOCC's *Multidisciplinary Meetings for Cancer Care: A Guide for Health Service Providers*⁶ states that team membership will vary according to the cancer type but should reflect both clinical and psychosocial aspects of care.

SUMMARY OF FINDINGS

Core team membership was defined for each cancer type.²⁰

In the NBOCC sample:

- Only 4% of 50 breast cancer teams and none of the 163 teams for other cancers reported routine attendance at meetings by all core team members.
- Of particular note is the proportion of cancer teams which had no core members routinely present: lung 12%, gynaecological 13%, colorectal 10% and prostate 22%.
- Nursing staff were reported most commonly as routinely attending meetings (89%), followed by allied health professionals (57%) and specialists (48%).

- More respondents from metropolitan hospitals reported that specialists routinely attended meetings than those from regional hospitals (92% vs 28%), and more respondents from private hospitals reported this than those from public hospitals (83% vs 41%).
- Medical oncologists were in routine attendance at about a third of the meetings, radiation oncologists at about 25% of meetings (higher in breast cancer at 36%), and pathologists at between 12% and 16% of meetings (higher in breast cancer at 26%).
- 45% of respondents reported that GPs were regular meeting attendants; however, the vast majority of these responses came from regional hospitals.

In the NSW and Victorian samples, specialists were reported most commonly as routinely attending meetings (37% and 57%), followed by nursing staff (31% and 18%). Only 1% of meetings in NSW and Victoria included regular attendance by GPs. No teams in NSW or Victoria reported routine attendance by all core team members.

ISSUES IDENTIFIED

Almost all MDC meetings did not have all core team members regularly attending multidisciplinary treatment planning meetings, and alarmingly, some reported that no core team members were routinely present.

LINKS TO OTHER SERVICES

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Principles of Multidisciplinary Care*⁵ recommend that to ensure that the patient has access to the full range of therapeutic options, the core team may be expanded or contracted to include services (may be off-site) such as genetics, psychiatry, physiotherapy and nuclear medicine. Referral networks should be established for non-core team specialist services.

SUMMARY OF FINDINGS

In the NBOCC sample, 93% of the 213 respondents had established links to other specialities; most respondents reported established links to palliative care (78%) and community nursing (63%), whereas fewer than a third reported links to psychology (24%), psychiatric services (28%) or genetic counselling (28%). Five per cent reported no links to other services.

There was no difference in the number of respondents reporting established links by cancer type, location or hospital type. However, some differences were apparent in the services to which links were reported:

- More respondents from regional hospitals reported links to palliative care than those from metropolitan hospitals (53% vs 25%).
- Links to psychiatric services were more frequently reported in public hospitals than in private hospitals (26% vs 2%), as were links to psychology services (15% vs 9%).
- 8% of respondents in metropolitan areas reported links to psychiatric services, compared with 20% in regional areas.
- 49% of breast cancer teams and 67% of gynaecological cancer teams did not have links to lymphoedema services.

- 64% of breast cancer teams did not have links to plastic surgery, and 62% did not have links to genetic services.
- 59% of prostate cancer teams did not have links to continence or erectile dysfunction services.
- Public hospitals identified a greater range of links than did private hospitals.

In the NSW sample, only limited information was available regarding links to other specialities or allied health services.

In the Victorian sample, information was available from 29 teams, of which 94% reported links to other services, 33% to palliative care services, 19% to counselling and 4% to psychiatry. No genetic services were linked with gynaecological cancer teams.

A high percentage of teams across all cancer types, locations and hospital types reported links to speciality services, particularly private hospitals. A number of services had no commonly established links. Some of these are relevant to generic cancer care such as psychology and psychiatric services, and other services relate to particular cancers, such as erectile dysfunction and stomal therapy services.

Some common features were noted in both the NBOCC and Victorian samples; common links were to palliative care services, whereas links to psychiatric and psychology services were least commonly provided. In relation to speciality services relevant to particular cancer types, most breast cancer teams did not have links to genetic services, lymphoedema services or plastic surgery.

ISSUES IDENTIFIED

Links were not reported to a number of key generic services, including psychology and psychiatry. In addition, links to specific services – such as stomal therapy, erectile dysfunction services, genetic counselling, lymphoedema services and plastic surgery – were also uncommon.

COMMUNICATION WITH GENERAL PRACTITIONERS

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Multidisciplinary Meetings for Cancer Care: A Guide for Health Service Providers*⁶ recommends that one of the conditions for effective multidisciplinary case conferencing is the timely communication of outcomes of case discussions to the patient and his or her GP.

SUMMARY OF FINDINGS

In the NBOCC sample, 71% of 213 respondents reported that treatment plans were always communicated to the GP. More regional hospitals than metropolitan hospitals communicated treatment plans (80% vs 49%), but there was no difference between public and private hospitals. Seven per cent reported that plans were rarely or never communicated.

The most common approach to communicating with GPs:

- in metropolitan hospitals and private hospitals was through individualised letter (72% and 78%, respectively)
- in regional hospitals and public hospitals was 'in person through meetings' (64% and 48%, respectively).

Respondents from gynaecological teams (82%) and colorectal teams (79%) were most likely to report that plans were always communicated to GPs, but there was no difference in methods of communicating with GPs by cancer type.

Regional hospitals were more likely to communicate with GPs, most commonly through personal contact rather than by letter. Teams in metropolitan hospitals and private hospitals most commonly communicated with GPs by letter.

In the NSW sample:

- 22% of 49 respondents reported that treatment plans were always communicated to GP.
- 29% reported that treatment plans were communicated some of the time.
- 33% reported 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:

- 66% of 32 teams reported that treatment plans were always communicated to the GP, 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%).

Although practice varied across the three samples, it is noteworthy that treatment plans were not regularly communicated to GPs in up to a third of cases (Table 3).

Table 3: Lack of communication with GPs

Sample	Treatment plans are not communicated to GPs
NBOCC	5% sometimes 3% rarely 4% never
NSW	29% some of the time 16% in specific patient cases 33% never
Victoria	13% sometimes 3% never 16% don't know

ISSUES IDENTIFIED

Up to a third of teams did not communicate treatment plans to GPs.

COMMUNICATION AND INVOLVEMENT WITH PATIENTS

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Multidisciplinary Meetings for Cancer Care: A Guide for Health Service Providers*⁶ recommends that the concept of the multidisciplinary team should be introduced to patients and that permission is sought from them for discussion of their case at team meetings.

SUMMARY OF FINDINGS

Respondents were asked whether patients were informed that their case was to be discussed at an MDC meeting, and whether consent was obtained.

In the NBOCC sample, of respondents who reported that patients were informed of team discussions, 84% stated that this was done verbally and 16% in writing. Informing patients of case discussion was more common in public hospitals than in private (81% vs 58%). There appeared to be no difference in informing patients about team meetings and obtaining consent between cancer types.

The extent to which patients were typically informed that their case would be discussed by an MDC team ranged between 64% (NSW: 'usually' to 'always') and 85% (Victoria: 'yes' routinely). In the Victorian sample, respondents reported that all patients were informed verbally.

Across the three samples, between 52% and 64% of respondents reported that patient consent was sought for case discussion by an MDC team. Consent was typically obtained verbally (57%–100%). In the NBOCC sample, of respondents who reported that consent was obtained, 43% stated that this was done in writing (Table 4).

Table 4: Consent from patients

Sample	Total consent obtained	Written consent (% of total)	Verbal consent (% of total)
NBOCC	64%	43%	57%
NSW	56%	13%	87%
Victoria	85%	0%	100%

ISSUES IDENTIFIED

Not all cancer patients were informed that their case was to be discussed at an MDT meeting. This is particularly noteworthy for patients treated in private hospitals. Patient consent for case discussion by MDC teams was not sought from some patients whose cases were discussed.

RECORDING THE TREATMENT PLAN

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Multidisciplinary Meetings for Cancer Care: A Guide for Health Service Providers*⁶ recommends the treatment plan should be a formal, written plan that organises the work of the team and helps patients to navigate the steps involved in their treatment. This is supported by NBOCC recommendations from the workshop report *Multidisciplinary Care – What Are the Medicolegal Implications?*,¹⁷ which recommended that the treatment plan should be documented in the patient record. The use of a pro-forma is suggested to document the recommended treatment plan, including options and dissenting views.

SUMMARY OF FINDINGS

Across all three samples, between 62% and 77% of respondents reported that the treatment plan was recorded in the patient notes. The treatment plan was never recorded in 5% of NBOCC responses, 19% of NSW responses and 24% of Victorian responses.

In the NBOCC sample, respondents from breast cancer teams were more likely than those of other teams to report that they 'always' recorded treatment plans in the patient notes.

ISSUES IDENTIFIED

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.

COMMUNICATING WITH PATIENTS ABOUT MEETING OUTCOMES

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Principles of Multidisciplinary Care*⁵ recommend that patients with cancer should be encouraged to participate as members of the multidisciplinary team in treatment planning. This is supported by the workshop report on *Multidisciplinary Care – What Are the Medicolegal Implications?*,¹⁷ which recommends that outcomes from multidisciplinary meetings be recommendations or options to be discussed with the patient by the treating clinician.

SUMMARY OF FINDINGS

Specialists were most frequently identified as the health professionals responsible for communicating the outcome of the MDC team meeting to the patient (Victoria 38%, presenting clinician; NSW 43%, referring specialist; NBOCC 58%, specialist).

The NBOCC sample indicated that:

- there was no difference between the cancer types in who was responsible for communicating the outcome of team meetings to patients
- in regional areas, GPs and nurses were reported as often as specialists as being the professionals responsible for communicating the outcome to patients
- specialists were more often reported as being responsible for communicating the outcome to patients in responses from private hospitals than from public hospitals.

ISSUES IDENTIFIED

GPs and nurses need to be involved in and informed about treatment planning meeting outcomes in order to effectively communicate these to patients, especially in rural areas.

INPUT BY PATIENTS INTO TREATMENT PLAN

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Principles of Multidisciplinary Care*⁵ suggests that patients should be supported to have as much input into their treatment plan as they wish.

SUMMARY OF FINDINGS

The extent to which patients were encouraged to provide input into their treatment plan varied widely, from 7% (NSW: 'always' to 'usually') to 75% (NBOCC: 'always' to 'almost always').

- In the NSW sample, 56% of respondents reported that patients were never encouraged to have input into their treatment plan.
- The NBOCC sample indicated that lung cancer teams were most likely of all the cancer teams to encourage patient input into their treatment plan.

The most frequent response regarding methods for dealing with changes to the treatment plan following discussion with the patient varied between the three samples:

- NBOCC – plan changed and reason noted (69%)
- NSW – team discusses different treatment plans at next meeting (43%)
- Victoria – don't know (45%).

Respondents reported that patients were never offered a written treatment plan developed by the MDC team in 35% of the NBOCC sample and 77% in the Victorian sample.

ISSUES IDENTIFIED

There appears to be wide variability in the approach used to encourage patient input into the treatment plan across the three samples. A high proportion of patients were not encouraged to have input into their treatment plans.

PROCEDURES AND PROTOCOLS

Data collected on procedures and protocols used in MDT meetings have not been presented. There was too much variability in the way the questions were asked across the three samples to allow any meaningful conclusions to be drawn or results to be compared.

DATA COLLECTION

NATIONAL BREAST AND OVARIAN CANCER CENTRE GUIDANCE

NBOCC's *Principles of Multidisciplinary Care*⁵ recommends that local clinician data should be consistent with national benchmarks.

SUMMARY OF FINDINGS

In the NBOCC sample:

- 28% of respondents reported no data collection, either centrally or by clinicians.
- Of respondents who reported a central process for collecting data (33%), only 14% reported a process for review of the data.
- Although individuals collected data for professional college audits (8%) and their own practice (24%), a large proportion of meetings appeared not to collect data in a systematic way.

In the NSW sample:

- 18% of respondents reported no data collection, either centrally or by clinicians.
- Only 14% of respondents reported both a central process for collecting data and a process for review.

Ten per cent of the NBOCC sample and 37% of the NSW sample did not know whether there was a process for data collection and review. This may indicate that review of data was not recognised as a key part of the meeting processes or that data collection is not seen as the responsibility of meeting attendants.

ISSUES IDENTIFIED

Many teams did not collect data in a systematic way. Of those that collected data, few have an organised system for review.

BARRIERS

SUMMARY OF FINDINGS

The most commonly reported barriers to implementing MDC in all three samples were time ('lack of time' in the NBOCC and Victorian samples, and 'coordination of time' in NSW). In the NBOCC sample, staffing resources and having a small case load were also commonly reported. Funding was reported as a barrier by almost a quarter of respondents in the NBOCC sample and by 5% of the NSW sample. Time and funding are not necessarily unrelated, as creating time to attend meetings may require funding for more staff to cover allocated meeting times. The qualitative reporting on barriers does not provide consistent information to allow strong conclusions to be drawn about these barriers.

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 plans¹⁻⁴ and cancer 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 in 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 NBOCC⁸ (see Appendix A) and at the state level, particularly in NSW,¹ Western Australia,² Victoria³ 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 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 the results 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 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 in efforts. 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 different 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.²⁰

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.²¹

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 for 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 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.²²

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 the initiatives 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.²³
- 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.²⁴

FUTURE DIRECTIONS

Consideration of the barriers to MDC identified in this audit and in previous projects¹⁴ 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 have 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 from regional hospitals suggests that regional meetings may have 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, for example using teleconference facilities, has been identified as a flexible model for reducing the barrier of distance²² 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*¹⁴ and found that irrespective of caseload, most of the 60 hospitals surveyed had implemented some aspects of MDC for breast cancer. However, the provision of multidisciplinary care was generally lower in hospitals with low caseloads.¹⁴

MEETINGS IN PUBLIC AND PRIVATE HOSPITALS

Feedback from previous projects¹⁴ 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 for multidisciplinary meeting attendance, 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.^{14,15}

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 for 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 are considered for discussion.¹⁷

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.¹⁴

LINKS TO OTHER SERVICES

NBOCC's *Principles of Multidisciplinary Care*⁵ identify 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% had access to psychologists.²¹

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.²¹

COMMUNICATION WITH GENERAL PRACTITIONERS

NBOCC's *Principles of Multidisciplinary Care*⁵ recommend 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.²⁵

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. Legal precedent was set with a case in the NSW courts in 2004, highlighting the importance of informed consent to the disclosure of health information in a multidisciplinary setting.²⁶

Consumer and health professional expectations on the sharing of patient information have been shown to vary.²⁷ 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.¹⁷ 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 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.¹⁷ Further public debate about the understanding of patient consent is needed to ensure a consensus between what the general public expect and 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.

The recording of 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 MDC teams is available from NBOCC.⁶ The higher prevalence of plan recording in patient notes amongst 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 emphasise the importance of patient involvement in decisions about their treatment. In addition, it is recognised that the desire for involvement in treatment decisions will vary between patients²⁸ 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 and radiation oncologists.²⁹

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 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.³⁰

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.³⁰

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.³¹ 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

Data collection and review was a key gap identified. Measurement of quality and safety is recognised as playing a fundamental role in improving health care delivery.³² The review of data against national benchmarks is an important process in ensuring continual improvement in the quality of services are 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.¹⁴

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.²²

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.³³ 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 audit 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 provides 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*¹⁴ in 2001 found that lack of time and payment for attendance at meetings were considered barriers to implementation of MDC. In Victoria, similar barriers have been previously identified, including lack of workforce, caseload, geographical distance and physical infrastructure.³⁴

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.²² 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*.¹⁴

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.¹²

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 it is encouraging that most hospitals participating in the audit were aware of the importance of MDC, and some hospitals had high-functioning multidisciplinary care 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 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 the 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 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 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.

APPENDIX A

NBOCC has published a range of reports and developed several resources to support the implementation of MDC. These are listed below. To view an online version of these reports and resources, visit the NBOCC website: <http://www.nbocc.org.au/bestpractice/mdc/resources.html>. Where available, hard copies may be ordered online or by phone on 1800 624 973.

Medicolegal issues in multidisciplinary care. 4-page summary brochure, in preparation 2008

Multidisciplinary care principles for advanced disease: a guide for cancer health professionals. In preparation 2008

Multidisciplinary care – what are the medicolegal implications? 19-page workshop report and recommendations, June 2007¹⁷

Also see: Evans A et al. Medicolegal implications of a multidisciplinary approach to cancer care: consensus recommendations from a national workshop. *Med J Aust* 2008; 188 (7): 401-404.

Multidisciplinary Cancer Care in Australia: information about the new MBS items for multidisciplinary cancer care. 2-page brochure, March 2007¹⁶

Making multidisciplinary cancer care a reality: a National Breast Cancer Centre forum series. 25-page report and recommendations, July 2006¹⁵

Multidisciplinary meetings for cancer care: a guide for health service providers. 52-page report, 2005⁶

Multidisciplinary care in Australia. 4-page summary brochure, 2005

Sustainability of multidisciplinary cancer care: a follow-up study to the national multidisciplinary care demonstration project. 62-page report, January 2005³⁴

Multidisciplinary care in Australia, a national demonstration project in breast cancer. 61-page summary report, November 2003¹⁴

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