Treatment and supportive care for people with cancer involves a number of different medical and allied health care professionals. Evidence indicates that a team approach to cancer care, in which health care professionals together consider all relevant treatment options and develop an individual treatment plan for each patient, can reduce mortality and improve quality of life for the patient. Such an integrated approach to health care is known as multidisciplinary care (MDC). There is evidence that decisions made by a multidisciplinary team are more likely to be in accord with evidence-based guidelines than those made by individual clinicians. Furthermore, patient satisfaction with treatment and the mental well-being of clinicians in a multidisciplinary team has been shown to be improved by a multidisciplinary approach to care.

The need to develop strategies to encourage participation by clinicians and health service providers in MDC is a critical intervention point in the National Service Improvement Framework (NSIF) for cancer. The NSIF is a key direction for the National Health Priority Action Council for 2003–2005 and the critical intervention points indicate areas where Australia might most usefully invest to reduce death and suffering from cancer.

While a number of health services in Australia participate in MDC to some extent, published sources reveal little, if any, information about its components, barriers or enablers, nor any established or recommended models for the Australian context. Funded by the Australian Government Department of Health and Ageing, the National Breast Cancer Centre (NBCC) conducted a National Demonstration Project of Multidisciplinary Care in 2000–2002 to provide an insight into strategies for implementing MDC in Australia, using breast cancer as a model (see box). 

What is multidisciplinary care?

The Principles of Multidisciplinary Care developed by the NBCC (see box) provide a definition of MDC that is flexible and recognises that implementation will vary in different locations. This unique approach to MDC has the potential for use in the management of other chronic diseases requiring input from a range of disciplines.

Multidisciplinary care for breast cancer in Australia

Sustainable strategies for implementing multidisciplinary care

Barriers and enablers of multidisciplinary care

Cost of implementing multidisciplinary care

Running an effective multidisciplinary care meeting

A flexible approach to multidisciplinary care for Australia

Australia presents a challenge for the implementation of MDC, given its geography, the mix of private and public service provision, and significant regional differences in population, resource availability and access. The Principles of Multidisciplinary Care developed by the NBCC (see box) provide a definition of MDC that is flexible and recognises that implementation will vary in different locations. This unique approach to MDC has the potential for use in the management of other chronic diseases requiring input from a range of disciplines.

The National Demonstration Project of Multidisciplinary Care aimed to explore the process, impact, acceptability and costs of providing MDC for women with breast cancer in Australia. It was recognised from the outset that the Project outcomes would have broader application to other cancers and chronic diseases.
Multidisciplinary care for breast cancer in Australia

In 2000, the NBCC surveyed clinicians from 60 hospitals Australia-wide treating high, medium and low caseloads of women with breast cancer about MDC practices. The majority of 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 and 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 multidisciplinary treatment planning meetings with even fewer meetings in the medium- and low-caseload hospitals.

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
- 15% had no established referral links for reconstructive surgery or psychiatric care.

Despite senior clinical support for MDC, opportunities remain for improvement in its implementation, particularly in areas with low caseloads.

Sustainable strategies for implementing multidisciplinary care

In the Demonstration Project three multi-facility sites across Australia nominated locally relevant strategies designed to improve MDC in accord with the Principles of Multidisciplinary Care (see box for examples).

Major achievements of the project included the establishment or improvement of multidisciplinary treatment planning meetings attended by ‘core team’* and improvements in psychosocial care and care coordination for women with breast cancer, mainly through the inclusion of a breast care nurse in the team.

Some changes in clinical practice were also evident following implementation of strategies, including improvements in pre-operative diagnosis and increased enrolment of patients into clinical trials.

A follow-up study in 2004, 19 months after completion of data collection for the Demonstration Project, indicated that with adequate resourcing, these strategies were sustainable, and flow-on effects to other cancers had been achieved.

*For breast cancer, the ‘core team’ includes representation from surgery, pathology, radiology, medical and radiation oncology, supportive care and general practice.

Examples of strategies:
- introduction of regular multidisciplinary treatment planning meetings (or change in focus of existing meetings)
- inclusion of a breast care nurse as a team member to improve coordination and continuity of care
- video-/teleconferencing to strengthen links to rural sites
- development of care pathway/local protocols.

“...the benefits (of the meetings) have just been absolutely incalculable to us... mutual learning experiences, mutual communication pathways, they have spread into all our activities throughout the hospital”

“We’ve seen a transition from the presentation of ‘a case of breast cancer’ with a lot of technical detail, to the presentation of ‘a woman with breast cancer’...”

“people who had unusual patterns of practice have normalised them... (now) treatment is much more aligned to guidelines...”
In general, clinicians involved in the *Demonstration Project* agreed that the implementation of strategies was worthwhile. A number of enablers of sustainable MDC strategies were identified, including:

- local ‘champions’ to drive the implementation process and gain peer support
- ongoing administrative assistance and resource provision
- support from senior hospital administration
- the importance of making MDC meetings part of the weekly routine so that they become habitual.

However, there was also acknowledgement by team members that the implementation of strategies can be difficult. Perceived barriers to the implementation of MDC included the inadequacy of infrastructure resources, both human and technological, to overcome difficulties in communication between specialists from urban and rural areas, especially in regions covering large geographical areas. Communication between specialists and general practitioners was difficult for some groups.

Resistance to change by some clinicians, staffing issues and fears such as a loss of clinical independence were also issues that were encountered.

The outcomes demonstrate the importance of individuals with leadership qualities and of adequate resourcing in ensuring the success of MDC implementation.

### Cost of implementing multidisciplinary care

The cost of implementing MDC strategies during the *Demonstration Project* was dependent on the level of multidisciplinary initiatives already in place at a facility. Costs were higher for newly established strategies compared with adaptation of existing strategies.

Significant personal time was needed to implement strategies. While this does not represent a direct cost to the health service, it should be considered when implementing MDC.

The cost of staff attendance at case conference/educational meetings was dependent on the number and type of attendees and the length and frequency of meetings. The average cost per meeting tended to decrease as meetings became better established. Use of existing facilities, such as hospital meeting rooms and sharing of equipment reduced the overall cost.

While the *Demonstration Project* was not a cost-effectiveness study, there are likely to be efficiency dividends and therefore cost savings associated with streamlining of referrals through a multidisciplinary approach.

### Running an effective multidisciplinary care meeting

**Common factors:**

- sound preparation of materials and information in advance of meetings
- strong leadership and facilitation of meetings by the Chair
- representation and input into discussions from core disciplines
- strategies for communicating case discussion outcomes to the patient and GP.

**Motivational factors:**

- perceived benefits of MDC for both clinicians and their patients
- streamlining of referral pathways
- opportunity for peer interaction in a friendly and inclusive atmosphere
- opportunity for education/professional development.

An Observational Study was conducted to learn more about the organisation, style, leadership and benefit of MDC meetings. Independent observations and clinician interviews were conducted at four hospitals in Australia with high breast cancer caseloads and well established MDC meetings (see box).

The outcomes demonstrate the importance of individuals with leadership qualities and of adequate resourcing in ensuring the success of MDC implementation.
Recommendations for multidisciplinary cancer care in Australia

In the report about the Demonstration Project, the NBCC makes the following recommendations to promote MDC as an integral part of national policy for cancer care.

1. That the Principles of Multidisciplinary Care developed for breast cancer be used as the basis for developing similar frameworks for other cancers and other chronic diseases requiring multidisciplinary input.

2. That a brief user-friendly guide for establishment, preparation and support for multidisciplinary meetings be developed for use by health service providers. (Guide in development by NBCC; available early 2005.)

3. That the National Cancer Plan and National Service Improvement Frameworks should explicitly quantify:
   - efficiency dividends for institutions
   - service improvement implications for patients in order to promote the benefits of MDC.

4. That clinical outcome studies to establish the benefits of MDC for patients with other cancers and chronic diseases, such as diabetes, within the Australian healthcare system be encouraged in order to provide an evidence base for broader implementation of MDC.

5. That the role and effectiveness of breast care nurses is supported at all levels by:
   - informing health service providers of the benefits of the breast care nurse role in the provision of MDC
   - promoting the adoption of the core competencies currently being developed by the NBCC for the breast care nurse role, to nurse training programs nationally
   - providing opportunities for nurses caring for women with breast cancer to access specialist training to support that role.

6. That the establishment and maintenance of MDC meetings must be adequately and explicitly resourced by health service providers. Affordability would be enhanced with broader application to other cancers and chronic diseases to amortise infrastructure costs. Areas in which generalisation is already occurring should be studied.

7. That hospital funding models and specialist and general practitioner payment schedules should be modified to support the implementation of MDC strategies, given their broad application across a number of chronic diseases.

References


Prepared and produced by the National Breast Cancer Centre:
92 Parramatta Road, Camperdown NSW 2050
Australia, Locked Bag 16 Camperdown NSW
1450 Telephone: +61 2 9036 3030;
Fax: +61 2 9036 3077;
Website: www.nbcc.org.au
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Website: www.nbcc.org.au
Email: directorate@nbcc.org.au
Funded by the Australian Government Department of Health and Ageing: A National Health Priority Area.