



Profile of Multidisciplinary Teams in NSW

2007

Executive Summary

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Commissioned by: Cancer Institute NSW

Conducted by: Eureka Strategic Research

Introduction

Development of a co-ordinated and multi-disciplinary approach to patient care across geographical areas in NSW is an important program to the NSW Cancer Plan 2007-2010 (Cancer Plan 2007-2010). A patient centred approach via multidisciplinary team (MDT) meetings provides an effective platform to deliver coordinated patient care across multifaceted treatment programs and varied treatment centre locations.

Multidisciplinary Team (MDT) meetings bring together healthcare professionals with all the relevant skills, knowledge and experience related to a particular area of healthcare. They are a key component of coordinated care and essential in the management of cancer patients for whom treatment is delivered in a variety of settings and involves a range of services including screening, diagnosis, treatment (surgery, chemotherapy and radiotherapy), rehabilitation, supportive care and palliative care (Edwards, 1998).

As well as improved care coordination, MDTs offer an effective vehicle to underpin and integrate professional development, participation in clinical trials and measurement of outcomes, as well as support for the lead clinician role in support of multidisciplinary treatment planning. In addition, research evidence supports the benefits of MDT care, including access to standardised and current therapies (Landheer 2001, Chang 2001, Baldwin 2004), reduced waiting times and increased efficiency of patient management (Gabel 1997, Stephens 2006, Birchall 2004), increased enrolment in clinical trials (Maslin-Prothero, 2006) and improved patient satisfaction (Gabel 1997, Carter 2003). In order to ensure these benefits are realised for cancer patients in NSW future development and support of MDT care is required. This process would benefit from a coordinated approach which requires as a first step an understanding of the status of current teams.

Background

The Cancer Institute NSW commissioned Eureka Strategic Research to conduct a comprehensive survey of multidisciplinary teams (MDTs) treating cancer patients in NSW. The objectives of this research were as follows.

- To collect basic information on each cancer treatment centre (such as cancer stream, contact details and lead personnel) to be made available through the NSW Cancer Services Directory, the Cancer Institute NSW website and as a published resource.
- To collect information on the operation of each MDT, covering key aspects of multidisciplinary care, to be made available to the Cancer Institute NSW and Area Health Services on an individual basis.
- To investigate how each MDT compares to an identified gold standard for multidisciplinary care, based on their responses to the survey.
- To assess the current level of access by patients to multidisciplinary care across different cancer streams and in different locations.
- To establish a benchmark against which individual MDTs can compare their performance (both at the present time, when compared to other MDTs elsewhere, and in the future, when compared to their own past performance).
- To contribute to research being conducted by the National Breast Cancer Centre (NBCC) on MDTs across Australia treating patients with certain cancer types.

Methodology

A four stage approach to the survey was employed to meet the survey's multiple objectives.

Stage 1

- A letter from the Cancer Institute NSW was sent to 165 health service sites in NSW identified as treating cancer patients. The letter requested information on each MDT at that site such as cancer stream, lead personnel and contact details. An additional 75 sites identified by the NBCC were contacted by phone to establish whether they treated cancer patients. Of these 75 sites, 2 were identified as cancer treatment centres and sent a letter requesting information.

Stage 2

- Sites that had not yet responded were followed up by phone. A total of 55 sites were identified as having at least one MDT in place, with many having more than one. Across the 55 sites, 158 individual MDTs were identified.
- Of the 167 sites sent the original letter, 89 confirmed having no MDT in place. These services were asked to identify any barriers to establishing an MDT.
- Overall, 86% of those 167 who were sent the original letter responded to it. Of the 158 known MDTs across these sites, 82% actually completed the survey.

Stage 3

- A detailed questionnaire was developed, based on a draft version provided by the Cancer Institute NSW. The questionnaire was designed to capture information to contribute to an assessment of the operation of MDTs.
- Nominated personnel for each MDT identified through stage 1 were sent an email invitation to complete a questionnaire on their MDT. Respondents who expressed a preference for completing the survey in writing were sent hard copies by post.
- Of the 158 known MDTs across NSW, 82% actually completed the survey.

Stage 4

- By the end of stage 3, 91 completed questionnaires had been received. To maximise the level of response to the survey, additional follow up of MDTs was carried out by Eureka and the Cancer Institute NSW by phone and email.
- By the end of the fieldwork period (early March 2007), questionnaires covering data for 129 teams were received.

Overview of findings

- Of the 167 cancer services contacted, 55 sites reported having at least one MDT, 92 sites confirmed no MDT in place and 22 did not respond. The 55 cancer centres had 158 MDTs of which 129 (82%) completed the survey.
- The 129 MDTs were estimated to have discussed 69% of new cancer cases. The report therefore, while not providing the complete profile for NSW, represents substantial baseline data on the number and operational performance of MDTs in NSW cancer services. This

information will be useful in defining gaps in service and providing a quality framework to benchmark the MDT service currently provided.

- The 158 MDTs treating cancer patients in NSW include 141 in publicly-funded health services and 17 in the private sector. *Breast* cancer has the highest number of MDTs for any cancer stream, with 24.
- The survey collected detailed information on the operation of 129 MDTs, or 82% of all the MDTs in NSW. Each of these was rated according to two sets of criteria (and given a score out of 5 for each): the involvement of core disciplines (or *team membership*), and other (*general*) criteria. When each MDT's team membership score is added to its general score, an overall score out of 10 is produced. The average overall score for all MDTs in the survey sample was 5.6 out of 10, with 3.5 out of 5 for team membership and 2.1 out of 5 for the general criteria.
- The cancer stream with the highest overall score was the one *melanoma* MDT to complete a survey (on 7 points), followed by *gynaecological* MDTs on 6.4, *urogenital* MDTs on 6.0, and *bone & soft tissue* and *breast cancer* MDTs both on 6.0. Overall, those cancer streams with the lowest average overall scores were *haematological* on 5.1 and *neurological* on 5.4.
- When the average overall scores are compared across service types, there are very similar figures for metropolitan compared to rural MDTs, which both scored 5.6. Meanwhile, MDTs in privately-funded services scored higher than MDTs in the public sector (6.1 vs 5.6), despite having a lower average team membership score. Sites with radiotherapy facilities scored slightly higher than other sites (5.7 compared to 5.5).

Team membership criteria

- Across different cancer streams, team membership scores were highest for *gynaecological* MDTs and lowest for *haematological* MDTs. Metropolitan MDTs scored higher on team membership than their rural counterparts, particularly for medical team members (with similar scores for the allied health team members).
- Each cancer stream varied in relation to the types of medical and allied health disciplines commonly missing from the core team. Across all MDTs, by far the most common core discipline missing was a *social worker*, with a *dietician* also often missing. Among the medical disciplines for each cancer stream, *radiologists*, *radiation oncologists*, *medical oncologists*, *pathologists* and *general practitioners* were also frequently missing.

General criteria

- Of the 27 general criteria against which MDTs were assessed, an average of 18.8 were met – including 8.7 out of 11 essential criteria, 5.8 out of 9 desirable criteria and 4.3 out of 7 high-level criteria. The one *melanoma* MDT that participated in the survey performed best by this measure; *gynaecological*, *breast cancer* and *bone & soft tissue* MDTs were next best. The worst performing teams were those in the *general (other)* category, along with *colorectal* and *haematological* MDTs.
- Although MDTs in metropolitan locations outperformed their rural counterparts on the general criteria, the differences between them were slight. The difference between the

public and private sectors was more pronounced, with private-sector MDTs clearly outperforming MDTs based in public health services.

- The criteria that MDTs found most difficult to meet include the following:
 - always informing patients that they are to be discussed in a multidisciplinary forum,
 - having a process for identifying patients who need referral to psycho-oncology and other allied health services,
 - getting verbal or written consent from patients for their case to be discussed in a multidisciplinary forum,
 - discussing patient preferences in MDT meetings,
 - informing patients of the identity of the leader and members of the MDT,
 - informing patients of alternative or dissenting views raised in MDT meetings,
 - discussing patient eligibility for clinical trials and all key members of the MDT being aware of open clinical trials,
 - having established criteria for the referral of patients to MDT meetings,
 - recording treatment plans in patient notes,
 - holding regular professional development sessions,
 - having a system for central data collection, and
 - reviewing at least 75% of newly diagnosed patients.

Patient access to multidisciplinary care

- Aggregated across the sample, an estimation by the survey respondents indicated that 19,158 patients diagnosed in the 12 months up to November 2006 were discussed in a multidisciplinary forum. When weighted to take account of the 18% of NSW MDTs which did not complete a questionnaire, this gives an estimated 23,465 newly diagnosed patients discussed in a multidisciplinary forum.
- According to NSW Cancer Registry incidence data, there were 34,091 new cancer cases in 2004. This means that an estimated 69% of all newly diagnosed patients were discussed in a multidisciplinary forum in the 12 months to November 2006.
- *Head & neck* and *breast* cancer MDTs had the highest levels of access by this measure, while *melanoma*, *colorectal* and *urogenital* MDTs had the lowest.
- Across the survey sample, MDTs indicated discussing an average of 257 patients over the previous year. An average of 74% of these had been diagnosed in the previous 12 months. *Melanoma*, *head & neck* and *lung cancer* patients had the highest proportion of newly diagnosed patients, while *palliative care*, *bone & soft tissue* and *paediatric* MDTs had the lowest.
- The average number of patients discussed per MDT, and the proportion that were newly diagnosed, was higher for metropolitan than rural sites. MDTs in publicly-funded services discussed a higher number of patients than private-sector MDTs, although the proportion of newly diagnosed patients was lower. Finally, sites with radiotherapy facilities saw a smaller

number of patients on average than other MDTs, although the proportion that was newly diagnosed was higher.

Conclusions and Future Directions

Under Program 3.1 of the NSW Cancer Care Program (Cancer Plan 2007-2010) the development of a co-ordinated approach to patient care across metropolitan, regional and rural NSW is pivotal to achieving better outcomes for cancer patients. A patient centred approach via multidisciplinary teams (MDTs) within a clinical network provides an effective platform to deliver coordinated patient care across multifaceted treatment programs and varied treatment centre locations. This survey provides a comprehensive profile of MDTs in cancer care in NSW in 2006. This information will be crucial to inform future development of new and existing teams and provide a benchmark for monitoring and evaluating change in this important area.

Current funding initiatives provided by the Cancer Institute NSW to established MDTs have targeted areas of need with the aim of supporting established teams to develop models to address these and other criteria which will then be available more broadly to support all MDTs in NSW. The findings of this study identify provide essential base line data for the ongoing evaluation of these initiatives and of multidisciplinary care in cancer services in NSW. In addition, the information provides an opportunity to now engage MDTs within a clinical network. As a pilot project developed by the Cancer Institute NSW for Cancer Australia, the CanNET program strategically aligns MDTs with other key programs within the Cancer Plan 2007-2010 under a managed clinical network model. The other network elements under this pilot program include a specialist services directory, evidence based standard treatment protocols (CI-SCaT), a cancer services accreditation framework, innovative roles for the cancer workforce, a professional development program, tele-health communication and a clinical cancer registry. The pilot is funded for two years and is supported by an evaluation framework to explore the contribution of MDTs in managed clinical networks along with the other key elements.