

Cancer services framework Highlights report

*A report from a consortium led by
The Collaboration for Cancer
Outcomes Research and Evaluation*



2003

Authors

Michael Barton MB BS, FRANZCR

Associate Professor, University of NSW

Research Director, The Collaboration for Cancer Outcomes Research and Evaluation

Deputy Director, Radiation Oncology, Cancer Therapy Centre, Liverpool Hospital

South Western Sydney Area Health Service

Michael Frommer MB BS, DObstRCOG, MPH, FAFPHM, FAFOM

Professor and Director, Sydney Health Projects Group

School of Public Health, The University of Sydney

Ian Olver MD, PhD, CMin, FRACP, FChPM, MRACMA

The Cancer Council Professor of Cancer Care

University of Adelaide

Clinical Director, Royal Adelaide Hospital Cancer Centre

Cathryn Cox BAppSc (Phy), MPublSectMgt(Health)

Deputy Director, Planning Division

South Western Sydney Area Health Service

Phil Crowe MB BS, DPhil, FRCS, FRACS

Professor of Surgery, University of New South Wales

University Department of Surgery

Prince of Wales Hospital, Randwick, Sydney

Brian Wall MPharm, MAppSc

Principal, Oceania Consulting Pty Limited, Perth

Rebekah Jenkin BSc(Hons), MSc, PhD, BA, GradDipApplPsych, DipLaw

Senior Associate, Sydney Health Projects Group

School of Public Health, The University of Sydney

Gabriel sam Gabriel MB BS, MPH, FAFPHM

Data Manager, The Collaboration for Cancer Outcomes Research and Evaluation

South Western Sydney Area Health Service

Table of Contents

- 1. Introduction 1
- 2. Strengths and weaknesses of cancer services in Victoria..... 2
 - 2.2 Major strengths..... 2
 - 2.3 Major weaknesses..... 2
- 3. Directions for the Cancer Services Framework 2
 - 3.1 Tumour streams, standards of care, and Statewide stream-specific reference groups 3
 - 3.2 Role designation, accreditation, and credentialing 3
 - 3.3 Service System and Integrated Cancer Services..... 4
- 4. Peter MacCallum Cancer Centre..... 5
 - 4.1 Findings 5
 - 4.2 Directions for Peter MacCallum Cancer Centre..... 6
- 5. Implementation of the Framework and operational management..... 7

1. Introduction

In 2002, the Department of Human Services commissioned The Collaboration for Cancer Outcomes Research and Evaluation (CCORE) to develop a Cancer Services Framework (Framework) for Victoria. The Framework is intended to inform the development of the Metropolitan Health Strategy and the Victorian Rural Human Services Strategy. This initiative was stimulated by various proposals relating to cancer services, concerns regarding the long term viability of the current location of the Peter MacCallum Cancer Institute (PeterMac) and the lack of a statewide cancer services plan for Victoria.

The main points in the terms of reference for the project were to:

- advise on whether Victoria has the appropriate combination of cancer services to meet future requirements for cancer service provision, taking into account trends in clinical practice, new technology and approaches to care, and whether the services are appropriately located
- advise on improvements in arrangements for the provision of cancer services, including options for a cancer–services system and the relationships of cancer services with other health services, such as non–acute health services
- recommend an approach to role designation for hospitals and other health services in the provision of cancer services
- advise on the future directions for PeterMac.

The following principles underpin the Framework:

- an emphasis on multidisciplinary cancer care to ensure that services are effective and efficient, and fulfil the needs of patients and their families and other non–professional carers
- the provision of services as close to patients’ homes as is feasible
- quality and safety in all aspects of patient care.

The development of the Framework involved:

- broad consultation with the major interested parties, through interviews, site visits to rural and metropolitan hospitals, and written submissions
- a review of relevant literature
- compilation and analysis of data on cancer incidence and prevalence, cancer service activity, and the oncology workforce
- projections of the future incidence of cancer in Victoria and related service delivery requirements
- a review of the organisational structure of cancer services in Victoria and an exploration of options for a cancer services framework
- consideration of options for the future of the PeterMac within this framework.

The project was guided by an Advisory Group appointed by the department. Membership of the Advisory Group included individuals with a knowledge of all aspects of hospital and ambulatory cancer service provision in Victoria, representatives of patient support and advocacy groups, the Chief Executive Officer of the Cancer Council Victoria, heads of cancer services, representatives of the department, and managers of health services within and outside Melbourne.

This Highlights Report is based on the final proposal for the development of a Framework for Victoria.

2. Strengths and weaknesses of cancer services in Victoria

From our analysis of data, our consultations and our site visits, we identified the strengths and weaknesses of cancer services in Victoria, some of which are listed below.

2.2 Major strengths

- A relatively high level of services and service provision across Victoria, compared with some other States and Territories of Australia.
- Unanimous support for multidisciplinary care.
- Innovative service–delivery arrangements, such as those advanced under the Breast Services Enhancement Program and the Single Machine Unit Radiotherapy Trial.
- A strong tradition of effective non–government contribution to the improvement of cancer services through The Cancer Council Victoria.
- Good links between cancer services and the community in some rural areas.
- Research networks of high national and international stature.
- A strong track record of service delivery and professional education provided by the Peter Mac.

2.3 Major weaknesses

- Inadequate data on cancer management and outcomes, and lack of timeliness of available data.
- Evidence of patchy implementation of established national guidelines in cancer care throughout Victoria.
- Evidence that better adherence to guidelines could improve cancer outcomes for Victorians.
- Lack of an overall cancer services plan for the State, and lack of specific benchmarks for services.
- Lack of coordination of services.
- Lack of a population focus in service delivery.
- Problems with referral to high–level treatment centres, and problems with ‘back–referral’ from specialised facilities to lower–level hospitals and community care.
- Lack of definition of linkages between services.

3. Directions for the Cancer Services Framework

Three interfacing elements to the Framework are recommended and outlined below:

- Specific standards of care for tumour streams.
- Hospital role designation – levels and types of services are informed by the standards of care. Five service levels are proposed.
- A service system with the establishment of Integrated Cancer Services in metropolitan and rural/regional Victoria is proposed.

3.1 Tumour streams, standards of care, and Statewide stream-specific reference groups

The core of the proposed Framework comprises a set of evidence-based specific standards of care for the ten most frequently occurring cancers, i.e. ten 'tumour streams'. These ten tumour streams are:

- genito-urinary cancers, including cancers of the prostate, bladder, kidney, and testis
- colorectal cancer
- breast cancer
- lung cancer
- skin cancers, notably melanoma
- haematological malignancies, encompassing lymphomas, leukaemias, and myeloma
- gynaecological cancers
- head and neck cancers
- upper gastro-intestinal cancers, encompassing cancers of the oesophagus, stomach, pancreas, and hepato-biliary system.
- central nervous system tumours.

These standards cover:

- access, diagnosis, treatment, continuing care, and outcome measurement
- the provision of coordinated multidisciplinary care
- issues in linkages among services
- requirements for accreditation of services.

Stream-specific reference groups comprising clinical experts, patient and community representatives, service managers and others would be established for each of the Statewide tumour streams to provide advice on the development of standards.

3.2 Role designation, accreditation, and credentialing

In order to fulfil the specified standards, cancer services of different levels are defined according to their role designation, within a five-level structure.

Level 1 services (the lowest level):

These services would be capable of providing chemotherapy using pre-ordered materials. A nurse with training in the administration of chemotherapeutic agents would be on site. No surgical or radiation oncology services would be available. Level 1 services would be linked with higher-level services to meet other requirements in the continuum of cancer care.

Level 2, 3 and 4 services:

These services would offer progressively more sophisticated care, with Level 4 services being typical of those provided in a major centre such as Geelong.

Level 5 services (the highest level):

Level 5 services would exist only in selected centres in Melbourne. They would provide the full range of specialised surgical, radiation and medical oncology services, as well as imaging and pathology, although not all super-specialty services would be available at all sites.

Regardless of the level of the service in which they receive treatment, all patients would be provided with education and information, as well as access to rehabilitation, psychosocial support, and palliative care services, either on site or by referral. Services of different levels would contribute to multidisciplinary care.

A formal accreditation process, conducted by an independent body, would lead to approval of the role–designation level for a particular service in a given tumour stream. Accredited services would be responsible for the enlistment of practitioners who have appropriate credentials to carry out aspects of service delivery. Accredited services would also develop local databases providing detailed information to the accrediting body and the Statewide tumour–stream–specific reference groups. Local care coordinators would assist accredited services, and Statewide reference groups would oversee their evaluation.

3.3 Service System and Integrated Cancer Services

We also propose the formation of a service system, with the establishment of Integrated Cancer Services (ICS) in Melbourne and outside Melbourne. Each ICS would comprise clusters of hospitals and associated health services that deliver services for people with all type of cancers within a geographic area. Each ICS is intended to be self–sufficient in accordance with its role designation and to the extent that the ICS can meet the requirements of the standards of care that form the core of the Framework.

It is envisaged that each Metropolitan ICS (MICS) would bring together two or more of the existing Metropolitan Health Services and hospitals. The broad range of services, up to and including Level 5 services, could be provided in each MICS. Each MICS would also be expected to carry out research in its established field of strength, as well as education and training.

Highly–specialised services, services for the management of rarer cancers, and other services providing for the whole of Victoria, would be available only at a limited number of sites. This may require rationalisation of existing services to concentrate high–level expertise and specialised facilities as effectively and efficiently as possible. Such specialised services may include the following:

- services for the management of certain gynaecological, head and neck, upper gastro–intestinal and paediatric cancers, sarcoma, and melanoma
- allogeneic bone marrow transplantation services
- stereotactic radiosurgery services
- brachytherapy services.

Possible groupings that would constitute the MICSs, based on existing hospital sites and services, are:

- Southern Melbourne – Bayside, Southern and Peninsula Health.
- Western Melbourne – PeterMac, Melbourne Health, Western Health, Women’s and Children’s Health, and Mercy Werribee.
- North Eastern Melbourne – Austin Repatriation Medical Centre, St Vincent’s Hospital, Eastern Health, Northern Health, and Mercy Women’s Hospital.

The nucleus of each Rural/Regional ICS (RICS) would comprise a group of rural hospitals that could provide a range of services in Levels 1 – 4 and treat most cancers, taking into account the numbers of patients and the complexity of care required. Five RICSs aligned with the Department of Human Services rural regions are proposed.

Where a MICS does not provide a specialist service, it would develop links with another MICS that does. RICS would develop links with one or more MICSs for cancers requiring specialist services. Specified relationships and arrangements between geographically proximate services, either within or between ICSs, should be encouraged. This will enable development of defined referral pathways between geographically proximate hospital and community services, and promote more effective local coordination of care for patients.

A Director, with secretariat support, would manage each ICS. Their role would include:

- development of a strategic and service plan that would encompass training, quality improvement, research, and the development of links with other ICSs
- provision of leadership in the development and implementation of tumour–stream–specific standards of care
- development of funding models and budget management.

Within each ICS, each tumour stream would be led by an executive comprising clinicians from each hospital. Ideally, some or all of the members of the tumour–stream executive would also work in the private sector, thus providing a means to engage the private sector in the integrated services, and work with providers to ensure uptake in the private sector.

4. Peter MacCallum Cancer Centre

4.1 Findings

The terms of reference required provision of advice on future directions for the PeterMac, our inquiries included an assessment of its strengths and weaknesses.

In summary, the major strengths of PeterMac are as follows. It is widely recognised in professional circles and by the public as a major Statewide (and indeed national) repository of expertise in the management of cancer, especially in radiation oncology. It has particular expertise in super–specialised radiotherapy techniques, such as brachytherapy, and the provision of radiotherapy for tumours in difficult sites, for example the lung and the head and neck. It also undertakes complex surgery where more than one surgical discipline is involved, and where innovative therapy such as intra–operative radiotherapy is provided.

In addition, PeterMac has broad–ranging patient–support and –education programs. PeterMac has been able to serve as a hub for satellite radiotherapy services at Moorabbin, Box Hill, and Bendigo, and more recently at Epworth, and PeterMac staff conduct specialist clinics at several sites within and outside Melbourne. Very significantly, PeterMac has an excellent basic and clinical research program, evidenced by the number and value of the peer–reviewed grants awarded to it and the number and quality of its publications.

Offsetting the strengths and the reputation of PeterMac are some deficiencies. The fact that it is a free–standing cancer centre has deprived it of opportunities to develop capacity in several clinical areas that are outside the sphere of oncology practice, yet are often required by cancer patients. Thus, it does not have on–site access to non–oncological medical and surgical specialties, such as would be available in a general hospital. PeterMac has an acute reception centre that is available 24 hrs a day, seven days a week, for its patients who develop problems, but it does not have an emergency department. It has a high–dependency unit, but lacks a full–scale intensive care unit, and this constrains its capacity to undertake complex surgery. Its capacity to provide the full range of multidisciplinary coordinated care for cancer patients is hampered by the limited development of surgical oncological services.

4.2 Directions for Peter MacCallum Cancer Centre

Given its contribution to oncology services, and its pivotal role in radiation oncology in Australia, we consider that every effort should be made to ensure that PeterMac survives, grows in strength, and retains its identity. In our consideration of the future directions of PeterMac, we noted the following points:

- The ‘icon factor’ – the identity of PeterMac is important as a symbol in any cancer care system for the State of Victoria.
- The value of a free-standing cancer centre.
- The role of PeterMac as a provider of cancer services through outreach and consultation to other services, having a statewide role, and as a provider of cancer services in adjacent areas of metropolitan Melbourne.
- The distribution of public sector radiotherapy services and facilities in Melbourne – with some areas served better than others.
- It is a hub for radiotherapy services in several sites in Melbourne and beyond.
- Research and education – the extent and importance of the contribution of PeterMac to research and education is widely recognised.
- Accommodation – expanded, updated accommodation for PeterMac is required, and interim refurbishment and maintenance of existing accommodation are also necessary, whether PeterMac is redeveloped on its present site or rebuilt elsewhere.

Three options for the future development of PeterMac were examined.

Option 1:

The first option is to take no action at all, leaving PeterMac to operate as it currently does on its present site. The benefits of this are low cost, and no infringement of its historical identity, independence and configuration. This option does not address the difficulties that PeterMac faces as a free-standing cancer service, or provide for current and foreseeable accommodation needs. Also, this does not resolve lack of public radiotherapy services in western Melbourne.

Option 2:

The second option is to redevelop PeterMac on its present site. This would guarantee retention of the identity of PeterMac. However, PeterMac would be left with a limited capacity in surgical oncology, and constraints on access to certain types of clinical infrastructure, such as a full-scale emergency department and an intensive care unit, and limited on-site access to non-oncological specialty services for cancer patients.

Option 3:

The third option is to relocate and rebuild PeterMac on a new site. Possibilities for the re-location of the Institute were examined. Possible sites are:

- (a) the Parkville precinct, as close as possible to the Royal Melbourne Hospital (RMH)
- (b) a site (yet to be identified) in Southern or North Eastern Melbourne. It is also assumed that whilst continuing to have a statewide role, PeterMac will have a regional service role.

Of the two, the move to Parkville is recommended on the basis of the following advantage. This assumes that PeterMac will have a regional service role in the Western ICS and a statewide role.

Our preferred option is Option 3, and we see particular advantages in rebuilding PeterMac on a site in Parkville. The main advantages are as follows:

- The RMH and the PeterMac would complement each other, because the RMH lacks a capacity for radiotherapy, but offers the full spectrum of general medical, surgery, and emergency services. Thus the current clinical constraints facing PeterMac would be overcome.
- The combination of the RMH and PeterMac would create an impressive cancer services, education and research facility for Victoria.
- The RMH and PeterMac could have both a local service–delivery role in the Western Melbourne ICS and a Statewide role. The combined clinical resources of the RMH and PeterMac would meet the needs of the residents of Western Melbourne for high–quality multidisciplinary coordinated cancer care.
- The move would give PeterMac researchers a clear opportunity to form strong collaborations with researchers in the Walter and Eliza Hall Institute, the Ludwig Institute, the Royal Women’s Hospital, the Royal Children’s Hospital, and the University of Melbourne.

At present, PeterMac is the only source of radiation oncology expertise with a capacity to provide services at Moorabbin and Box Hill. It therefore makes sense for PeterMac to continue to provide radiotherapy services at these sites for the time being. Alongside this, PeterMac should form a Western Melbourne area–based cancer service in conjunction with RMH, the private radiotherapy service at Footscray, and the possible development of radiotherapy at Sunshine. It should also have a Statewide role with provision of highly–specialised services, such as multi-speciality surgery and radiosurgery.

5. Implementation of the Framework and operational management

We propose mechanisms for the department to oversee the implementation of the Framework and its operational management throughout Victoria, with advice from the Ministerial Council on Cancer, the formation of which has been announced by the Premier.

Further details on the implementation strategy will be available in *A Cancer Services Framework for Victoria, and future directions for the Peter MacCallum Cancer Institute*, due to be released by the end of 2003.