

Patient management framework

Skin tumour stream: melanoma

a guide to
consistent
cancer care

Patient management framework

Skin tumour stream: melanoma

Acknowledgements

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1. Introduction

Cancer is the leading cause of death in Victoria, representing 28.9 per cent of all deaths in 2002²⁴. Population ageing will significantly increase the number of new cases of cancer over the next ten years, with an estimated 10,000 more cases per annum in Victoria by 2016. In 2003, 1,739 Victorians were diagnosed with melanoma and in 2002, there were 215 deaths due to melanoma²⁴.

Cancer is a complex disease to diagnose and treat, and represents a significant burden to patients and their families, the health system, and the community at large. Victoria's strategic and planned approach to cancer reform includes the establishment of a Ministerial Taskforce for Cancer, and implementation of the *Fighting cancer* policy³ and *A Cancer Services Framework for Victoria*²⁵. Two significant directions of the Cancer Services Framework are the establishment of Integrated Cancer Services in metropolitan and regional Victoria, and the development of service delivery and improvement through a tumour streams model.

Since 2004, eight Integrated Cancer Services have been established in metropolitan and regional Victoria, based on specified geographic populations. The philosophy of an integrated cancer service is that hospitals and primary and community health services develop integrated care and defined referral pathways for the populations they serve. This requires effective collaboration between hospitals and community-based services, including general practitioners. This will promote more effective local coordination of care for cancer patients, and a more rational, evidence-based approach to cancer service planning and delivery. The Cancer Services Framework also recommended that organ or system-specific tumour streams be adopted to support the delivery and improvement of care. The reasoning behind the tumour streams is that a consistent approach to clinical management based on evidence-based practice will reduce unacceptable variations in care across the state.

2. Patient management frameworks

The Cancer Services Framework suggested some areas for improvement in the quality of care for cancer patients in Victoria. These included:

- under-treatment of patients with colorectal, lung and prostate cancer^{9,22,23}
- inadequate follow-up surveillance of patients with testicular cancer²⁶
- a high proportion of cancer patients undergoing surgery with surgeons who performed relatively few operations for colorectal cancer^{11,23}
- a high proportion of surgery for ovarian cancer having been undertaken by generalists rather than specialist surgical oncologists¹⁰.

As a consequence, the Cancer Services Framework recommended that tumour streams be developed to reduce unwanted variation in practice. In response, the Ministerial Taskforce for Cancer recommended that patient management frameworks be developed to provide a consistent statewide approach to care management in each tumour stream. The patient management frameworks are a clear description of the care pathway, identifying the critical points along that pathway and the optimal model of care required. It is important that all patients are assessed and managed appropriately throughout each stage of their journey; however, it should be noted that not all patients will progress through each step of the relevant patient management framework. This is a consequence of many factors, including disease outcomes, management decisions, and patient decisions.

2.1 Purpose of the patient management frameworks

The patient management frameworks **are a guide** to the **optimal care management** of patients in each tumour stream. They are intended to improve patient outcomes by facilitating consistent care based on evidence and best practice across the state. They set out the key requirements for the provision of optimal care which need to be considered at each step of the care pathway. In contrast to clinical practice guidelines that guide appropriate practice and decision making, the patient management frameworks provide a guide to the patient journey to ensure patients with cancer and their families receive optimal care and support.

As a guide, the patient management frameworks are to be followed subject to the health professional's independent medical judgment and the patient's preference in each individual case. They are designed to provide information to assist in decision making and organisation of service delivery.

The patient management frameworks **are not rules** and **do not carry a sense of prescription**. The patient management frameworks represent the 'what', rather than seeking to prescribe the 'how'. Recognising that services should be responsive to the needs of different patients at different phases, the patient management frameworks draw on best practice and encourage local solutions. For example, while multidisciplinary care is an essential part of treatment planning, how it is organised depends on the local situation.

In their current format, the patient management frameworks are not designed for accreditation purposes, but may be used to facilitate local benchmarking, service mapping and service development.

The patient management frameworks have been developed in collaboration with a wide range of practitioners, consumers and carers. Wherever possible, the patient management frameworks are based on current best practice, including clinical guidelines, care pathways, standards and research that exist to support optimal care at the critical points. In many cases, however, they are a statement of consensus regarding currently accepted approaches to treatment.

2.2 Structure of the patient management frameworks

The patient management frameworks set out seven critical steps of the patient journey. The seven steps provide a consistent structure across the ten tumour streams. While the seven steps appear as a linear model, it is clear that in practice patient care does not always occur in this way but rather depends on the particular cancer, when and how the cancer is diagnosed, prognosis, management decisions, and patient decisions.

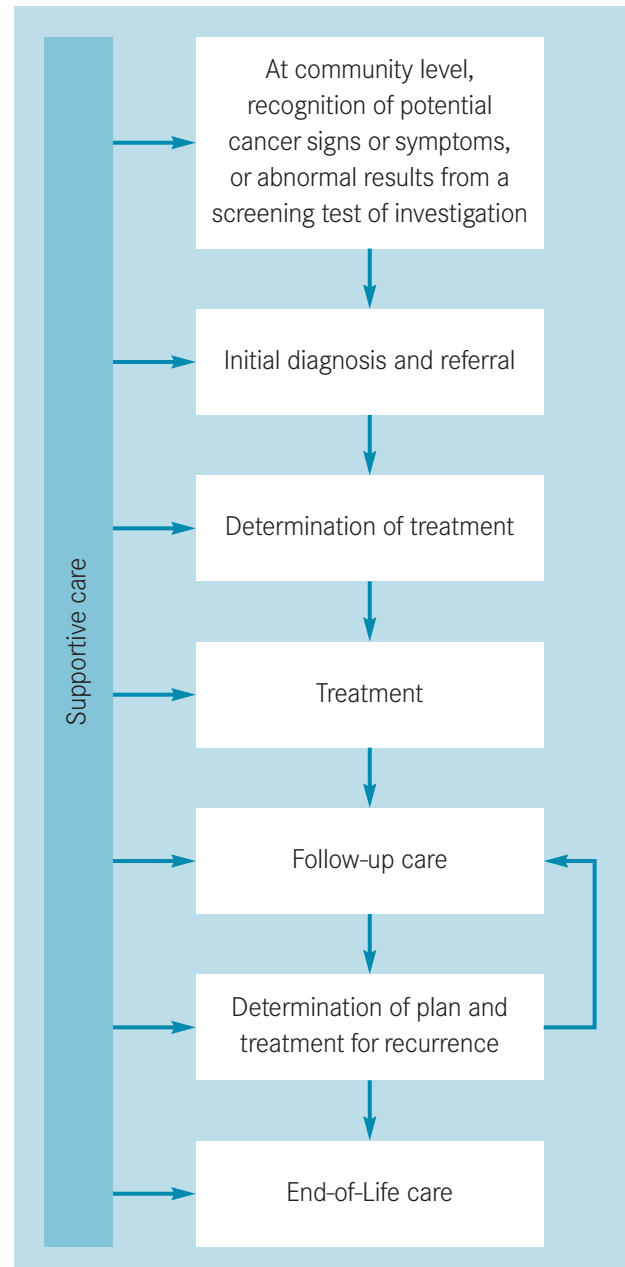
Underpinning the patient management frameworks are key principles that support all seven steps. These are:

1. patient-centred care. Patients should be involved as active participants in care planning and decision making, and wherever appropriate so should their partners, families and carers. Ultimately, any treatment decision rests with the patient or designated person. This requires information and discussion in their preferred language and sensitive to their culture.

2. safe and high quality care. Cancer care is complex, involving a range of clinicians with different expertise. To ensure safe and high quality cancer care, it is important that clinicians have the technical skills and experience to carry out those aspects of cancer care they undertake and that there is institutional capacity to support such care, such as equipment, staffing and skill mix. Further detail is provided in section 3.

3. multidisciplinary care. The cornerstone of best practice in cancer care is multidisciplinary treatment planning and multidisciplinary care. An effective multidisciplinary approach can result in survival benefit¹³, increased recruitment into clinical trials^{15,16}, detection of emotional needs of patients⁵, reduction in service duplication and improved coordination of services⁴. Further detail is provided in section 4.

Figure 1: Steps of the patient journey



4. supportive care. People with cancer have psychological and social needs that are frequently undetected and unmet⁹. This has the potential to result in long term distress. In the context of cancer, supportive care describes all services that may be required to support people with cancer and their carers to meet their physical, psychological, social, information and spiritual needs. Further detail is provided in section 5.

5. care coordination. The cancer journey is complex and challenging, and it is not uncommon for patients to be seen by many health professionals within and across multiple health services and across different sectors. A variety of strategies are successful in improving the coordination of care. Some of these include strategies directed at the team, such as multidisciplinary team meetings, clinical protocols and case conferencing; strategies directed at the patient, such as personal patient records, appropriate information provision or case managers; and strategies directed at the health care system, such as electronic medical records, standards, performance indicators and funding models. To ensure patients experience care that is coordinated and integrated over time and settings, services need to consider the range of strategies required to facilitate care coordination.

2.3 Development of the patient management frameworks

The patient management frameworks have been developed over a 15-month period in consultation with more than 500 clinicians and consumers through workshops and written submissions. Further information on the development process can be obtained at <http://www.health.vic.gov.au/cancer/tumourstreams.htm>.

Fourteen patient management frameworks have been developed, addressing the following tumour streams and tumour categories:

- breast
- central nervous system (cerebral metastases)
- central nervous system (malignant glioma)
- colorectal (colon and rectal)
- genitourinary (prostate)
- genitourinary (testis)
- gynaecological (ovarian)
- haematological (acute myeloid leukaemia)
- haematological (intermediate grade non-hodgkin's lymphoma)
- head and neck (larynx, pharynx and oral)
- lung (non-small cell)
- skin (melanoma)
- upper gastrointestinal (oesophagogastric)
- upper gastrointestinal (pancreatic).

2.4 Future review and development of the patient management frameworks

The 14 patient management frameworks that have been developed will be reviewed in December 2007. Further development of patient management frameworks relevant to the ten major tumour streams will commence in January 2007.

3. Credentialling and scope of practice

In 2004, the *National standard for credentialling and defining the scope of clinical practice*² was endorsed by the Australian Health Ministers. Developed by the Australian Council for Safety and Quality in Health Care, the standard provides a credentialling framework for all medical practitioners. Credentialling is a formal process for verifying qualifications, competence and performance of individual clinicians as well as defining their scope of practice within a specific health service. The process takes into account the skills and ability of the clinician as well as the capacity of the institution to support the clinician's practice.

This has particular relevance to clinicians working in the area of cancer care. Cancer care is complex for a number of reasons. These include:

- the large number and type of cancers that vary greatly in their pathology and management
- the range of clinicians with different professional expertise (medicine, nursing, allied health) that are involved in care
- the range of specialities for specific treatment modalities, such as breast or colorectal surgeons, radiation and medical oncologists, breast care nurses
- the life-threatening nature of many cancers and the serious complications and side-effects of some treatments
- the advances in technology and research that are changing best practice care at a rapid pace⁸.

In Victoria, the complexity of cancer care poses specific challenges for health professionals working in the area of cancer. The large distances between health services and the relatively low numbers of complex cancers that will be seen at individual health services or by individual health professionals require that innovative approaches to care be developed. These include developing links between health professionals and multidisciplinary teams and initiatives such as the expansion of telemedicine, specific mentoring and upskilling programs.

For patients to have access to safe and high quality services, it is important that professionals working in the area of cancer care ensure:

- they have the necessary skills to carry out those aspects of cancer care they undertake and there is institutional capacity to support such care (for example, equipment, staffing and skill mix)
- they have clear links with a range of specialties or multidisciplinary care team required for cancer care, for the purpose of clinical advice, referral and continuing education
- they follow evidence-based practice or treatment recommendations of a multidisciplinary care team
- they undertake regular review of their performance and contribute to regular audit of their cancer care
- they are actively involved in continuing professional development
- their patients can make an informed choice about their care, including the options of referral to other professionals or specialised centres⁸.

4. Multidisciplinary care

4.1 Achieving multidisciplinary care

Multidisciplinary care is an approach that includes both treatment planning and ongoing care. The 'gold standard' for multidisciplinary care is a team who meets regularly (whether in person or via teleconferencing) to prospectively plan care and treatment for all patients within a tumour group; however, it is expected that different components of multidisciplinary care will be implemented depending on the setting, the location of the team and the number and type of cancer patients being treated. While it may not always be possible to hold a multidisciplinary team meeting prior to surgery, for instance, it would be expected that some other form of multidisciplinary discussion around treatment planning take place. It is likely that regional multidisciplinary care will look different from metropolitan, while being guided by the principle that interaction between multidisciplinary team members is critical in the determination and effective implementation of the treatment plan. It is also acknowledged that patients move between the private and public sector and multidisciplinary care needs to take this into account.

4.2 Principles of multidisciplinary care¹⁸

The team

- There is an established multidisciplinary team comprising all core disciplines, including allied health and psychosocial health practitioners.
- The patient's general practitioner is regarded as a team member and processes to ensure effective communication with general practitioners are implemented.
- Effective communication and referral linkages are made to all core and non-core team members.

Communication

- All core disciplines where appropriate and relevant regularly attend multidisciplinary meetings to provide input to diagnostic, treatment, supportive and palliative care planning.

- In instances where not all patients within a tumour group or groups are discussed, team protocols are developed to outline those patients who will be presented at meetings.
- Processes for communicating treatment and care plans for team members who are absent are developed and implemented.

Full therapeutic range

- All patients regardless of where they reside will have information about and access to relevant treatments and services.
- Clinical trial involvement is considered for all eligible patients who will be undergoing cancer treatment.

Quality

- Decisions, protocols and care pathways are in line with current best practice, including standards, guidelines, research and where these are not available, currently accepted approaches to treatment.
- All relevant diagnostic results, reports and pathology and radiology images are available for multidisciplinary meetings.
- Collaborative links will be formed with smaller and larger referring centres and practitioners. The result will be a network of multidisciplinary teams and practitioners across and between integrated cancer services.
- Professional development activities are supported and held for all team members.

Involvement of patient

- Patients are informed of the multidisciplinary team process.
- Patients are informed of the recommendations of the multidisciplinary discussion, provided with information about all aspects of their treatment and participate in the decision making process.
- Patients are routinely given information about and access to supportive care services.

5. Supportive care

‘Supportive care is an ‘umbrella’ term for all services, both generalist and specialist, that may be required to support people with cancer and their carers’²⁰. It includes self-help and support, information, psychological support, symptom control, social support, rehabilitation, spiritual support, palliative care and bereavement care²⁰.

Supportive care is required throughout the diagnostic, treatment and follow-up phases of care⁶.

In the context of cancer, supportive care needs include:

- physical needs (for example, pain, fatigue)
- psychological needs (for example, anxiety, distress)
- social needs (for example, practical supports, carer needs)
- information needs (for example, regarding diagnosis, prognosis, types of treatment)
- spiritual needs (for example, addressing hopelessness, despair).

5.1 Providers of supportive care

Supportive care is provided by generalist and specialist health services as well as community services.

All members of the multidisciplinary team, including general practitioner, surgeon, radiation oncologist, medical oncologist, nurse, social worker and other allied health staff, have a role in the provision of supportive care. In addition, community capacity to support people with cancer makes an important contribution to supportive care. This includes support from family, friends, support groups, volunteers and other community-based organisations.

As a specialist service, palliative care may provide many of the elements of supportive care; however, palliative care also includes specific areas of expertise that may be required, such as unresolved symptoms, and complex psychosocial, end-of-life and bereavement issues²⁰.

5.2 Achieving supportive care

An important step in the provision of supportive care services is to identify, by routine and systematic questioning of the patient and family, views on issues they require help with for optimal health and quality of life outcomes⁷. Reassessment of their needs is not a ‘once only’ incident because a person’s needs change along the disease trajectory¹².

A routine and systematic approach to identifying supportive care needs will help to identify people who are at higher risk of psychological or social distress. This identification provides the opportunity for further referral for assessment that is specific to their needs and recognises the individual factors that may place them at increased risk of psychological morbidity. Such factors include characteristics of the individual, such as age and marital status, and characteristics of the disease, such as time of diagnosis or recurrence, stage of disease and prognosis¹⁹.

A detailed assessment will help to identify those patients who require more specific one-to-one intervention and follow-up.

5.3 Establishing a supportive care model

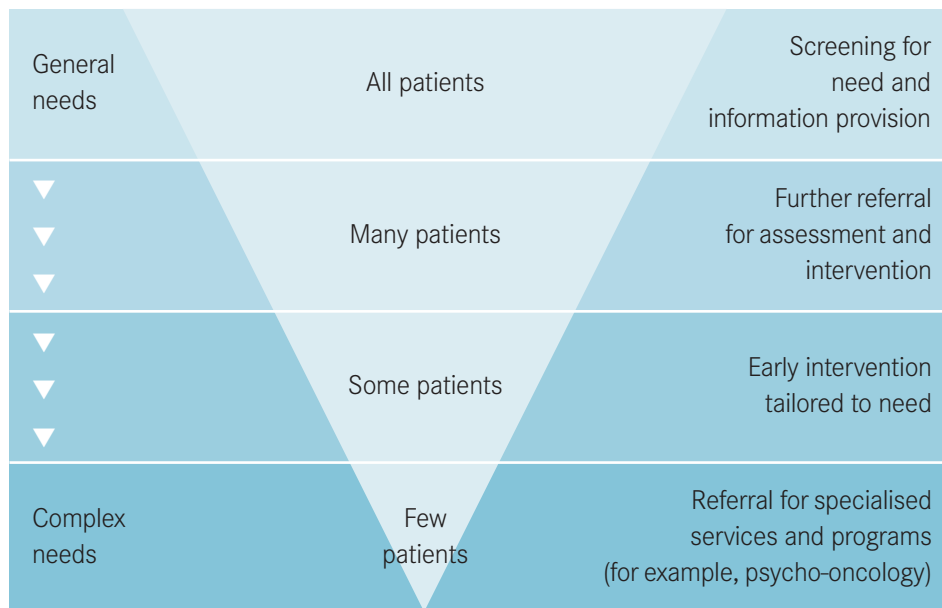
A supportive care model should recognise the variety and the level of intervention required at each phase and be specific to the individual. Such a model (see Figure 2) targets the type and level of intervention required to meet patients' supportive care needs. While there needs to be provision of general information to all patients, only a few patients will require specialised intervention.

As supportive care is provided by a range of services, it is important the following are considered in ensuring cancer patients have access to supportive care:

- processes that assist the identification of patient, family and carer supportive care needs
- clear referral pathways to specialised supportive care services
- adequate staff training in identifying and responding to supportive care needs
- promotion of supportive care as an important element of cancer service delivery.

Figure 2: Supportive care model

(Adapted from Fitch⁶. Reproduced with kind permission of Peter MacCallum Cancer Centre).



6. Steps in the care of patients with melanoma

This section sets out the steps along the treatment pathway and the optimal care required. Not all patients will follow every step of the pathway. This will depend on the stage of the cancer at diagnosis and the patient's decisions about his or her care.

Step 1:

At community level, recognition of potential cancer signs or symptoms, or abnormal results from a screening test or investigation

This step identifies screening programs, the types of people who may be at higher than average risk of developing cancer, and the types of symptoms that require further investigation by the general practitioner.

1.1 Screening

- There are no formal screening programs. Currently, there are no data that show that general practitioner screening for melanoma is an effective way of controlling melanoma mortality¹.

1.2 Those at higher risk

- People with the following are at higher risk:
 - number of benign melanocytic naevi on the arms
 - fair or red hair colour
 - poor tanning ability
 - tendency to sunburn
 - multiple dysplastic naevi
 - multiple non-melanomatous skin cancer
 - increased numbers of naevi overall
 - past history of melanoma
 - melanoma in first-degree relatives.
- Management of increased risk includes:
 - education by the general practitioner or dermatologist about skin self-examination
 - sun protection advice for the person at risk and the family. Use of melanoma surveillance photography should be considered
 - dermatologist or general practitioner total skin check every six to 12 months.

In high risk patients, melanoma surveillance photography by a qualified clinical photographer should be considered.

1.3 Signs and symptoms that should lead to general practitioner consultation

The following should be investigated:

- any changing skin lesions, including new lesions or lesions that do not respond to treatment (note that lesions do not have to be pigmented)
- a rapidly growing lesion that remains unresolved after one month
- lesions showing specific features of ABCDE criteria (asymmetry, border irregularity, colour variation, large diameter (> 6 mm), evolution).

1.4 Timeframe for general practitioner consultation

- If symptoms are unresolved within one month, the patient should be seen within seven days.
- Receptionists should accelerate this process where patient anxiety is high.

Step 2: Initial diagnosis and referral

This step details the process for establishing the diagnosis and appropriate referral. The types of investigations undertaken by the general practitioner and specialist depend on many factors, such as the patient's decisions, access to particular tests or access to a specialist (dermatologist or surgeon). Decisions on investigations require discussion and agreement between the general practitioner, specialist and patient.

2.1 General practitioner

- A period of observation is appropriate for low-risk lesions with a low level of doctor suspicion. The general practitioner should educate the patient about what to report between appointments.
- Time interval for review should be judged by reference to the rapidity of evolution (range one to six months).
- A baseline photograph and/or measurement of the lesion should be taken before a period of observation.
- If there is a high level of patient concern or repeated consultations about a specific lesion, this should lower the threshold for biopsy or referral to a specialist (dermatologist or surgeon).

Biopsy

- See clinical practice guidelines for recommended method and indications¹.
- Biopsy may be undertaken by a general practitioner, dermatologist or surgeon.
- Ensure complete excision biopsy (2 mm lateral margin and to the depth of the upper layer of the fat) according to National Health and Medical Research Council Melanoma Guidelines¹.
- Lesions diagnosed as possible melanoma should be read by a pathologist experienced in melanoma/dermatopathology, with provision for further opinion to be obtained from a reference centre pathologist.
- Biopsy should be performed within two weeks of the decision that it is necessary.
- Biopsy result should be available within one week.

2.2 Referral

- The patient should be referred to a specialist (dermatologist or surgeon) who is experienced in melanoma and/or a multidisciplinary melanoma service.
- Referral should be sent directly by the general practitioner to the specialist, to allow the specialist to prioritise the booking.
- Referral should include all medical history details and a copy of the pathology report if there is one.
- The specialist should provide timely communication to the general practitioner about the consultation, and should notify the general practitioner if the patient does not attend.
- Further referral may be required from:
 - dermatologist to surgeon
 - surgeon to surgeon
 - surgeon to dermatologist for total skin check
 - specialist to a multidisciplinary service depending on prognosis and site of tumour.

2.3 Staging

- Staging is the cornerstone of treatment planning following surgical excision. Reporting of biopsy result should be in the synoptic format as described in the National Health and Medical Research Council Melanoma Guidelines¹.
- Imaging may be required in high-risk cases after referral for staging.

Step 3: Determination of treatment

This step identifies the members of the multidisciplinary team who need to be involved in initial treatment planning for this type of cancer. While the planning process varies considerably depending on the type of the cancer and the context of the care, the guiding principle is that interaction between appropriate multidisciplinary team members should determine the treatment plan.

3.1 Multidisciplinary team

- The multidisciplinary team comprises (in alphabetical order):
 - dermatologist
 - general practitioner
 - medical oncologist
 - nurse
 - pathologist
 - radiation oncologist
 - social worker
 - surgeon
- with access to:
 - allied health services where appropriate
 - palliative care services where appropriate
 - psycho-oncology services where appropriate (psychologist/psychiatrist).
- The lead role may be taken by any medical specialist with a high level of interest and expertise in melanoma.

3.2 Multidisciplinary planning

- Multidisciplinary team discussion may be required for tumour thickness greater than 1 mm, presence of histologic ulceration, in pregnancy, lesions of uncertain biological potential (atypical Spitz naevi, atypical cellular blue naevi), perineural invasion, desmoplastic melanoma, amelanotic melanoma, and/or for other issues as defined by treating doctor, which may include the very anxious patient, contentious pathology, strong risk factors for further primary, or difficult primary (for example, periocular large tumour).
- Multidisciplinary discussion must be conducted before implementation of treatment, and after pathology and dermatology review.
- The primary specialist who makes the referral to the multidisciplinary team is responsible for the patient until care is passed to another practitioner.

3.3 Next steps in starting treatment

- Next steps will be determined by the chosen treatment path; individual medical specialists will implement the treatment plan determined by the multidisciplinary team.
- The lead clinician should ensure there is adequate discussion with the patient (and family) of the diagnosis and recommended treatment, including rationale and aim, likely effects, possible outcomes, other treatment options, and psychosocial supports for patient and family.
- There should be timely communication to the general practitioner about the agreed treatment plan.
- Progression of care within the multidisciplinary team should be coordinated, ensuring the patient, general practitioner and multidisciplinary team members are clear on their responsibilities for coordination of care.

Step 4: Treatment

This step is concerned with the scope of clinical practice to deliver quality and safe practice. Scope of practice reflects both the expertise and experience of the individual as well as the organisational capability for the provision of safe, high quality cancer services².

4A: Surgery

4A.1 Patients who may benefit from surgery

- Almost all patients will be offered surgery, other than some with advanced disease.

4A.2 Training and experience of practitioner

This depends on the disease and the body site:

- for simple procedures, such as excision biopsy and limited re-excision: general practitioner or dermatologist with adequate training and experience that enables institutional credentialling and agreed scope of practice within this area²
- for all types of excisions, sentinel lymph node biopsy and all other procedures: surgeon (FRACS or equivalent) with adequate training and experience that enables institutional credentialling and agreed scope of practice within this area².

4A.3 Hospital or treatment unit characteristics

Staff

Staffing includes:

- surgeon as specified in 4A.2
- anaesthetic services.

Facilities

For simple procedures (for example, excision biopsy and limited re-excision), a general practitioner clinic is suitable.

- Some procedures may be done in a regional hospital with (depending on the patient and the disease):
 - operating theatre
 - high dependency unit
 - emergency service
 - anaesthetic service
 - access to appropriate pathology service.

- More complex procedures may require a major hospital with (depending on the patient and the disease):
 - operating theatre with a Woods Light
 - intensive care/high dependency unit
 - emergency service
 - access to appropriate pathology service
 - nuclear medicine imaging equipment sufficient to perform sentinel lymph node biopsy
 - on-site CT
 - a reference pathology service with immunohistochemistry available.

Note: Sentinel lymph node biopsy should only be performed under specified conditions, and those centres performing the procedure should be subjecting it to audit.

4B: Radiotherapy

4B.1 Patients who may benefit from radiotherapy

- Radiotherapy may be of benefit to:
 - patients with specific types of primary melanoma (for example, desmoplastic melanoma with neurotropic spread, lentigo maligna when patient is unsuitable to have surgery—approximately less than one per cent of cases)
 - patients in clinical trials (for example, Stage 3 patients with positive nodes)
 - patients with loco-regional and distant metastatic disease
 - those requiring palliative therapy for locally recurrent or metastatic disease.

4B.2 Training and experience of radiation oncologist

- Radiation oncologist (FRANZCR or equivalent) with adequate training and experience that enables institutional credentialling and agreed scope of practice in the treatment of patients with melanoma²

4B.3 Hospital or treatment unit characteristics

Staff

Staffing includes:

- nurses
- radiation oncologist as specified in 4B.2
- radiation oncology medical physicist
- radiation therapist.

Facilities

The following are available:

- access to SXRT
- dual modality LINACS
- CT planning facilities
- treatment planning system.

4C: Drug therapy

4C.1 Patients who may benefit from drug therapy

- Most patients with Stage 1 and 2 diseases will not require drug therapy, with the exception of those participating in clinical trials.
- Stage 3 and 4 patients should be discussed by the multidisciplinary team.
- Patients requiring palliative care may benefit from drug therapy.

4C.2 Training and experience of medical oncologist

- Medical oncologist (FRACP or equivalent) with adequate training and experience that enables institutional credentialling and agreed of practice in the treatment of patients with melanoma²

4C.3 Hospital or treatment unit characteristics

Staff

Staffing includes:

- medical oncologist as specified in 4C.2
- nurses with adequate training in chemotherapy administration, handling and disposal of cytotoxic waste
- If chemotherapy is prepared on site, then a pharmacist with adequate training in chemotherapy medications, including dosing calculations according to protocols, formulations and/or preparation, is required.
- Some components of less complex therapies may be delivered in a setting where no medical oncologist is locally available, by another medical practitioner with training and experience that enables credentialling and agreed scope of practice within this area. This should be in accordance with a detailed treatment plan or agreed protocol, and with communication as agreed with the medical oncologist or as clinically required.

Facilities

- The facility has a clearly defined path to emergency care and advice after hours.
- The facility is able to care for neutropenic patients.
- There is access to haematology testing.
- Cytotoxic drugs are prepared in a pharmacy with appropriate facilities.
- Occupational health and safety guidelines are followed in relation to handling of cytotoxic drugs, including preparation, waste procedures and spill kits²⁷.
- Guidelines and protocols, in the case of extravasation of drugs are available and understood.

Step 5: Follow-up care

This step includes monitoring of the status of the disease (including detection of metastatic disease) and management of symptoms that arise following the initial treatment. A clear follow-up plan needs to be established to avoid excessive follow-up by multiple specialists. Follow-up may vary depending on the intent of the initial treatment.

5.1 Plan for follow-up

For follow-up to detect metastatic disease and/or a second (new) primary, for which there is increased risk:

- The follow-up plan must be made at the time of diagnosis.
- Tumours less than 1 mm thick: follow-up for two years unless the patient is at high risk for a second primary melanoma due to multiple dysplastic naevi or a history of melanoma in close relatives¹. Patients should be seen four- to six-monthly for two years and then less frequently, according to risk factors, for an indefinite period
- Tumours greater than 1 mm thick: follow-up three- to four-monthly for the first two years, six-monthly review to five years, and lifelong yearly review thereafter¹.
- Each appointment should include total skin examination and examination of lymph nodes and liver.

For follow-up to manage metastatic disease:

- Depending on clinical circumstances, patients should be seen one- to four-monthly for an indefinite period.

In addition:

- Patients requiring extra psychological support may require an individualised follow-up plan.
- Importantly, asymptomatic patients in either group do not need routine periodic investigations.
- Where possible, patients should be referred to local practitioners.
- The specialist should provide the general practitioner with a written plan specifying prognosis and what is expected at follow-up visits, including goals, procedures, frequency, implementation and the action to be taken if a new relevant clinical finding is made. The patient should have a copy of this plan.
- Patient self-examination is essential.

5.2 Persons involved in follow-up care

- Follow-up should involve the multidisciplinary team as appropriate, including social worker, physiotherapist, occupational therapist, community nursing, and palliative care.
- The multidisciplinary team, in consultation with the general practitioner decides on the lead clinician who will coordinate follow-up. This may be the surgeon, general practitioner, radiation/medical oncologist or dermatologist as appropriate to the patient's clinical condition.
- Not all disciplines need to be involved in longer term follow-up.
- Responsibility for follow-up investigations needs to be agreed between the designated lead clinician, the general practitioner and the patient, with an agreed plan documented, including notification to the general practitioner or multidisciplinary team member if the patient does not attend.
- The general practitioner has a key role in coordination of follow-up.

Step 6:

Determination of plan and treatment for recurrence

This step covers treatment for recurrence. The intent may be curative or disease control and, in some situations, palliative. Clinical evaluation and patient decision making will determine the focus of the treatment.

6.1 Investigative tests

- The following investigations may be indicated:
 - clinical examination
 - MRI/CT
 - PET.

6.2 Multidisciplinary team

- Management should be discussed by the designated lead clinician in liaison with the general practitioner, with involvement of a multidisciplinary team if available, including surgeon, radiation oncologist, medical oncologist, and dermatologist (as appropriate).
- General practitioner and palliative care service participation is essential.

6.3 Treatments that a patient is most likely to have for recurrence

- Treatment will depend on the location and extent of the recurrence, and on previous management. Treatment may include surgery (resection of localised metastases; for example, in-transit tumour deposits, regional lymph node dissections, resection of metastases in lung, abdomen, cerebrum and so on), radiotherapy (for appropriate localised symptomatic metastases), and drug therapy (for regional or generalised disease).

Step 7: End-of-life care

This step is concerned with quality of life for the patient and his or her family through care that addresses physical, psychological, emotional and spiritual needs. For the family and carers, this may include bereavement support.

7.1 Multidisciplinary team

- The multidisciplinary team should include (in alphabetical order):
 - allied health staff as appropriate
 - general practitioner
 - medical oncologist
 - nurses
 - palliative care service—relevant team members
 - pastoral care services—relevant team members.

7.2 Services that may be required

- Palliative care service: community-based and inpatient
- Home and community care
- Community nursing
- Allied health: dietitian, occupational therapy, pastoral care, physiotherapy

7. Specific supportive care needs to consider for patients with melanoma

The supportive care needs of patients with melanoma will vary in severity and complexity along the disease trajectory. Identifying and assessing the supportive care needs of people with melanoma involves a general assessment of the physical, psychological, social, information and spiritual needs as detailed in section 5. In addition to these general needs, all members of the multidisciplinary team should be aware of the particular needs related to melanoma detailed below which may require intervention from specific members of the multidisciplinary team.

Physical needs

- Possible wound infections following grafts¹ may require review by a wound specialist.
- Lymphoedema is also a possibility depending on the location of the melanoma and the extent of surgery required²¹. Lower limb lymphoedema may impair mobility, especially when both legs are affected. Referral to a physiotherapist or trained lymphoedema massage specialist may be needed.

Psychological needs

Depression

- Distress can occur particularly for patients with deeply indented scars, such as those that occur with skin grafting¹⁹, and/or with disfigurement, particularly of the face, head and neck²¹. Providing patients with tailored accurate information prior to treatment, facilitating patient decision making about appearance-altering treatment, and meeting others with similar personal experience may assist some people¹⁴. Support and counselling by a specialist psychologist, psychiatrist or social worker may also be required.
- Depression, particularly for patients receiving interferon alpha therapy, may require antidepressant therapy and/or referral to a psychiatrist for review¹⁷.

Social/practical needs

- The additional costs of prosthetic, camouflage or lymphoedema services and wound/skin dressings may have a significant financial impact. Referral to a social worker for further assessment and identification of appropriate funding support may be required.

Information needs

- Information about avoiding activities that may lead to lymphoedema and identifying early symptoms of lymphoedema should be provided. For further information, see a lymphoedema web site, such as <http://www.lymphoedema.org.au/>. If lymphoedema develops, contacts for lymphoedema associations and support groups¹⁹ may be obtained from the Lymphoedema Association of Victoria web site, www.lav.org.au.
- Familial melanoma is relatively rare unless there are other risk factors present; however, referral to a familial cancer centre for people with a family history of cancer in first- and second-degree relatives may be helpful¹.
- Further specific information is available from The Cancer Council Victoria web site <http://www.cancervic.org.au/cancer1/patients/melanoma/howdiagnosed.htm>.

8. Resource list

For patients, families and carers

1. The Cancer Council Victoria

1 Rathdowne Street
Carlton 3053

Telephone: 03 9635 5000
Facsimile: 03 9635 5270
Email: enquiries@cancervic.org.au
Web site: <http://www.cancer.org.au>

For information on cancer, its treatment and side effects, support services, medical terminology, and research

2. Cancer Helpline (operated by The Cancer Council Victoria)

Telephone: 13 11 20
Hours: Monday to Friday, 8.30 am–5.30 pm

For telephone peer support from people who have had cancer experiences or for information on more than 120 cancer support groups across Victoria

3. The Cancer Council Australia

<http://www.cancer.org.au>

Fact sheets:

Lifestyle: www.cancer.org.au/lifestyle
Early detection: www.cancer.org.au/earlydetection
Post diagnosis: www.cancer.org.au/diagnosis

For health professionals

4. National Health and Medical Research Council

<http://www.nhmrc.gov.au/publications/subjects/cancer.htm>

For downloading clinical practice guidelines for cancer prevention and treatment

5. The Cancer Council Australia

Fact sheets for health professionals providing advice to patients:

<http://www.cancer.org.au/factsheets>

One-page fact sheets to help general practitioners and other health professionals advise their patients about cancer prevention, screening and diagnosis. These can also be downloaded from the patient education browser in the latest version (2.86) of the general practice software package, Medical Director.

Cancer resources for primary health care professionals:
www.cancer.org.au/primarycare

Directory of cancer resources to support general practitioners and other health professionals. Developed by the General Practice Committee of The Cancer Council Australia, the directory provides a single point of access to state, territory and national cancer resources.

6. Clinical trials

A national, online register of clinical trials being undertaken in Australia, the Australian Clinical Trials Registry, is available at <http://www.actr.org.au>. The Australian Clinical Trials Registry includes trials from the full spectrum of therapeutic areas, trials of pharmaceuticals, surgical procedures, preventive measures, lifestyle, devices, treatment and rehabilitation strategies and complementary therapies.

9. Abbreviations

CT	computed tomography
FRACP	Fellow of Royal Australasian College of Physicians
FRACS	Fellow of Royal Australasian College of Surgeons
FRANZCR	Fellow of Royal Australian and New Zealand College of Radiologists
LINAC	linear accelerator
MRI	magnetic resonance imaging
PET	positron emission tomography
SXRT	superficial x-ray therapy

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