

WA Cancer & Palliative Care Network

Colorectal Cancer Model of Care



Government of **Western Australia**
Department of **Health**



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Introduction

Cancer is the leading cause of death in Western Australia, representing 30.6 per cent of all deaths in 2006.

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 Western Australia by 2016. In 2006, 1080 Western Australians were diagnosed with colorectal cancer and there were 400 deaths due to this type of cancer in 2006.¹

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.

Western Australia's strategic and planned approach to cancer reform includes the establishment of a Ministerial Taskforce for Cancer, the implementation of the Fighting cancer policy and a cancer services framework for Western Australia.

Two significant directions of the Cancer Services Framework are the establishment of integrated cancer services in metropolitan and regional Western Australia, 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 Western Australia 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.

Data Collection and Audit

Data collection regarding treatment and outcomes is essential to monitor the quality and safety of care. An appropriate clinical database for colorectal cancer treatment and outcomes should be available and adequately resourced. Treatment outcomes including morbidity and survival data should be readily available in the public domain.

Model of Care

The WA Cancer and Palliative Care Network (WACPCN) Model of Care for Cancer 2008.

(http://www.healthnetworks.health.wa.gov.au/modelsofcare/docs/Cancer_Model_of_Care.pdf) provides the basis for this tumour site specific model of care.

This document describes how Colorectal Cancer care should be delivered in WA.

The eight steps in figure 1 describe the patient centred journey that provides safe, quality, evidence based, and multidisciplinary care resulting in optimum outcomes.



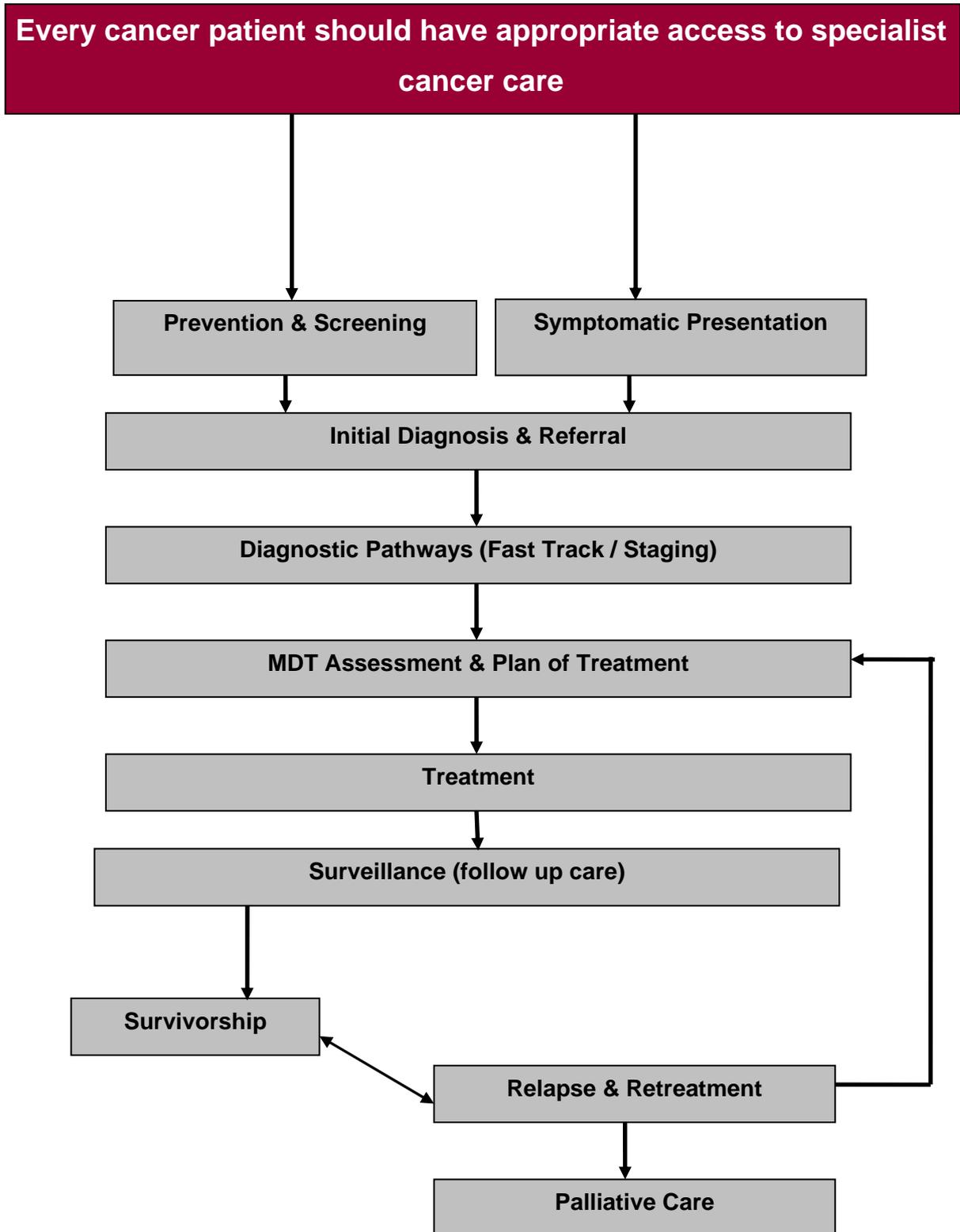
Underpinning this journey is the integration of primary care, supportive care, psycho-oncology and palliative care.

<http://www.healthnetworks.health.wa.gov.au/modelsofcare>

¹ The Western Australian Cancer Registry, Cancer incidence and mortality in Western Australia, 2006.



Figure 1. Appropriate access to specialist care





1. Screening & Prevention

Screening

The early detection of colorectal cancer, especially at an asymptomatic stage, is associated with improved patient outcomes. To this end, the National Health and Medical Research Council (NHMRC) strongly recommends organised screening with faecal occult blood testing (FOBT) every 2 years for all Australians over 50 years of age. Attempts to fulfil these recommendations have begun with the Commonwealth funded National Bowel Cancer Screening Program (NBCSP), although it is currently only available to individuals aged 50, 55 and 65 years. Invitations to participate and FOBT kits are delivered to eligible individuals by letter directly from the Commonwealth. Participants found to have a positive FOBT are advised to contact their nominated general practitioner, who is then responsible for organising appropriate further investigations, usually a colonoscopy.

The Department of Health, Western Australia (DoH,WA) in conjunction with the WA Cancer and Palliative Care Network (WACPCN), Colorectal Tumour Collaborative (CRTC), WA Bowel Cancer Screening Implementation Team and the Cancer Council WA have provided supplementary professional and community education regarding this Program.

It is essential that FOBT positive participants are able to access timely follow-up colonoscopies provided by credentialed colonoscopists in approved facilities. This can be provided through the private or public system, or through the Ambulatory Surgery Initiative which allows access for uninsured patients in secondary hospitals.

Individuals not eligible for the NBCSP are encouraged to participate in FOBT screening privately, by purchasing kits from pharmacists, via selected general practices or online, until such time that the NBCSP is extended to all individuals as recommended by the NHMRC.

Surveillance for High Risk Subjects

Individuals who are at significantly increased risk of colorectal cancer (> 3x average risk) should enter an appropriate surveillance program, usually involving regular colonoscopy. Such individuals include those with a strong family history of bowel cancer, those belonging to inherited autosomal dominant genetic bowel cancer families (e.g., Familial Adenomatous Polyposis and Lynch syndrome (hereditary nonpolyposis colorectal cancer syndrome)) and those with long history of inflammatory bowel disease. Surveillance programs for these individuals must include review by appropriate specialists such as the Familial Cancer Clinic of the Genetic Services of WA, gastroenterologists and surgeons.

Prevention

The burden of colorectal cancer in our society can be substantially reduced by primary prevention. This involves acting on recommendations in relation to physical activity, body weight, dietary modifications, alcohol consumption and smoking. Evidence-based guidelines have been published by the NHMRC. Health promotion information should be provided by Government, through health professionals or organisations such as the Cancer Council WA.



2. Initial Diagnosis and Referral

1. Symptoms and signs – the common symptoms of colorectal cancer are rectal bleeding, altered bowel habit, abdominal discomfort and bloating, iron deficiency anaemia and the general symptoms of cancer.
 - a. Patients present to the General Practitioner (GP) for assessment and appropriate diagnostic tests in order to diagnose (or exclude) cancer.
 - b. In some circumstances the patient's symptoms, signs or general condition will warrant urgent referral to a specialist rather than being investigated further by the GP. Patients with *suspicious* symptoms may be referred by the GP for a diagnostic colonoscopy without the necessity of specialist consultation. On diagnosis of a colorectal cancer the patient should be referred to a specialist surgeon for further management.
 - c. Patients may present to an Emergency Department (ED) with acute bowel obstruction/acute abdomen necessitating urgent surgical intervention. In less urgent cases patients seen in the ED need fast tracked referral to an appropriate specialist for urgent assessment and diagnostic investigations. Appropriate referral pathways should be available or developed.
2. Timeframe to see a specialist
 - a. The aim is to see a specialist and begin treatment within 4-6 weeks of (proven or strongly suspected) cancer diagnosis.
 - b. Verbal referral essential in urgent cases and should be confirmed by urgent written (fax, email) referral.
3. Type of specialist
 - a. A patient with a confirmed diagnosis of colorectal cancer should be referred directly to a colorectal surgeon, specialist surgeon or colorectal cancer care team who participate in a multidisciplinary team (MDT) approach to colorectal cancer care.
 - b. A patient with a suspected diagnosis of colorectal cancer may be referred to a relevant specialist (gastroenterologist or surgeon or colorectal cancer care team for further investigation).



3. Diagnostic Pathways

This step deals with the investigations that may be required to confirm the diagnosis of cancer and assess the extent (staging) of the cancer.

This may involve complex tests in different departments/locations and wherever possible should be coordinated to improve patient convenience and well being. Fast track, coordinated diagnostic pathways should be implemented at a system level.

Colonoscopy

An important investigation in the diagnosis of colorectal cancer is colonoscopy. This must be performed by appropriately trained and credentialed practitioners. It is the responsibility of the DoH,WA to ensure there are sufficient colonoscopists to provide a timely service. The DoH,WA should ensure that training programs and credentialing protocols are provided. In rural and regional centres it will be appropriate for colonoscopy to be performed in appropriately staffed facilities, usually a secondary hospital. An important strategy to increase colonoscopy availability is to reduce the numbers of procedures being performed for inappropriate indications, including excessively frequent surveillance colonoscopies.

Computed Tomography Scan (CAT Scan)

CAT scan of the chest abdomen and pelvis is the most useful imaging study to determine the presence of locoregional and distant metastasis. This must be and is available in both the public and private community setting, and in both metro and regional areas. It is appropriate for GPs or specialists to organise a CAT scan in a private radiology community setting as this will expedite this investigation. Discussion with the specialist at the time of referral may lead to this investigation being performed so that it is available at the time of initial specialist consultation. Timely access to CAT scanning should be available in metro and regional centres.

Magnetic Resonance Imaging (MRI)

MRI is used in the assessment of rectal cancers to determine whether preoperative chemoradiotherapy is indicated. The need for this investigation is usually determined by the colorectal surgeon and the MDT as part of the comprehensive assessment prior to determining the type of treatment. When required, decision planning is dependant on the result, otherwise treatment is delayed. It is expected that MRI will be available in a timely fashion so that treatment delay does not occur.

Pathology

Assessment of tissue specimens by appropriately qualified histopathologists is critical to the diagnostic process. Fine Needle Aspiration (FNA) specimens for cytology may be obtained from sites of potential metastasis and expert cytopathologists are required to assess this material. Timely provision of these services will usually be carried out by the state pathology service, PathWest or by private pathology providers.



4. MDT Assessment and Plan of Treatment

All patients should have access to a MDT to plan the management of their cancer. It is essential that a cancer specialist lead the MDT approach and that this be available to all patients no matter where they live. It is expected that patients in rural and remote areas will have access to this care and that this will be co-ordinated by their GP, local specialist or cancer nurse coordinator using video-conferencing or assisted travel where appropriate.

MDT Team

The multidisciplinary team comprises (in alphabetical order):

- Medical Oncologist
- Nurse Coordinator
- Pathologist
- Radiation Oncologist
- Radiologist with expertise in MRI
- Social Worker
- Surgeon (colorectal for rectal cancer)
- Stomal therapist

With access to:

- Allied health services including Dietician, where appropriate
- Palliative care service for patients with locally advanced cancers and metastatic disease.
- Psycho-oncology services as required (psychologist/psychiatrist)
- Hepatobiliary Surgeon
- Gastroenterologist with colorectal expertise

The lead role in the multidisciplinary team will be determined by the team and must take responsibility for the activity of the team.

MDT Treatment Care Plan

Treatment will be planned after all relevant investigations have been reviewed.

Ideally, all patients with **rectal cancer** should **at the very least** be discussed in a MDT setting where there is expertise in rectal cancer (see below).

Discussion should take place before surgery, because multimodality neoadjuvant therapy is often optimal.

Patients with **uncomplicated colon cancer** will usually be presented for MDT planning **after** surgery, particularly with respect to follow up chemotherapy.

The primary specialist who makes the referral to the MDT is responsible for the patient until care is passed to another practitioner.



The MDT must be adequately resourced to undertake the following responsibilities and should:

- Specify and document who will be the primary treating specialist.
- Fully document the agreed care plan.
- Circulate the agreed care plan to all relevant members of the team.
- The progression of care within the MDT should be coordinated ensuring that the patient and all care givers understand their responsibilities for delivering this care.
- The GP should be informed of the planned treatment and their role in this plan.

The patient and their family should be centrally involved in arriving at the preferred treatment plan.



5. Treatment

This step is concerned with the type of treatment that will be delivered, who will provide it and where it should be provided to ensure safe, high quality and effective care.

Surgery

- Nearly all patients will be offered surgery if appropriate.
- Surgery should be performed by surgeons (FRACS or equivalent) with adequate training and experience in colon or rectal surgery that enables institutional credentialing and agreed scope of practice within this area.
- Patients with rectal cancer should, wherever possible, have their surgery performed by specialist colorectal surgeons with adequate training and experience that enables institutional credentialing and agreed scope of practice within this area.
- Surgery should be performed in institutions (usually tertiary and secondary hospitals) that provide appropriate facilities including:
 - Surgeon, stomal therapist and anaesthetic services
 - Intensive care and/or high dependency care unit
 - 24 hours medical staff availability
 - 24 hours operating room access
 - Diagnostic imaging

Radiation Treatment

- For high risk rectal cancer, adjuvant pre-operative or post-operative radiation treatment is commonly indicated. In colon cancer it has a limited role.
- Radiation treatment should be given by a radiation oncologist (FRANZCR or equivalent) with adequate training and experience that enables institutional credentialing and agreed scope of practice within this area.
 - Radiation treatment should be performed in accredited institutions with experience in complex treatment planning.

Drug Therapy

- Drug therapy including chemotherapy is usually given to patients who are at high risk of relapse and who may benefit from adjuvant therapy.
- Drug therapy may be given to those patients with locally advanced or metastatic disease.
- Drug therapy is usually given by a Medical Oncologist (FRACP or equivalent) with adequate training and experience that enables institutional credentialing and agreed scope of practice within this area.
- Drug therapy is usually given in an institution with the following characteristics:
 - Staff including a medical oncologist, nurses with adequate training in chemotherapy administration, handling and disposal of cytotoxic waste, pharmacist with adequate training in chemotherapy medications and preparation.



- Less complex therapies may be given in secondary, regional or primary care settings (where no medical oncologist is locally available) by another medical practitioner or nurse chemotherapy provider with training and experience that enables credentialing and agreed scope of practice. This should be in accordance with a detailed treatment plan arising from a MDT setting, and should be under the supervision of a medical oncologist with communication as required.
- Facilities for safe administration of drug therapy include:
 - Emergency care and advice after hours
 - Care for neutropenic patients
 - Access to haematology testing
 - Cytotoxic drugs are prepared in a pharmacy with appropriate facilities, including provision and transport of such drugs from a tertiary or secondary institution
 - Guidelines and protocols for the safe administration of drugs including management of extravasation
 - Intensive care/high dependency unit availability

Combined therapy with chemotherapy and radiation therapy needs effective coordination, especially where the facilities are not co-located.



6. Surveillance (Follow-Up Care)

This step concerns the monitoring of the patient following initial treatment. The aim is the early detection of disease relapse and /or the management of symptoms arising from treatment or the disease. It also provides reassurance to patients who appear to be free of disease. A clear documented plan of surveillance should be established and be available to the patient. This should avoid multiple visits to multiple specialists.

What follow up care is needed:

- Patients who are medically fit should undergo regular surveillance as they are at increased risk of second primary colorectal cancers.
- Patients who are medically fit , who are at moderate to high risk of metastatic or recurrent disease, should undergo surveillance to identify potentially resectable metastases (often hepatic).
- A surveillance/follow up plan should be agreed by the patient and the coordinating MDT clinician and clearly documented in the patient record.
- The surveillance plan must be communicated to the patient's general practitioner.
- The surveillance plan should be individualised according to risk of recurrence and patient needs.
- Clinical examination and investigations such as colonoscopy, CT scan, Chest Xray and Tumour markers should be available in tertiary, secondary and primary care settings as recommended in established clinical practice guidelines (ref : ACN colorectal cancer guidelines 2005).
- The exact location of follow up will be decided in consultation with the patient, GP and lead clinician.

Who should provide the follow up care:

- The MDT team should decide whether the patient is medically fit for intensive follow-up and communicate this appropriately to avoid unnecessary investigations in those patients who would not be fit for further procedures.
- The MDT team in consultation with the GP will decide who should lead the follow up care.
- Responsibility for follow up investigations (colonoscopy, CT scan) should be agreed by the lead clinician, GP and patient and should be documented.
- Patient failure to attend for follow up should be notified to the responsible clinicians.
- Every effort must be made to reduce multiple visits to different treatment disciplines.
- Patient specific follow up may require involvement of occupational therapists, physiotherapists, dieticians, stomal therapists, social work, psycho-oncology support and nurses.



Where should follow up be provided:

- Follow up should be provided in public hospitals (tertiary and secondary), private hospitals, private specialist consulting rooms or general practitioner rooms.
- Imaging studies can be provided by any appropriately credentialed facility as long as results are delivered to the appropriate responsible clinician.
- Regional centres should be encouraged to provide coordinated follow up according to protocol, with input from the lead clinician as required, if necessary by videoconference.
- The GP has a key role in the coordination of follow up.



7. Survivorship

The transition from active to post treatment care is critical to long term health. Care should be planned and coordinated. Survivors should have knowledge of their increased risk of second/ recurrent cancers or treatment related morbidities. This encourages them to actively participate in their continuing post treatment care. This approach is essential so that routine follow up visits become opportunities to promote a healthy life style, check for cancer recurrence and manage lasting effects of the cancer experience.

Survivorship may be medically led, particularly through primary care, nurse-led or patient-led. Cancer Councils across Australia are developing and evaluating approaches that are patient centred.



8. Relapse and Retreatment

This step concerns the diagnosis and management of patients who have recurrence of the disease (local or metastatic) and who need assessment regarding further treatment. This assessment may be made by the GP initially with subsequent involvement of the specialist and the MDT. Clinical evaluation and patient discussion will determine the most appropriate treatment which may be curative or palliative in intent.

Patients who relapse require expert opinion as to the best plan of management and this will usually be provided by the colorectal MDT. Treatment for relapse may require drug therapy, radiation therapy or surgery.

What should be provided:

- The diagnosis of relapse will usually be made by the GP or the specialist surgeon/physician coordinating follow up.
- Referral for full assessment and discussion by the MDT is recommended.
- Access to appropriate investigations is important including:
 - Haematology and Biochemistry
 - Chest X ray
 - Ultrasound
 - CAT scan
 - MRI pelvis where appropriate
 - Positron Emission Tomography (PET) where appropriate
 - Colonoscopy
 - Biopsy or FNA

Management should be discussed by:

- The lead clinician in liaison with the GP and with involvement of one or more relevant members of the multidisciplinary team with input from a hepatobiliary surgeon if necessary.
- The management plan should be decided in consultation with the patient and fully documented in the patient record.
- Where appropriate, participation by the GP and palliative care team is essential.

Where should assessment and retreatment occur:

- Following diagnosis and confirmation of relapse, assessment should occur in a setting that involves the lead clinician and the MDT, often in a tertiary cancer centre but could be in a secondary or regional centre with input by the relevant clinician/oncologist and the MDT. Telehealth may be of assistance in some cases.
- Surgical treatment for relapse often involves complex therapy and is usually carried out in a tertiary cancer centre.
- Patients receiving palliative chemotherapy could be treated at public tertiary or secondary hospitals or large private hospitals with appropriate infrastructure.
- The extent of disease and the patient's health may lead to a process of disease control or palliation rather than a curative approach.



9. Palliative Care

The WA Palliative Care model defines the appropriate approach to symptom management and end of life care.

It is important that patients and their families receive optimal palliative care and early referral for assessment and advice is recommended.

It is also important to recognise that a major component of palliative care involves symptom relief and this may require surgical intervention, radiation therapy or chemotherapy.

http://www.healthnetworks.health.wa.gov.au/modelsofcare/docs/Palliative_Care_Model_of_Care.pdf



10. Recommendations

1. MRI for rectal cancers is currently not covered by a Medicare rebate. It is recommended that this is highlighted as an area of concern and that public patients accessing MRI in the private setting be eligible for a full rebate from the Department of Health.
2. Data collection regarding treatment and outcomes is essential to monitor the quality and safety of care. An appropriate clinical database for colorectal cancer treatment and outcomes should be available and adequately resourced.
3. Patients with rectal cancer should, wherever possible, have their surgery performed by specialist colorectal surgeons with adequate training and experience.
4. Multidisciplinary team assessment and treatment planning should be available to all patients with a diagnosis of colon or rectal cancer. It is recommended that support be given to this essential activity with particular emphasis on rural patients who may be disadvantaged due to location.



References

1. The Western Australian Cancer Registry, Cancer incidence and mortality in Western Australia, 2006.
2. Australian Cancer Network Colorectal Cancer Guidelines Review Committee (ACNCCGRC) 2005, *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer*, The Cancer Council Australia and Australian Cancer Network, Sydney.

Acknowledgements

The WA Cancer & Palliative Care Network have used, with permission, some of the content and template, used in the "*Victorian Government Cancer Initiatives – Cancer Services Framework Overview*" to produce this Model of Care for Colorectal Cancer <http://www.health.vic.gov.au/cancer/framework.htm>



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