1. Care map information
This pathway was developed based on the Cancer Council 2015 Optimal care pathway for people with Prostate Cancer

2. Resources for patients, families and carers

**Andrology Australia**
Information on male reproductive health
Phone: 1300 303 878

**Australian Cancer Survivorship Centre**
Has general and tumour-specific information, primarily focussed on the post-treatment survivorship phase
Phone: 9656 5207

**Beyond Blue**
Information on depression, anxiety and related disorders, available treatment and support services
Phone: 1300 22 4636

**Cancer Australia**
Information on cancer prevention, screening, diagnosis, treatment and supportive care for Australians affected by cancer, and their families and carers
Phone: 1800 624 973

**Cancer Council Victoria**
A confidential phone support service for people affected by cancer providing information on treatment, cancer support groups and other community resources
Phone: 13 11 20 (Monday to Friday, 8.30am – 5.30pm)

**Care Search: Palliative Care Knowledge Network**
Information for patients and carers on living with illness, practical advice on how to care, and finding services
Phone: (08) 7221 8233

**Continence Foundation of Australia**
Provides advocacy and support for those affected by bladder or bowel control issues
Phone: 1800 33 00 66

**Pathfinder – Prostate Cancer Research Register**
A national online register for participating in research into improving the health and lives of people post-prostate cancer treatment.

**Prostmate**
Provides personalised, specialist support online

**Optimal Care Pathways resources**
- Patient information
- Quick reference guide for GPs
- Optimal Care Pathway for people with prostate cancer
3. Resources for health professionals

**Andrology Australia**
Information on male reproductive health
Phone: 1300 303 878

**Australian Cancer Trials**
Information on the latest clinical trials in cancer care, including trials that are recruiting new Participants

**Cancer Australia**
Information for health professionals including guidelines, cancer guides, reports, fact sheets, DVDs, posters and pamphlets

**Cancer Council Australia**
Information on prevention, research, treatment and support provided by Australia’s peak independent cancer authority

**EviQ**
Clinical information resource providing health professionals with current evidence based, peer maintained, best practice cancer treatment protocols and information relevant to the Australian clinical environment

**National Health and Medical Research Council**
Information on clinical practice guidelines, cancer prevention and treatment

**Optimal Care pathways Resources**
- Patient information
- Quick reference guide for GPs
- Optimal Care Pathway for people with prostate cancer

4. Aboriginal & Torres Strait Islander Health

The burden of cancer is higher in the Australian Indigenous population (AIHW 2014). Survival also significantly decreases as remoteness increases, unlike the survival rates of non-Indigenous Australians. Aboriginal and Torres Strait Islander people in Australia have high rates of certain lifestyle risk factors including tobacco smoking, higher alcohol consumption, poor diet and low levels of physical activity (Cancer Australia 2013). The high prevalence of these risk factors is believed to be a significant contributing factor to the patterns of cancer incidence and mortality rates in this population group (Robotin et al. 2008).

In caring for Aboriginal and Torres Strait Islander people diagnosed with cancer, the current gap in survivorship is a significant issue. The following approaches are recommended to improve survivorship outcomes (Cancer Australia 2013b):

- Raise awareness of risk factors and deliver key cancer messages.
- Develop evidence-based information and resources for community and health professionals.
- Provide training for Aboriginal and Torres Strait Islander health workers and develop training resources.
- Increase understanding of barriers to care and support.
• Encourage and fund research.
• Improve knowledge within the community to act on cancer risk and symptoms.
• Improve the capacity of Aboriginal and Torres Strait Islander health workers to provide cancer care and support to their communities.
• Improve system responsiveness to cultural needs.
• Improve our understanding of care gaps through data monitoring and targeted priority research.

5. Risk factors

Risk factors
• Increasing age
• Family history of prostate cancer
• Certain dietary factors (diets high in animal fat, dairy products or calcium)
• Race (men of Caucasian background are more at risk than Asian men)

Genetic Factors:
• Known mutations in BRCA1 or BRCA2 genes
• Lynch syndrome

6. Diagnosis and screening

Prostate Specific Antigen (PSA) testing in asymptomatic patients
• No formal based screening programs for prostate cancer
• Men in all risk categories should be offered the opportunity to consider and discuss the benefits and harms of PSA testing before making the decision whether or not to be tested
• Digital Rectal Examination (DRE) is not recommended as a routine addition to PSA testing in primary care

Symptomatic patients:
• Urinary complications – haematuria, nocturia, dysuria, hesitancy/urgency
• Erectile dysfunction

7. Initial investigations

Initial investigations may include:
• PSA level
• Measurement of free-to-total PSA ratio

The significant of rising PSA or free-to-total PSA ratio, even within the age-adjusted range, should be recognised, as well as a PSA that is at the end of the normal range in younger men. Assessments by the general practitioner should be completed within one week.

8. Signs and symptoms

The majority of men presenting with prostate cancer have no symptoms.
Symptoms of locally or advanced disease may include irritation on urination, obstructive urinary symptoms and/or blood in the urine.

Only a small percentage of men present with metastatic disease; symptoms may include back pain, bone pain, weight loss and neurological symptoms, and/or symptoms in primary cancer.

9. Referral

The patient should be referred to a urologist who is affiliated with or has access to a multidisciplinary team (and multidisciplinary team meetings).

- Men without symptoms should see a specialist within six to 12 weeks of an abnormal result being identified
- Men with symptoms should see a specialist earlier, depending on the urgency of the symptoms (including psychological distress)

**Referral should include:**
- PSA history
- Family history
- Reason for referral

**Eligibility**
- Patients concerned about PSA testing
- Patients with an elevated PSA
- Patients diagnoses with prostate cancer
- Patients with a family history of prostate cancer

10. Referral Uro-oncology

**ALFRED HEALTH**

*Urology Clinic*

Advice: Phone the urology registrar on **9076 2000** for clinical advice
Phone **9076 2025** for referral advice or email outpatient@alfred.org.au
Fax: 9076 6938
Head of Unit: A/Prof Peter Royce
*Referral Guidelines - Urology*

**MONASH HEALTH**

*Moorabbin Hospital & Casey Hospital*

Advice: **1300 342 273**
Fax: 9594 2273
Head of Unit: Mr Scott Donnellan

**PENNINSULA HEALTH**

*Uro-oncology clinic* (alternating Monday afternoons)
Advice: For urgent queries, contact the Registrar on call via the hospital switchboard on **9874 7777**
Fax: 9784 2666
Phone: **9784 2600**
Head of Unit: Dr Zee Wan Wong
*Referral Guidelines – Uro-oncology Clinic*
11. Prostate cancer care nurse

Prostate Cancer Specialist Nurses have been funded by the Commonwealth to support people with prostate cancer. They are able to help by:

- Providing patients and family with an ongoing point of contact and support
- Assisting patients to assess services both in the hospital and in the community during and after treatment
- Providing patients with reliable information about their diagnosis and treatment plan
- Providing patients with information on dealing with the effects of treatment and how to get further help to deal with specific problems they may be having
- Helping to coordinate care
- Helping to access a support group

Referral can be made to Prostate cancer care nurses at the health services in which they are being treated if there is a Prostate Cancer Nurse. Click [here](#) for Prostate Cancer Nurse locations.

12. Diagnosis and staging

Implications of both positive and negative biopsy result should be discussed with the patient before biopsy. A prostate biopsy should not be offered in the basis of serum PSA level alone.

Diagnosis and Staging:

- DRE (prior to biopsy)
- Prostate biopsy
- With or without prostate magnetic resonance imaging (MRI)

The use of staging investigations in men with clinically localised disease should be based on their risk of metastatic spread (Gleason score, clinical stage, PSA) and provisional treatment intent. Tests may include:

- DRE assessment
- Isotope bone scans
- Computed topography (CT) scan and/or prostate MRI
- Interval reimaging (to determine the appropriate timing of androgen deprivation therapy (ADT)
13. Management planning

All newly diagnosed patients should be discussed by a multidisciplinary team (surgeons, radiation oncology, medical oncology, pathology, palliative care, nursing staff, waiting list coordinator, radiology) before beginning treatment.
GPs are invited to participate in person or by phone.
Consider enrolment in research or clinical trials where available and appropriate.

14. GP participation in MDT

GPs are invited to attend the MDT meeting to discuss their patient outcomes.
It is an opportunity to discuss the case with the lead clinician.

15. Treatment

The need for treatment is determined by the risk of progression.
If curative treatment is considered, men should be offered an opportunity for a second opinion in order to have a balanced view about the available treatment options.

Treatment options for localised or locally advanced prostate cancer may involve:
- Watchful waiting
- Active surveillance
- Surgery (radical prostatectomy)
- Radiation therapy by external beam radiotherapy (ERBT) or brachytherapy

16. Side effects

Side effects of prostatectomy may include:
- Blood loss/transfusion
- Erectile dysfunction
- Incontinence
- Penile shortening
- Venous thromboembolism
- Lymphoedema
- Infection
- Rectal/ureteric injury (rare)

Side effects of radiation may include:
- Acute cystitis/proctitis
- Long-term radiation cystitis/proctitis (uncommon)
- Incontinence (uncommon)
- Urethral stricture
- Erectile dysfunction
- Secondary malignancy
- Exacerbation of obstructive LUTS/retention
Prostate irradiation is usually given in combination with Androgen Deprivation Therapy for 6-36 months.

Side effects of Androgen Deprivation Therapy include:

- Hot flushes
- Fatigue
- Reduced libido
- Cognitive decline
- Osteo and sarcopaeia
- Gynaecomastia

References

17. Supportive care

Supportive care is an umbrella term used to refer to services, both generalist and specialist, that may be required by those affected by cancer. Supportive care in cancer refers to the following five domains:

- Physical needs
- Psychological needs
- Social needs
- Information needs
- Spiritual needs

All members of the multidisciplinary team have a role in providing supportive care. In addition, support from family, friends, support groups, volunteers and other community-based organisations make an important contribution to supportive care.

Common indicators in patients with prostate cancer that may require referral for support include:

- Changes in continence
- Altered sexual health or performance
- Poor performance status
- Breathlessness
- Pain
- Difficulty managing fatigue
- Difficulty sleeping
- Malnutrition (as identified using a validated malnutrition screening tool or presenting with weight loss)
- Distress, depression or fear
- Living alone or being socially isolated
- Having caring responsibilities for others
• Cumulative stressful life events
• Existing mental health issues
• Aboriginal or Torres Strait Islander status
• Being from a culturally and linguistically diverse background.

Depending on the needs of the patient, referral to an appropriate health professional and/or organisation should be considered including:
• A psychologist or psychiatrist
• A genetic counsellor
• Community-based support services (such as those provided by state and territory Cancer Councils)
• A dietitian

18. Care after initial treatment

Cancer survivors should be provided with a treatment summary (provided to the patient, carer and general practitioner) outlining:
• Diagnostic tests performed and results
• Tumour characteristics
• Type and date of treatment(s)
• Interventions and treatment plans from other health professionals
• Supportive care services provided

The follow up care plan (provide a copy to patient/carer and general practitioner) outlines:
• Medical follow-up required (tests, ongoing surveillance)
• Care plans for managing the late effects of treatment
• A process for rapid re-entry to medical services for suspected recurrence

19. Monitoring

Detection:
Most residual or recurrent disease will be detected by a rising PSA in asymptomatic men.

Treatment:
Where possible, refer patient to the original multidisciplinary team. Treatment will depend on the location and extent of disease, previous management and patient preferences.

20. Management of recurrent disease

Management of recurrent disease often benefit from an MDT

Salvage therapy may consist of:
• Radiation
• Salvage prostatectomy
• Enrolment in clinical trial
• Hormonal therapy
21. Side effects

The side effects of recurrent disease are those of radiotherapy if undergoing salvage external beam, those of surgery if undergoing salvage prostatectomy, and hormonal therapy if undergoing systemic treatment.

**Side effects of salvage radiotherapy**
Some patients who develop biochemical recurrence following prostatectomy may be rendered disease free with salvage radiotherapy. The side effect profile is similar to primary radiotherapy, although often better tolerated in the short-term. Longer term complications include urethral and bladder neck strictures which are often difficult to treat, and worsening of incontinence and erectile dysfunction. Salvage radiation may also complicate surgery to correct incontinence.

**Side effects of salvage prostatectomy**
Similarly, a proportion of men who develop persistent/recurrent disease following primary radiation treatment may benefit from salvage surgery. The risk of a rectal injury however is significantly higher, and this is more likely to be treated with a diversion (colostomy) rather than with a primary repair. In addition, the rates of erectile dysfunction (~90-100%) and incontinence (~50%) are considerable.

**References**

22. Metastatic disease

Half of the men who die of prostate cancer present with metastatic disease. The goals of treatment are cancer control and quality of life.

Treatment options:
**Androgen deprivation therapy/hormone therapy** is the standard treatment. **Chemotherapy** in combination with hormonal therapy may be beneficial in select patients. Systemic treatments are non curative and patients eventually develop resistance. There are a number of options available for patients with resistant disease:
- Further hormonal treatment
- Abiraterone
- Docetaxel/Cabazitaxel
- Mitoxantrone/Prednisolone
23. Palliative planning and management

Early referral to palliative care can improve quality of life and in some cases survival. Referral should be based on need, not prognosis.