UNDERSTANDING BRACHYTHERAPY FOR PROSTATE CANCER
This book is for men who have made a decision to have a specific treatment or have already received treatment for prostate cancer. It contains information about important issues to help men who need to know about brachytherapy treatment and prostate cancer.

PCFA provides a range of resources to support men, partners and their families with prostate cancer. For further information, please see www.pcfa.org.au.

NOTE TO READER
Because what is known about prostate cancer and its treatment is constantly changing and being updated, your treating health professionals will give you information that is specific to your unique needs and situation.
If you would like further information please contact PCFA (telephone: +61 2 9438 7000 or freecall 1800 22 00 99 email: enquiries@pcfa.org.au).

DISCLAIMER
PCFA develops materials based on the best available evidence and advice from recognised experts; however, it cannot guarantee and assumes no legal responsibility for the currency or completeness of the information.

PERIODIC UPDATES
It is planned that PCFA will review this booklet after a period of, but not exceeding, four years.

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Welcome. We hope you find the following content informative and clear.
Introduction

This booklet is for men who have made a decision to have brachytherapy treatment or have already received brachytherapy treatment for prostate cancer. It is also designed for men who are in the process of deciding on their treatment option. It could be helpful for significant people in your life, such as your partner, family and friends, to read this booklet.

Your cancer journey
After being diagnosed with prostate cancer, it’s common for you to see a number of health professionals with different expertise who work together as a multidisciplinary team (also known as a healthcare team). Best practice treatment and supportive care for people with cancer involves a multidisciplinary team to which each team member brings different skills that are important in managing care and in making decisions around your individual needs. The team includes health professionals who are involved in diagnosing your cancer, treating your cancer, managing symptoms and side effects, and assisting you with your feelings or concerns during your cancer experience.

The cancer journey is your personal experience of cancer. It’s not the same for everybody, even with the same type of cancer. Depending on your stage of prostate cancer and other underlying conditions, your experience may be quite different to someone else’s.

As the diagram ‘Your cancer journey’ shows, it can be useful to think of the journey in stages that may include detection, diagnosis, treatment, follow-up care and survivorship. For some, it may include end of life care. Take each stage as it comes so you can break down what feels like an overwhelming situation into smaller, more manageable steps.

For some men, the impact of treatment may be minimal or quickly resolved. For others, this impact can be more difficult, requiring further support and help. The aim of this booklet is to provide you with information that you can then use as a guide to further discussions with your doctor and healthcare team about your situation. Being informed enables you to participate in decisions about your care and leads to improved experiences and better care.
What is the prostate?

The prostate is a small gland located below the bladder and in front of the rectum in men. It surrounds the urethra, the passage in the penis through which urine and semen pass.

The prostate gland is part of the reproductive system (see diagram). It produces most of the fluid that makes up semen, which enriches and protects sperm. The prostate needs the male hormone testosterone to grow and develop. Testosterone is made by the testicles.

The prostate is often described as the size of a walnut and it is normal for it to grow as men age. Sometimes this can cause problems, such as difficulty with urinating. It is important to remember that these problems may not be symptoms of cancer.

What is prostate cancer?

Prostate cancer occurs when abnormal cells develop in the prostate. These cells have the potential to continue to multiply, and possibly spread beyond the prostate.
What is brachytherapy – an overview?

Brachytherapy is a type of radiation therapy (radiotherapy) in which a radioactive source is placed directly into or next to an organ or tissue with a cancer in it. In the case of prostate cancer, one of two main types of brachytherapy may be an option – either low dose rate (LDR) or a high dose rate (HDR). ‘Dose rate’ refers to the speed at which the dose is delivered, not the actual dose itself. Brachytherapy may not be available in all hospitals and is not suitable for all prostate cancers.

LDR brachytherapy or ‘seed’ implant involves the insertion of permanent radioactive sources directly into the prostate. These sources or ‘seeds’ give off a localised radiation to the entire prostate with the aim of destroying the cancer cells. The radiation is limited to the prostate and only a few millimetres around it. LDR brachytherapy is generally a treatment for men with prostate cancer which is completely contained within the prostate gland. Placement of ‘seeds’ requires a procedure under anaesthetic that typically takes an hour or two. You may be able to have the treatment as a ‘day-only patient’ or be booked for an overnight stay.

HDR brachytherapy also involves radioactive material being placed directly into the prostate but, unlike LDR seeds, the placement of the material is temporary and for shorter periods – usually for a day or two at a time. The procedure takes place at a hospital but may require a longer stay than LDR brachytherapy. It is often given in conjunction with external beam radiation therapy (EBRT) for locally advanced disease.

MORE INFORMATION
Brachytherapy can cause side effects such as stinging and frequent and/or difficult urination. There is no reason not to have sex soon after brachytherapy but you may not feel like it for the first few weeks. You may be advised to take certain precautions initially like wearing a condom when having sexual intercourse.
Who is suitable for brachytherapy?

The type of brachytherapy you may be offered mainly depends on the stage of your prostate cancer as well as other features such as the amount of cancer, the Gleason score and the PSA. It may also depend on a man’s suitability for an anaesthetic, the size and shape of the prostate and the degree of any urinary symptoms currently experienced. Further details are given below under the specific types of brachytherapy.

Low dose rate brachytherapy is generally a treatment for men with localised disease. When the cancer is found only in the prostate gland, this is known as localised prostate cancer or early prostate cancer.

LOCALLY ADVANCED PROSTATE CANCER

High dose rate brachytherapy is generally a treatment for men with locally advanced disease and/or when the cancer has higher Gleason scores and/or volume. Locally advanced prostate cancer is when the cancer has spread to the area just outside the prostate and may include seminal vesicles (the glands that produce semen) or other surrounding organs such as the bladder or rectum.

For some men, neither type of brachytherapy is suitable. Often there are effective alternate options for treatment that may be equally suitable for your situation. You are encouraged to discuss your own circumstances with your treating doctor.

This booklet discusses both types of brachytherapy. It is recommended you read the section that relates to the type of brachytherapy you are receiving as the treatments differ in their delivery.
Low dose rate (LDR) brachytherapy (seed implants)

WHO CAN HAVE LOW DOSE RATE BRACHYTHERAPY?
LDR brachytherapy is generally a treatment option for men with localised prostate cancer. It is used to treat localised prostate cancer with the intent of curing the cancer. It is generally used in treating cancer in men who meet the following criteria:
- Disease stage – localised prostate cancer
- Gleason score equal to or less than 7
- Initial PSA level lower than 10ng/ml
- Less than 50% of biopsy cores involved with cancer
- A prostate volume of less than 50cm\(^3\)
- Minimal urinary symptoms
- No previous prostate surgery.

WHAT IS LOW DOSE RATE BRACHYTHERAPY?
This treatment is given by implanting permanent radioactive sources or ‘seeds’ directly into the prostate. The seeds give off concentrated amounts of radiation to the prostate with the aim of killing the cancer cells. Because the radiation is limited to the prostate and only a few millimetres around it, the amount of normal tissue affected outside the prostate is reduced. The radiation is emitted from the ‘seeds’ over the next few months. Within one year, they will have released around 98% of the radiation.

ADVANTAGES AND DISADVANTAGES OF LOW DOSE RATE BRACHYTHERAPY
When compared to other treatments for localised prostate cancer, low dose rate brachytherapy offers the following advantages and disadvantages:

**Advantages**
- Usually only requires one night in hospital
- Less invasive procedure than prostatectomy
- Repeated treatments not required
- Lesser risk of long term effects to normal tissues (rectum, bladder, urethra)
- Probably better preservation of erectile function

**Disadvantages**
- Not available in all centres
- Urinary side effects may occur which might last over several weeks or months
- Anaesthetic and surgical procedure required
- You will have minor temporary changes to lifestyle as a result of radioactive implant
- You may have to pay for this treatment

Listed below are some questions you may want to ask your radiation oncologist or members of your healthcare team about prostate cancer brachytherapy.
- What does brachytherapy involve?
- What are the benefits and how likely are they?
- What are the possible side effects and how likely are they to occur?
- How will brachytherapy affect my quality of life?
- How will brachytherapy affect my sexual function or sex life?
- Will brachytherapy make me incontinent?
- What are the costs involved with brachytherapy?
- How may brachytherapy affect other health conditions I may have?
- If I want children, what are my options? Is there anything I need to do before treatment?
- What are my options if I don’t have brachytherapy?

Talk to a member of your healthcare team (e.g. social worker) about what financial and practical support services are available. Talk to your local Medicare office about how the ‘Pharmaceutical Benefits Scheme Safety Net’ and ‘Medicare Safety Net’ may affect medications costs and medical bills (www.humanservices.gov.au/customer/services/medicare/pbs-safety-net and www.humanservices.gov.au/customer/services/medicare/medicare-safety-net).
Low dose rate (LDR) brachytherapy (seed implants)

YOUR TREATMENT
This procedure involves the insertion of the radioactive brachytherapy seeds. Having LDR brachytherapy will require a minor surgical procedure that will take one or two hours. Some men may be required to stay in hospital overnight. Whilst this is a relatively short procedure, understanding the elements involved can help you prepare and better recover.

The following pages contain useful information on what to expect during each step of your journey and provide you with information that you can then use as a guide to further discussions with your doctor and healthcare team about your situation.

PLANNING YOUR TREATMENT
You will be required to attend the radiation therapy centre for treatment planning prior to your admission to hospital. The radiation oncologist, radiation therapist and medical physicist all may be a part of this procedure.

— You will have a procedure called a “volume study” to assess the size and shape of your prostate. This helps assess the size and position of the gland as part of the process of determining the number of seeds required and where they will be positioned. At this procedure it will be confirmed if this treatment option is suitable for you.

This may be done under a brief general or spinal anaesthetic (which numbs the area from the waist down for the period of the procedure) or sedation. It involves taking ultrasound pictures with a probe in the rectum and takes around 20 minutes.

— You may be given medication, a special diet or an enema to clear your bowel prior to this procedure.
— You may be given some oral antibiotics.
— You should be able to go home after this procedure.

Depending on the particular hospital’s procedures, some or all of the steps shown in the following section titled ‘Before admission to hospital’ may apply for the volume study as well as for the actual brachytherapy implant procedure.

STEPS IN THE LDR BRACHYTHERAPY IMPLANT PROCEDURE
(A) Before admission to hospital
Your healthcare team and treating hospital will inform you of important details regarding your hospital stay.

— You may be required to attend a pre-admission clinic
— You may receive a phone call for screening of your health history
— You may be required to complete your health history online
— You may be admitted the night prior, or the day of your procedure
— Admission to hospital date and time will be given
— You will be told what personal belongings to bring with you

Your healthcare team will advise you on:

— how to prepare your lower bowel (rectum) for the procedure including diet and possibly suppositories
— fasting time (when to stop eating and drinking before your procedure)
— medication, x-rays, scans that you are required to bring with you
— medication you need to stop before the procedure, e.g. anti-coagulants, anti-inflammatory, herbal or complementary supplements
— the appointment time with your anaesthetist either before your hospital stay or on the day of your procedure.

(B) Admission to hospital
You may be admitted directly to a hospital ward or to a pre-surgery area. Following your preparation, you will be taken to the operating theatre for the implant procedure. This operating theatre may be within the radiation therapy centre or in another part of the hospital.

The preparation for your procedure may include the following:

— hospital admission paper work to be completed with nursing staff
— a nurse clipping or shaving the hair from your genital area
— anti-embolic stockings to assist with blood circulation and help prevent the formation of blood clots to your legs
— showering and changing into a surgical gown that is to be worn for your procedure
— medication to assist in relaxing you, if prescribed by your anaesthetist.
Low dose rate (LDR) brachytherapy (seed implants)

(C) The implant procedure
You will be given either a general anaesthetic or spinal anaesthesia. The radiation oncologist or urologist will insert an ultrasound probe into the rectum and the image of your prostate can then be viewed on a screen. They will then place approximately 60-100 small radioactive seeds into the prostate through hollow catheters guided by a template placed over the area between your scrotum and your anus (the perineum). This is shown in the diagram below.

D) After your procedure
— You will remain in the theatre recovery area for a short period of time before being transferred to the ward.
— You may have an ice pack placed between your legs to help reduce swelling to the implant area.
— You will be given some pain killers after the procedure though the pain usually settles quickly.
— You may have a catheter in place to drain urine and this may be removed a few hours after the procedure
— You will be given antibiotics to prevent infection.
— You may be given stool softeners to avoid constipation.
— You can usually resume eating and drinking once you are awake.
— Advise your healthcare team if you are experiencing pain, and they can help manage this.

(E) Preparing to go home
There are a variety of ways that you can prepare yourself for managing after you are discharged from hospital.
— Ask how long you are going to be in hospital. This will vary based on your individual situation and your healthcare team. They will guide you with what to expect.
— Ensure that you have arranged transport to and from the hospital as you will be unable to drive for a period of time following your procedure. If you are having a day only procedure you will need to have someone drive you home that day. Ask your healthcare team about when you can expect to return to driving.
— Consider support or assistance you may need when you first go home from hospital. You may wish to organise meals or house cleaning. For example, stock up on pre-cooked or frozen meals to cover a day or so. The healthcare team social worker will be able to advise on arranging support including costs.
— You may need time off work. Discuss with your radiation oncologist or urologist when you can expect to return to work.

(F) Radiation aftercare
It is normal for you to be concerned about radiation safety – but it is important to remember that whilst the seeds are radioactive, you are not. Most of the radiation is absorbed by the prostate. Normal social contact will not put you or anyone around you at risk. However, for the first couple of months you should, as a precaution, avoid having small children on your lap for continual periods of time, as well as prolonged physical contact with pregnant women. Your healthcare team will give you specific instructions regarding this issue.
Low dose rate (LDR) brachytherapy (seed implants)

What to do if you “pass” any seeds
— It is rare to pass a seed when you empty your bladder. If you do see a seed in the toilet bowl, flush until it disappears.
— If you find a seed in your clothing, use a pair of tweezers to throw it in the toilet bowl and flush until it disappears.
— Sometimes your healthcare team will give you a sieve through which to urinate for the first few days and/or a lead ‘pouch’ that you can place a seed in using tweezers if you do notice one in your clothes. Dispose of this ‘pouch’ according to the instructions your treatment centre has given you.

(G) Sexual activity
There is no reason not to have sex soon after brachytherapy but you may not feel like it for the first few weeks. You may have some soreness around where the implant catheters were inserted or some urine symptoms that make sex a bit uncomfortable. A condom is recommended for use for the first two months after implantation. If your partner is pregnant, use condoms for the whole pregnancy as a precaution.

Be aware that your semen may be discoloured for the first few weeks after treatment. The first few orgasms may be painful; this is ‘normal’ and will resolve with continued intercourse.

If you plan to have children following treatment, discuss this with your healthcare team. There may be options available to you such as storage of semen in a sperm bank.
High dose rate (HDR) brachytherapy

Having high dose rate brachytherapy treatment will require a minor surgical procedure that may take a few hours. This procedure is to implant the needles or catheters (tubes) into the prostate through which the treatment is later given in the radiation therapy department. Whilst this is a relatively short procedure, understanding the elements involved can help you prepare and better recover.

WHO CAN HAVE HIGH DOSE RATE (HDR) BRACHYTHERAPY?

High dose rate brachytherapy is generally a treatment option for men with intermediate risk or locally advanced prostate cancer. It is used to treat these prostate cancers with the intention of curing it. It is generally used to treat cancer in men who meet the following criteria:

— Men with locally advanced prostate cancer – disease stage T3
— Lower stage cancers with high Gleason scores and/or high tumour volume.

WHAT IS HIGH DOSE RATE BRACHYTHERAPY?

HDR brachytherapy uses radioactive sources to kill the cancer cells. It provides a very precise high dose treatment given over a shorter period of time than when a course of external beam radiation therapy (EBRT) is used alone. The term relates to the speed of delivery of the dose, not the actual dose itself. It also reduces exposure of surrounding tissues to radiation. HDR treatment involves having a procedure to place implant catheters into the prostate gland through a template which is placed over the area between the scrotum and the rectum (the perineum). Radioactive sources are passed through these implant catheters to deliver the treatment directly into the prostate gland. Unlike low dose rate brachytherapy, the placement of the material is temporary and for shorter periods. The procedure takes place in hospital and will nearly always require a hospital stay.

HDR brachytherapy is often used in conjunction with other treatments such as hormone (androgen deprivation) therapy and external beam radiation therapy (EBRT). It is less commonly given alone. Your healthcare team will discuss with you what your particular treatment plan will involve.

ADVANTAGES AND DISADVANTAGES OF HIGH DOSE RATE BRACHYTHERAPY

When compared to other treatments for locally advanced prostate cancer, high dose rate brachytherapy offers the following advantages and disadvantages:

**Advantages**

— Shorter course of treatment than if external beam radiation therapy (EBRT) is used alone
— Usually minimal side effects are experienced around the time of treatment
— Minimal post procedure recovery time required

**Disadvantages**

— A short hospital stay is usually required
— Not available in all centres
— Having to lie flat while the implant catheters are in place, sometimes overnight, which can be uncomfortable. A spinal anaesthetic is given to minimize movement and discomfort.
— Side effects affecting bladder, bowel and erectile function can occur in the longer term
— Possible cost and travel

Listed below are some questions you may want to ask your radiation oncologist or members of your healthcare team about prostate cancer brachytherapy.

— What does brachytherapy involve?
— What are the benefits and how likely are they?
— What are the possible side effects and how likely are they to occur?
— How will brachytherapy affect my quality of life?
— How will brachytherapy affect my sexual function or sex life?
— What are the costs involved with brachytherapy?
— How may brachytherapy affect other health conditions I may have?
— If I want children, what are my options? Is there anything I need to do before treatment?
— What are my options if I don’t have brachytherapy?

Talk to a member of your healthcare team (e.g. social worker) about what financial and practical support services are available. Talk to your local Medicare office about how the ‘Pharmaceutical Benefits Scheme Safety Net’ and ‘Medicare Safety Net’ may affect medications costs and medical bills.
High dose rate (HDR) brachytherapy

YOUR TREATMENT
Expect to be in hospital for one to two nights. This will vary based on your individual situation and the length of your treatment. Your healthcare team will guide you with what to expect.

The following pages contain useful information on what to expect during each step of your journey. They provide you with information you can then use as a guide to further discussions with your doctor and healthcare team.

HORMONE THERAPY USED WITH HDR BRACHYTHERAPY
Some men are required to have hormone treatment prior to undergoing their HDR brachytherapy procedure. The hormone therapy will shrink the prostate gland and this will make it easier for the radiation therapy to destroy the cancer cells. In this case, hormone treatment will be prescribed for a fixed time only. This is usually an injection.

EXTERNAL BEAM RADIATION THERAPY USED WITH HDR BRACHYTHERAPY
Most men undergo a course of external beam radiation therapy (EBRT) prior to or after undergoing their brachytherapy procedure. EBRT is given on a daily basis as an outpatient for 4-5 weeks (Monday – Friday).

PLANNING YOUR TREATMENT
You will be required to attend the radiation therapy centre for treatment planning prior to your treatment commencing and admission to hospital.

— You may be required to attend a pre-admission clinic.
— You may receive a phone call for screening of your health history.
— You may be required to complete your health history online.
— You may be admitted the night prior to, or the day of, your procedure.
— Your admission to hospital date and time will be given.
— You will be told what personal belongings to bring with you.

You healthcare team will advise you on:
— fasting time (when to stop eating and drinking before your procedure)
— medication, x-rays, scans that you are required to bring with you
— medication you need to stop before the procedure e.g. anti-coagulants, anti-inflammatories, herbal or complementary supplements
— the medication or an enema to clear your bowel prior to this procedure
— appointment time with your anaesthetist either before your hospital stay or on the day of your procedure.

(B) Admission to hospital
You may be admitted directly to a hospital ward or to a pre-surgery area. Following your preparation, you will be taken to the operating theatre for your procedure.

The preparation for your procedure may include the following:
— hospital admission paperwork to be completed with nursing staff
— showering and changing into a surgical gown that is to be worn for your procedure
— clipping or shaving the hair from your genital area by a nurse
— fitting anti-embolic stockings that assist with blood circulation and help prevent the formation of blood clots to your legs
— medication to assist you in relaxing, if prescribed by your anaesthetist.

Your physical wellbeing
There are a variety of ways that you can prepare yourself before your procedure.

— Consult with your healthcare team about any health issues that should be managed prior to your treatment. Further tests or examinations may be needed to assess your health before treatment.
— Visit your hospital’s prostate cancer nurse, urology nurse or continence advisor for further information, advice and support.
— There are certain medications that you may need to stop taking temporarily before the procedure, for example anti-coagulants and anti-inflammatories. Discuss this with your healthcare team.
UNDERSTANDING BRACHYTHERAPY FOR PROSTATE CANCER

High dose rate (HDR) brachytherapy

— Quit smoking. Smoking can reduce the amount of oxygen being delivered to the tissues of your body. Oxygen is important to the healing process. If you quit smoking, you have less chance of developing chest and circulatory problems after your procedure. There are benefits in stopping smoking even 24 hours before your procedure. If you need help, talk with your GP or a member of your healthcare team.

— Infertility can occur, so if you wish to have children in the future, you will need to discuss alternatives such as having some of your sperm stored before treatment starts (this is called sperm banking).

(C) The implant procedure
You will be given a local spinal anaesthesia (epidural) which will numb the area from the waist down for the duration of your treatment. If you have back problems that don’t allow this to be done, you will have a drip inserted in your arm that will trickle painkillers in for the duration of the process. In this case you control the rate of painkiller—a process called patient controlled analgesia or PCA. An ultrasound probe is inserted into the rectum and the image of your prostate can then be viewed on a screen. You will have a urinary catheter inserted at this time. A template is placed over the area between your scrotum and your anus. The implant catheters through which the radioactive sources are placed to give the radiation are inserted through this template. The number of implant catheters will vary, but are usually between 15 and 25 in total. The template remains in place along with the implant catheters until the treatment is completed. This is shown in the diagram below.

HDR BRACHYTHERAPY

The implant catheters are secured in place and you will be required to lay flat for the time they remain in place, which may be overnight. Keeping flat and still is important as movement may cause the implant catheters to move inside your prostate and this could affect your treatment. If they are bent then the procedure will have to be abandoned. Should this occur alternative options will be discussed by your healthcare team. Once the implant catheters are in place, an x-ray and CT scan are taken to help further planning for your treatment. In some centres this procedure is repeated to deliver each short high dose of radiation to the prostate over 2 separate sessions.

(D) After your implant catheter insertion procedure
— You will remain in the theatre recovery area for a short period of time after the procedure and then be transferred to the ward.
— While the implant catheters are in place you will be lying flat on your back.
— You will have a catheter to drain urine and this is usually left in place overnight.
— You will be given antibiotics to prevent infection.
— You can usually resume eating and drinking once you are awake, though you are usually restricted to a “clear fluid only” diet for the course of your treatment.
— You will have an intravenous infusion (IV) in place to give you fluids.
— Speak to the healthcare team if you experience any pain or discomfort during your treatment stay. The epidural infusion (or a PCA device) will remain in place for the duration of your treatment.

HAVING YOUR RADIATION THERAPY TREATMENT
Your treatment will be given in the radiation therapy department. The implant catheters are connected onto the machine that delivers the radiation therapy treatment. The treatment itself only lasts a few minutes. This process may be repeated two to four times whilst you have the treatment implant catheters in place. Your healthcare team will discuss this with you prior to your treatment commencing. If you are having a number of treatments over a number of days, you will be returned to your ward area between treatments.

AFTER YOUR TREATMENT
Once you have completed your whole course of treatment, the implant catheters, your urinary catheter, epidural and IV infusion will be removed. You will then be able to resume normal activity once the anaesthetic wears off and you regain normal movement in your legs.
You should also be able to pass urine in the usual manner once the spinal anaesthetic wears off. It is important to tell your
**High dose rate (HDR) brachytherapy**

healthcare team immediately if you are unable to pass urine if you have the urge.

You may experience discomfort around the site where the implant catheters were placed. Let your healthcare team know about any pain or discomfort and they can arrange medication to help.

Once you have resumed a normal level of functioning, your healthcare team will talk to you about going home from hospital.

**PREPARING TO GO HOME**

There are a variety of ways that you can prepare yourself for managing after you are discharged from hospital.

— Ask how long you are going to be in hospital. This will vary based on your individual situation and your healthcare team. They will guide you with what to expect.

— Ensure that you have arranged transport to and from the hospital as you will be unable to drive for a period of time following your procedure. Ask your healthcare team when you can expect to return to driving.

— Consider support or assistance you may need when you first go home from hospital. You may wish to organise meals or house cleaning. For example, stock up on pre-cooked or frozen meals to cover a day or so. The healthcare team social worker will be able to advise on arranging support including costs.

You may need time off work. Discuss with your radiation oncologist or urologist when you can expect to return to work.

**MANAGING AT HOME**

Your treating hospital and healthcare team will provide you with specific guidelines to follow when you are discharged from hospital until you visit your healthcare team for a follow up appointment.

What to expect:

**Activity levels:**

— A gradual return to normal activity is recommended

— Short periods of activity such as gentle walking each day.

**Eating and drinking:**

— Continue with a healthy, nutritious diet.

**Pain relief:**

— Follow the instructions from your hospital healthcare team and ask questions about your pain relief medication if you are unsure.

— The amount of pain experienced afterwards is usually not significant. However you may need mild painkillers for a day or two. As you recover you will find you can reduce your intake of pain relief tablets. It is important however to have an adequate amount of pain relief to allow you to perform normal daily activities comfortably such as showering, dressing and taking gentle walks.

Care of your wound (site where the implant catheters were placed):

— Nursing staff will explain how to care for your wound.

— Expect to have swelling and bruising of your scrotal area, which will resolve in the weeks following your procedure. Wearing supportive underwear can make things more comfortable.

— Look at your wound or the area around your wound dressing for signs of an infection. You can use a mirror to help you with this. Contact your healthcare team immediately if you have any signs of wound infection. Signs of a wound infection can include:
  o redness to the surrounding skin
  o the area may be hot to touch
  o swelling of the area
  o the wound may have a smelly odour
  o leakage such as pus or fluid from the wound.
Side effects from LDR and HDR brachytherapy and how to manage these

Side effects from brachytherapy can start immediately or later after treatment.

(A) Side effects immediately after treatment
These effects are caused by the implant catheters used to place the seeds for LDR or through which the HDR treatment was delivered.

Urinary symptoms
Stinging, burning, poor stream, urgency in passing urine, frequency of urination or needing to pass urine more at night are very common after brachytherapy over a few months. These symptoms occur as the prostate swells and the urethra gets irritated. Talk to your healthcare team about how to manage these. Tips include:
— drink plenty of water (2 – 3 litres per day)
— avoid caffeinated drinks
— medication that might reduce pressure on the urethra or reduce inflammation
— medication that reduces the acidity in the urine
— watch for infection – temperature, discharge or pain.

Mild soreness, bruising and swelling
You should speak to your treating team regarding suitable pain medication to help manage any discomfort you are experiencing. An ice pack used soon after treatment can help.

Blood in the urine
Slight traces of blood in the urine can be noticed for a few days after the procedure. If you notice heavy bleeding, you pass blood clots in your urine or experience a fever, you should contact your healthcare team for further advice without delay.

Inability to pass urine following removal of the urinary catheter
If you are unable to pass urine following your brachytherapy treatment, you should seek urgent medical attention through your emergency service provider as this requires immediate treatment. Discuss this situation prior to your discharge from hospital so that you know who to call as first contact.

(B) Later side effects from treatment
Constipation
Constipation can be a problem for up to four weeks after the procedure, mostly from the drugs given for anaesthesia and pain relief. It may also be partly due to the radiation which may cause inflammation to the prostate gland, which in turn presses on the bowel. Preventing constipation and achieving regular soft bowel motions can be achieved with the following tips:
— eat a well-balanced diet including an adequate amount of fruit, vegetables and high fibre foods
— drink at least two litres of fluid per day, mainly water
— maintain regular activity as per your hospital healthcare team advice
— you may be prescribed medications (laxatives, stool softeners) by your healthcare team to maintain regular soft bowel actions in the short term following your procedure.

Other commonly reported side effects following prostate cancer brachytherapy include:
— Erectile dysfunction – your healthcare team can advise on this. More information is available in the booklet “Understanding sexual issues following prostate cancer treatment” available from PCFA (1800 220 099).
— Bowel symptoms – less common with LDR brachytherapy. More information is available in the booklet “Understanding bowel disturbance following prostate cancer treatment” available from PCFA (1800 220 099).

Speak to your healthcare team about managing these side effects. Further investigations and treatment may be required.

PREVENTING COMPLICATIONS AFTER YOUR PROCEDURE
DEEP VEIN THROMBOSIS (DVT) AND PULMONARY EMBOLISM (PE)
Following the procedure, your risk of having a blood clot in your leg or lung is much higher than usual. A blood clot that forms in a deep vein of the leg is called a deep vein thrombosis (DVT). A clot can partly or totally block blood flow. Most blood clots form in the calf muscle of your leg. Time spent lying in bed following a procedure can prevent healthy blood flow and can increase your risk of developing blood clots in your legs.

A clot in your lung is called a pulmonary embolism (PE) and is generally the result of a clot that has formed in the leg (DVT). A clot can break away and travel through your blood stream to your lungs.

Preventive strategies for DVT or PE will be discussed with you by your healthcare team, taking into account your individual needs. Some strategies include:
— Your surgeon may prescribe medication called an anti-coagulant (prevents clot formation), which is generally given as an injection following your procedure.
— You will be given anti-embolic stockings to wear just before and after the procedure.
— The leg pumps applied in theatre will help reduce this risk.

DVT AND PE – SIGNS AND SYMPTOMS
Speak to your radiation oncologist or surgeon or a member of your healthcare team about the risks associated with DVT or PE.

DVT signs and symptoms: occur in the affected leg if a clot obstructs or blocks the blood flow. You may experience redness, heat, pain or swelling in your leg.

PE signs and symptoms: You may experience difficulty breathing or feeling short of breath, faintness, coughing up blood, pain in your lungs or chest and a feeling of anxiety.
Side effects from LDR and HDR brachytherapy and how to manage these

Inform your radiation oncologist or surgeon or a member of your healthcare team immediately if you experience any of these signs or symptoms. They can occur at any stage following your procedure.

BRACHYTHERAPY MEDICAL EQUIPMENT – WHAT TO EXPECT
For some men, the amount of medical equipment they have attached following their procedure can be quite alarming. Having information and understanding what to expect following the procedure can help you feel less anxious and more in control.

The following is a list of equipment that may be in place following the procedure. Not all of this will be relevant to you and your individual situation. This is a guide to what you may expect.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Reason</th>
<th>Length of time required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen (O2) (Mask over your mouth and nose or plastic prongs into your nose)</td>
<td>— To assist in breathing following the effects of the anaesthetic and pain medication.</td>
<td>— As prescribed by your healthcare team.</td>
</tr>
<tr>
<td></td>
<td>— As prescribed by your healthcare team.</td>
<td>— Time required is variable.</td>
</tr>
<tr>
<td></td>
<td>— Fluid replacement.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Medications for pain relief, nausea, antibiotics or a blood transfusion can be given through this line.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Until you are drinking normally.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Until your vital signs (blood pressure, pulse, respirations) are stable.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— As prescribed by your healthcare team.</td>
<td></td>
</tr>
<tr>
<td>Intravenous (IV) line (a needle into a vein in your arm, with plastic tubing attached)</td>
<td>— Fluid replacement.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Medications for pain relief, nausea, antibiotics or a blood transfusion can be given through this line.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Until you are drinking normally.</td>
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<td></td>
<td>— Until your vital signs (blood pressure, pulse, respirations) are stable.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— As prescribed by your healthcare team.</td>
<td></td>
</tr>
<tr>
<td>Epidural infusion (Pain relief)</td>
<td>— For pain relief and to ease discomfort following the procedure, which will help to reduce your movement to prevent the implant catheters from moving in your prostate.</td>
<td>— For the duration of your treatment.</td>
</tr>
<tr>
<td>Patient controlled analgesia (PCA)</td>
<td>— For pain relief</td>
<td>— For the duration of your treatment</td>
</tr>
<tr>
<td>Urinary catheter (thin tube travels from your bladder out through your penis)</td>
<td>— Drains urine from your bladder into a collection bag</td>
<td>— For the duration of your treatment</td>
</tr>
</tbody>
</table>
Side effects from LDR and HDR brachytherapy and how to manage these

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Reason</th>
<th>Length of time required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-embolic stockings</td>
<td>— Assist in promoting blood circulation by graduated pressure on the lower legs&lt;br&gt;— Reduce the formation of blood clots in the deep veins of the legs whilst you are mobile</td>
<td>— Length of your hospital stay&lt;br&gt;— At home until you are fully recovered&lt;br&gt;— As prescribed by your urologist</td>
</tr>
<tr>
<td>Below knee – Above knee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sequential leg pumps</td>
<td>— Assist in promoting blood circulation by a series of pulsating compressions to the lower legs&lt;br&gt;— Reduce the formation of blood clots in the deep veins of the legs whilst you are immobile.</td>
<td>— For the duration of your treatment</td>
</tr>
</tbody>
</table>
Monitoring your health after either type of brachytherapy treatment

Your PSA level is a good indicator of how effective the treatment has been. In general, the PSA level should fall to a low level after your treatment is completed, but it can take up to 18 months or even longer for the PSA to reach its lowest level. You might even experience a PSA ‘bounce’ or ‘spike’, when PSA levels go up slightly for a short time during the first year of treatment. The level will drop again and the PSA bounce doesn’t mean the cancer has come back.

Your healthcare team will also ask you about any side effects you are experiencing and will be able to refer you to other specialists to investigate and help you manage these side effects if necessary. Tell your doctor or members of your treating team if any symptoms are getting worse, or if you have developed any new symptoms.

Your PSA level is a good indicator of how effective the treatment has been.

Your emotional wellbeing

You may find yourself dealing with a range of feelings and emotions following your diagnosis and preparation for your procedure. Feelings such as anger, fear and frustration are common and occur at any time. These feelings are normal reactions to what is a highly stressful situation.

We often have well established ways of coping with difficult situations, like talking through problems with a partner or distracting ourselves from unpleasant thoughts. Sometimes these strategies can help you cope with your cancer diagnosis, but sometimes you might need additional support. Talk to your GP or a member of your healthcare team if you feel you are not coping. They can provide support and information and refer you to other healthcare team members where required.

It is important to remember you are not alone; there are established prostate cancer support groups all around Australia. Support and advice can be received from men who have been in the same position as you; this can provide a powerful method in coping.

Further information about maintaining your wellbeing can be found in the following resource:

Maintaining Wellbeing with Prostate Cancer: This booklet aims to provide information about important issues to help men maintain wellbeing when they’re diagnosed or are being treated with prostate cancer.

This resource can be obtained from PCFA. If you would like further information please contact PCFA.

Tel: +61 (02) 9438 7000 or freecall 1800 220 099
email: enquiries@pcfa.org.au
www.pcfa.org.au

Sources of additional support are also listed in this booklet.
Your healthcare team

Our GP can help coordinate your care and provide you and your family with support and information to help you make informed choices about treatment. Your GP can help you and those close to you manage your physical and emotional health needs throughout the cancer journey, including help with managing your urinary problems.

Generally, there is a member of the healthcare team who will be your main contact person. This person might change during your cancer journey. If you’re unsure who this person is, ask one of the health professionals you’re seeing. Your contact person can talk with other health professionals on your behalf and can make sure all your health care needs are met.

The benefits to you in having a healthcare team include:
- improved communication, coordination and decision making between health professionals about your care
- improved treatment planning because all treatment types and options are considered by a range of health professionals
- improved coordination of services
- improved delivery of services
- improved quality of life.

When working with your healthcare team, you may see the following health professionals:

- **General Practitioner (GP):** Your first port of call who can provide referrals to other specialists and who will monitor your health
- **Urologist**: A specialist in treating diseases of the urinary tract system and male reproductive organs
- **Radiation Oncologist**: A specialist in the treatment of cancer using radiation therapy
- **Medical Oncologist**: A specialist doctor who uses different drugs to treat cancer (such as chemotherapy)
- **Endocrinologist**: A doctor who specialises in hormones, body chemistry and bone density

*These health professionals also use hormone therapy, also known as androgen deprivation therapy (ADT), as part of their treatment.

- **Pathologist:** Conducts tests to assess the stage and aggressiveness of cancer
- **Radiologist:** A specialist doctor who examines scans, X-rays and other imaging results
- **Nurse (also known as Urology or Prostate Care Nurse):** Provides treatment, support and assistance through all treatment stages
- **Cancer Nurse Coordinator:** Guides you, your family and the person you are caring for through cancer treatments and liaises with other care providers

- **Continence Nurse:** Helps you manage any problems related to continence (urinary or bowel) care after treatment
- **Pharmacist:** Dispenses medications and offers medication advice
- **Dietitian:** Recommends the best eating plan while in treatment and recovery
- **Physiotherapist:** Specialises in movement and function of the body, advises on resuming normal physical activities
- **Exercise Physiologist:** Specialises in the benefits of exercises to help people get fitter for overall health or help people with a medical condition through exercise
- **Occupational Therapist:** Helps with the physical side of daily life by providing rehabilitation exercises
- **Social Worker:** Advises on support, practical and legal matters, and provides strategies to cope with emotional, social and spiritual challenges
- **Psychologist, Psychiatrist or Counsellor:** Provides strategies with decision making, problem solving, and dealing with psychosocial issues; including providing emotional and practical support, and managing anxiety and depression
- **Palliative Care Specialist:** Expert in pain and symptom control who works closely with the treatment team
- **Sex Therapist:** Helps with sexuality issues by identifying the level of sexual functioning available, and enhancing sexual and relationship functioning
- **Fertility Counsellor:** Specialises in helping people with fertility concerns and issues, and can advise on fertility preservation options before starting treatments.
Where to go to get support and assistance

Listed below are some of the leading organisations and services that can provide accurate information and support about prostate cancer.

— Prostate Cancer Foundation of Australia (PCFA): providing information, resources and a list of support groups across Australia.
  Email: enquiries@pcfa.org.au
  Tel: (02) 9438 7000/1800 220 099
  www.pcfa.org.au
  (PCFA state offices are listed on the website).

— Cancer Australia: providing national leadership in cancer control and improving outcomes for Australians affected by cancer – www.canceraustralia.gov.au

— Cancer Council Australia: providing research, information, prevention, patient support, treatment and advocacy for Australian affected by cancer. www.cancer.org.au

Cancer Councils:

Cancer Council ACT
Tel: (02) 6257 9999
Email: reception@actcancer.org
www.actcancer.org

Cancer Council Northern Territory
Tel: (08) 8927 4888
Email: admin@cancernt.org.au
www.cantercouncilint.com.au

Cancer Council NSW
Tel: (02) 9334 1900
Email: feedback@nswcc.org.au
www.cancercouncil.com.au

Cancer Council Queensland
Tel: (07) 3634 5100
Email: info@cancerqld.org.au
www.cancerqld.org.au

Cancer Council South Australia
Tel: (08) 8291 4111
Email: tcc@cancersa.org.au
www.cancersa.org.au

Cancer Council Tasmania
Tel: (03) 6212 5700
Email: infotas@cancertas.org.au
www.cancertas.org.au

Cancer Council Victoria
Tel: (03) 9514 6100
Email: enquiries@cancervic.org.au
www.cancervic.org.au

Cancer Council Western Australia
Tel: (08) 9212 4333
Email: inquiries@cancerwa.asn.au
www.cancerwa.asn.au
Where to go to get support and assistance

— Cancer Council Helpline: a free, confidential telephone information and support service run by Cancer Councils in each State and Territory. Tel: 13 11 20

— Impotence Australia: providing information about impotence, treatments and accessing support – Tel: (02) 9280 0084/1800 800 614 (freecall) E: admin@impotenceaustralia.com.au www.impotenceaustralia.com.au

— Andrology Australia: providing information about prostate cancer and male reproductive health. Tel: 1300 303 878 Email: info@andrologyaustralia.org www.andrologyaustralia.org

— Continence Foundation of Australia: providing information about bladder and bowel health and accessing support Tel: +61 (03) 9347 2522 or 1800 330 066 Email: info@continence.org.au www.continence.org.au

— Talk It Over – Men’s Line Australia: providing professional telephone and online support, information and referral service, helping men to deal with relationship problems in a practical and effective way – Tel: 1300 789 978 www.menslineaus.org.au

— BeyondBlue – The National Depression Initiative: providing information on and support for depression and anxiety. Tel: 1300 224 636 www.beyondblue.org.au

— Black Dog Institute: providing treatment and support for mood disorders such as depression – Tel: (02) 9382 4523 Email: blackdog@blackdog.org.au www.blackdoginstitute.org.au

— Relationships Australia: – providing relationship support services for individuals, families and communities. Tel: 1300 364 277

— Lifeline Australia: providing all Australians experiencing a personal crisis with access to 24 hour crisis support and suicide prevention services Tel: 13 11 14 (24 hour service).

— Fertility Society of Australia: providing information about fertility issues and accessing services. Tel: +61 (03) 3645 6359 www.fertilitysociety.com.au

— Urological Society of Australia and New Zealand: peak professional body for urological surgeons in Australia & New Zealand - Tel: +61 (02) 9362 8644 www.usanz.org.au

— Royal Australian and New Zealand College of Radiologists, Faculty of Radiation Oncology: Tel: (02) 9268 9777 www.targetingcancer.com.au

FURTHER READING

— The Localised Prostate Cancer Pack is a resource for men affected by localised prostate cancer. It provides information on how localised prostate cancer is diagnosed, treatment options, managing side effects and wellbeing.

— The Advanced Prostate Cancer Pack is a resource for men affected by different stages of advanced cancer, including locally advanced disease. It provides information on how advanced prostate cancer is diagnosed, treatment options, managing side effects and wellbeing.

Other resources
For more information about prostate cancer and symptom management, PCFA has a number of resources. Please visit PCFA website www.pcfa.org.au or call: (02) 9438 7000/1800 220 099 (freecall).

Please note: If calling from overseas, the country code for Australia is +61
# Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdomen</td>
<td>The part of the body that includes the stomach, intestine, liver, bladder and kidneys. The abdomen is located between the ribs and hips.</td>
</tr>
<tr>
<td>Adjuvant therapy or adjuvant treatment</td>
<td>Treatment given after the primary treatment to increase the chances of a cure. In cancer, adjuvant treatment often refers to chemotherapy, hormonal therapy or radiotherapy after surgery, which is aimed at killing any remaining cancer cells.</td>
</tr>
<tr>
<td>Advanced prostate cancer</td>
<td>Prostate cancer that has spread to surrounding tissue or has spread to other parts of the body.</td>
</tr>
<tr>
<td>Alternative therapy</td>
<td>Therapy used instead of standard medical treatment. Most alternative therapies have not been scientifically tested, so there is little proof that they work and their side effects are not always known.</td>
</tr>
<tr>
<td>Anaesthetic</td>
<td>A drug that stops a person feeling pain during a medical procedure. A local anaesthetic numbs only a part of the body; a general anaesthetic puts a person to sleep for a period of time.</td>
</tr>
<tr>
<td>Bladder</td>
<td>A sac with an elastic wall of muscle; found in the lower part of the abdomen. The bladder stores urine until it is passed from the body.</td>
</tr>
<tr>
<td>Brachytherapy</td>
<td>A type of radiotherapy treatment that implants radioactive material sealed in needles or seeds into or near the tumour.</td>
</tr>
<tr>
<td>Cancer</td>
<td>A term for diseases in which abnormal cells divide without control.</td>
</tr>
<tr>
<td>Carer</td>
<td>A person who helps someone through an illness or disability such as cancer.</td>
</tr>
<tr>
<td>Catheter</td>
<td>A hollow, flexible tube through which fluids can be passed into the body or drained from it.</td>
</tr>
<tr>
<td>Cells</td>
<td>The building blocks of the body. A human is made of millions of cells, which are adapted for different functions. Cells can reproduce themselves exactly, unless they are abnormal or damaged, as are cancer cells.</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>The use of drugs, which kill or slow cell growth, to treat cancer. These are called cytotoxic drugs.</td>
</tr>
<tr>
<td>Clear Margin</td>
<td>When a malignant tumour is surgically removed some surrounding tissue will be removed with it. If this surrounding tissue does not contain any cancer cells it is said to be a clear margin.</td>
</tr>
<tr>
<td>Clinical trial</td>
<td>Research conducted with the person’s permission, which usually involves a comparison of two or more treatments or diagnostic methods. The aim is to gain a better understanding of the underlying disease process and/or methods to treat it. A clinical trial is conducted with rigorous scientific method for determining the effectiveness of a proposed treatment.</td>
</tr>
<tr>
<td>Complementary therapy</td>
<td>Therapy used together with standard medical treatment. Examples include counselling, relaxation therapy, massage, acupuncture, yoga and meditation, aromatherapy, and art and music therapy.</td>
</tr>
<tr>
<td>Constipation</td>
<td>Inability to have regular bowel movements.</td>
</tr>
<tr>
<td>Cultural engagement</td>
<td>Actively involve people with respect to their cultural needs.</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>The identification and naming of a person’s disease.</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Opening the bowels very frequently. Motions may be watery.</td>
</tr>
<tr>
<td>Dietitian</td>
<td>A health professional who specialises in human nutrition.</td>
</tr>
</tbody>
</table>
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erectile dysfunction</td>
<td>Inability to achieve or maintain an erection firm enough for penetration.</td>
</tr>
<tr>
<td>Erection</td>
<td>When the penis becomes enlarged and rigid.</td>
</tr>
<tr>
<td>External beam radiotherapy (EBRT)</td>
<td>Uses x-rays directed from an external machine to destroy cancer cells.</td>
</tr>
<tr>
<td>Fertility</td>
<td>Ability to have children.</td>
</tr>
<tr>
<td>General Practitioner (GP)</td>
<td>General practitioners diagnose, refer and treat the health problems of individuals and families in the community. Also commonly referred to as family doctors.</td>
</tr>
<tr>
<td>Grade</td>
<td>A score that describes how quickly the tumour is likely to grow.</td>
</tr>
<tr>
<td>Hormone</td>
<td>A substance that affects how your body works. Some hormones control growth, others control reproduction. They are distributed around the body through the bloodstream.</td>
</tr>
<tr>
<td>Hormone therapy/treatment</td>
<td>Treatment with drugs that minimises the effect of testosterone in the body. This is also known as androgen deprivation therapy (ADT).</td>
</tr>
<tr>
<td>Incision</td>
<td>A cut into a body tissue or organ.</td>
</tr>
<tr>
<td>Impotence</td>
<td>See erectile dysfunction.</td>
</tr>
<tr>
<td>Incontinence</td>
<td>Inability to hold or control the loss of urine or faeces.</td>
</tr>
<tr>
<td>Intravenous</td>
<td>Into a vein. An intravenous drip gives drugs directly into a vein.</td>
</tr>
<tr>
<td>Localised prostate cancer</td>
<td>Prostate cancer that is at an early stage and is still contained within the prostate gland.</td>
</tr>
<tr>
<td>Locally advanced prostate cancer</td>
<td>Cancer which has spread beyond the prostate capsule and may include the seminal vesicles but still confined to the prostate region.</td>
</tr>
<tr>
<td>Lymph nodes</td>
<td>Also called lymph glands. Small, bean-shaped collections of lymph cells scattered across the lymphatic system. They get rid of bacteria and other harmful things. There are lymph nodes in the neck, armpit, groin and abdomen.</td>
</tr>
<tr>
<td>Malignant</td>
<td>Cancerous. Malignant cells can spread and can eventually cause death if they cannot be treated.</td>
</tr>
<tr>
<td>Metastatic prostate cancer</td>
<td>Small groups of cells have spread from the primary tumour site and started to grow in other parts of the body – such as bones.</td>
</tr>
<tr>
<td>Multidisciplinary team</td>
<td>A team approach to cancer treatment and planning.</td>
</tr>
<tr>
<td>Non-nerve-sparing radical prostatectomy</td>
<td>Nerve bundles on both sides of the prostate are removed during surgery to remove the prostate.</td>
</tr>
<tr>
<td>Palliative care</td>
<td>An approach that improves the quality of life of the person and their families facing problems associated with a life-threatening illness. Prevention and relief of suffering is provided through early identification and assessment and treatment of pain and other problems such as physical, psychosocial and spiritual.</td>
</tr>
<tr>
<td>Pathologist</td>
<td>A person who studies diseases to understand their nature and cause. Pathologists examine biopsies under a microscope to diagnose cancer and other diseases.</td>
</tr>
<tr>
<td>PBS</td>
<td>Pharmaceutical Benefits Scheme</td>
</tr>
<tr>
<td>Pelvic</td>
<td>The area located below the waist and surrounded by the hips and pubic bone.</td>
</tr>
<tr>
<td>Glossary</td>
<td>Definition</td>
</tr>
<tr>
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</tr>
<tr>
<td>Pelvic floor muscles</td>
<td>The floor of the pelvis is made up of muscle layers and tissues. The layers stretch like a hammock from the tailbone at the back to the pubic bone in front. The pelvic floor muscles support the bladder and bowel. The urethra (urine tube) and rectum (back passage) pass through the pelvic floor muscles.</td>
</tr>
<tr>
<td>Perineal (Perineum)</td>
<td>The area between the anus and the scrotum.</td>
</tr>
<tr>
<td>Penis</td>
<td>The male reproductive organ consists of a body or shaft which starts deep inside the body and extends externally to the end of the penis at the glans (head).</td>
</tr>
<tr>
<td>Primary care</td>
<td>Primary Care is a sub-component of the broader primary health care system. Primary care is provided by a health care professional who is a client’s first point of entry into the health system (for example: a general practitioner, practice nurse, community nurse, or community based allied health worker). Primary care is practised widely in nursing and allied health, but predominately in general practice.</td>
</tr>
<tr>
<td>Prognosis</td>
<td>The likely outcome of a person’s disease.</td>
</tr>
<tr>
<td>Prostate cancer</td>
<td>Cancer of the prostate, the male organ that sits next to the urinary bladder and contributes to semen (sperm fluid) production.</td>
</tr>
<tr>
<td>Prostate gland</td>
<td>The prostate gland is normally the size of a walnut. It is located between the bladder and the penis and sits in front of the rectum. It produces fluid that forms part of semen.</td>
</tr>
<tr>
<td>Prostate specific antigen (PSA)</td>
<td>A protein produced by cells in the prostate gland, which is usually found in the blood in larger than normal amounts when prostate cancer is present.</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>Treatment that is intended to address psychological, social and some spiritual needs.</td>
</tr>
<tr>
<td>Quality of life</td>
<td>An individual’s overall appraisal of their situation and wellbeing. Quality of life encompasses symptoms of disease and side effects of treatment, functional capacity, social interactions and relationships, and occupational functioning.</td>
</tr>
<tr>
<td>Radical prostatectomy</td>
<td>A surgical operation that removes the prostate.</td>
</tr>
<tr>
<td>Radiotherapy or radiation oncology</td>
<td>The use of radiation, usually x-rays or gamma rays, to kill tumour cells or injure them so they cannot grow or multiply.</td>
</tr>
<tr>
<td>Self-management</td>
<td>An awareness and active participation by people with cancer in their recovery, recuperation, and rehabilitation, to minimise the consequences of treatment, promote survival, health and wellbeing.</td>
</tr>
<tr>
<td>Shared decision making</td>
<td>Integration of a patient’s values, goals and concerns with the best available evidence about benefits, risks and uncertainties of treatment, in order to achieve appropriate health care decisions. It involves clinicians and patients making decisions about the patient’s management together.</td>
</tr>
<tr>
<td>Side effect</td>
<td>Unintended effects of a drug or treatment.</td>
</tr>
<tr>
<td>Stage</td>
<td>The extent of a cancer and whether the disease has spread from an original site to other parts of the body.</td>
</tr>
<tr>
<td>Standard treatment</td>
<td>The best proven treatment, based on results of past research.</td>
</tr>
<tr>
<td>Support group</td>
<td>People on whom an individual can rely for the provision of emotional caring and concern, and reinforcement of a sense of personal worth and value. Other components of support may include provision of practical or material aid, information, guidance, feedback and validation of the individual’s stressful experiences and coping choices.</td>
</tr>
</tbody>
</table>
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Supportive care</td>
<td>Improving quality of life for people with cancer from different perspectives, including physical, social, emotional, financial and spiritual.</td>
</tr>
<tr>
<td>Surgeon</td>
<td>A doctor who performs surgery to remove cancerous tissue.</td>
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<tr>
<td>Surgery</td>
<td>Treatment that involves an operation. This may involve removal of tissue, change in the organisation of the anatomy or placement of prostheses.</td>
</tr>
<tr>
<td>Survivorship</td>
<td>In cancer, survivorship focuses on the health and life of a person with cancer beyond the diagnosis and treatment phases. Survivorship includes issues related to follow-up care, late effects of treatment, second cancers, and quality of life.</td>
</tr>
<tr>
<td>Testosterone</td>
<td>The major male hormone which is produced by the testicles.</td>
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<tr>
<td>Unilateral nerve-sparing radical prostatectomy</td>
<td>Nerve bundles on one side of the prostate are left intact during surgery to remove the prostate.</td>
</tr>
<tr>
<td>Therapy</td>
<td>Another word for treatment, and includes chemotherapy, radiotherapy, hormone therapy and surgery.</td>
</tr>
<tr>
<td>Urethra</td>
<td>The tube that carries urine from the bladder, and semen, out through the penis and to the outside of the body.</td>
</tr>
<tr>
<td>Urologist</td>
<td>Urologists are surgeons who treat men, women and children with problems involving the kidney, bladder, prostate and male reproductive organs. These conditions include cancer, stones, infection, incontinence, sexual dysfunction and pelvic floor problems.</td>
</tr>
</tbody>
</table>
UNDERSTANDING BRACHYTHERAPY FOR PROSTATE CANCER

SOURCES


— Prostate Brachytherapy Advisory Group, UK. Treatment options for localised prostate cancer: An introduction to prostate brachytherapy – Information for nurses.

— www.prostatebrachytherapyinfo.net/docs/NURSES%20SUPPLEMENT.pdf

— Royal Australian and New Zealand College of Radiologists, Faculty of Radiation Oncology web-resources for patients, carers and health professionals: www.targetingcancer.com.au

— WP Holman Clinic, Launceston General Hospital. High dose rate brachytherapy procedural orders and patient information.

PCFA is a broad-based community organisation and the peak national body for prostate cancer in Australia. We are dedicated to reducing the impact of prostate cancer on Australian men, their partners, families and the wider community.

We do this by:

— Promoting and funding world leading, innovative research in prostate cancer

— Implementing awareness campaigns and education programs for the Australian community, health professionals and Government

— Supporting men and their families affected by prostate cancer, through evidence-based information and resources, support groups and Prostate Cancer Specialist Nurses.