Your Guide to Robotic Prostatectomy

The Prostate Clinic

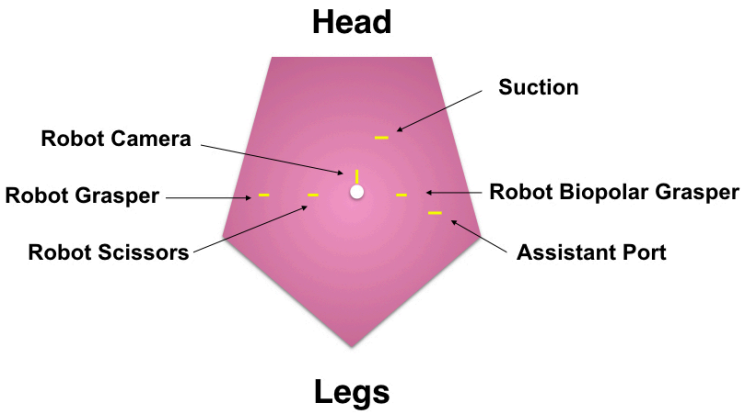
What is the surgery for?

Radical prostatectomy is recognised as the most successful treatment for localised prostate cancer. As long as the cancer is within resected margins, surgery should be a cure for the disease. Surgery is equally effective for high and low risk cancer, unlike radiotherapy, where high risk cancers can reactivate over time. RARP is a type of keyhole surgery that improves results using a magnified view and precise instruments. Keyhole surgery is associated with a much shorter hospital stay, shorter recovery, faster return to work, less blood loss and less pain than open surgery.

What does the operation involve?

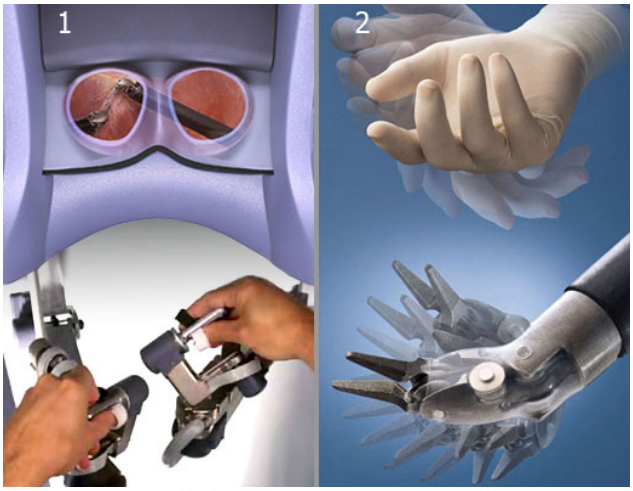
Six small incisions made on the abdomen. The first is above the umbilicus (belly button) where the camera is inserted. This wound is enlarged at the end of the operation to remove the prostate gland and is the only wound that is normally felt post operatively. If you lie still and do not use your abdomen after surgery, you will have very little pain.

Incisions and Instruments



Small straw like channels called ports are placed through the abdominal wall and the robot is connected. Long robot instruments are placed into the abdomen and the surgeon leaves the bedside to control the instruments from the robot console. A scrub nurse and assistant remain at the bedside to change instruments, pas sutures and perform suction as required.

Bedside Cart and Instruments



Console view

Surgery proceeds deep in the pelvis, well away from the incisions. If lymph nodes are taken, this will be done first by exposing the major arteries and nerves in the pelvis. Fatty tissue and lymph nodes are carefully removed to clear

all nodes from the pelvis. The prostate is removed by separating it from its attachments, the pelvic muscles, the bladder, rectum and the erection nerves. The sphincter is the final attachment, buried behind large veins. These are divided and sutured to allow a clear view of the prostate apex and sphincter. With the prostate removed, the gap between the bladder and sphincter is closed by bringing the bladder down to the pelvic floor in two stages, The sphincter is then sutured to the bladder and a catheter inserted.

What are the risks of surgery?

All surgery carries risks, due to the surgery and also the anaesthetic. Surgical risks relate to your level of health, operation complexity and the experience of your surgical team.
General risks of surgery include heart attacks, strokes, pneumonia, blood clots, pulmonary embolii, blood loss and wound infections. Robotic radical prostatectomy appears to be a very low risk procedure, with complication rates less than one in 500.
Many general risks can be reduced by undertaking weight loss and exercise conditioning pre op. This also has benefits in improving your continence and erection recovery, as well as reducing future risks of heart disease, stroke and diabetes.
Specific problems of this surgery include port site bleeds (1 in 200), ureteric injury (1 in 1000), rectal injury (1 in 1000). Rectal injury is a significant concern, as it is possible to develop a fistula (communication) between the bladder and the bowel if both are open at the same time.This would require further surgery to fix. We have seen this once in 1500 cases. Ureteric injury would put the kidney at risk of damage. We have seen this once in 1500 cases, repaired without consequence.
Hernias deserve a special mention. Many men have undiagnosed hernias at surgery and we will reduce them to perform the operation. If needed, we will repair them, but usually these hernias do not need repair and are left alone. Definitive repair with mesh is done by a general surgeon in a few cases, after recovery from prostate surgery.

What are the expected complications of surgery?

Incontinence: It is expected that you will be incontinent for a period of time post operatively. Your return to continence will depend on your cancer grade, the size of your prostate gland and your anatomy. Your specific predicted outcomes will be discussed with you pre operatively. Many patients will regain complete control quickly, whereas some patients may have a slow return to continence and need to wear continence pads for a longer period of time. Although everyone is different, we expect a significant improvement in continence within the first 6 weeks, and then a gradual improvement over 3 - 6 months. Should you still be incontinent at 12 months we would discuss surgical correction with you. Over 15 years of practice just 3% of patients have required surgery to correct incontinence.

Erectile dysfunction (ED): It is expected that you will have little to no erectile function post operatively. Surgery will either be nerve sparing or non nerve sparing, in nerve sparing surgery the nerves are still bruised and damaged and can take up to two years to regenerate. Some men will have erectile function return sooner than this. We are here to help you recover your erectile function and there are a number of treatment options available to you. Some men report penile shrinkage, this is directly linked to lack of erections. Our team are here to help you with treatment options for ED and maintaining erections with medications during your erectile function recovery will help to lessen the risk of penile shrinkage.

You can optimise your continence and erectile function outcomes by implementing lifestyle interventions pre operatively. Reducing your weight, thus reducing your abdominal circumference are important in aiding your return to continence and return of erections. Pelvic floor exercises pre operatively can help with faster return to continence. Our nursing team and multidisciplinary support team at Trench Health and Fitness are here to help you with this.

What are the alternatives to surgery?

Surgery is not the only choice for the treatment of prostate cancer. It is the only treatment that achieves complete cancer removal, and hence cure, so it is usually the treatment of choice in men with over 10 yrs life expectancy of with more aggressive disease. Sometimes control is all that is needed and at other times no treatment is needed at all. It is important t understand your own cancer before making a decision. Ideally a thorough explanation of your disease should be made to you, as well as a meeting with a prostate cancer specialist nurse. Follow up visits and second opinions from other specialists can be helpful also. Please visit **http://theprostateclinic.com.au/2016/03/09/choosing-a-treatment** for more information on treatment choices

What do I need to do in the weeks before surgery?

It is normal to have a few weeks between biopsy and surgery to allow the tissues to settle. During this time it is common to undertake a conditioning program. We will target fitness, weight loss, pelvic floor training and erections. The aim is to minimise the risks of surgery and maximise your chances of a rapid recovery from this major operation.

Who will be involved in my care?

As well as your surgeon, you will meet many people along your journey. These include;
Lisa Ferri - Lisa is our Prostate Cancer Specialist nurse who will be with you from the start. Her role is to help you gather and process information to help in decision making, answer questions as they arise and give you support as you move through surgery to recovery. Lisa is a highly experienced and knowledgeable member of the team. Lisa is employed by Hollywood hospital with her services provided free to you by the hospital.
Melissa Hadley - Barrett is our nurse practitioner, who works onsite in the practice. As a nurse practitioner Melissa is recognised as an independent prescriber of tests and medication. Her main role is the management of sexual health, but is also involved with patient support and continence advice. Melissa will also follow your progress as you recover and return to normal again, working closely with Lisa.
Physiotherapists - We may recommend seeing a physiotherapist pre-operatively if we feel that you will benefit from their expertise in pelvic floor training.
Trench health and fitness - For weight loss and exercise medicine we have developed programs with Trench health and fitness. They are a part of our multidisciplinary team with a doctor, dietician and exercise physiologist. Pre operatively they can provide an individual diet and exercise program to get you in shape before surgery. Post operatively they can look at your risk of developing other diseases and put in place a preventative program to maximise your long term health. Dr Shannon has written software to deliver services used under licence by Trench health and fitness, ensuring expert medical care during your weight loss journey.
Hospital staff - there is large team of nurses who work closely with us in speciality areas in day surgery, theatre and on the ward. You may not meet them all, but they are essential to your care.

Why do I need to lose weight before surgery?

Most patients who develop cancer are overweight. Unfortunately for men most of our excess weight is ‘toxic fat’ in the abdominal cavity. Too much fat can make surgery difficult, whilst losing weight improves the access to the pelvis and reduces the stress of the anaesthetic on your body. Having less weight inside makes it easier to regain urinary and sexual function post op. Toxic abdominal fat is a special kind of fat that is linked to cancer, diabetes and heart disease. Many men who develop prostate cancer will also develop these conditions, if they have not done so already. We can arrange to measure your toxic fat with a DEXA scan before and after your weight loss if this is of interest to you. We have been working with our patients for many years to improve their overall health, with the aim of keeping you fit and healthy. There is little point in curing your cancer to have you die from a heart attack!

How do I learn pelvic floor exercises?

Many men find it difficult to learn pelvic floor exercises, and what works for one man, may not work for the next. Prior to surgery we will perform a flexible cystoscopy, where we will look into the bladder with a telescope. This is a simple procedure that can give us a lot of information as well as allowing us to show you how your urinary control works. By seeing the sphincter in action, you should soon master the exercises you need to do. Lisa will discuss this with you also when you meet. If needed we can involve a physiotherapist to help with your training.

Why do I need the bowel preparation before surgery?
On the day before surgery you will need to clear the bowels. This will prevent constipation post surgery and reduce infection risk. Please follow the bowel preparation information sheet as supplied.

How do I do the pre op wash?
Please see the attached instructions on the body wash.

What should I expect when I wake up after the operation?

When you wake up you will be in the recovery ward. This is a special ward with specially trained nurses, with a single nurse assigned to look after you until you are awake. You will have an oxygen mask, fluid drip into the arm, catheter in the bladder and a drain that sits in the abdominal cavity. All the wounds have local anaesthetic in them, so we expect you will be comfortable. This will wear off after a few hours. The main wound you will notice is the one above the belly button, where the prostate was removed. If you use your abdominal muscles, you will notice this wound. keep your head and shoulders on the bed and try not to lift up you knees to minimise the use of these muscles. Although you will have a PCA or pain relief button to use, we prefer that you avoid the pain altogether, as the drugs will have side effects that may slow your recovery from surgery. Expect some discomfort, but not pain. The catheter can be noticeable after the surgery, giving you a feeling that you need to pass urine or open your bowels. This does settle as your body becomes accustomed to the tube draining your bladder. Please be assured that the bladder is empty.
When the recovery nurses are happy with your progress you will return to the ward.

What happens on the ward?

Once you are on the ward you will be checked in by the nursing staff and have regular measures of many things including your pulse and blood pressure. If you can relax and even sleep you will be comfortable. On the night of the surgery you will stay in bed, connected to many things in many places. The ward will place pneumatic compression stockings on your legs that will regularly inflate and deflate to massage the blood from the legs to prevent clots developing. You will have a blood thinning injection twice a day also. It is a good idea to take the occasional fully deep breath to re expand your lungs after surgery. We may give you a machine to help with this. We will probably take away your painkiller button before you go to sleep. if we leave this on, you will need to be woken at frequent intervals as a part of routine observations.
On the first post op day, after review, we will start to disconnect you from all our devices to get you moving. The drain will come out and we will place the catheter onto the ‘leg bag’. The drip will cease and the oxygen will come away. We will show you how to get out of bed and start walking around. Once you have passed wind, you will be allowed to eat.

What if I need to cough after surgery?

It is common to need to cough at some stage. Coughing is a violent action that can be quite painful, mostly to the main wound at the belly button. If you place your hand flat on your abdomen and push in a little, this will help support the muscles and limit the discomfort.

How should I manage my pain after surgery?
After the operation, you will have a button connected to a pain killer medication. The drug is a type a narcotic, good for pain relief, but associated with side effects. The best approach is to avoid the pain, rather than treat it. As most of the pain comes from the abdominal wounds, we find it is best to stay still after the surgery. If you lift your knees or shoulders, you will use your abdominal muscles and have pain. If you need help to move, ask the nursing staff to help you. The day after surgery, we will get you up, and you will be more comfortable upright.

How do I get out of bed?
There is a right way and a wrong way to get out of bed after surgery. You should roll onto your side, and let you ankles start to fall off the bed. Turn to face the pillow and push up using both arms, letting your feet fall towards the floor. Once you are sitting up, place your feet on the floor, lean forwards, and stand up using your legs.

When can I go home?
You will be allowed home once you are independent, passing wind and eating normal food. We expect you can take care of yourself, but should have someone home with you.

When you go home -
What can I do?
There are no strict rules after surgery. You will be more tired than you expect, but you will not have much pain. The catheter will irritate, but should not be painful. Try to stay active, but expect you can only be active for short periods. It is common to need a rest in the afternoons. We suggest you do not drive in the first week. A mix of activity, plenty of rest and nutritious food gives your body what it needs to recover.

How do I look after the catheter?
You will be instructed by the nurses at the hospital on how to care for your catheter.
Wash your hands before handling the catheter. Ensure you wash the end of the urethra where the catheter goes in with soap and water in the shower.
Ensure the catheter bag is secured correctly to your thigh, above your knee, the catheter leg bag shouldn't pull and should sit comfortable but securely.
At night you attach the bigger overnight bag to the bottom of existing catheter leg bag. The overnight bag simply plugs into the bottom drainage tap on your leg bag. In the morning you detach the overnight bag from the leg bag and rinse the overnight bag out.
You should never detach the leg bag from the catheter tube that goes inside your urethra.

What is the discharge around my catheter?
You may experience some bypass at the end of the catheter, urine, discharge or blood are normal. You should wear supportive pants and a continence pad to contain this.

What do I do if my catheter doesn’t drain properly?
If you are concerned the bag is not draining consider the following:
- Stand up, allow gravity to drain the urine from your bladder
- Check the tube is not kinked
- Are you drinking enough water
- Are you constipated as this can impact on the catheter draining

When will my bowels open?
You need to keep your bowel motions soft and regular. This is important after any operation. We do not want you to strain to open your bowels as this may cause bleeding from your urinary tract. Straining will also put pressure on your abdominal wounds.
Whilst you have a catheter in place it is important to avoid constipation, you will likely be sent home from hospital on Movicol.
If you continue to be troubled with constipation and are passing no stools or hard stools please use Movicol or another osmotic laxative. You can get Movicol from any pharmacy if you have not been supplied it by the hospital.
If constipation persists please speak to your local pharmacist. If your bowels have not opened by day 3 post operatively you need to self administer suppositories.
Drink plenty of water (1.5-2L per day) and maintain a healthy balanced diet to help prevent constipation.

What if I see blood in my urine?
Your urine may have some blood in it. You need to drink adequate amounts of fluid to keep your urine clear - light pink coloured. Should you experience bright red bleeding, rest, drink plenty of water and if the bleeding does not resolve please contact the rooms.

How much can I do in the first week after surgery?
During the first week after surgery you will have your catheter in, this does not however restrict your activities. Although you will feel tired and need to be mindful you have had surgery, you may resume gentle activities if you feel able. It is important to balance gentle walks with rest.

How do I care for my wounds?
Your small laparoscopic wounds on your abdomen will be dressed with waterproof dressings. You can remove these dressings 3-5 days post surgery. Once these dressings are off they shouldn't need to be replaced.
Under the dressings are steri-strips, sometimes they come off with the waterproof dressings and sometimes they stay in place and will gradually peel away, leave these in place until they fall off.
Your stitches are all dissolvable. There will be one stitch on the central larger wound which is about 2cm long, this will dissolve but it may take a few weeks. If this is bothering you, you may trim the stitch using a razor.
You need to monitor the wounds for signs of infection. Any excess redness / swelling / ooze / pain or odour you need to alert the rooms or the hospital.

Will I have pain at home and how do I manage it?
You should only require simple analgesia after your procedure, use regular Paracetamol for discomfort. You have however had major abdominal surgery and need to balance rest with gentle mobility. If you are tired and sore you need to rest.
Your abdomen will feel bloated, heat packs are comforting for this. Wear supportive pants to reduce scrotal swelling and help with catheter discomfort.

How long will my catheter stay in?
The catheter will be in place for approximately one week.

What does catheter removal involve?
The catheter is secured inside your bladder with a small balloon which is inflated with sterile water. When it is time to remove the catheter, the nurse will deflate the balloon using a syringe and then the catheter slips out. Although many men are apprehensive about the catheter removal, it is not a painful experience, most men describe it as just a strange sensation.

What can I do when the catheter comes out?
When the catheter is removed you are likely to find that you have little to no bladder control. You will be given a pull up pad when the catheter is removed. Although these can feel bulky you will feel safe to travel home and remain dry as the pad will absorb any urine leakage. Gradually you will reduce the pad size as you regain continence.

Can I drive a car?
No driving for at least 1 week after abdominal surgery. It is advisable to speak to your insurance company with regard to this. You need to be safe to respond in an emergency, i.e : slam on the breaks and move freely in the car without restriction.

What activity is acceptable to do after my operation?
No heavy lifting or strenuous activities for 4 weeks post operatively. Any activity which causes you to use your abdominal muscles will increase abdominal pressure and you may experience bleeding from your urinary tract and put pressure on your abdominal wounds. Your activity will predominantly be guided by how your continence is, if you are troubled with incontinence you will need to reduce your activities.
Please discuss with us when it is appropriate to return to work.

Can I hurt myself?
If you follow the post operative instructions, look after yourself, ensure the catheter is well secured and are mindful of your activities, you will not hurt yourself.

Why do I feel so tired?
It is normal to feel tired after having major surgery. It will take you a few weeks to resume normal energy levels. Many men find the prostate cancer diagnosis and journey impacts their energy levels and emotional state. We are here to support you with this and can refer you into counselling services if need be.

Is it OK to have an erection after surgery?
Although very unlikely, some men do get erections while the catheter is in, if this happens it may be slightly uncomfortable but is certainly not something to be concerned about. We will discuss erectile function with you in detail during your follow up appointments.

What issues should I alert you to?
- If your catheter is not draining and you feel uncomfortable
- If your wounds are red / oozing / hot / painful.
- If you experience signs of an infection - fever / discomfort / odour to your urine / feeling unwell
- If you have bright fresh blood in your urine that doesn't settle with rest and increased fluid.

Why do I have to wait for the post op PSA test?
It takes 6 weeks for the prostate specific antigen to be undetectable in your body. If you have your PSA test done prematurely the result will be inaccurate. Although we understand it is a anxiety provoking time to wait for the test, you must wait until 6 weeks post op to have this done.

What happens after surgery, How am I followed up?

Immediately post op

You will be seen by Dr Shannon and your nurse approximately one week post surgery for catheter removal and an explanation of pathology results. We will check your recovery progress and discuss next steps. If erection recovery is a priority an appointment will be made with our nurse practitioner for a discussion of treatment options for this. Please see the attached information on erectile recovery after surgery for more information.

At six weeks

We will check your PSA at 6 weeks to confirm complete cancer clearance. The PSA test should come down to undetectable levels. PSA becomes a highly sensitive indicator of the presence of cancer cells after surgery. It is effectively checking the entire body for the presence of prostate cancer.

After 6 weeks

Plans will be made for your PSA follow up with our prostate care physician or your GP. This must be done on a regular basis initially, decreasing over time.

Erectile and continence issues will be managed by our nurse practitioner, as needed.

Cancer survivorship

The management of your prostate cancer should not end with the clearance of your cancer. Many men who develop prostate cancer are at increased risk of a second cancer or cardiovascular disease. We will also put in place a series of future tests to monitor and treat the impacts of prostate cancer. The good news is that with attention to lifestyle factors we can reduce the risk of cancer recurrence and improve long term sexual and continence outcomes. Men who have had prostate cancer are at an increased risk of a number of other diseases also, which can be predictable and preventable. With our prostate care physician, we are able to assess your risk of these conditions and develop a personalised prevention plan using a system developed by Ionic health.

We recommend that you arrange to meet with our prostate care physician after surgery to discuss your risks and what needs to occur to maximise your quality and quantity of life. We have developed plans that use a a specifically trained dietician and exercise physiologist, who can help enact the changes needed to live a long and healthy life. Regular review and goal setting can keep you on the path.

Fees and charges - Prostate Cancer Surgery

A cancer diagnosis is an unsettling event and unfortunately not all treatment expenses are covered by medicare and health funds. Whilst surgery is cheaper than radiotherapy or chemotherapy, the cost is borne more proportionally by the patient than other treatments.

In most cases you will have out of pocket expenses for prostate cancer treatment and it is important to understand this in detail. We will provide you with a written quote and our staff will help you through the journey with health funds etc.

This practice specialises in prostate cancer diagnosis and treatment. We have done this because prostate cancer is a complex disease which requires a team of specially trained doctors, nurses and allied health providers to achieve the best results. Unlike breast cancer, there is very little government support for these roles and the specialised nature of the surgery. As a high volume prostate cancer surgeon, Dr Shannon has treated thousands of men with prostate cancer and has built a dedicated team in his practice and at Hollywood Private Hospital. In addition, Dr Shannon has served as Board member of the Prostate Cancer Foundation of Australia and WA Urological Research Organisation. He is also an advisor to the Exercise Medicine Research Institute at ECU Joondalup.

Our results reflect our focus
Please see the attached information sheet on our results for more information. Our surgical results rival those of any major international centre of excellence and are significantly better than the pooled results for other surgeons in Western Australia. In cancer surgery these results have significant implications for long term survival and outcomes.

Expenses
Our fees - Item numbers 37210 or 37211 are used for prostate cancer surgery. Our surgery takes around half a day and our fees reflect this time. Our fees are similar or less than would be charged for smaller less complex cases that take a similar time to complete. Surgical fees cover your operation, in hospital care and outpatient care in the immediate post operative period should you need it.
Assistant - Dr Glenn Liew has 10 yrs experience in prostate cancer assisting. His fees are receive health fund and medicare rebates Ph 61610661
Hospital - Health funds and medicare cover most of the hospital cost, which includes your hospital bed and theatre fee, with the exception of the robot fee - currently $2500 to cover the cost of the machine and disposables used. Some health funds will make an ex gratis payment or even full cover this fee as an acknowledgement of the importance of the robot in tyour care. Please ask our staff for more information.
Histoathology - Uropath is a specialty practice dedicated to prostate cancer pathology. Please contact uropath on 9388 3180
Pharmacy and pathology - you may receive bills for blood test, medications and even fluids used during your stay.

Nursing services
There is no fee to you for specialist nursing services during your pre op and immediate post op periods, (around 4 weeks). Prostate cancer specialist nurse Lisa Ferri will be involved with your education and support perioperatively. Services with our nurse practitioner Melissa Hadley-Barrett will incur further fees for which medicare rebates are available.

The Prostate Clinic

Physiotherapist / Psychologists / Dieticians
Ancillary services are provided by outside providers and incur additional fees.

Weight loss / Trench Health and Fitness
Trench health and fitness run programs designed by Ionic health, specific for pre operative patients. We have found this to be the most successful method of achieving weight loss in a short period of time, which can be essential to surgical success. The periods of weight loss are much less than with other programs, effectively reducing costs. Trench Health and Fitness pay a fee to Ionic health in which Dr Shannon has an interest, with monies used to develop these programs further.

Payment options
Whilst health funds and Medicare cover a significant portion of the total cost, patients usually are several thousand dollars out of pocket. There are options to help ease these fees.
Ex gratia payments - health funds recognise the funding shortfall and are limited by medicare in their payouts. Some health funds will pay substantial ex gratia payments to help meet this shortfall. You will need to ask specifically. Payments are usually proportional to length of membership and cleaning history.
Robot fees - some health funds will cover the robot fee of $2500. Dr Shannon has performed open, laparoscopic and robotic surgery in large numbers and is proficient at each. He can discuss reasons for selecting a treatment in your case.
Superannuation - Superannuation can be accessed for the treatment of prostate cancer and can be used for the surgery, pre operative and after care. Please access http://mysupercare.com.au/
Tax deductibility - up to 20% of out of pocket expenses over $2218 can be claimed against tax. You will need to get independent advice regarding your own situation.
Health financing - There are several financing companies dedicated to health. Examples include
Mac credit - https://www.maccredit.com.au/
Mediplan - http://www.mediplan.com.au/
We do not have any relationships with these financiers and suggest you look online at options.
Cancer council - Will pay up to $500 off your non medical bills after a cancer diagnosis.
Trauma Insurance - Some superannuation funds have inbuilt trauma insurance. Trauma insurance will usually cover the complete cost of your care and provide for a period off work.
Pad costs - support may be available for the costs of continence pads. Our nurses can help with this.

We are dedicated to the best possible outcome for you at this significant time. With the best care, we expect to minimise the impact of the disease to allow you to get back on with life as soon as possible. Please feel free to contact us to discuss this document further.

Our results

We are proud of the results we achieve and are happy to share them. Our results reflect the focus we have on prostate cancer and our experience and dedication to achieving the best possible outcomes. There is large team involved in achieving this, some you will and some you won't meet. We can present what has been measured to date, with data stretching beyond 15 yrs. Over this time surgical techniques have continued to improve and we expect future results to be even better. Cancer outcomes have been measured independently by the WA Prostate Cancer Registry held at Uropath. We are happy for you verify results with them if you wish on 93883180.

Positive Surgical Margins

An accepted early measure of surgical success is the positive surgical margin rate (PSM). This measures cancer extending to surgical margins at final pathology and is an independent risk factor for cancer recurrence. It is determined by disease extend to a degree, but also surgeon skill. For this reason it is usually reported as two numbers. T2, organ confined and T3, non organ confined rates. PSM rates vary from surgeon to surgeon based on individual skill, experience and caseload. Complete cancer resection is more important in higher risk disease. International centres of excellence report T2 PSM rates of less than 10% and T3 Positive margin rates less than 20%.The.

Our results 2017

T2 PSM 0%. (Literature averages 15 - 40%)
T3 PSM 9.9% (Literature averages 35 - 60%)

Lymph node dissection

In high risk disease lymph node dissection can be curative. It is essential that nodal dissection is thorough to achieve complete resection. A nodal resection greater than 10 nodes is generally accepted as adequate. We average **19 nodes** per dissection, over double published averages.

PSA failure

All patients in WA are followed by our database. Long term success is measured by PSA failure rates, which are a very sensitive, with 0.2 used as the definition of failure. In all other cancers failure is measured by clinically detectable disease, which is a much cruder measure. PSA is detectable in the blood in very low concentrations well before any clinical signs of the cancer are found and as such is a useful measure. PSA failure can occur due to incomplete resection (Positive margin) or if the cancer has spread beyond respectability to lymph nodes or bones.

Over the last 20 yrs

Our results

T2 - 3% (One third of published average PSA failure rates)
T3 - 16% (Half the rate of published average PSA failure rates)

Continence

Continence outcomes are not routinely measured by the database at this time. We have reviewed our rate of continence surgery over the last 17 yrs. Our current results would be less than this due to advances in techniques. Over the last 17 yrs 3.8% of our patients have required surgery to correct incontinence. Half of these had a sling procedure for moderate incontinence and half an artificial sphincter for more significant incontinence. These results are in keeping with international best practice.

Erectile function

Prospective erectile function results have not been measured to date. Pre operative function, disease extent, intra operative nerve sparing and rehabilitation all play a role. We can give you an good idea of your risks pre op on an individual basis.

Long term success and our multidisciplinary team

We will look at your whole health, to reduce the impact of disease and reduce the risks of recurrence. We have specific programs for weight loss, cancer survivorship, continence and erectile dysfunction delivered by our team.

Post Radical Prostatectomy Sexual Function

Normal function

To preserve penile health, men naturally have 3-5 erections each night, with the penis filling with blood and the tissues being stretched. ED is more common in men over 40 years of age and in men who have had prostate surgery, heart disease or are diabetic. Lifestyle factors are important in preserving erectile function; obesity and lack of exercise are risk factors for erectile dysfunction. Interventions for ED are sought for various reasons, some seek treatment purely for the psychological aspect of being able to achieve an erection, whilst some men are interested in preserving penile health and some men are seeking treatment in order to be sexually active.

Erectile dysfunction after surgery

Erectile dysfunction (ED) is a common problem for men after radical prostatectomy, as the erection nerves are closely related to the prostate gland. Sexual function after surgery is determined by three things. The first is pre operative function, the seconds is the degree of nerve sparing done and the third is the rehabilitation. Nerve sparing is not always possible, especially if the cancer is invading the nerves. Those most at risk of losing erections have impaired function pre op, or have more advanced disease. Your individual situation should be clearly discussed pre op.

Treatment

Medications
Phosphodiesterase type 5 inhibitors (PDE5i), medications such as Viagra and Cialis are useful in many men. PDE5's improve blood flow and increase erections. They are generally not helpful if there is no erection, but can be used after surgery even when erections are yet to start to keep penile tissue healthy. Some men, including those on certain heart medications may be unsuitable for PDE5's.'On demand' medication involves taking a full dose of a PDE5i, such as Viagra, to achieve or boost an erection. Desire and sexual stimulation are necessary for the medication to work.

Vacuum Devices
Vacuum devices are cylindrical tubes placed over the penis, air is pumped out of the cylinder and as the pressure builds up blood is drawn into the penis. To aid in preserving penile tissue health in men who can't get erections, vacuum devices can be used regularly. Vacuum devices can be used on demand with a constriction ring placed to keep the erection long enough for sexual intercourse. The constriction band must only be on for 30 minutes at a time. These devices can be purchased from medical suppliers and most sex shops. Some health funds will reimburse you for the purchase of the device. You will need instructions from your nurse, urologist or the provider on how to use these devices.

Injection therapy
Intracavernosal injections (ICI) offer an alternative for men who are unsuitable for PDE5i or who do not respond to them. ICI's do not require the nerves to be functioning, so they have a low failure rate. The injections relax smooth muscle, increasing blood flow to the penis. Interested men will be helped to overcome the apprehension of self-injecting, and be taught how to inject into the penis. Your specialist nurse will teach you how to draw up and administer the medication, how to titrate the dose and provide ongoing support for you.

Penile Prosthesis
Men who are unsuitable for, or fail the above mentioned treatments may wish to discuss the option of a permanent penile prosthesis. A prosthesis is a mechanical device implanted into the penis, which is activated via an implanted activation button in the scrotum. It involves a surgical procedure, but once implanted, can offer a long term solution for erectile dysfunction. Your urology nurse or urologist can discuss the prosthesis and procedure in detail with you.

Post prostatectomy incontinence

Losing control of your bladder is probably the most distressing part of the prostate cancer journey. Whilst many women of a similar age experience incontinence, men rarely do. The good news is that most men recover their incontinence with time, but of course the shorter that time, the better. Prostate cancer is a journey and we are here to help support you along the way. Understanding the issues is key to getting you back to normal as soon as possible.

Why does incontinence happen?

Incontinence can be a normal part of ageing with 3 - 11% of men and 3 to 17% of women experiencing incontinence. Normally, urine is stored in your bladder. When your bladder is full, muscles relax and all your urine passes through the prostate, past the external sphincter and into the urethra. Although we don't understand everything about what causes incontinence, the prostate is a crucial part in men. Cough / sneeze type leakage is very rare for men when they have their prostate. Removing the prostate can disrupt some of the supportive continence mechanisms, but the biggest problem may simply be that cork in the stopper has been removed. Prostates alone can effectively block the flow of urine, especially when large. The sphincter that is downstream may be out of condition and lazy. None of this is a problem, until cancer comes along and the prostate has to come out. Once everything has healed, the anatomy is much more like a woman's anatomy than a man's. This means your risk of cough / sneeze type leakage increases. For a good video explanation, visit https://vimeo.com/188759839

What factors affect my risk for incontinence?

There are several factors that affect your risk.

Patient factors -

Age - is an independent risk factor for incontinence after surgery
Having a large prostate - usually means a weak sphincter and more dissection
Being overweight - is a major issue. High pressure on the bladder from fat in the abdomen
Preoperative difficulty passing urine - affects bladder functions
Previous prostate surgery - may weaken the sphincter
Poor general health - poor muscle mass and tone is linked to incontinence
Smoking - lung disease and coughing is a problem
The length of your urethral sphincter - you are born with a set length that cannot be changed
Poor sensation of pelvic floor
Depression - increases incontinence risk
Some medications

Disease factors -

Larger cancers
High grade cancers not suitable for nerve sparing
Cancer invading the badder, nerves or sphincter

Surgical factors -

Surgeon experience and good surgical technique (minimal bleeding, tension and diathermy)
Nerve preservation
Sphincter length preservation
Anastamotic contractures (scarring at join of bladder and sphincter after surgery)
Time of catheterisation - prolonged catheterisation is not desirable

What can I do before surgery to reduce my risk of incontinence?

Stop smoking

Lose weight - you should try to have an abdominal circumference less than 95cm.

Learn pelvic floor exercises and practice them

What should I expect after the catheter comes out?

Initially continence can feel quite poor, with most of the urine going into the pad. This is frustrating, as you may be feeling over the surgery in most other ways, Incontinence often improves in the first few days to become more manageable. As a rule, try not to do things that cause you to leak. This may mean taking it easier than you want to. Good continence takes time. We are waiting for the sphincter to improve and the bladder to settle. Try not to stress the system too much, it will not be very forgiving. Remember, everyone gets incontinence, but it is rare for treatment to be needed to correct it. We have to wait, as frustrating as that is. Men are hard wired to solve problems when they face them. You cannot exercise or will the problem away.

What can I do after catheter removal to improve incontinence?

Avoid - coffee, tea, alcohol
Limit your fluid intake - you don't need to drink as much as you think. The commonest mistake is following well meaning advice to 'drink plenty of water.' Your sphincter has a pressure limit, which when exceeded will allow urine to leak. You cannot fill or stretch your bladder early on. A gladder that fills slowly can hold more than one that fills quickly.
Rest - leakage is much worse when you are tired. Don't get over tired. Rest in the afternoons and sleep well at night. You need it.
Consider medication - if you are rushing to the toilet, medication can help
Don't get constipated
See a continence physiotherapist - a good continence physiotherapist can give you tips and tricks and ensure you are doing your exercises properly. Many men don't need them, but they can be invaluable if you do.

How often should I change my pad?

At first, you will change them as soon as you notice they are filling. Each pad has a certain capacity. Try to get close to this. Pads should keep the skin dry. If you are experiencing skin irritation or significant smell, you are leaving the pads on too long.

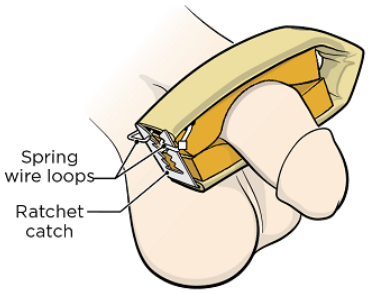
How much water should I drink?

You should drink enough to avoid constipation (benefiber helps trap water in the bowels and should be taken every day). More water than that will just fill your pads. You should aim for a urine that is yellow to mid yellow, never, ever clear. Please see below. You should know that most of your required fluid intake comes from the food you eat. In a healthy diet with lots of vegetables and fruit, supplementary water may not be needed.

Avoid	Acceptable	Ideal

What is a penile clamp and how do they work?

Penile clamps are an externally worn device that stope leakage. They are good and bad. They can be effective, but can also put back pressure on the sphincter and cause damage to the urethra. They are best used for short periods, such as social engagements.



What is a realistic rate of improvement?

Everyone is different and you may have some complicating factors that slow your recovery. Most men still get there, without help, even if they have some underlying issues. By 6 - 8 weeks, most men have a good degree of control in normal situations, but can leak later in the day, with alcohol or with exertion. Continence receivers gradually. Firstly men are dry at night and when laying down. Next they can be dry when sitting, then standing, then walking. Most men have better control in the mornings that progresses to longer in the day. Exercise can often be done early on, but non weight bearing, non impact exercise is easiest for continence.

I can't tell when I need to go? Is this normal?

Some men experience altered sensation and desire to void after surgery. It is more likely with bigger prostates and higher stage cancers. Losing sensation is important, because you can lose the normal warning signs that the bladder is full. If you are leaking only when the bladder is full and not at other times, it can help to use timed voiding. Start by setting an alarm every hour and increasing the intervals. If you have a stable fluid intake, this can get your bladder into a good routine. We need to try and get your bladder to hold for at least a couple of hours to allow you to get on with your life.

What can I do if I am not improving?

Whilst for most men, it is a matter of time before they become dry, it can be a frustrating experience if you feel you are not making progress. The reasons for a lack of progress can be complex and require further investigation. Please contact us to discuss what can be done.