The aim of knee replacement surgery is to:

- Relieve pain
- Correct deformity e.g. bow leg / knock knee
- Restore function to your knee
- Improve your quality of life

What are the possible complications?

Depending on the condition of your knee before surgery, a good result can be expected in approximately 90%- 95% of cases. However, some knees have a higher complication rate than others, which reduce the chances of a good result. Your surgeon will discuss with you what he can reasonably expect to achieve.

Knee replacement surgery is a successful operation and we make every effort to minimise the risks. However risk cannot be completely eliminated. It is therefore important that you are informed of the risks prior to surgery to help you make an informed decision.

1. Risk of **medical/surgical** complications
2. Risk of **infection**
3. Risk of **wear / loosening** of the artificial knee
4. Risk of **stiffness / reduced bend** in the operated knee
5. Risk of **nerve or artery damage**
6. Risk of **amputation**
7. Risk of **death**

1. Medical and Surgical Risks

Knee replacement surgery is associated with the following medical and surgical risks:

- Heart attack
- Stroke
- Chest infection
- Urinary tract infection
- Deep vein thrombosis (blood clot in the blood vessels of the legs)
- Pulmonary embolism (blood clot in the lungs)

Medication will be prescribed to thin your blood and minimise the risk of clots developing. However, despite all the above precautions a clot may still develop and you would require a period of treatment. In addition you will be given compression stockings (TEDS) to help reduce the risk of blood clots forming and knee/leg swelling. Please wear them for 6 weeks following surgery. Preventative measures such as leg exercises, deep breathing exercises and early mobilisation are most important.

2. Risk of Infection

Superficial infection: (Delayed wound healing): This mainly involves the skin of the knee joint but does not extend into the knee joint itself. When a superficial infection is present, the wound may be moist and skin around the surgical wound looks red and inflamed. These problems often settle with simple measures and occasionally antibiotics.

Deep Infection: In a small number of cases (less than 1%) a deep infection may develop. Whilst this complication is rare, the consequences can be very serious. A deep infection extends down to the artificial knee joint. A patient developing this complication may feel unwell and have a high temperature. The joint is invariably more painful than normal.

When a deep infection is present your surgeon may recommend surgery to wash out and clean the infection away and also put you on intravenous antibiotics.

However, if deep infection does not respond to this treatment it may be necessary to treat the infection by removing the artificial knee completely and replacing it with a new one. This is known as revision surgery and can be a complex surgical procedure with higher complication rates.

3. Wear/Aseptic loosening of the Prosthesis

Artificial knee joints last for many years (we expect 95% of artificial knees to last for ten - fifteen years). However they can become loose and painful and are subject to wear over the years. The length of time an artificial knee will last is often an individual matter, depending upon factors such as how much use you subject the knee to, and your age. The younger you are the more likely the knee is to wear out in your lifetime. If this does happen, further surgery may be necessary to re-implant a new knee replacement. This is called revision knee surgery.

4. Pain and Stiffness / Reduced Flexion in the Operated Knee

A knee replacement may not bend as far as a normal knee joint. However, most knee replacements flex to well beyond a right angle, which is sufficient for most daily activities. Very often you will have the same amount of movement in your new operated knee as you had beforehand. Unfortunately there are occasions when the artificial knee becomes excessively painful and stiff, leaving the patient with little movement in the knee joint. The cause of this is often unknown, although it is associated with the production of excessive scar tissue inside the knee following surgery. Sometimes this stiffness and reduced movement can be treated by manipulating the knee (putting it through a range of movements) whilst you are under a general anaesthetic. However, sometimes this treatment does not correct the problem and the patient is left with permanent stiffness.

5. Risk of Nerve or Artery Damage

The two main nerves supplying the leg (femoral and sciatic) can be damaged from surgery however this is quite rare. Nerve damage may recover over time, however sometimes it may be permanent. A numb patch on the outside (lateral) of the knee is sometimes present, this may settle with time or regular massage. Damage to the main artery to the leg requires emergency surgery at the time of the knee replacement.

6. Risk of Amputation

This is exceptionally rare but if a serious complication develops that does not respond to urgent treatment, very occasionally the leg has to be amputated.

7. Risk of Death

Most people come through surgery without any major problems. The risk of death, however, does increase with serious medical conditions.

High Risk Groups

There are some people who fall into a higher risk group and these include patients whom:

- have had **previous surgery** to the knee
- have had **previous infection** within the knee
- have **Inflammatory Arthritis, Rheumatoid Arthritis or Psoriasis**
- have **medical problems (heart, chest, diabetes)**
- take drugs such as **steroids or immunosuppressant drugs**
- have **high body mass index**

Pre – Operative Assessment Clinic

Prior to surgery you will be asked to attend the **pre-assessment clinic** at **Clatterbridge and Arrowe Park Hospital.**

The purpose of this visit is to assess your overall level of fitness prior to anaesthetic and includes:

- Medical and social history – this will be recorded by the **assessment nurse.**
- Physical examination – this is performed by the **advanced nurse practitioner** and includes a chest examination.
- The **pharmacist** will review your medications with you.
- **Anaesthetic review** may be required depending on your medical history. This may involve the anaesthetist reviewing your medical records or an anaesthetic consultation may be arranged if necessary.
- Medical investigations including routine blood tests, heart tracing and x-rays may be undertaken.

All patients are screened for MRSA bacteria (Methicillin Resistant Staphylococcus aurus) at the pre-assessment clinic. A nasal and groin swab will be sent to the laboratory. You will only be contacted by the hospital if your results are positive for MRSA. This contact will be by telephone and then by letter. Your doctor will also be informed so you can begin your treatment.

Please note - new or uncontrolled medical conditions may require additional tests or anaesthetic review, which could possibly delay your admission.

Please bring with you to this visit:

All medications you are currently taking in the original packaging, including tablets, inhalers and lotions. Also over the counter medicines including herbal medication

Your dental letter, indicating your mouth and gums are free from infection.

A sample of urine (mid-stream). Please bring this in a sterile container available from your doctor or chemist. The urine sample will be sent to the laboratory to exclude infection.

Please note that your operation cannot proceed without your attendance at the pre-operative assessment clinic.