



YOUR GUIDE TO SURGERY

An essential guide to support you through your surgery at
UHCW

The Trust has access to interpreting and translation services. If you need this Information in another language or format please contact 024 7696 6352 and we will do our best to meet your needs.

The Trust operates a smoke free policy

Document History
Department: Perioperative Medicine
Contact: Dr George Madden
Updated:
Review:
Version:
Reference:

This document uses QR codes

QR codes are 3D barcodes. Most smartphones can read a QR code, to create a quick link to a website or other resource. All you have to do is

1. Open your phone's camera app
2. Point the camera at the QR code – it should recognize it and pop up the website link.
3. If it doesn't work, free apps such as Google Lens can be downloaded to do this
4. The website address will always be typed next to the QR code just in case.



<https://www.uhcw.nhs.uk/>

CONTENTS

	Page
Getting the best results	5
Your pathway to surgery	23
On the day	41
Your Anaesthetic	49
Managing your pain	67
After the operation	83
Going home	105
Other information	115

This publication includes text taken from the Royal College of Anaesthetists' (RCoA) leaflets 'You and your Anaesthetic 2014, Anaesthesia Explained 2015, Preparing for surgery: Fitter Better Sooner 2018' but the RCoA has not reviewed this as a whole

The full RCoA resources can be accessed by the link below, or by using this QR code



<https://www.rcoa.ac.uk/patient-information/patient-information-resources>

Getting the best results

To get the best results from your surgery, it is vital that you understand what you can do to help yourself. This section will explain *why* surgery doesn't always go to plan, and then explain what you can do to get the best outcome from your surgery.

Contents	Page
Why surgery can be “complicated”	6
The impact of having a complication after surgery	7
How you can improve your health and fitness before surgery:	13
Exercise	14
Diet	16
Weight loss	18
Alcohol	19
Smoking	20
Personal hygiene	21

Why surgery can be “complicated”

After surgery, you may develop a problem that would keep you in hospital for longer. We call these “complications”. This may be something that seems unrelated to the operation itself, but increasingly evidence shows that these occur as a result of the body’s response to surgery. These problems may include

- Chest infections (pneumonia)
- Urinary tract infections
- Wound infections
- Kidney problems
- Heart attacks (myocardial infarctions)
- Strokes

Most people will go through surgery without any of these happening, but when there is a complication, we need to act quickly to treat it.

You will have a pre-operative assessment, where we will identify whether you are at risk of any particular complications, and we will advise on what can be done to help prevent these from happening.

The impact of having a complication after surgery

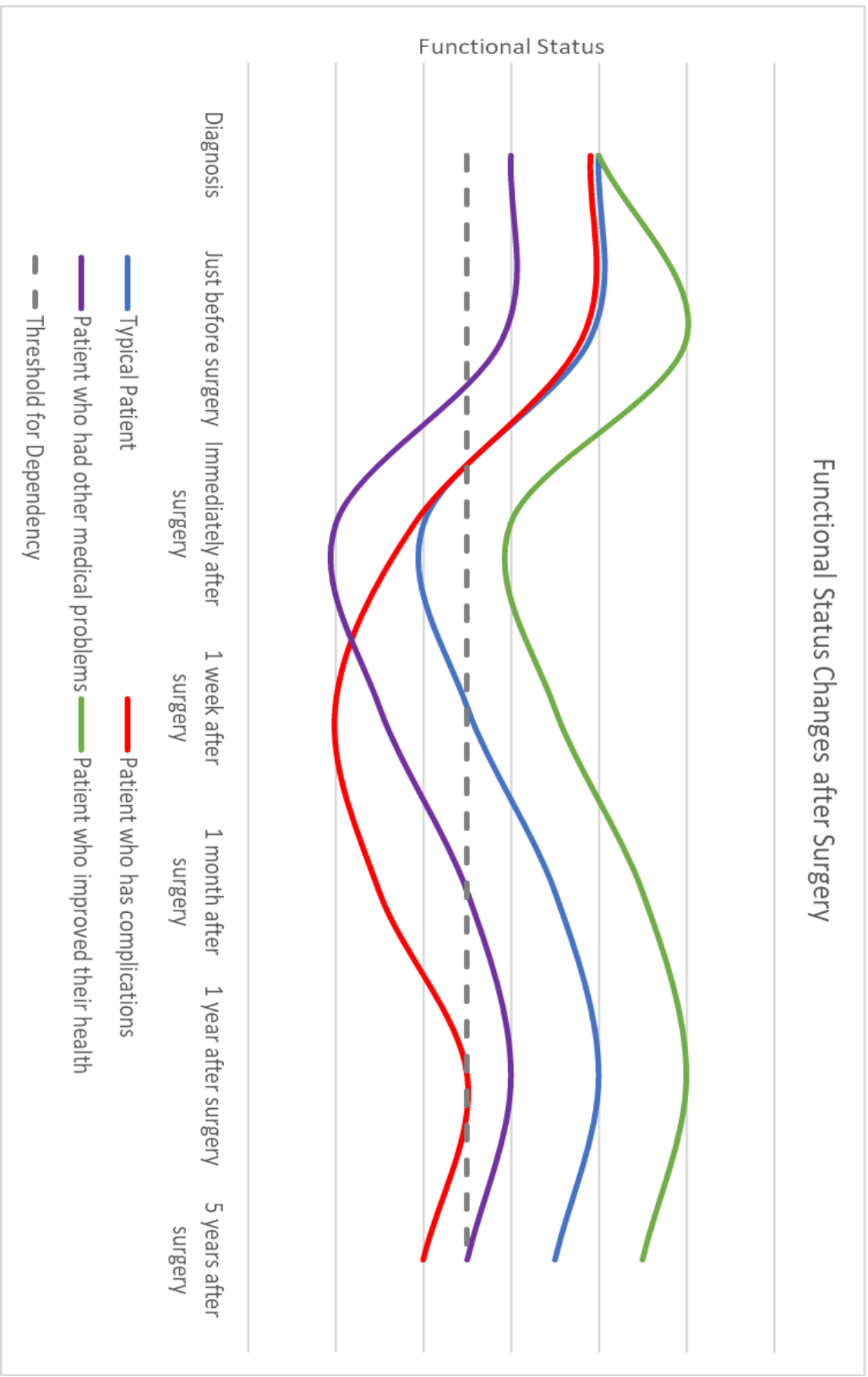
We often refer to the ability of a person to exercise and look after themselves (e.g. getting washed, dressed, going to the toilet, cooking) as their “Functional Status”.

Below a certain threshold, the person becomes dependent on others. The aim of most surgery is either to improve functional status (such as improving mobility with a hip operation), or to extend life.

When complications occur, surgery to extend life may end up reducing functional status, and surgery to improve functional status in one regard (such as a hip replacement improving mobility) may reduce functional status in another way (such as becoming more breathless due to lung problems).

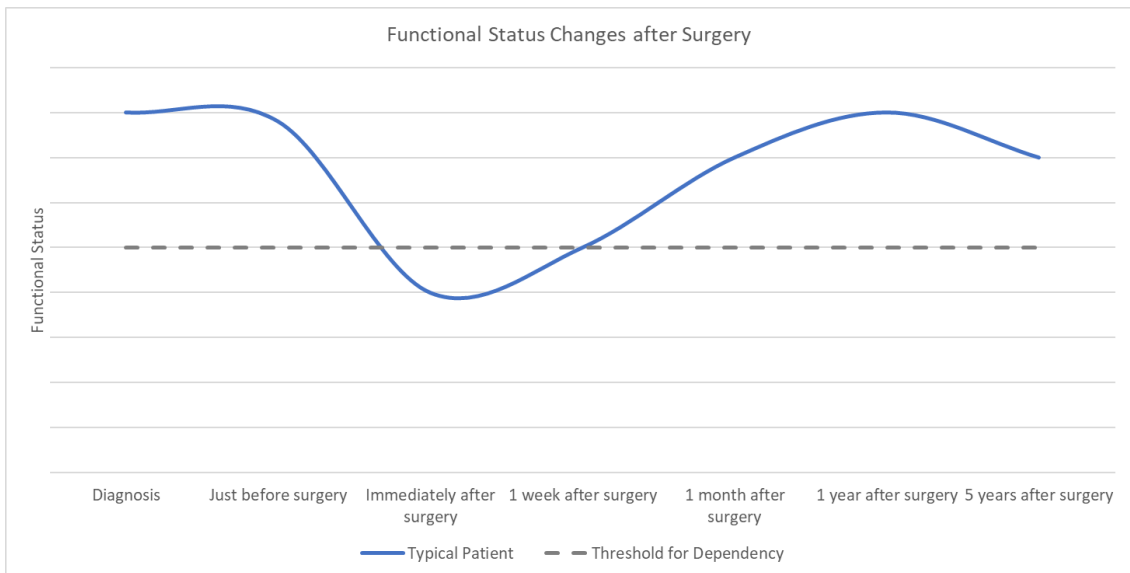
The evidence is developing all the time, but what we think happens can be described with the diagram below:

Functional Status Changes after Surgery



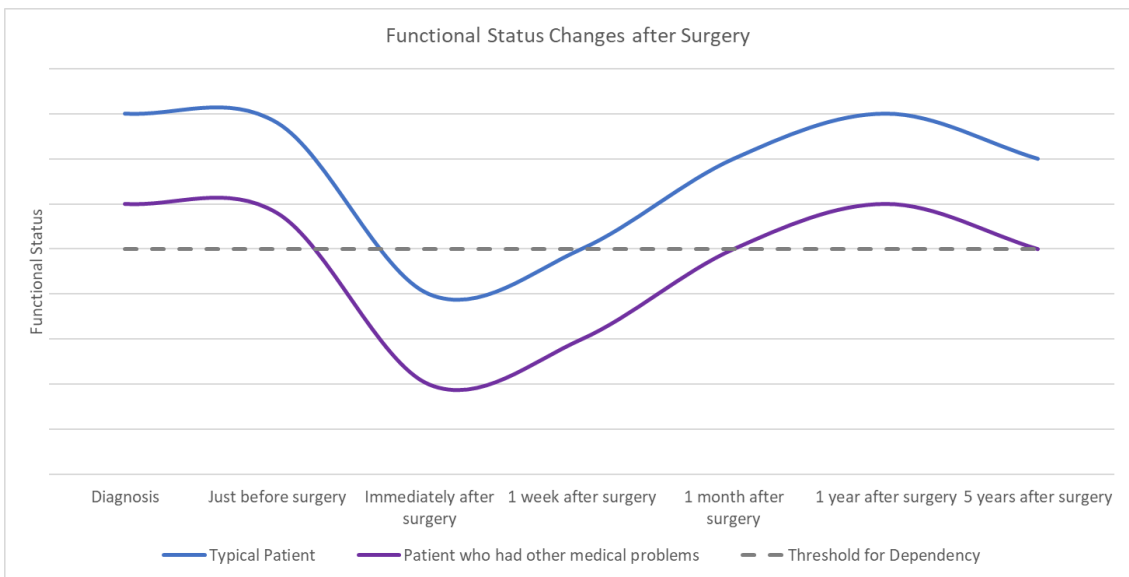
The blue line is a typical patient

They have a generally good functional status when they are given their diagnosis and told they need surgery. They can look after themselves and enjoy an active life. This continues until just before surgery. The operation then reduces their functional status as they are dealing with pain, and reduced mobility while they recover. They fall below the “Threshold for Dependency” – the level at which they need help with daily tasks such as washing and dressing. With time they recover and get back to normal. As years go by, however, their functional status will gradually drop with age.



The purple line is someone with serious health problems

Their functional status may be worse, and though they may follow the same course as the typical patient, because they are already closer to the threshold for dependency, it takes them that much longer to recover their independence.

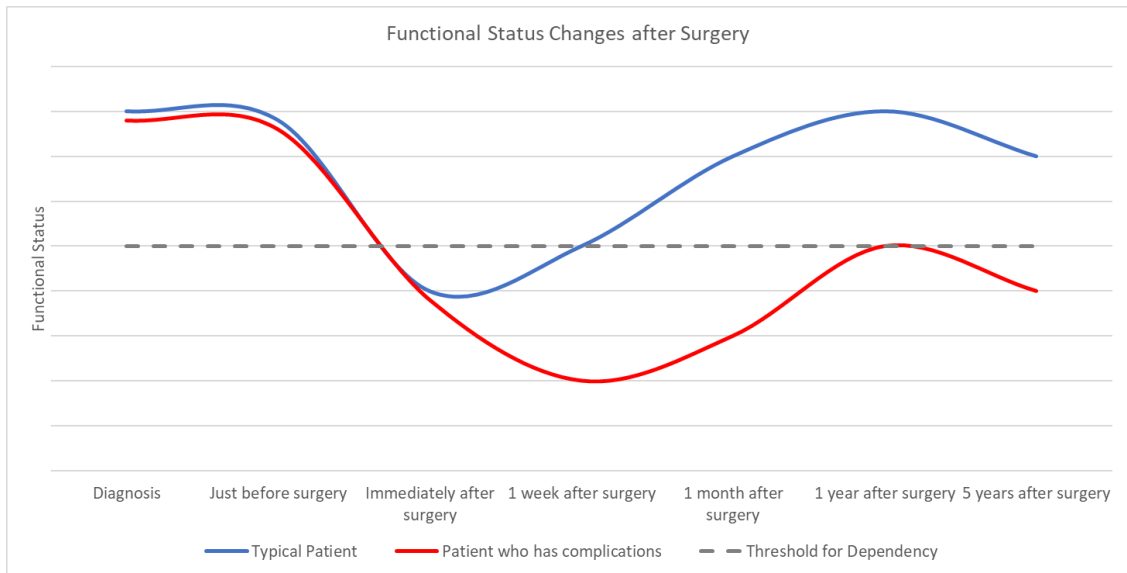


The red line is a typical patient who has a serious complication

They start off following the same course as the “typical” patient, but a week after surgery, their functional status has taken an extra “hit” from that complication.

Their recovery is slower, and they never get back to where they were before surgery.

They are more likely to need help with their usual activities in the longer term.

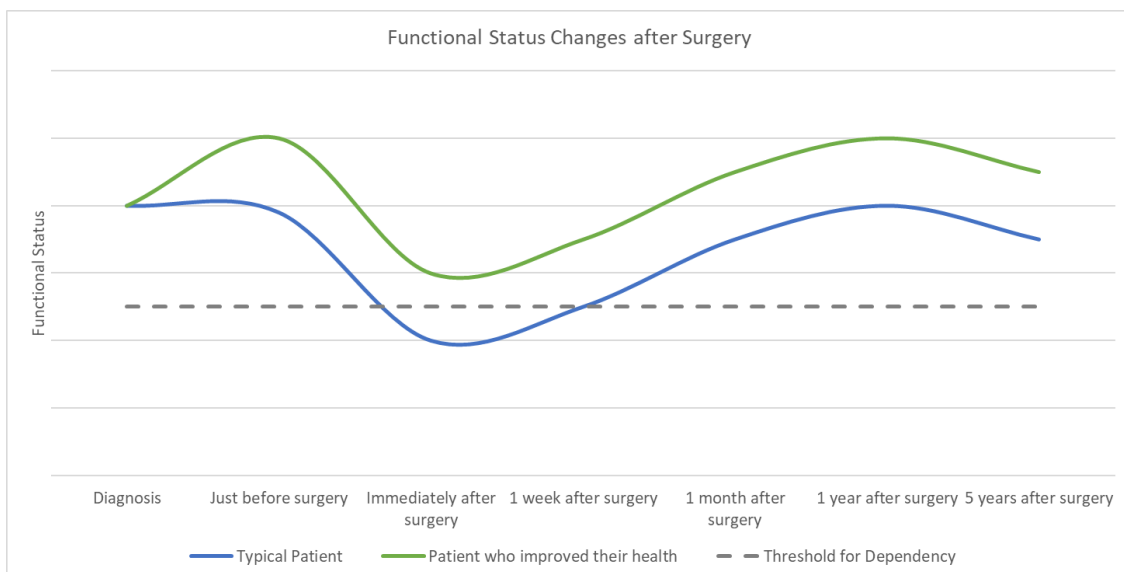


The green line is someone who has improved their health and fitness before surgery

They have a better functional status before surgery, a bit like training for a marathon, and then, though they drop the same amount as the typical patient, they manage to stay independent.

They can get up and about sooner after surgery, are less likely to have a complication, and are more likely to return not just to their original functional status, but may actually maintain that extra fitness they gained just before surgery.

This is becoming known as “prehabilitation”, and is an approach that is becoming established throughout the uk.



How you can improve your health and fitness before surgery

There are many changes you can make to reduce the risks of surgery. Even small changes can make a big difference. The longer you wait for surgery, the more you'll be able to achieve, but even a couple of weeks can make a difference.

You should try to

- **Exercise** more
- Improve your **diet**
- Lose some **weight**
- Reduce your **alcohol** intake
- Stop **smoking**
- And in the days up to your operation, you should pay attention to your **personal hygiene**

Exercise

Your heart and lungs have to work harder after an operation to help the body to heal. If you are already active, they will be used to this. If you are not very active, it is a good idea to use the time while you are waiting for your operation, try and increase your activity levels.

Brisk walking, swimming, cycling, gardening or playing with your children are all helpful. Try to do any activity which makes you feel out of breath at least three times per week, but always check with your doctor first what type of exercise is most appropriate for you. Activities that improve your strength and balance will also be useful for your recovery.

Exercise – *who can help me?*

- ✓ Your GP surgery may be able to refer you to an exercise scheme at your local gym. Some people find a personal trainer helpful.
- ✓ Depending on where you live, you may have access to NHS healthtrainers who can help motivate you and offer advice. There are also a number of mobile apps to help you set goals and track your progress, such as 'Active 10 walking tracker' and 'Couch to 5K'.
- ✓ Try joining a free council or community walking group or environmental volunteering scheme in your local area such as 'Walks on Prescription'. As well as giving you encouragement and support to start walking and exercising, they are enjoyable and will boost your mood. Ask your GP surgery what is available in your area.
- ✓ If you have back or joint pain you will often see a physiotherapist before seeing a consultant. You may be more limited than others, but ask your physiotherapist for exercises that you can do. These are only some ideas and there will be many health and fitness programmes that you can explore in your local area.

Diet

Your body needs to repair itself after surgery – eating a healthy diet before and after your surgery can really help.

- Eat regularly through the day.
- Base your meals on starchy carbohydrate foods such as bread, potatoes, pasta, rice, breakfast cereals, noodles, chapatti, naan or yam. Wholegrain and higher fibre varieties are better choices unless otherwise indicated.
- A third of your daily intake should be from fruit and vegetables. Aim for five portions a day. Ask for more information from your dietitian or nurse if you are struggling with this. If you are struggling to meet your fruit and vegetable intake, talk to your pharmacist about a multivitamin.
- Eat 2 portions of fish per week one of which is oily (salmon, sardines or pilchards for example)
- Include two servings of dairy foods a day, for example, milk, cheese, yoghurts or calcium fortified soya products daily to keep your bones and teeth strong. Low fat versions will provide less calories.
- Include two servings of protein rich foods a day, for example, meat, poultry, eggs, pulse vegetables, nuts, seeds, Quorn®, orsoya alternatives every day.
- Remember to drink plenty of fluids as this will help keep your bowels regular. Aim for at least eight glasses of non-alcoholic drinks a day, for example, water, diluted squashes, fruit juice, fizzy drinks (preferably diet to avoid extra calories), tea or coffee.

Eatwell Guide

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.



Water, lower fat milk, sugar-free drinks including tea and coffee all count.
Limit fruit juice and/or smoothies to a total of 150ml a day.

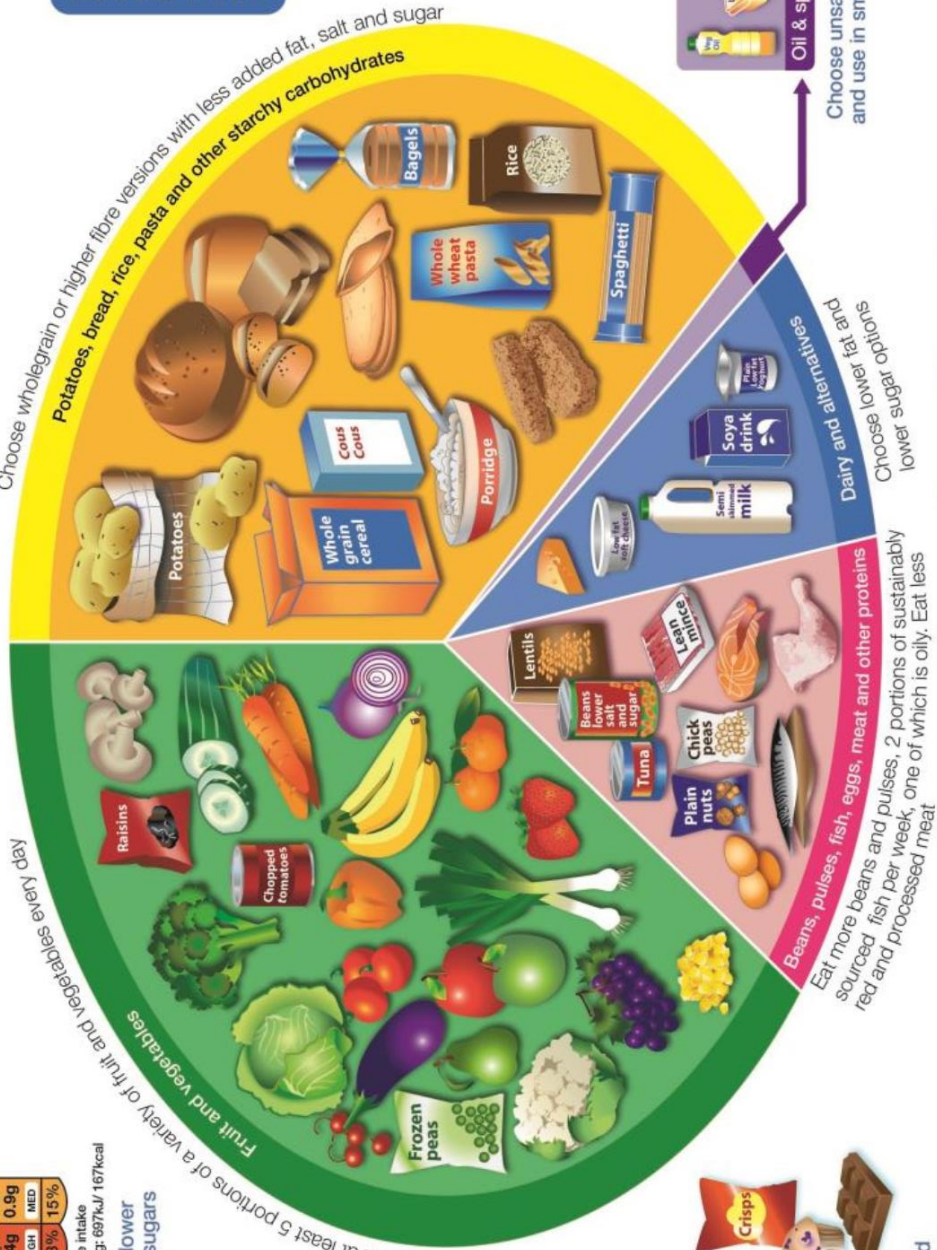
Check the label on packaged foods

Each serving contains

Energy	Saturated Fat	Sugars	Salt
1046kJ	5g	1.3g	0.9g
250kcal	LOW	LOW	HIGH
12.5%	7%	6.5%	38%
			15%

Typical values (per 100g/100ml) *167kcal of an adult's reference intake

Choose foods lower in fat, salt and sugars



Eat less often and in small amounts

Per day 2000kcal 2500kcal = ALL FOOD + ALL DRINKS

Source: Public Health England in association with the Welsh government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

© Crown copyright 2016

Weight loss

If you are overweight, losing weight can help reduce the stress on your heart and lungs. In addition it can help to:

- lower your blood pressure
- improve your blood sugar level
- reduce pain in your joints
- reduce your risk of blood clots after surgery
- reduce your risk of wound infections after surgery
- allow you to exercise more easily.

Who can help me?

There will likely be a weight loss clinic at your GP surgery. Alternatively there will be a nurse who can weigh you and give you advice on healthy eating and exercise.

You may find it helpful to join a weight loss class. In some areas there are NHS healthtrainers who may be available to help you.

It has been shown that people who improve their lifestyle in the run up to surgery are much more likely to keep up these changes after surgery. This can have a really positive impact on their health in the long term.

Alcohol

Alcohol can have many effects on the body, but importantly it can reduce the liver's ability to produce the building blocks necessary for healing. Make sure you are drinking within the recommended limits, or lower, to improve your body's ability to heal after surgery.

Who can help me?

You can find useful information on how to reduce alcohol and the benefits to you on the NHS Choices website: bit.ly/2N6IQ1F Also see the Drinkaware website: www.drinkaware.co.uk

Your preoperative assessment nurse should also be able to refer you to services in the local area.

Smoking

Stopping smoking is hard, but the good news is that quitting or cutting down shortly before surgery can reduce length of stay in hospital, improve wound healing and lung function. Preparing for surgery offers a real opportunity to commit to stopping smoking.

Who can help me?

- Your GP practice will be able to offer help in reducing or stopping smoking, so ask them about the best options for you.
- There may be charities or support groups in your local area.
- Action on Smoking and Health (ASH) is a public health charity that works to reduce the harm caused by smoking. They have helpful advice on quitting here: bit.ly/2N7FLgG

Personal hygiene

Wounds heal more quickly if your body is clean and healthy just before the operation.

- **Shower or bath:** You are advised to shower or bath using soap, either the day before or on the day of surgery. If you are in hospital you will be given help to do this, if you need it.
- **Keeping warm:** If your temperature is low just before or during your operation you may be at higher risk of an infection developing in your wound. Therefore, you should try and keep warm whilst sitting waiting for your surgery in hospital by bringing in a dressing gown, slippers, pyjama bottoms etc from home to wear whilst waiting.
- **Shaving:** For most operations, you will not need to have the hair around the site of the operation removed. However, if your healthcare team do need to remove hair (to allow them to see or reach the skin) it should be done by the healthcare professionals caring for you on the day of the operation using electric hair clippers with a disposable head. We would not advise you to do this yourself.

Your pathway to surgery

Having surgery is about much more than the operation itself. To achieve the outcome you are expecting, it requires the input of many different teams. This section will explain all the people and the steps that are needed to guide you along this pathway, and to prepare you so you can have the best result

Contents	Page
Your healthcare team	24
Your role	25
Pre-operative assessment	26
Phase 1: Risk Evaluation	28
Once we've completed your Risk Evaluation	32
Phase 2: Preparation	33
Medical conditions and surgery	34
Deferring your surgery	37
Making plans to go home	38

Your healthcare team

Many healthcare professionals from different medical specialties will work together to make your surgery and recovery go smoothly. They will look after you before, during and after your surgery. This is often referred to as the perioperative team. But it all starts with you.

The perioperative team might consist of:



Your role

Having surgery is a big moment in your life and it's normal to feel anxious about it. Fitter patients who are able to improve their health and activity levels recover from surgery more quickly. What you do now can have a really big impact on your recovery. Taking an active role in planning and preparing for your operation will help you feel in control, leave hospital sooner and get back to normal more quickly.

Giving consent

Before having a planned operation, your consent should be obtained by the surgeon well in advance of your surgery. This is to ensure you have plenty of time to examine any information about the procedure and ask questions.

You will be asked to sign a consent form; please ensure that you understand the procedure, risks and your options before signing the form. It is important that you completely understand the information and are an active partner in your care. You will be given several opportunities to ask any questions you may have. There will be a copy of the signed consent form for you to keep. Please ask for it at the time of signing.

Remember you can withdraw your consent if you change your mind at any point before the operation.

Pre-operative assessment

If you are having a planned operation (rather than emergency) you will usually be invited to a pre-operative assessment clinic before your surgery. This is to check if you have any medical problems that might need to be treated before your operation, or if you'll need special care during or after the surgery.

University Hospitals Coventry and Warwickshire is constantly reviewing and updating its pre-operative pathway in response to the latest evidence and in order to best meet the needs of patients. As such, your pathway may be slightly different to what is described here.



Why do I need a pre-operative assessment?

Most surgery involves damaging parts of your body in a very controlled way in order to treat, replace, or remove the diseased parts. Most types of surgery aim to do as little harm as possible (such as keyhole surgery), but even so, just like when you are injured in any other way, the body needs to heal.

Healing needs your heart and lungs to work harder to get oxygen into, and around your body to the healing tissues. Any long-term illnesses affecting your heart or lungs can make the operation more risky for you. This can result in “complications” occurring. There’s more detail on this in the section “**Getting the best results**”.

In addition, having a general anaesthetic is a bit like putting your brain into a standby mode – things that it does in the background (such as controlling your breathing, heart rate, and the size of your blood vessels) get switched off, in a way that is similar to being put on life support. Your anaesthetist is a highly specialised type of doctor who is expert at managing this during your operation, and safely waking you up at the end.

This is why it is very important that we know about your general health before you have an anaesthetic or an operation, so that we can plan the best way to do it.

Phase 1: risk evaluation

The first stage of your Pre-Operative Assessment is called the “Risk Evaluation”. This is to make sure that it is safe to proceed with your operation, and to identify any further tests or checks that are needed. **Your surgeon may decide to refer you for Risk Evaluation before you have decided to have surgery, so that we can help you make an informed decision.**

It can happen in a few ways:

- You may be sent a telephone appointment where a pre-operative assessment nurse will take you through a questionnaire. We will also want to know about any regular medications you are taking.
- In some cases we will send you an appointment to visit us in hospital. This will be if we anticipate that you will need other tests or appointments that mean you will come into hospital anyway. We will try and keep the number of visits into hospital to a minimum.

We will also need your height, weight and vital signs (such as your blood pressure). In most cases, these will be taken when you visit your surgeon, but if not, we will ask you GP for this. If you take your height, weight and blood pressure at home, then we can usually use this, but it is very important that this is accurate as we may be basing drug doses on these.

Your nurse assessment

Most people will speak to a pre-assessment nurse specialist, to discuss any medical problems you may have, how they may impact your surgery and how surgery may affect them. Most of this can be done at a telephone consultation, but we may need to bring you into hospital for an appointment, depending on the circumstances.

An accurate list of your medicines is very important. We aim to collect this information directly from your GP practice via a system known as the NHS Summary Care Record. We need permission to access your information, and if you do not consent to this, then it is essential that you provide this information yourself. We will then advise you which medications to stop, and which ones to continue taking before surgery.

If you are allergic to anything, this will be recorded. As well as medications, we need to know about other important allergies including eggs, nuts, nickel/metal, plasters/ dressings, latex or rubber.

Tests will be organised if necessary, depending on the type of operation and anaesthetic you're having. Tests might include blood tests and an ECG (heart tracing). We will usually need you to visit hospital for an ECG, but we can usually arrange for your local GP or pharmacy to do blood tests.

All this information will build a picture of the risks of you having your operation.

This is a good time to ask questions and talk about worries that you may have. If the staff in the clinic cannot answer your questions, they will help you find someone who can.

If you're High Risk

Or you are having a very major or complex operation that carries high risks, or if you have other serious medical problems, you may also need to see an anaesthetist.

If your operation is not urgent, the anaesthetist at the pre-operative assessment clinic may talk to you about taking some time to improve your health. More tests may be needed, or some treatment may need to be started. They would do this working closely with your surgeon. If your operation is urgent, the anaesthetist will liaise with the surgeon and the critical care team, to ensure that your care can be tailored to suit your needs.

It is also possible that the anaesthetist you see thinks there are very high risks if you have the operation. You may want time to think about whether to go ahead with the operation.

Referrals to other specialists

You may also be referred to other specialists to investigate potential medical problems that might have an impact on your surgery (such as sleep apnoea or anaemia).

These referrals aim to identify and treat conditions that may cause a problem with your recovery after the operation, and therefore to prevent you coming to harm that could have been avoided. We will only delay your surgery if we feel that this is the case.

Once we've completed your risk evaluation

We will inform your surgeon, and they will look for a date for your surgery. If your surgery is urgent, they may already have given you a provisional date, but this is only confirmed once you've completed your risk evaluation.

Specialty preparation services

For certain operations, you will go on to have assessments and education specific to that surgery. It may involve:

- Education and counselling from specialist nurses, including cancer specialists.
- Education for operations where you may have a stoma
- Education from physiotherapists (particularly for hip and knee replacements)
- Psychologist input
- Extra blood tests, x-rays or scans to aid in planning for the operation
- Meetings with research nurses to discuss being involved in clinical trials

Every operation may have different people involved, and your surgical team will arrange who you will see. Wherever possible, we try and do all of these things on the same visit, and if you have to come to the pre-operative assessment clinic we try and do this on the same day too.

Phase 2: preparation

Once you have received a date for your surgery, you will be placed onto a surgical pathway. We will usually ask you to isolate before surgery to protect you from infection. Information on these pathways is available on our website, which you can access by scanning the QR code opposite with your mobile phone camera

Surgical pathways



Or you can type this link into your browser

<https://www.Uhcw.Nhs.Uk/caring-for-you/coronavirus/surgical-pathways/>

Preparing for your surgery



2 to 4 days before your date of surgery, you will be asked to come to a clinic where blood tests and screening for infection will take place, details of this are in the leaflet called **preparing for your surgery**. You should have received this at your risk evaluation appointment. If not you can access it with this QR code.

Or you can type this link into your browser

<https://www.Uhcw.Nhs.Uk/patiets/clinical-support-services/anaesthetics/>

Medical conditions and surgery

Many medical conditions can affect recovery from surgery. It is important to make sure any known conditions are controlled as well as possible ahead of your surgery.

When you have your pre-operative assessment you will be asked about your health in order to screen for medical conditions you may not know you have, but which may have an impact on your surgery. It is not unusual for new conditions to be discovered in the run up to surgery, and there is usually time to control them well enough to prevent them from causing problems during surgery.

If you are worried that your health has changed since your preoperative assessment, please get in touch – you will have been given contact numbers after your assessment.

Diabetes

Good control of your blood sugar is really important to reduce your risk of infections after surgery. Think about your diet and weight. Talk to your diabetes nurse or team early to see if they need to make any changes to your treatment.

Your preoperative assessment nurse will also advise you on what to do with your treatment before your surgery.

Blood pressure

Blood pressure should be controlled to safe levels to reduce your risk of stroke. Sometimes operations may be delayed if it is too high.

Have your blood pressure checked at your surgery well ahead of your operation – some GP surgeries have automated machines so you can pop in any time. If it is high, your GP can check your medications and make any changes needed ahead of the operation.

Anaemia (low blood count)

If you have been bleeding or have a chronic medical condition, a blood test can check whether you are anaemic. We will do a blood test looking for anaemia before your surgery if it is appropriate. If you are found to be anaemic, we will automatically refer you to a specialist clinic which will provide you with the appropriate treatment.

Treating your anaemia before surgery reduces the chance of you needing a blood transfusion. It will also help your recovery and make you feel less tired after your surgery.

Heart, lung and other medical problems

If you have any other long-term medical problems, consider asking your GP or nurse for a review of your medications, especially if you think your health is not as good as it could be.

Anxiety and mental health

Most people feel some anxiety about having surgery. If the thought of going into hospital is making you very anxious or upset, it may be helpful to talk about your concerns with your GP. In some areas GPs can refer you for specific support.

Many techniques including mindfulness, relaxation and breathing exercises or yoga could help you relax before and after your surgery.

If you are taking medication for mental health problems, it is important to let the preoperative assessment nurse at the hospital know about your medication. They will usually not want you to stop this. They can help organise any particular support you need for your time in hospital or return home.

Dental health

If you have loose teeth or crowns, a visit to the dentist may reduce the risk of damage to your teeth during an operation.

Deferring your surgery

Occasionally, after assessment we will have to defer your surgery because you are not yet fit to proceed. This means that proceeding with surgery may expose you to risks of harm that could be prevented. It doesn't necessarily mean your surgery will be cancelled altogether. Your preoperative assessment nurse or anaesthetist will explain why you have been deferred and the plan of what to do next. It may be that further information or tests are required.

We are always mindful of the urgency of the operation, and deferring it will be a balance between the risks of waiting and the risks of proceeding. A consultant anaesthetist will often be involved in this decision.

The type of operation you are having can also affect these decisions, so you may find you are not deferred for one operation, and then you are deferred for the next.

Making plans to go home

You should make arrangements for going home BEFORE you come into hospital.

It is helpful to find out from your surgeon when they would expect you to go home. Sometimes this can be difficult to predict, but having a date to aim for can be helpful.

You must arrange for an adult to drive you home after surgery. A taxi is not acceptable unless you have a responsible adult to accompany you. Bring the name and phone number of this person with you. If you need an ambulance to take you home, this will be decided by the staff looking after you after surgery, and arranged for you.

Before you come in, find out:

- Who is going to take you home?
- What is their phone number?
- Who will be able to help you at home?
- How long can they stay with you?

Planning for your recovery at home

When you are discharged from hospital, we will check that you are safe to be at home, but this doesn't mean you will be completely recovered. You are likely to still need painkillers, and will find your energy levels will be lower. Nonetheless, you will probably find you recover quicker in the comfort of your own home. You will also find you become more active once you are at home, and this is important for your recovery. After major surgery, it can take weeks or sometimes months before you feel fully recovered.

It is worth planning ahead:

- Make sure you have plenty of food that is easy to prepare at home, or someone who can help you with this
- You may want to ask a friend or relative to help you with shopping
- Think about things you can do while you're recovering so you don't get bored
- Have a thermometer at home – so you can check your temperature in case you feel unwell when you get home
- Make sure you have a supply of simple over-the-counter painkillers at home

Simple painkillers like paracetamol and ibuprofen can be very effective, though it is much more expensive for a hospital to provide them than for you to buy them from a chemist (they cost as little as 19p). Buying your own supply before your operation can help us spend money where it is most needed.

On the day

In most cases, you will be invited to arrive on the day of surgery. This means you can sleep in your own bed and get a better night's sleep before your surgery.

The day of surgery can be stressful, and it may help if you know what to expect.

Contents	Page
Arriving at the hospital	44
When you arrive	44
How will I get to theatre?	47
What will happen to me during my operation?	48
Dignity and respect in theatre	48

Arriving at the hospital

There are a number of different places where you may be asked to arrive at for your surgery. This depends on the type of surgery you're having. You will receive a letter explaining when and where you should arrive.

If you have any queries, your surgeon's secretary will be able to help you.

When you arrive

You will be greeted by a nurse or healthcare support worker who

- Will check your details and put a wristband on you – it is vital that your name and date of birth on this are correct.
- May measure your vital signs, including your pulse and blood pressure
- May measure your legs and supply you with surgical stockings to wear
- May give you medication prescribed by the anaesthetist if needed
- Will run through a safety checklist with you (this may be done shortly before you go down to theatre)

You will be seen by your anaesthetist who

- Will ask you a series of questions about your health, your medications, and your experience with previous anaesthetics. You may have already been asked these questions in the pre-operative assessment clinic, but the anaesthetist may wish to ask them again to “double-check” or to go into more detail
- Will discuss the type of anaesthetic you will have. They may wish to recommend one type over another based on your health and the type of operation you are having
- Will outline the risks of anaesthesia

You will be seen by your surgeon who

- Will confirm what procedure you are having and complete a consent form with you if this has not already been done
- May place an arrow on you to indicate the site or side of the operation. This is done so that there can be no confusion about what part of your body is being operated on. If you think this is wrong, you must say.
- Will answer any questions you may have
- May often be a member of the surgical team rather than the consultant. This is normal practice, as several members of the team will be involved in your care.

You may also be seen by

- **A surgeon in training:** This can range from a junior trainee who is learning how to do the operation to a senior trainee who may be able to perform the operation independently. Surgeons in training are normally always under the supervision of a consultant. If the surgeon in training is not supervised, then they will be senior and be fully able to perform your surgery without help.
- **An anaesthetist in training:** This will normally be a trainee developing their skills at anaesthetising for your operation. They will be skilled in the basic principles of anaesthetic care and may well perform the majority of the anaesthetic while a consultant supervises. On occasion, they may be the only anaesthetist. If so, they will be fully able to manage your anaesthetic, and if they have concerns, they will have a senior anaesthetist available to help them.

As a University hospital, you may also see

- **A medical student:** They may want to ask you questions about the medical problem that you are having surgery for. They may ask to examine you so they can practice this skill. As this is a teaching hospital, the assumption will be that you are happy to see or speak to students. If you do not want to see them, please say.
- **A nursing student:** They may help the nurse with their work. They often work as an additional member of the team, but will be supervised by one of the nurses.
- **Research nurses:** The Trust is involved in a number of research projects. You may already have been approached by research nurses in clinic. Some projects randomly recruit patients on the day of surgery

How will I get to theatre?

A chaperone from the theatre admissions unit will come to the ward to collect you.

Your paperwork and theatre checklist will have been completed on the ward by the nursing staff. This is one of several checks that we will go through to ensure we have the right person for the right operation. Once the chaperone from theatre admissions has verified with the nurse you are ready and all your checks have been completed, it's time to go. You will either be taken on your ward bed, in a wheelchair or walked down, this depends on how mobile you are and which operation you will have.

Who are the theatre team that will be caring for you?

Health care assistant / support worker / chaperone	A member of staff who cares for you throughout your theatre journey, but also supports the theatre practitioner during the operation
Theatre practitioner	A member of staff who supports the surgeon with the instrumentation needed for the operation
Anaesthetic Practitioner (ODP)	A member of staff who will support the anaesthetic team throughout your operation
Recovery Practitioner	A member of staff who will look after you straight after your surgery, and make sure you are well enough to go back to the ward

What will happen to me during my operation?

The process is generally the same whether you are asleep or awake. The surgical site will be cleaned and draped with sterile sheets. Just before the surgeon starts the procedure a safety checklist will be performed where we will do a final check to make sure you are the right patient, what procedure you are having and where on your body the surgery will be performed. If you are having a regional anaesthetic, even if you have sedation, you may be aware of all this happening. If you have a general anaesthetic it will all happen while you are asleep. Only once the final check has been done the will surgeon be allowed to start.

Dignity and respect in theatre

While having your operation you may feel embarrassed and uncomfortable; the theatre staff are extremely respectful of your dignity and take extra time to consider your feelings. Some operations may require you to remove your underwear; the ward has disposable underwear if you feel uncomfortable travelling to theatre without your own.

If you wear glasses, hearing aids or dentures you are welcome to wear them to theatre and they can be removed in the anaesthetic room and labelled with your details; they will be returned to you in the recovery ward. If you have any worries or concerns, then please raise them with any theatre team member and we will do our best to help you

Your Anaesthetic

It is common to be anxious about having an anaesthetic, though it doesn't need to be. Modern anaesthesia is very safe, though like everything in medicine, it has small risks.

This section explains in detail about ways the anaesthetic can be given, including the risks involved, in order to help you make the right decisions for your care.

Contents	Page
Fasting before surgery	
What is anaesthesia?	50
Local anaesthesia	51
Regional anaesthesia	51
Spinal anaesthesia	52
General anaesthesia	61
Sedation	62
Risks of anaesthesia	63
Managing your pain	66
Why do we treat pain?	67
The Pain Service	68
Types of pain relief	68

Fasting before surgery

If you are coming into hospital in the morning

- Do not eat anything after 2am on the night before (please do not drink milk or fruit juice after this time either)
- Drink as much water, squash, black tea or coffee as you want until 6am
- At 6am, drink your “pre-op” carbohydrate drink if you have been given one (not all operations need this)
- You are encouraged to continue to drink water until 7am

If you are coming into hospital in the afternoon

- Do not eat anything after 7am in the morning (please do not drink milk or fruit juice after this time either)
- Drink as much water, squash, black tea or coffee as you want until 11am
- At 11am, drink your “pre-op” carbohydrate drink if you have been given one (not all operations need this)
- You are encouraged to continue to drink water until midday

Why is fasting important?

If you are expecting a general anaesthetic, you will need to be fasted so that your stomach is empty at the time the anaesthetic is given.

If your stomach is not empty, acid, bile or food may pass back up your food pipe (oesophagus) and go into your lungs. This is called aspiration and can be fatal. Aspiration is extremely rare in people who have followed the fasting instructions correctly.

Even if you are not expecting a general anaesthetic, your anaesthetist will want you to prepare in the same way. This is because, if the other anaesthetic technique doesn't work, or if there are problems during the surgery, you may then need to be given a general anaesthetic.

Acid Reflux

If you suffer from acid reflux or severe heartburn you must tell your anaesthetist. If you are on medications that control these symptoms, then you should take them as normal. If it is not treated, the anaesthetist may want to give you a drug to help with the acid. In severe cases, the way we give the anaesthetic is modified to ensure that acid does not travel back up the food pipe and enter the lungs

What is anaesthesia?

The word anaesthesia means 'loss of sensation'. It can involve a simple local anaesthetic injection which numbs a small part of the body, such as a finger or around a tooth. It can also involve using powerful drugs which cause unconsciousness. These drugs also affect the function of the heart, the lungs and the circulation. As a result, general anaesthesia is only given under the close supervision of an anaesthetist, who is trained to consider the best way to give you an effective anaesthetic but also to keep you safe and well. The drugs used in anaesthesia work by blocking the signals that pass along your nerves to your brain. When the drugs wear off, you start to feel normal sensation again.

Types of anaesthesia

There are four main types of anaesthetic which will be discussed in more detail in this section

- Local anaesthesia
- Regional anaesthesia
- Spinal anaesthesia
- General anaesthesia

There is also sedation, which can be combined with local, regional or spinal anaesthesia.

Local anaesthesia

A local anaesthetic numbs a small part of the body. It is used when the nerves can be easily reached by drops, sprays, ointments or injections. You stay conscious, but free from pain. Common examples of surgery under local anaesthetic are having teeth removed and some common operations on the eye.

Regional anaesthesia

This is when local anaesthetic is injected near to the nerves which supply a larger or deeper area of the body. The area of the body affected becomes numb. This could be used for

- Operations on your hand, arm, or sometimes shoulder
- Operations on your foot or ankle

This can be the best option for your operation, recovery, and pain control afterwards, but depends on the operation you're having. The anaesthetist who will be looking after you will discuss this with you in more detail if it's appropriate.

Spinal anaesthesia

For many operations it is usual for patients to have a general anaesthetic. However, for operations in the lower part of the body, it is often possible for you to have a spinal anaesthetic instead. This is when an anaesthetic is injected into your lower back (between the bones of your spine). This makes the lower part of the body numb so you do not feel the pain of the operation and can stay awake.

Typically, a spinal lasts one to two hours, but drugs can be used which last longer or shorter depending on the operation. Other drugs may be injected at the same time to help with pain relief for many hours after the anaesthetic has worn off. During your spinal anaesthetic you may be:

- Fully awake
- Sedated – with drugs that make you relaxed, but not unconscious

For some operations a spinal anaesthetic can also be given before a general anaesthetic to give additional pain relief afterwards. Your anaesthetist can help you decide which of these would be best for you.

When is spinal anaesthesia used?

Many operations in the lower part of the body are suitable for a spinal anaesthetic with or without a general anaesthetic.

Depending on your personal health, there may be benefits to you from having a spinal anaesthetic. Your anaesthetist is there to discuss this with you and to help you make a decision as to what suits you best.

A spinal anaesthetic can often be used on its own or with a general anaesthetic for:

- orthopaedic surgery on joints or bones of the leg
- groin hernia repair, varicose veins, haemorrhoid surgery (piles)
- vascular surgery: operations on the blood vessels in the leg
- gynaecology: prolapse repairs, hysteroscopy and some kinds of hysterectomy
- urology: prostate surgery, bladder operations, genital surgery.

How is the spinal performed?

1. You may have your spinal in the anaesthetic room or in the operating theatre. You will meet the anaesthetic assistant who is part of the team that will look after you.
2. Your anaesthetist will first use a needle to insert a thin plastic tube (a 'cannula') into a vein in your hand or arm. This allows your anaesthetist to give you fluids and any drugs you may need.
3. You will be helped into the correct position for the spinal. You will either sit on the side of the bed with your feet on a low stool or you will lie on your side, curled up with your knees tucked up towards your chest.
4. The anaesthetic team will explain what is happening, so that you are aware of what is taking place.
5. A local anaesthetic is injected first to numb the skin and so make the spinal injection more comfortable. This will sting for a few seconds.
6. The anaesthetist will give the spinal injection and you will need to keep still for this to be done. It involves passing a very fine needle between the bones of your spine into a space close to your spinal cord. It can sometimes be quite difficult., but anaesthetists are very experienced at doing this, and it is quite normal if they need to try a couple of times.
7. A nurse or healthcare assistant will usually support and reassure you during the injection.

What will I feel?

A spinal injection is often no more painful than having a blood test or having a cannula inserted. It may take a few minutes to perform, but may take longer if you have had any problems with your back or have obesity.

- During the injection you may feel pins and needles or a sharp pain in one of your legs – if you do, try to remain still, and tell your anaesthetist.
- When the injection is finished, you will usually be asked to lie flat if you have been sitting up. The spinal usually begins to have an effect within a few minutes.
- To start with, your skin will feel warm, then numb to the touch and then gradually you will feel your legs becoming heavier and more difficult to move.
- When the injection is working fully, you will be unable to lift your legs up or feel any pain in the lower part of the body.

Testing if the spinal has worked

Your anaesthetist will use a range of simple tests to see if the anaesthetic is working properly, which may include:

- spraying a cold liquid and ask if you can feel it as cold
- brushing a swab or a probe on your skin and asking what you can feel
- asking you to lift your legs.

It is important to concentrate during these tests so that you and your anaesthetist can be reassured that the anaesthetic is working. The anaesthetist will only allow the surgery to begin when they are satisfied that the anaesthetic is working.

During the operation (spinal anaesthetic alone)

- In the operating theatre, a full team of staff will look after you. If you are awake, they will introduce themselves and try to put you at ease.
- You will be positioned for the operation. You should tell your anaesthetist if there is something that will make you more comfortable, such as an extra pillow or an armrest.
- You may be given oxygen to breathe, through a lightweight, clear plastic mask, to improve oxygen levels in your blood.
- You will be aware of the 'hustle and bustle' of the operating theatre, but you will be able to relax, with your anaesthetist looking after you.
- You may be able to listen to music during the operation. You are welcome to bring your own music, with headphones.
- You can talk with the anaesthetist and anaesthetic practitioner during the operation.

If you have sedation during the operation, you will be relaxed and may be sleepy. You may snooze through the operation, or you may be awake during some or all of it. You may remember some, none or all of your time in theatre.

You may still need a general anaesthetic if:

- your anaesthetist cannot perform the spinal
- the spinal does not work well enough around the area of the surgery
- the surgery is more complicated or takes longer than expected.

Side effects and complications of spinal anaesthesia

Common (1 in 10 to 1 in 100)

- *Low blood pressure* – as the spinal takes effect, it can lower your blood pressure. This can make you feel faint or sick. This will be controlled by your anaesthetist with the fluids given through your drip and by giving you drugs to raise your blood pressure.
- *Itching* – this can commonly occur if morphine-like drugs have been used in the spinal anaesthetic. If you have severe itching, a drug can be given to help.
- *Difficulty passing urine* (urinary retention) or loss of bladder control (incontinence) – you may find it difficult to empty your bladder normally while the spinal is working or, more rarely, you may have loss of bladder control. Your bladder function will return to normal after the spinal wears off. You may need to have a catheter placed in your bladder temporarily, while the spinal wears off and for a short time afterwards. Your bowel function is not affected by the spinal.
- *Pain during the injection* – if you feel pain in places other than where the needle is – you should immediately tell your anaesthetist. This might be in your legs or bottom, and might be due to the needle touching a nerve. The needle will be repositioned.

Side effects and complications of spinal anaesthesia

Less Common (1 in 100 to 1 in 1000)

- *Post-dural puncture headache* – there are many causes of headache after an operation, including being dehydrated, not eating and anxiety. Most headaches can be treated with simple pain relief. Uncommonly, after a spinal it is possible to develop a more severe, persistent headache called a post-dural puncture headache, for which there is specific treatment. This happens on average about 1 in 200 spinal injections. This headache is usually worse if you sit up and is better if you lie flat. The headache may be accompanied by loss of hearing or muffling or distortion of hearing.

Rare (1 in 1000 to 1 in 10,000)

- *Nerve damage* – this is a rare complication of spinal anaesthesia. Temporary loss of sensation, pins and needles and sometimes muscle weakness may last for a few days or even weeks, but most disappear with time and a full recovery is made.
- *Permanent nerve damage* is rare (approximately 1 in 50,000 spinals). It has about the same chance of occurring as major complications of having a general anaesthetic

General anaesthesia

General anaesthesia is a state of controlled unconsciousness during which you feel nothing. You will have no memory of what happens while you are anaesthetised.

A general anaesthetic is essential for a very wide range of operations. This includes all major operations on the heart or lungs or in the abdomen, and most operations on the brain or the major arteries. It is also normally needed for laparoscopic (keyhole) operations on the abdomen.

Anaesthetic drugs are injected into a vein, or anaesthetic gases are given for the patient to breathe. These drugs stop the brain from responding to sensory messages travelling from nerves in the body.

Anaesthetic unconsciousness is different from a natural sleep. You cannot be woken from an anaesthetic until the drugs are stopped and their effects wear off.

While you are unconscious, the team in theatre look after you with great care.

Your anaesthetist stays near to you all the time.

Sedation

Sedation involves using small amounts of anaesthetic drugs to produce a 'sleep-like' state. It makes you physically and mentally relaxed, but **not** unconscious.

Many people having a local or regional anaesthetic do not want to be awake for surgery. They choose to have sedation as well.

If you have sedation, you may remember little or nothing about the operation or procedure. However, sedation does not guarantee that you will have no memory of the operation. Only a general anaesthetic can do that.

The “deeper” your sedation is (ie. More asleep you appear to be), the closer it comes to a general anaesthetic. This is why you may be expected to prepare as if it were a general anaesthetic by fasting beforehand.

Combinations

Anaesthetic techniques are often combined. For example, a regional anaesthetic may be given for pain relief afterwards, and a general anaesthetic makes sure you remember nothing

Risks of anaesthesia

The risks of anaesthesia are significantly smaller than those of the surgery – the surgeon should explain these to you in detail before you consent to the surgery.

In modern anaesthesia, serious problems are uncommon.

Risk cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure than people may perceive it to be.

To understand a risk, you must know:

- How likely it is to happen
- How serious it could be
- How it can be treated.

The risk to you as an individual will depend on:

- Whether you have any other illness
- Personal factors, such as smoking or being overweight
- Surgery that is complicated, long or done in an emergency.

More information on the side effects and complications than is listed here is given in the booklet anaesthesia explained which is available from the college website via the link below:

[Www.Rcoa.Ac.Uk/document-store/anaesthesia-explained](http://www.Rcoa.Ac.Uk/document-store/anaesthesia-explained)

Risks of anaesthesia

Very common and common side effects

1 in 10 (someone in your family to 1 in 100 people (someone in a street))

RA = having a regional or spinal anaesthetic

GA = having a general anaesthetic

	GA	RA
Feeling sick and vomiting after surgery	✓	✓
Sore throat	✓	✗
Dizziness, blurred vision	✓	✓
Headache	✓	✓
Bladder problems (eg. Difficulty passing urine)	✓	✓
Damage to the lips or tongue (usually minor)	✓	✗
Itching	✓	✓
Aches, pains and backache	✓	✓
Pain during injection of drugs	✓	✓
Bruising and soreness	✓	✓
Confusion or memory loss	✓	✗

Uncommon side effects and complications

1 in 1000 (someone in a village)

	GA	RA
Chest infection	✓	✗
Damage to the cornea of the eye	✓	✗
Damage to teeth	✓	✗
An existing medical condition getting worse	✓	✓
Nerve damage to peripheral nerves	✓	✓
Awareness (becoming conscious during your operation)	✓	✗

Rare or very rare complications

1 in 10,000 (someone in a small town) to 1 in 100,000 (someone in a large town)

	GA	RA
Damage to the eyes including loss of vision	✓	✗
Heart attack or stroke	✓	✓
Serious allergy to drugs	✓	✓
Nerve damage to nerves in the spine	✓	✓
Death (probably about 5 for every million anaesthetics in the UK)	✓	✓
Equipment failure causing significant harm	✓	✓

Managing your pain

There are many effective treatments to help keep you comfortable after your operation. The different ways of relieving pain vary depending on the operation you have, and on particular aspects of your medical history that have been identified during your pre-operative assessment. The options for pain control will be explained before your operation by the anaesthetist looking after you.

Contents	Page
Post-operative pain	66
The pain service	67
Types of pain relief	68
Tablets, liquids and suppositories	69
Injections	69
Patient controlled analgesia (PCA)	70
Wound catheters	72
Nerve blocks	72
Spinal (intrathecal) analgesia	73
Epidurals	73
Managing pain when you go home	80

Post-operative pain

What is pain?

Pain is the unpleasant sensation that people experience after an injury or surgery. You will be asked to tell the doctors and nurses about any pain that you have. They will ask you about the severity of the pain at rest and on movement, such as deep breathing, coughing or sitting out of bed.

Why treating pain is important

It may seem obvious, but good pain relief (also called “analgesia”) is very important to your recovery and has many benefits, such as

- Greater comfort while you recover from surgery, meaning you are in a more positive mind-frame
- Quicker recovery as breathing exercises, mobilising and physiotherapy can all be managed with less discomfort
- Reduces the complications of surgery such as chest infections and blood clots

The pain service

At the university hospitals coventry and warwickshire NHS trust we aim to provide the safest and best pain relief for all patients after surgery. To achieve this, we have an acute pain service provided by a team of specialist nurses. The team is available weekdays to advise and answer any questions that you may have about pain relief. If you would like to speak to one of the team you can ask the ward nurses to contact us.

How will my pain be treated?

There are many different ways to control pain and sometimes combinations of treatments are used to get the best results. The effectiveness of your pain relief will be assessed at regular intervals and adjustments to the treatment can be made if required. We aim for patients to be able to cough, breathe deeply and move around the ward without experiencing significant discomfort. It is much easier to relieve pain if it is managed before it gets too severe.

The ways we can manage pain are:

- Tablets, liquids and suppositories
- Injections of painkiller
- Patient controlled analgesia (PCA)
- Wound catheters
- Nerve blocks
- Spinal analgesia
- Epidural analgesia

Tablets, liquids and suppositories

If you are able to eat and drink, the most convenient way to take painkillers is by mouth. We know that combinations of different types of analgesics (painkillers) provide the best pain relief.

If you find swallowing tablets difficult you need to tell the nurses and doctors looking after you, as soluble or liquid forms are available. Some patients may be offered the use of pain killers in the form of suppositories.

Paracetamol is prescribed for nearly all patients to take regularly after surgery as research has shown that it can improve the effectiveness of other painkillers. Smaller doses of stronger painkillers can then be used with reduced side effects.

You may be given some painkillers to take home with you.

Injections

When patients are experiencing a lot of discomfort, an injection of strong painkiller can be given either just under the skin (subcutaneous) into a muscle (intramuscular) or a vein (intravenous).

These can be given at regular intervals or as required.

Sometimes a small plastic tube (a cannula; also called a venflon or a “drip”) will be inserted into the vein which will prevent the need for several injections.

Opioids

Drugs such as morphine are known as *opioids*. They are widely used and effective for short term pain management. As with all drugs, morphine can produce some unwanted side effects, the more common of which are:

- Tiredness/drowsiness
- Light-headed feeling
- Vivid dreams
- Itchiness
- Nausea, vomiting
- Constipation

Treatments are readily available to treat any unpleasant side effects, so it is very important for you to report any symptoms.

Patients sometimes worry about becoming addicted to opioids like morphine. It is important to stop taking them once the pain has improved, and to stop them if they don't improve the pain, but when used to treat pain after surgery they do not cause addiction.

Patient controlled analgesia (PCA)

PCA is a system that allows you to be in control of your own pain relief. A device containing a strong painkiller such as morphine is connected to a cannula in the vein, usually in your hand or arm. The device enables you to control the pain via a button on the PCA handset.

When you press the button a small dose of painkiller is delivered into the vein.

- Pca allows you to give yourself small amounts of the pain killing drug when you require it and avoids any wait to get analgesia and also any further injections.
- You can press the button as often as you require. It is important not to let the pain build up before pressing the button.
- The device has a safety mechanism to make sure that you cannot give yourself too much painkiller. It will only allow a measured dose to be delivered every 5 minutes.
- Pca is very safe as long as only you press the button, as only you know the pain you can feel and how much painkiller you need to relieve it and how much effect the medicine is having. The nurses will check and record at regular intervals how much of the painkiller you are using.
- If you are using the pca and continue to experience pain, you must tell the nurse looking after you.

You can have a pca until you are able to take medicines by mouth.

Wound catheters

Local anaesthetic is administered into your wound via one or more small plastic tubes. This should give a numb area around the wound. The surgeon places the tubes during the operation. They are connected to a pump that continuously delivers local anaesthetic. Wound catheters can stay in for several days after your operation, but can only be used for certain types of procedure and will usually need other forms of pain relief as well.

Nerve blocks

A nerve block is when the nerve supply to an area that is being operated on is anaesthetised with local anaesthetic solution. This will normally make the area or limb being operated on feel weak and numb. Nerve blocks normally last for approximately 12 hours after surgery and some patients may also have a continuous infusion of local anaesthetic via a small pump. In addition to the nerve block patients will also be prescribed additional painkilling medicine.

Your anaesthetist will explain nerve block procedure to you.

With all nerve blocks there is a very rare chance of nerve damage, but modern techniques make the risk of this extremely low and the pain relief they provide is very good.

Spinal (intrathecal) analgesia

Spinal analgesia is administered in a spinal injection (see the section on **spinal anaesthesia**) and can either be given with a spinal anaesthetic as your only anaesthetic, or can be given with a general anaesthetic.

Spinal analgesia is usually a very small dose of opioid such as morphine. When given as a spinal injection, it can be much more effective than when injected into a vein, and will last a lot longer (often between 12 and 24 hours).

Epidural analgesia

An epidural is a fine, flexible tube placed in the back near the nerves coming from the spinal cord, through which pain-killing drugs can be given to give pain relief.

It is used during surgery (usually in addition to a general anaesthetic), after the operation for pain control, or both.

Local anaesthetic, and sometimes other pain-relieving drugs, are put through the epidural catheter. This lies close to the nerves in your back. As a result, the nerve messages are blocked. This gives you pain relief, which varies in extent according to the amount and type of drug given. The local anaesthetic may cause some numbness and weakness as well as pain relief.

An epidural pump is used to give pain-relieving drugs continuously through the epidural catheter. The pain relief lasts as long as the pump is running. When it is stopped, full feeling will return within a few hours.

Why have an epidural?

Epidurals are commonly used for pain relief after major surgery where there will be large cuts in the thorax (chest), abdomen (tummy) or pelvis.

What are the benefits of an epidural?

If your epidural is working well, after your surgery you will have better pain relief than with other methods, particularly when you take a deep breath, cough or move about in the bed.

You should need less alternative strong pain relief medicine. This means your breathing will be better, there should be less nausea and vomiting, and you are likely to be more alert.

There is some evidence that other complications of surgery may be reduced, including reduced risk of blood clots in the legs or lung and chest infection. There is also some evidence that you may lose less blood with an epidural, which would reduce your chance of needing a blood transfusion.

What if I don't have an epidural?

It is your choice. Your anaesthetist will tell you if they particularly recommend an epidural, and what alternatives there may be.

Other pain relief may be less effective and may have more side effects including nausea and constipation., and in some people, confusion.

It is often possible to combine other options such patient controlled analgesia (PCA) and methods such as spinal analgesia or nerve blocks as an alternative.

Can anyone have an epidural?

No. An epidural is not possible for some people. Your anaesthetist will discuss this with you if necessary. An epidural may not be possible for you if:

- you take blood-thinning drugs, such as warfarin
- your blood does not clot properly
- you are allergic to local anaesthetic
- you have significant deformity of the spine
- you have an infection in your back
- you have had previous surgery on the spine with metalwork in your back
- you have had problems with a spinal anaesthetic or epidural in the past.

How is an epidural done?

Epidurals can be put in when you are fully awake, or with sedation (drugs that make you sleepy and relaxed).

Your anaesthetist will talk to you about which might be best for you. The steps for having an epidural are:

1. a cannula (drip) is placed in a vein in your arm for giving fluid
2. you will be asked to sit up or lie on your side. You will be helped to bend forwards, curving your back as much as you can
3. the anaesthetist will clean your back with antiseptic
4. a small injection of local anaesthetic is given to numb the skin
5. a needle is used to place a thin plastic catheter (tube) into the epidural space in your back. The needle is removed, leaving only the catheter in your back.

How will this feel?

The local anaesthetic injection in the skin will sting briefly. There will then be the feeling of pushing, but usually no more than discomfort as the needle and catheter is inserted.

Occasionally, a sharp feeling, like an electric shock, is felt. If this happens, it will be obvious to your anaesthetist. They may ask you where you felt it.

A sensation of warmth and numbness gradually develops after the epidural is started. For some types of epidural, your legs may feel heavy and become difficult to move.

Overall, most people do not find these sensations to be unpleasant, just a bit strange.

Risks of having an epidural

The risk of complications should be balanced against the benefits and compared with alternative methods of pain relief. Your anaesthetist can give you more information and help you understand the relative risks.

Very common side effects (occur in around 1 in 10)

- *Low blood pressure* – it is normal for the blood pressure to fall a little when you have an epidural. Your anaesthetist will use fluids and drugs to correct it.
- *Inability to pass urine* – the nerves to the bladder are affected by the epidural. A catheter (tube) is inserted into the bladder to drain away the urine. This is often needed after major surgery with or without an epidural.
- *Itching* – this is a side effect of the pain relief drugs that are sometimes used in an epidural. Antihistamine drugs may help, or the drug in the epidural can be changed.
- *Feeling sick* – this is less common with an epidural than with other pain relief methods. It may be helped by anti-sickness medicines.
- *Inadequate pain relief* – the epidural may not relieve all your pain. Your anaesthetist or the pain relief nurses looking after you will decide if it can be improved or if you need to switch to another pain relief method.

Common side effects (occur in around 1 in 100)

- *Headache* – headaches are quite common after surgery. It is possible to get a more severe, persistent headache after having an epidural. This happens on average about once in every hundred epidurals. It happens if the needle used to place the epidural or the epidural catheter unintentionally puncture the bag of fluid that bathes the spinal cord. A small amount of fluid leaks out, causing a headache. It can cause a severe headache that is worse if you sit up and is relieved by lying flat. The headache sometimes will go away on its own with good hydration and pain relief. The staff looking after you should alert the anaesthetic team as this will need to be reviewed by them before you are discharged. If the headache is severe or remains, you may need specific treatment for the headache. The headache may be accompanied by loss of hearing or muffling or distortion of hearing.

Uncommon side effects (occur in around 1 in 1000)

- *Slow breathing* – some drugs used in the epidural can cause slow breathing or drowsiness, which requires treatment.
- *Temporary nerve damage* – uncommonly, the needle or epidural catheter can damage nerves. This can give loss of feeling or movement in a large or small area of the lower body. In most people this gets better after a few days, weeks or months.

Rare/very rare complications (less than 1 in 10,000)

- *Permanent nerve damage* – Permanent nerve damage by the needle or the catheter is rare:
 - permanent harm occurs in 1 in 23,500 to 50,500 spinal or epidural injections
 - Paraplegia or death occurs in 1 in 54,500 to 1 in 141,500 spinal or epidural injections (141,500 is about a third of the entire population of Coventry in 2020)
- *Catheter infection* – an infection can occasionally develop around the epidural catheter. If this happens, it will be removed. It is rare for the infection to spread deeper than the skin. Antibiotics may be necessary or, rarely, emergency back surgery. Disabling nerve damage due to an epidural abscess is very rare.

Managing pain when you go home

It is normal to have some pain around the wound after your return home, how much pain will vary with each individual patient.

When you are ready to be discharged from hospital, the ward doctors will write a prescription for painkillers along with other medicines that they want you to continue at home.

You should take the painkillers as prescribed and at the prescribed intervals. If you are not sure about how or when to take painkillers please ask the ward nurses before you are discharged. The pain should improve with time and the painkillers can then be discontinued.

Once you have been discharged from hospital, if you have any problems with pain, you should contact your gp.

Simple painkillers like paracetamol and ibuprofen can be very effective, though it is much more expensive for a hospital to provide them than for you to buy them from a chemist (they cost as little as 19p). Buying your own supply before your operation can help us spend money where it is most needed.

After the operation

It is natural to be anxious about having an operation, but this often leads to people worrying about the event of the surgery, and thinking less about the time after it. In fact, it is very rare to suffer serious harm or die during an operation – the operating theatre is probably one of the safest places you can be. The risks are usually after the operation.

Emerging evidence tells us that alongside adequate preparation, motivation to recover can have a tangible impact on the success of your recovery after surgery. This chapter deals with some of the things you can expect to happen after surgery, and what you can do to make your recovery as smooth as possible.

Contents	Page
Recovering from the anaesthetic	82
What is it like in PACU?	83
Recovering from the operation	84
Physiotherapy after surgery	91
Complications you should know about: Sepsis	94
Complications you should know about: Blood clots	97

Recovering from the anaesthetic

Where will I be?

After most anaesthetics you will be cared for in a Post-Anaesthesia Care Unit (PACU), often referred to as “Recovery”. This is close to the operating theatre. Your surgeon or anaesthetist can quickly be told about any change in your condition.

Who will be looking after me?

Staff in PACU will either be nurses or ODPs. They are trained to deal with critical situations that can happen after surgery, such as bleeding or low blood pressure. They will also treat any pain or sickness that you have. Most people receive extra oxygen in the recovery room, through a face mask or through little tubes that sit under the nostrils.

If you gave dentures, hearing aids or glasses to staff, they will be returned to you.

How long will I be in PACU?

You will leave PACU when the staff are satisfied that you are safely recovering normally. This means that you will be awake enough to communicate, have satisfactory and stable vital signs, and have any symptoms such as pain and nausea under control. You will be able to eat or drink according to the instructions of the surgeon.

What is it like in PACU?

You will still have the monitors that were attached to you before your anaesthetic was given. You will also have the cannula in your hand or arm that was put in. You may also have other cannulas attached to you.

You may find that we have placed a soft plastic tube (called a catheter) into your bladder. This allows us to measure how well your body is producing urine. At first it may give you the sensation that you need to pass urine and might seem quite distressing. This is a normal sensation with a catheter, and you will get used to it. All your urine will be collected by the catheter and you won't need to move. The catheter will be taken out after a day or two once your doctors and nurses are happy that you are making enough urine and that you can get to the toilet yourself if needed.

Depending on your operation, you may also find you have other tubes coming from you called surgical drains. They are there to collect any fluid or blood that may collect in the area of your operation. Your surgeon will warn you if these are likely, and will remove them as soon as it is safe.

Recovering from the operation

Where you go after you leave PACU will depend on the type of operation, how quickly you can expect to recover, and how high risk your surgery was.

Broadly speaking, there are 4 places you might go after your surgery:

- The Day Surgery Unit
- Surgical Wards
- Enhanced Care Units
- Critical Care

Day surgery unit

The Day surgery unit is designed for people who are relatively well, and who have had particular types of surgery, to be enabled to go home on the day of the operation. Whether you meet the criteria will be determined in your Pre-operative Assessment. You will be told in advance if you are likely to go home on the day so you can make arrangements. The Day Surgery Unit also has the capacity to manage overnight stays for those who need slightly longer in hospital.

Though the majority of operations are performed in the Day Surgery Unit, you may find that your operation will be performed in the Main Theatres complex, but you will then go to Day Surgery afterwards.

Surgical wards

The majority of patients will go to the wards after their operations. Here you can expect to

- Have regular monitoring of your vital signs to ensure you are recovering well
- Have symptoms such as pain and nausea addressed
- Have physiotherapy, and input from occupational therapists if needed
- Have help to wash and dress yourself while you are unable to do so on your own

Many wards are tailored to certain types of surgery, so the nurses will have special expertise in managing your care.

Enhanced care units

If you have a particular type of surgery, you may go to a specialist area known as an “Enhanced Care Unit” or ECU, or a “Step-Down” area. These are areas which have more nursing staff and more monitoring. They can also manage more specialist interventions. Often people who have had major surgery will go here.

Critical care

After some major operations, or if you have particular health problems, you may need care in an area that provides a range of advanced facilities

These advanced facilities are called *Critical Care*. They are commonly divided into different types

- Intensive Care Unit (ICU) – This is very specialised care for the sickest people. People here are usually kept under anaesthetic and have their breathing supported with a mechanical ventilator, alongside everything that can be done in HDU.
- High Dependency Unit (HDU) – This is similar to ICU, except people are awake. They still receive very close monitoring and often have infusions of drugs to support their heart and blood pressure. Sometimes special masks will be needed to support their breathing while still awake.
- Overnight Intensive Recovery (OIR) – this is a limited form of HDU care designed specifically for people after certain types of surgery.

Why might I need to go to critical care?

Most people will be sent to these areas for closer monitoring and so that, should any problems occur, you can be managed by expert nurses and doctors as swiftly as possible. Occasionally plans will change during the day, or during your operation, if things do not go as expected. This is usually done as a precaution. If this happens the reasons will be explained to you as soon as possible.

Very occasionally, it is necessary to continue the anaesthetic after the operation has finished for a few hours, or until your condition is stable. If you need this type of care, you will not go to the recovery area. Your anaesthetist will take you to the ICU. When your condition allows, the ICU team will allow you to breathe for yourself and you will gradually wake up.

You may have your own nurse, or one nurse looks after two patients. He/she will ensure that you are comfortable, and give prescribed medicines to control sickness and prevent blood clots. Some of the medicines that you were taking at home may be stopped or changed to help your recovery. If you are worried about this, speak to your nurse.

What will critical care be like?

While you're in critical care, you can expect:

- Your heart rate, blood pressure, and breathing to be monitored in a similar way as when you had your anaesthetic
- A special tube may have been inserted into your wrist or arm during your anaesthetic to monitor your blood pressure – called an arterial line. This will stay in so we can monitor you closely and take blood samples
- Another tube may have been inserted into a vein in your neck, like a very large cannula, so we can deliver drugs closer to your heart. You may need these special drugs to keep you well after surgery, and will need close monitoring for as long as you need them,
- You will probably have a catheter in your bladder to drain urine. This may be uncomfortably at first, but you'll get used to the sensation.
- As your recovery progresses, you will need less monitoring, and some of your drips, tubes and monitors will be removed.
- The nurses and physiotherapists will teach you regular breathing exercises. It is very important that you can breathe deeply and cough effectively throughout your time on ICU or HDU. This will help avoid a chest infection.
- Your nurse will be able to advise you on visiting times and the number of visitors allowed.
- You may be looked after in an area where there are other patients who are very ill, and it can sometime get very noisy. Many monitors will make alarms to alert the nurses of changes, but aren't anything to worry about.

When the team looking after you are satisfied that you are recovering safely, you will return to the surgical ward. The length of time that you spend in critical care will depend on what type of operation you have had, any complications, and any other health problems you may have.

WHAT WILL IT BE LIKE AROUND ME?

You should be prepared to expect a high level of activity in these areas. Noise levels are likely to be higher than on a general hospital ward due to the equipment. If you do hear an alarm it does not necessarily mean that something is wrong, it may mean there is a change the staff need to be aware of. Staff will be able to explain the equipment and noises to you should you have concerns about the alarms. Try not to focus too much on all the machinery.

You may also find that patients on these units have a range of serious conditions, many of them not related to surgery. Many patients in Critical Care will be there because they have life-threatening illnesses or have been involved in a serious accident, and you may see people in induced comas while they are being looked after.

Though you will have a nurse assigned to you, you may find they will also have to help other patients who are sicker and need more attention.

Physiotherapy after surgery

Physiotherapy techniques are a vital part of your recovery. This section contains some simple ways that you can help yourself following your surgery.

After an operation there are risks that may mean you produce phlegm and be more 'chesty' than normal. This can be due to the anaesthetic, pain from the incision and reduced activity following an operation.

If phlegm remains in the lungs, it provides an ideal environment for bacteria to grow and chest infections to develop. A chest infection can prolong and complicate your hospital stay.

Fortunately, there are a number of simple exercises and measures that you can take to help reduce the risk of this. The following advice is to help you to keep your chest clear.

Positioning yourself in bed

When you are in bed ensure you are always in a good position. This means sitting upright or lying on each side alternately. Do not slump in bed.

Walking

The most important thing after your operation is to get out of bed and walk as soon as possible. This is the most effective way to prevent a chest infection.

The nurses will help you to sit out in a chair and walk on the ward as soon as your condition allows. This may be the same day as your operation but is often the first day after your operation. It is normal to have oxygen, drips and drains attached but this should not stop you getting out of bed.

Staff will continue to help you every day until you can do it by yourself. Once you can walk safely on your own you are expected to gradually increase the distance you can walk daily. Aim to sit out at regular intervals and complete regular short walks throughout the day.

Breathing exercises and coughing

It is essential you do hourly deep breathing and coughing practice throughout the day.

Deep breathing and coughing may feel uncomfortable, but you will not cause any damage to stitches or clips. It is very important that you can cough strongly and effectively after your operation. To help strengthen your cough and ease any pain, support your wound with a clean rolled towel over the top of your clothing.

Repeat the breathing exercises and coughing for the first few days following your operation. They may be discontinued when you are able to walk a moderate distance on the ward, for example to the bathroom, so long as you are not coughing up any phlegm.

Breathing exercises

You must do these exercises every hour in the day when awake or as advised after your surgery:

1

- Sit upright in bed or preferably in an armchair

2

- Take a deep breathe in, preferably through your nose, hold for 5 seconds and breathe out gently through your mouth.

3

- Repeat 6 times

4

- Support your wound with a rolled towel

5

- Cough strongly from your stomach not your throat

6

- You may or may not cough up some phlegm

7

- If you cough up some phlegm spit it into a pot or tissue and repeat the cycle until you are not coughing up phlegm

8

- Rest and repeat the breathing exercises every hour

Complications you should know about: **sepsis**

What is Sepsis?

Sepsis is the body's reaction to an infection which causes damage to the tissues and the organs, such as the kidneys, to fail. It has previously been known as septicaemia or blood poisoning.

Sepsis can be caused by any type of infection in the body, such as a chest infection which causes pneumonia, a urine infection, an infected cut or bite, an infection in a cannula, or a wound following surgery. In some people, Sepsis can be quite mild where antibiotics given into the vein are the only required treatment, although in others, it can become more severe requiring advanced treatment in an Intensive Care Unit.

Why might I get Sepsis?

Everybody is at risk of developing Sepsis however some people are more at risk than others. Those more at risk include:

- Those who are having or who have recently had treatment for cancer;
- Are diabetic;
- Are pregnant or have just given birth;
- Have recently had an operation;
- Take long-term steroids;
- Have a wound, cut or bite;
- Are very young or very old;
- Are immunosuppressed for any other reason (the body has difficulty fighting an infection).

What does Sepsis do to your body?

Initially, you may feel like you are developing flu like illness. You may also have some or all of the following symptoms;

- Feel very cold and shivery;
- Feel very hot and looked flushed;
- Have a high temperature;
- Aching muscles;
- Feel very tired;
- Sickness and diarrhoea;
- Low appetite;
- Seem confused, drunk or have slurred speech.

What is the treatment for Sepsis?

The main treatment for Sepsis, no matter how severe, is antibiotics given into the vein. Ideally, these must be given within the first hour of diagnosis. Other treatments include fluids given via a drip if Sepsis has made your blood pressure become unusually low.

You may also be given oxygen if Sepsis is making it difficult for you to get oxygen into your blood. You will also have had blood taken to determine which type of antibiotics would be best for the infection that you have and to determine if your organs have begun to fail. Medical staff will also keep a close eye on how much urine you are passing, which may mean that a catheter may have been inserted into your bladder in order to do this.

How might I feel after Sepsis?

Following Sepsis, some patients may develop Post-Sepsis Syndrome. This is a collection of symptoms that can occur for up to two years following their illness. The severity of their illness and the length of time spent in hospital can affect this.

Symptoms include the following physical, emotional and psychological feelings:

- Extreme tiredness;
- Muscle weakness and poor mobility;
- Breathlessness;
- Anxiety, depression and insomnia;
- Poor concentration;
- Hair loss;
- Repeated infections;
- Swollen limbs and joints.

Sepsis Support Group

Sepsis Support groups are held across the country for those who have had a personal experience with and/or know of a friend or family member who has experienced Sepsis. For further details about a support group in your area please contact the UK Sepsis Trust:

Tel: 0800 389 6255

Email: info@sepsistrust.org

Web: <https://sepsistrust.org/get-support/my-local-group/>

Complications you should know about: **blood clots**

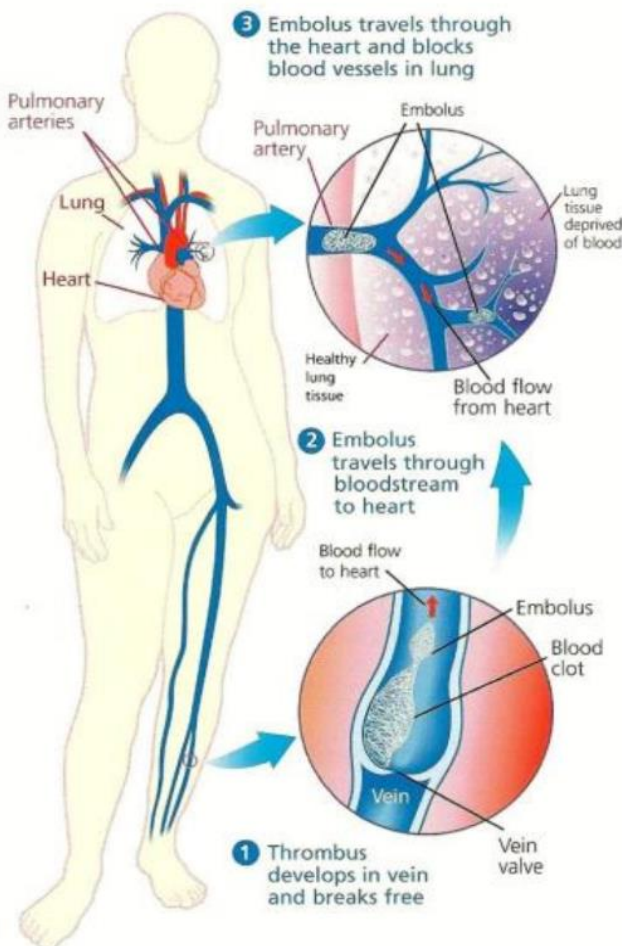
How to reduce your risk of blood clots during your hospital stay

We often hear about the risk of Deep Venous Thrombosis (DVT) or Pulmonary Embolus (PE) while on long distance trips, but they are more common after admission to hospital.

This leaflet explains how to reduce your risk. If you have any questions please ask.

What is a deep vein thrombosis (DVT)?

A DVT is a blood clot that forms in the deep veins of the leg. It can result in a red, painful swollen leg



How serious is this condition?

Symptoms generally ease over time for most people with treatment. However it can be more serious if either of the following complications arise:

- Swollen and painful leg - known as post-thrombotic syndrome
- Pulmonary Embolus (PE)

What is a Pulmonary Embolus (PE)?

If the blood clot in the leg breaks off, it can travel around the body and may cause a blockage in a blood vessel going to a lung (PE). Depending on the size of the blockage, symptoms include chest pain, shortness of breath and coughing up blood and in the most severe cases can result in death.

How will I know if I have a DVT or a PE?

There are important signs that can help detect blood clots Please tell your doctor or nurse if you develop any of the following while you are in hospital or in the 3 months after discharge:

- DVT signs and symptoms: usually only one leg is affected which becomes painful, swollen, hot and discoloured affecting either the whole leg or below the knee. Occasionally the leg veins become swollen and tender, with numbness or tingling on the overlying skin.
- PE signs and symptoms: new breathlessness without another apparent cause (e.g. chest infection), pain in the chest, back or ribs which is worse on breathing in deeply, coughing up blood.

We have specialised services for these conditions available in the hospital to ensure you can be diagnosed and treatment started as quickly as possible if we suspect you have a clot.

Who is at risk?

There are many factors that increase your chance of DVT or PE including:

- Age over 60 years – the older you are the higher the risk;
- Acute medical illness (e.g. heart or lung disease, kidney disease, inflammation such as inflammatory bowel disease);
- Major surgery including hip or knee replacement;
- Immobility caused by major trauma, leg injuries, paralysis etc.;
- Personal or family history of DVT or PE;
- Active cancer;
- Obesity;
- Pregnancy and recent delivery;
- Contraceptive pill or some forms of Hormone Replacement Therapy (HRT);
- If you have a condition which causes a clot more easily.

What precautions will the hospital take to reduce my risk?

When you are admitted to hospital you will undergo an assessment designed to assess your risk of developing a clot. Depending on the outcome of this, a number of measures will be taken to reduce your risk. This includes making sure you are not dehydrated and encouraging you to get out of bed as soon as possible. Inpatients admitted for a planned operation who are on the oral contraceptive pill may be advised to stop taking it for four weeks before admission.

If you are at higher risk

For those at higher risk, additional methods include:

- Giving a daily injection of a blood thinner (heparin) during your stay, to be continued after discharge for certain patients (your team will indicate if this is required and if so for how long). The main side effect of this is bruising. If you experience any other adverse effects e.g. bleeding, it is important to tell your doctor or nurse (if discharged please contact the VTE Nurse Specialist (see below) during routine hours) or if this is severe contact your GP or nearest Accident & Emergency Department. Please be aware that this medication is derived from pigs.
- Tight stockings called Graduated Compression Stockings (or Antiembolism stockings) or occasionally pumps which squeeze the legs intermittently.

It is important that both of these are continued for the total recommended time to ensure full benefit. If after discharge you have any concerns or queries the VTE Nurse Specialist can be contacted through the hospital switchboard.

If your risk is felt to be low it will not be necessary to start these treatments unless your condition changes. Once discharged from hospital the risk of having clots slowly falls. If you develop any of the symptoms described you should contact either your GP or go to your nearest Accident & Emergency Department.

How are DVT and PE treated?

DVT and PE are usually treated with high doses of blood thinning medications. Standard therapy includes daily heparin injections given until blood thinning with warfarin tablets has been achieved (average 5-6 days), or a newer oral anticoagulant taken once or twice daily. Patients are then referred to the anticoagulation clinic for regular checks, if you are on warfarin, or for counselling if you are on a newer oral anticoagulant. You may be prescribed compression stockings to reduce leg swelling.

Going home

This information is to help you to overcome any concerns you may have about going home after your surgery. You may also receive more detailed information that is specific to your type of surgery and your circumstances which will be given to you before you go home.

A useful resource that can give detailed answers to your questions and is tailored to many common operations can be found at:

<https://www.rcseng.ac.uk/patient-care/recovering-from-surgery/>

Contents	Page
Rest, activity and exercise	105
Resuming regular medications	105
Wounds and stitches	106
Bathing	106
Diet	107
Returning to work	110
Driving	110
Resuming normal activities	111

When you are ready to leave hospital

Nursing staff, physiotherapists, and occupational therapists may be involved in making sure you are safe to go home. If you need support at home, physical aids, or transport to get you home safely, this will be organised.

Before you are discharged, there are a few things that the team caring for you will want to be sure of:

- That your wounds are healing properly
- That you are eating and drinking sufficiently
- That you are managing to look after yourself.

If you have concerns about any aspect of your recovery, including those above, please speak to a member of the team.

On the day of discharge you will be given a letter from the ward nurses. A copy of this letter will be sent to your GP. This letter has information about your medication, your outpatient appointments and includes a section about any referrals that may have been made for you, such as with District Nurses.

Rest, activity and exercise

Once you are home you may find that you feel tired and lethargic and some people feel in a low mood for two to three days. This tiredness may last for several weeks and is quite normal after many types of surgery. You and your body need time to re-adjust after your operation.

Listen to your body and be aware of your limitations.

Exercise should be taken in small amounts to begin with. Alternate periods of rest and activity so that you do not overdo it. Gradually increase your level of exercise until your activity level returns to normal.

Resuming your regular medications

If you are normally on medications for other health problems, these will normally have been restarted before you leave hospital. In some cases, we may change the medications you take. We will normally give you a supply of any new medications when you go home, and make sure you have a supply of your other regular medications.

Wounds and stitches

Not all patients will have stitches that need removing. If you have stitches these are normally removed 10 days after your operation. If you are discharged with stitches or clips in, arrangements will be made for the GP practice nurse or district nurse to remove them.

Your wound is often swollen and bruised for a few weeks. It may also feel hard and firm due to the stitches in the deep tissue, but this will soften after several weeks. There may be an area of numbness below the scar, this soon disappears. If your wound still needs a dressing, some additional dressings will be given to you and you will be advised how often you need to change it.

Please check your wound regularly and contact your GP if you experience any of the following:

- Increased pain or tenderness
- Increased swelling, oozing or opening of the wound
- Redness or warmth around the wound
- If you have a temperature of above 38°C

Bathing

You may have a bath or shower as you would normally, even with your stitches. Pat the wound as dry as possible and avoid using talcum powder until the stitches are removed.

Diet

Nutrition is a vital part of recovery, especially after major surgery. Your body needs extra protein, calcium and vitamins (especially vitamins C and D) to help heal bones and skin. A good protein intake can also help improve your muscle strength for physiotherapy. After some types of surgery, or if you are at high risk of becoming malnourished, you will see a dietician who will give you tailored advice. For the majority of people having major surgery, this information may be a useful guide.

Protein

We need protein to maintain and repair body tissues, especially after surgery. Foods high in protein are:

- Meat and poultry
- Fish
- Dairy foods such as milk, yoghurt, cheese and eggs
- Vegetarian alternatives such as Soya, Quorn® or Tofu
- Nuts and seeds
- Pulse vegetables e.g. Beans, chickpeas and lentils

Sources of Vitamin C

Oranges, peppers, dark leafy vegetables, tomatoes, broccoli, strawberries, kiwis and guavas.

Sources of Vitamin D

Oily fish such as salmon, sardines, pilchards, trout, herring, kippers and eel, fortified breakfast cereals, fortified fat spreads, cod liver oil, eggs and liver.

Some ideas for high-protein meals at home

Meal/ small meal ideas	Snacks and Nutritious Drinks
<ul style="list-style-type: none"> ➤ Sandwich, wrap, roll or pitta with egg mayonnaise, ham, cheese, tuna mayonnaise, coronation chicken, bacon, sausage or nut butter ➤ Jacket potato with cheese, beans, tuna or salmon ➤ Chicken, beef or bean burger ➤ Toast with peanut butter, pate, houmous, cream cheese ➤ Fish finger sandwiches ➤ Boiled, scrambled, poached or fried egg on toast ➤ Omelette with ham, cheese and mushrooms ➤ Baked beans on toast ➤ Sardines or pilchards on toast ➤ Quinoa, Bulgar or Spelt in place of rice or pasta served with chilli carne for example ➤ Tuna and crackers ➤ Meat or fish soup with bread 	<ul style="list-style-type: none"> ➤ Cheese, cheese spread or cream cheese with breadsticks or crackers ➤ Nuts and seeds: add these to salads soups cereals and puddings to increase the protein content ➤ High protein cereal and nut bars ➤ Milk based puddings such as: rice pudding, crème caramel, mousse, trifle and custard. You could try custard with sponge pudding, a banana or tinned fruit ➤ Bread sticks or nachos with houmous/bean dips ➤ Thick and creamy fruit yoghurt or fromage frais or Quark based desserts ➤ Milkshakes and yoghurt based smoothies ➤ Milk and hot chocolate, milky coffee, malted drinks such as Ovaltine® and Horlicks® ➤ Fortify milk with milk powder (2-4tbsp per pint of milk) ➤ Slice of pizza or quiche ➤ Pork pie, sausage roll, scotch eggs

If you are struggling to open your bowels

Because of some medications and reduced activity levels, you may find it difficult to open your bowels. Eating foods higher in fibre and making sure you drink plenty of fluids can help your bowels function.

Choose the following high fibre foods to keep your bowels regular:

- Fruit, e.g. apples (skin on) and bananas
- Dried fruits, e.g. apricots and prunes
- Vegetables
- Bran flakes®
- Weetabix®
- Muesli
- Ready Brek® instead of corn flakes or Rice Krispies®
- Jacket potatoes (skin on)
- Wholemeal bread
- Nuts
- Beans and pulses, e.g. baked beans and kidney beans

Once you're feeling better

If your wounds have healed, your weight is stable and appetite normal, you will not need to follow a high protein diet, but should instead follow a balanced diet following the Eatwell guide.

Returning to work

Everyone is an individual and the recovery from surgery will vary from person to person. You will be given a rough idea of how long you can expect to be off by your surgical team. Returning to work, even for light duties, can help you recover faster, so it is quite normal to not feel fully over the operation before you go back. Just make sure your employers know about your surgery and can support you when you return.

Fit Notes

Your surgical team will be able to provide a Fit Note. Before you are discharged, make sure to ask for one if you need it. If you think you will need more time off work, see your GP who can assess whether you need an extension.

Driving

When you can safely drive again depends on the surgery you have. After an anaesthetic, most people would be safe to drive after 24 hours, though you should not drive if you feel drowsy, or if you are still on strong painkillers. You should inform your insurance company of your surgery, as they may not insure you for a period after it.

As a rough guide, to make sure it is safe to drive, sit in a stationary car and practice an emergency stop by stamping on the brake pedal. If you have no discomfort in the wound area then you should be all right to drive.

Resuming normal activities

Travelling abroad

You will need to contact your insurance company and the airline (if appropriate) as they may have rules about when you can travel after your surgery. This website provides some useful information:

<https://www.nhs.uk/common-health-questions/accidents-first-aid-and-treatments/when-can-i-fly-after-surgery/>

Sexual activity

Whenever you feel comfortable enough to do so you may resume your sexual activity, but take things gradually – it will take time before you recover. If you have any problems or particular worries do not hesitate to discuss these with your consultant, GP, or Specialist Nurse.

Follow-up hospital appointments

After your operation your surgeon, or one of their team, will want to see you again in the outpatient clinic. This appointment will be sent to you and any other referrals to other specialists will also be sent.

Other information

This section contains other information that may be helpful. More information is available on the Trust's website, but this will provide a brief overview.

Contents	Page
Travelling to University Hospital, Coventry	114
Travelling to the Hospital of St Cross, Rugby	117
Keeping in touch	119
Entertainment	120
Visiting	121
Food	123
Spiritual care	123

Travelling to University Hospital Coventry

By car

Sat Nav postcode: CV2 2DX

From Coventry City Centre

Follow the A4600 towards the M6 and M69. Turn right at the first roundabout after the dual carriageway onto Clifford Bridge Road. The Hospital is on the left hand side of Clifford Bridge Road.

From the North M6, M69

From the M6 and M69 leave at junction 2 and follow the A4600 towards Coventry City Centre. Turn left at the third roundabout (situated approximately one quarter of a mile past St Mary's Church) onto Clifford Bridge Road (A4082). The hospital is situated on the left hand side of Clifford Bridge Road.

From the South, M40

From the M40 leave at Junction 15 and take the A46 (Warwick bypass) then follow the signs towards the M69, continue along the A46 to the second roundabout on the eastern bypass and turn left onto the B4082. Continue along the B4082 and turn right onto Clifford Bridge Road. Follow this road for three quarters of a mile. The hospital is situated on the right hand side and can be accessed by a signposted slip road.

Parking

Due to the demand for spaces in our car parks being high during peak times, we recommend that you arrive with plenty of time before your appointment to find a parking space or consider using public transport where possible.

There are drop-off points near the main hospital entrance and the Women and Children's entrance which allow for 10 minutes of free parking. Disabled car parking facilities are also available, and are located near the main hospital entrance. When parking, please find a space within the marked bays rather than parking on any pavements or verges.

Automatic Number Plate Recognition (ANPR) is live across all University Hospital Coventry public car parks. Our car parks no longer issue tickets at barriers and instead read your number plate as your vehicle enters. If you have any queries about car parks or how to park, please talk to our car park staff.

Payment can be made using cash, card or contactless at one of the payment machines before exiting the car park. You must enter your full, correct registration in order to pay - we recommend taking a photo or writing it down before leaving your vehicle as you arrive.

You can also pay using PayByPhone via their website or downloadable app. Payment for total stay can be made at any time until midnight on the day of parking.

By Bus

University Hospital has excellent bus transport links. Below is a list of regular bus services that are available to and from the hospital. You can access an up to date list of bus routes on the Network West Midlands website:

<https://www.wmnetwork.co.uk/>

By Train

Coventry railway station has regular services between Birmingham New Street and London Euston. There are also local services to Rugby, Nuneaton and Northampton.

The station has a taxi rank and there are direct buses to University Hospital via the 9 and 9A services (please check the destination on the front of the bus which will display University Hospital).

Further information on bus routes from the railway station to University Hospital can be viewed on the Network West Midlands website.

By Accessible Transport - Ring and Ride

The Ring and Ride service provides a door-to-door fully accessible bus service for people whose circumstances limit their personal mobility. Ring and Ride operates within the Coventry boundary catchment area which is CV1 to CV6. Please contact Ring and Ride on 024 7660 2177 to register to use the service.

By Bike

At University Hospital there are cycle parking facilities outside the following entrances:

- Main entrance
- Arden Cancer Centre
- Women's and Children's Entrance
- Clinical Sciences Building (CSB)

Travelling to the Hospital of St Cross, Rugby

By car

Sat Nav postcode: CV22 5PX

Car parking spaces are more easily available, and spread throughout the hospital site. It is worth looking at the map of the hospital to find the best place for you to park.

By bus from Rugby town centre:

The Hospital of St Cross is serviced by buses from Rugby town centre and from Coventry. You can access an up to date list of bus routes on the Network West Midlands website:

<https://www.wmnetwork.co.uk/>

More Information on travelling to us is available on our website:

University Hospital, Coventry



<https://www.uhcw.nhs.uk/contact-us/university-hospital/>

Hospital of St Cross, Rugby



<https://www.uhcw.nhs.uk/contact-us/hospital-of-st-cross/>

Keeping in touch

Postal arrangements

Post is delivered to the wards on a daily basis. Please ask your friends and relatives to state your full name and ward clearly on the front of the envelope and their own name and address on the back of the envelope. If you wish to post any letters during your stay, please hand these to a member of the nursing team who will arrange to post them for you.

Wi-Fi

Patients and visitors can access wi-fi at the both University Hospital, Coventry and the Hospital of St Cross in Rugby. Users will be asked to sign up to the user agreement conditions when they initially sign in. A copy of the user agreement can be found on our website.

Entertainment

Radio, television and telephone

Hospital bedspaces are equipped with a Hospedia unit which offers digital TV, telephone, free 24hr radio, internet, email and information services. Every bed has a Hospedia unit helping patients to stay in touch, keep relaxed and entertained.

All radio is free and can be heard using earphones via this unit, including our own 24/7 Hospital Radio. In order to reduce the disturbance to other patients it is important that personal headphones are used with television and radios at all times. To access the system you need to set up an account and you can do this before coming to hospital by calling 0345 414 1234.

Once you have registered, you need to buy a Hospedia card. These cost either £5.00, £10.00 £15.00 or £20.00 and can be bought over the telephone or at a vending machine on your ward.

Further information is available on our website here:

<https://www.uhcw.nhs.uk/caring-for-you/your-inpatient-stay/entertainment/>



Visiting

We recognise and respect the important role played by families and carers in helping patients recover.

If you have a carer (and with your permission), their support in the delivery of care will be welcomed and valued. However, we do ask that they work with our ward staff to ensure they have the rest and support they need to maintain their own health and wellbeing whilst you are in our care.

For up to date information on visiting, we advise you check the Trust website at <https://www.uhcw.nhs.uk/caring-for-you/visiting/>



Please ask your visitors to

- Take any personal clothing home to wash. The hospital does not provide a patient laundry service.
- Follow all infection control instructions (such as using the alcohol hand rub provided on the wards), when entering and leaving the ward and your room to prevent illness and infections.
- Remember that it's okay to ask staff if they have cleaned their hands. Staff giving patient care should also have bare arms below their elbows and should have removed watches and stoned rings.

Please ask them not to

- Use the patient toilets on the wards. If they need the bathroom, our ward staff will direct them to the nearest public toilets.
- Touch your wounds or any medical equipment you are attached to, such as drips and catheters. This can cause infections.
- Visit if they have recently suffered with an illness such as cold, vomiting, diarrhoea or any other infectious condition in the last 48 hours.
- Sit or lie on the beds. Please use the chairs provided.
- Smoke on hospital grounds as it is not permitted anywhere on our hospital sites to protect our patients, visitors, staff and buildings from the damages and consequences of smoking.
- Drop litter. We kindly ask you all to put all litter in the bins provided to keep our hospital clean.

Food

Once you are able to eat you will be provided with three main meals a day, with snacks and drinks available between meals.

Please tell us about any food allergies or special diets as soon as possible.

You may bring items of food like fruit and snacks, or ask friends and family to bring them. However, please speak to a nurse before having food brought in from outside the hospital.

Spiritual care

The Department of Spiritual Care is available for members of any faith. It holds regular services in the Faith Centre, and ward visits can be arranged by

- calling the Chaplaincy office on 02476 967 515,
- or by emailing GMBFAITH@uhcw.nhs.uk

Further details are available on the website at

<https://www.uhcw.nhs.uk/caring-for-you/spiritual-care/>



