

Enhanced Recovery After Surgery (ERAS)

General Surgery Colorectal Surgery

Enhanced Recovery After Surgery (ERAS) Programme for Colorectal Surgery

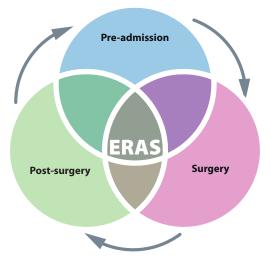
You will soon be having colorectal (bowel) surgery and it is important that you understand all aspects of your recovery as you will be playing a key role in it.

Enhanced recovery is an evidence-based approach that aims to help you recover sooner after major surgery. It also reduces the risk of complications and aims to get you back to full health as quickly as possible after surgery.

The three main elements of enhanced recovery:

- **Before your operation:** planning ahead, improving your fitness levels and nutrition, getting you in the best shape for your operation
- Your operation: Making surgery as stress free as possible on both your body and your mental health. If we can help reduce anxiety, this in turn can have a positive impact on your recovery
- After your operation: Early mobilisation (getting you moving as soon as possible), eating well, effective pain control and safe discharge home.

We want you to feel supported before your surgery, during your recovery in hospital and when you get discharged home.



The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature
 or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice
 from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

Before surgery – What you can do to help your recovery

Here are a few things you need to consider before your operation.



Smoking cessation: (stopping smoking)

- It is in your best interests to stop smoking as soon as possible before any major surgery
- Smoking can increase your risk of breathing problems and chest infections after surgery
- It can delay wound healing and slow down your recovery

Please note there is a no smoking policy at New Cross Hospital.



Reduce alcohol intake:

- It is important to reduce your alcohol intake prior to your surgery to reduce the risk of alcohol withdrawal if you are a heavy drinker
- Please do not drink alcohol at least 48 hours prior to surgery
- If you are at risk of alcohol withdrawal or would like help with reducing your alcohol intake, we can refer you to the hospital Drug and Alcohol Liaison Team



Keep active:

- Ensure you are having adequate exercise
- Take regular walks when you can. This will help with your breathing and your general fitness
- Try to do 10-30 minutes a day of exercise that increases your heart rate and makes you slightly breathless
- Further information can be found in the booklet Abdominal surgery, complete exercise booklet



Improve your diet:

• Reducing high fat or sugary foods can lead to weight loss and eating a healthy balanced diet can help reduce infection complications and aid recovery

- Aim to eat a high protein balanced diet, as this will help with your post operative recovery
- If you are diabetic, please try to keep your blood sugar levels within their normal limits on the lead up to your surgery and after surgery

For more information about how you can help yourself, please watch the video which can be found at: www.rcoa.ac.uk/fitterbettersooner

Plan ahead

Things to consider before coming into hospital, so you do not have to worry when you return home.



- Think about who can do your shopping and heavy housework for you in the first few weeks after you leave the hospital
- Ask relatives and or friends if they can help you out once you are home
- Get plenty of shopping in. Freeze meals, bread, and milk for the first few days after you get home
- Arrange for someone to look after your pets
- Organise who will take you home from hospital.

If you are a carer for a loved one it would be advisable to see if anyone in your family could help out while you are in hospital and recovering at home. You can also refer yourself to your community social work team if you think you may need some additional support to help look after you on discharge.

(Please see the contact numbers at the back of the booklet)

Checklist of things to bring into hospital:

- □ Medications in proper packaging
- □ Loose, comfortable day clothes and pyjamas for night-time
- □ Well-fitting comfortable shoes or slippers
- □ Glasses
- □ Walking aids
- □ This booklet; it is a guide for your hospital journey
- Personal toiletries as required
- □ Reading book, puzzle book, something to occupy your time

The trust does not accept responsibility for loss or damage to patient's personal property (including money) however caused, unless it has been deposited in safe custody.

Do Not bring any valuables or large amounts of money into hospital.

Preparing for surgery

Pre-assessment

Once you have been put on the waiting list for your surgery you will receive an appointment to attend the Pre-assessment department. This appointment is NOT the same as your Enhanced recovery appointment.

At the pre-assessment appointment you will be asked about your medical history, any medication you are taking and assessed to see if you will need to see an anaesthetist or have additional checks prior to surgery.

As part of the enhanced recovery programme, at this appointment, you will be given two carbohydrate drinks called Polycal® to take the day before your surgery. You will be given instructions on how and when to take it.

These drinks have a positive benefit on your metabolism following surgery and will aid your recovery in the following ways.

- Give you energy to aid your recovery •
- Reduce the risk of nausea (sickness) •
- Help your wounds to heal
- Reduce the risks of infection.

You will not be given Polycal® if you are diabetic.



Bowel Preparation

You may also be asked to take medication to clean out your bowel prior to surgery.

Your surgeon will decide if you need to take this, and you will be given instructions on how and when to take bowel preparation at your pre-assessment appointment.

If you have been given bowel preparation, you should take your Polycal® as well. You will also need to ensure you drink plenty of fluid, or you may become dehydrated.



Stoma care

If there is the chance you will have a stoma, formed during your surgery, a colorectal nurse specialist will see you before your operation.

They will discuss this with you in more detail and give you a training pack with which to practice.

Admission for surgery

Very few people are admitted the day before surgery but, if your surgeon requests this you will be admitted and be allocated a ward bed.

• If you are unwell in the days leading up to your operation you must inform pre-assessment or your consultants secretary. Even simple illnesses such as colds or urinary tract infections may require treatment.

Admission and fasting instructions:

Please bring all medicines, inhalers, and insulin injections with you on your admission to hospital and take all usual medications prior to admission unless otherwise instructed at your pre-assessment appointment.

Do not have a heavy meal the night before your surgery. But do think about having an extra snack before you go to bed to reduce the period of time you are fasting unless you have been given bowel preparation.

- You must have **nothing** to eat for 6 hours before your admission time
- You may have water only and your carbohydrate drink (Polycal®) until 2 hours before your admission time
- **Do NOT** take chewing gum or sweets on the morning of your operation.

Day of Surgery:

What will happen?

- When you arrive at the admission unit, a number of checks will be made, including your blood pressure, temperature, and heart rate
- You will be given a hospital gown to wear
- Unless there is any medical reason why you should not have compression stockings, you will be measured and given a pair of compression stockings 'TEDS', which you will wear during your stay to help prevent blood clots
- Your Surgeon will discuss your plan of care for surgery
- Your anaesthetist will discuss anaesthetic and pain control options; when you understand and agree with what is planned you will be ready for your surgery.



Theatre: your operation

The surgeon, anaesthetist and theatre staff will be responsible for your care during surgery. When the operation has finished you will be transferred to the recovery area and then to the ward or the high dependency unit for monitoring.

What to consider after your operation

Pain control: Pain control is important for your comfort, and your recovery. There are both drug and non-drug treatments that can help.

- Oral painkillers:
 - These are either tablets or liquid
 - We will give you these if you are drinking normally
 - They can be used alone or in combination with a PCA (see below) or other forms of painkillers.
- Patient Controlled Analgesia (PCA):
 - This is a painkiller given into a vein in your arm from a pump, which you control
 - When you have pain, you press a button to get a small amount of painkiller
 - It can be used when you have pain, just before moving, or coughing.
- Non-drug treatments
 - Repositioning, making yourself more comfortable
 - Taking your mind off the pain with relaxing music, television or doing something which you enjoy
 - Gentle exercise and movement can also help.

Remember it is important to tell the nurses and doctors if you are in pain.

How to reduce your risk of blood clots after your operation

- A 'blood clot' or Deep Vein Thrombosis (DVT) usually forms in the veins within the legs and can make the leg swollen, red and painful
- Sometimes these clots can break off and become lodged in the lungs. This is called a Pulmonary Embolism (PE) and can cause pain, breathlessness, and a lack of oxygen in the blood, which can be fatal
- Having an operation is a risk factor for developing a blood clot
- You will be prescribed a small injection daily to help prevent blood clots. This will be given into your skin, usually around your stomach or thigh. You may need to continue this medication at home and will be shown how to give it to yourself
- You will have your compression stockings 'TEDS'
- Keep well hydrated and aim to drink at least 6-8 drinks a day
- It is important you move around and do foot / leg exercises as soon as possible.

Mobilising after surgery, what to expect:

- Your nurse or ERAS practitioner will assist you out of bed and help you start walking as soon as
 possible following your surgery. It is important to get up out of bed and walking to assist in your
 recovery
- We will expect you to sit out of bed for an increasing number of hours each day, however you
 can take bedrest as required; please see the expectations per day from page 14 onwards of this
 booklet
- You will be encouraged to exercise while in the bed or chair and to perform deep breathing exercises, ankle pumps and static quad contractions. These exercises are in your physiotherapy booklet

 You may also feel the need to cough following your surgery, it is important to cough and clear any phlegm you may have. If your abdomen is sore when you cough you can make it easier by doing a 'supported cough / huff', staff will show you how to do this.

Eating and drinking after surgery

You should be able to drink after your operation. You will be reviewed daily and allowed to eat and drink as tolerated unless there are any medical concerns.

You may notice you struggle to return to normal diet. Ways to help:

- Aim to have 5-6 small meals a day
- Have additional snacks, between meals
- You will be given 'Fortisip[®]' to drink between meals to ensure you are getting your adequate nutritional requirements following surgery. This will aid with energy levels and wound healing
- Refer to the diet sheet in this booklet, a low fibre diet is often recommended as some foods can make your bowels loose after surgery
- Participate in daily exercise and sit out of bed for meals to help to stimulate your appetite and reduce gastric discomfort.

Food Group	Food Low in Fibre	Food High in Fibre
Bread, Potatoes, and other Cereals	 White Bread White Pasta White Rice Rice or Corn based cereals. For example, Rice Krispies, Cornflakes Cream Crackers, Rice Crackers Boiled, Mashed or Roasted Potatoes (no skin) Yams Sweet Potato 	 Wholemeal / Granary Bread, Added Fibre White Bread, Wholemeal Chapatti Wholegrain Pasta Brown Rice Wholegrain Cereals for example, Bran Flakes, Weetabix, Muesli, Porridge Oats, Linseeds, Ready Brek Rye Crispbreads, wholemeal Crackers, Oatcakes Jacket Potato Skins
Fruit and Vegetables	 Fresh, Tinned or Stewed Apples, Apricots, Cherries, Fruit Cocktail, Grapes, Lychees, Nectarine, Melon, Ripe Bananas, Pears, Peaches, Pineapples, Plums, Avocados (avoiding pips, skins, and pith) Carrots, Celery, Beetroots, Broccoli Florets, Cauliflower Florets, Courgettes, Lettuce, Marrow, Skinned Cucumber, Skinned / Pipped Tomatoes, Peppers, Radishes, Spinach, Swede, Turnips. 	 Berry Fruits, Unripe Bananas, Dried Fruit, Grapefruit, Kiwi Fruit, Mangos, Rhubarb, Oranges Brussel Sprouts, Cabbage, Garlic, Green Beans, Okra, Onions, Leeks, Mushrooms, Peas, Sweetcorn Beans, Pulses, Chickpeas, Split Peas
Meat, Fish and Alternatives	 All Meat, Poultry and Fish Quorn Smooth Nut Butters Eggs 	All types of Nuts and Seeds
Milk and Dairy Products	 Milk Plain of Fruit Yogurts Cheese 	Yogurts containing Nuts or Cereal
Foods containing Fat and/or Sugar	 Butter, Margarine, Oil Plain Biscuits. For example, Rich Tea, Morning Coffee Cakes, Puddings and Pastries made with White Flour Cream, Jelly, Ice Cream, Milk Puddings, Sorbet Honey, Sugar, Syrup, 'Jelly' type Jams and Fine-Cut Marmalade Boiled Sweets, Chocolate, Plain Toffee without Dried Fruit, or Nuts 	 Wholemeal Biscuits. For example, Digestives Biscuits containing Dried Fruit of Nuts for example, Garibaldi, Fig Rolls Cakes, Puddings and Pastries made with Wholemeal Flour and/or Nuts and Dried Fruits Flapjack, Cakes, and Puddings made with Oats Jams with Seed or Skin, Thick Cut / Chunky Marmalade, Sweet Mincemeat, Pickles, or Chutneys Sweet and Chocolate with Fruit and Nuts, Muesli Bars

ERAS Low / High Fibre Foods

What to expect after your operation

Day 0 (day of surgery): The nurses on the ward will let you know if you can mobilise when you return to the ward. They will assist you to get out of bed and sit up if appropriate.

You may have

- A tube (catheter) in your bladder to monitor your urine output
- A drip in your arm to give you fluids; as soon as you are able to drink this will be removed
- Flowtron boots / calf pumps to assist with blood flow in your legs
- A drain in your abdomen which will be monitored
- An oxygen mask until you are fully awake
- A PCA to help control your pain (see page 10).



Day 1 After surgery

• **Observations:** Your blood pressure, pulse and oxygen levels will continue to be measured regularly by the nurses

Your oxygen will be stopped when your oxygen levels are stable

- Pain / nausea: You will have regular pain killers and medication for nausea. You will feel more tired if you stay in bed as painkillers can make you feel sleepy, and the effects of the anaesthetic may still be in your system
- Mobility: You should try and sit out of bed 3 times during the day for 2 hours each time. Get dressed into your own clothes.

You will be assisted to take 3-4 short walks. Getting moving early will help avoid possible respiratory (breathing) problems and aid you to return to your normal mobility as quickly as possible.

Continue with your breathing and leg exercises every hour

• Eating and drinking: if advised by your surgeon, you will be able to start eating a light diet

If you have a drip this may be removed. You will be expected to sit out of bed for mealtimes

You will be given a nutritional drink (Fortisip®) to drink between meals to reduce the risk of feeling 'full up'

- Catheter care: If you have a catheter this may be removed. However, your urine output may still need to be monitored
- Bowels / Stoma: The nurses will ask you if you are passing wind. If you have a stoma, you will begin with your education with support from the ward staff and Colorectal CNS team.



Stoma care

If a stoma is planned, then you will have met the colorectal nurse specialists before your surgery. They will explain everything involved to you as well as giving practical demonstrations on stoma care.

Sometimes stomas are not planned but necessary at the time of surgery. In this event, the stoma nurses will provide the same level of input prior to your discharge.

Some stomas are reversible, and some are permanent. Your surgeon will advise you about whether a further procedure is possible or appropriate in the future to reverse the stoma.

Day 2 After surgery

- **Observations:** Your blood pressure, pulse and oxygen levels will continue to be measured regularly by the nurses
- Pain / nausea: Your PCA may be stopped today, and you will be changed onto appropriate oral painkillers. You may need to ask for these more often but please do so as you need to keep your pain well controlled
- Mobility: Aim for at least 3-4 assisted walks, this will be further than on day one. Your mobility is
 not affected by your surgery so you should manage walking the way you normally do. Continue
 with your breathing and leg exercises every hour
- Catheter care: If your catheter was not removed yesterday, it will probably be removed today
- Eating and drinking: Continue to sit out of bed for meals. Eating and drinking can help with your energy levels and wound healing after surgery. Sitting in a chair while eating can also help to reduce nausea and bloating. You will also continue with the nutritional drinks between meals
- Bowels / Stoma: The nurses will ask you if you are passing wind and if your bowels are moving. They can move frequently after surgery and for some patients it can take quite a few days before there is any movement
- Stoma care: If you have a stoma, it is important at this stage to begin to empty or change the bag. We will show you how to do this and you will be visited by the one of the colorectal nurse specialist team. We understand this can sometimes be difficult for you at this stage, but the nurses are here to support you.



Day 3 After surgery

We would hope that you are free from any remaining tubes or drips and are able to mobilise independently.

- Mobility: Increase the time you are sitting in the chair. Each day you should increase how far you • walk and remember to do your leg and deep breathing exercises
- Nausea or Vomiting: if you feel sick remember to let the nurse know so they can give you ٠ something to help
- Wound: The nurse may take off the dressing and check the wound today
- Stoma care: If you have a stoma, you should be working with the nurses to empty and change the bag.

Day 4 / Day 5 onwards

Continues as on previous days, we will be planning your discharge. If things are not quite as planned and we feel there are any issues these will be discussed with you.

Your Discharge Goals

Length of stay aim:

- Laparoscopic 'Keyhole' Surgery 3 days
- Laparotomy 'Open' surgery 5 days

You will be discharged home when you reach the following targets:

- Surgical staff are satisfied with your blood tests, or have a plan to continue to monitor your 'bloods' after you are discharged
- You are not requiring an intravenous drip •
- Your catheter is removed, and you are passing urine (if you still require a catheter, referral for ongoing support will be arranged)
- You are eating and drinking without ongoing nausea or vomiting
- You are passing wind; your bowels do NOT need to move prior to you going home .
- You are independent with your stoma •
- You can walk freely around the ward
- You are comfortable with your painkillers •
- There is a plan for your wound to be checked with your GP's practice nurse / community nurse / **ERAS** team
- Telephone and consultant review planned as required.

Discharge from hospital

If you have any questions or concerns once discharged, please contact the ERAS team. The ERAS team will be contactable within office hours of 8:30am – 4:30pm, Monday to Friday. Outside of these hours messages can be left on the answering machine. For more urgent issues you will have access to the Surgical SDEC (same day emergency care unit) for the first 10 days following discharge.

(See contacts page for telephone numbers)



General issues after surgery; when at home.

Diet and fluids: you may notice that you need to make some changes to your diet after your surgery until your bowel habit returns to normal. It is normal for your bowel habit to be different after surgery as part of your bowel has been removed. Depending on your surgery you may have loose stools or be constipated. Some patients find certain foods exacerbate their symptoms. If this happens, avoid these foods initially and continue to follow a balance diet. Have regular meals and snacks if required throughout the day.

Continue to aim for 5 portions of fruit and vegetables in your diet to provide your body with the vitamins and minerals it requires.

Make sure to include in your diet 2-3 servings a day of protein, including: meat, fish, pulses, lentils, and beans to help promote wound healing and return of muscle function.

Regular intake of dairy foods is important to provide adequate calcium for your bones, but it is also a good source of protein for example, milk (if you enjoy milk, please drink plenty of this), cheese and yoghurts.

Drink plenty of fluid (6-8 cups a day). If you experience loose stools, ensure you are drinking plenty to keep well hydrated.

If you continue to struggle with your diet, speak to your GP for a community dietitian referral if necessary.

Pain: You may still be sore from your surgery, this is nothing to worry about, keep taking the painkillers you have been given on discharge as prescribed. You may suffer from intermittent spasmodic pain; this is also quite normal however, if you are concerned refer to the 'What to watch out for' leaflet.

Nausea or vomiting: You may feel a little bit sick and occasionally vomit; if this happens and you are not managing to eat and drink, please contact us.

Wound: Your wound may be slightly red and swollen but this is part of the healing process. If you have had clips to close the wound, they will be removed at around day 10 by your practice nurse. If your wound is very inflamed, painful, or leaking you should call the ERAS team or your GP.

Exercise: Continue to take walks, it is important to keep mobile, try to increase the distance you walk every week.

Tiredness: It is normal to feel tired in the first few weeks. You will need to rest and relax at times, but it is very important that you try to get back to your normal everyday life as much as possible. Get up and get dressed every day.

Depression or low mood: It is normal to feel low in mood or depressed following major surgery, it is important to try to keep positive and help can be found via apps and at www. wolverhamptonhealthyminds.nhs.net

Driving: You should not drive until you can do an emergency stop safely. Discuss this with your insurance company.

Work: Discuss this with your employer and your GP. Your surgeon will often advise you when he/she feels it would be suitable.

Follow-up: You may be reviewed two to six weeks after your surgery in your consultant's clinic, or your consultant may have made other arrangements. If this has not happened, please contact your consultant's secretary.

If you have a stoma, you will also be contacted by the colorectal nurse specialists after discharge. Please also see the separate stoma care follow-up leaflet within your stoma pack.

We want you to feel supported throughout this process and to take an active role in your recovery.

Get out of bed, wear your own 'day' clothes, walk, eat, drink. But we are here to help you so please contact us if there is anything you are worried about.

General advice

Patients who have had an 'Open' operation: do not lift anything heavier than a kettle full of water for 6 weeks after your surgery. Please do not vacuum within this time either.

Patients who have had 'Keyhole' surgery: can get back to normal day to day things sooner, however, please be cautious, please discuss this with your consultant.

Contact numbers / visiting:

Pre-assessment: Tel: 01902 695587

Ward D7: Tel: 01902 307999 ext. 84034

Enhanced recovery team: Tel: 07552 250 212

SDEC – Same Day Emergency Care: Tel: 01902 481940

Stoma / Colorectal nurse specialists: Tel: 01902 694084 (answering machine)

Colorectal Consultants: Tel: 01902 307999 Then ask for the secretary of your consultant

Wolverhampton Bowel Cancer Support Group: Tel: 01902 694084

Macmillan cancer support: 0880 80000

New Cross Hospital switchboard: Tel: 01902 307999

PALS – Patient Advice and Liaison Service: Tel: 01902 695362

NHS 111: 111

RADAR

National key scheme for access to public toilets for the disabled. The RADAR key can be obtained from your local council. Wolverhampton - Tel: 01902 555611

Community social work teams: Wolverhampton – Tel: 01902 551199 Walsall – Tel: 0300 555 2922 South Staffordshire – Tel: 0300 111 8010 Email: Staffordshirecares@staffordshire.gov.uk

Useful websites:

www.bowelcanceruk.org.uk - for patients who have a bowel cancer diagnosis

www.macmillan.org.uk – information and support for patients with a cancer diagnosis and those close to them.

www.wolverhamptonhealthyminds.nhs.net- information and help if you are struggling with your mental health following surgery.

For patients having a stoma formed

Coloplast

www.coloplastcharter.co.uk www.coloplast.co.uk/stoma/People-with-a-stoma/Living-with-a-stoma/Managing-your-ostomyappliances/

Colostomy Association Tel: 0800 3284257 www.colostomyassociation.org.uk

Ileostomy and Internal Pouch Association Tel: 01702 549859

https://iasupport.org/about/

Salts Healthcare www.salts.co.uk/en-gb/your-stoma/after-your-surgery/changing your stoma bag

Stoma / Colorectal nurse specialists: www.royalwolverhampton.nhs.uk/colorectalnursing

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息,如易读或其他语种,请告诉我们。 如果您需要口译人员或帮助,请告诉我们。

> Designed & Produced by the Department of Clinical Illustration, New Cross Hospital, Wolverhampton, WV10 0QP Tel: 01902 695377.