Reversal of Stoma (Ileostomy or Colostomy)
This leaflet has been provided to give you information about the reversal of your small bowel stoma (ileostomy) or large bowel stoma (colostomy).

Your stoma is a connection between the bowel and the skin, which was formed temporarily at your previous bowel surgery.

Temporary stomas are created for a minimum of six weeks. It takes this time to allow for the swelling of the tissues to settle down. Some stomas may not be reversed for several months for various reasons including; your general health and recovery from the surgery. If your operation was performed for cancer, further treatment such as chemotherapy, may also delay the reversal.

Closing or reversing the temporary stoma is no doubt something you are eagerly awaiting. Many people see it as an indication of getting back to normal. Whilst this operation may be more straightforward and much shorter than your initial operation, there are still a few things to consider before surgery. It is important to be prepared for any potential side-effects which could develop after the operation and for you to know what to do if they occur.

 Ideally, as many people as possible will have their bowel joined back up, but there could be reasons why your surgeon may be reluctant to do so. This will be discussed with you in person if this is the case.

The main considerations for the stoma reversal are:

- The doctors must be happy that you are fit enough for another operation.
- The bowel that your temporary stoma was created to protect has healed or improved since the first operation.
The anal sphincters which control the flow from your bowels are working, so that loss of control of your bowels (faecal incontinence) will not develop afterwards.

Depending on what operation you have had, the surgeon may need to perform a rectal examination, and possibly arrange some further tests before making this decision.

**What does the operation involve?**

The closure of your stoma is ‘technically’ not as demanding as your previous surgery when the stoma was created.

This operation involves making a cut around the stoma, to free it from the abdominal wall and stitching the bowel back together to restore continuity, the stitching may be referred to as an anastomosis. The joined bowel is dropped back inside the abdominal cavity. This is followed by the stitching of the abdominal wall muscles and skin. It is still considered a significant operation.

Very occasionally it is necessary to reopen the original laparotomy wound scar to be able to reverse the stoma.

**Alternatives to surgery**

The alternative to this surgery is not having the stoma reversed and keeping the stoma. Around 1 in 12 patients who have had a planned temporary stoma for cancer of the rectum will keep a permanent stoma.
Preparation for your surgery

Before coming into hospital you will attend a pre-admission clinic. At this appointment you will be asked questions about your general health and you might have a chest x-ray, ECG (heart tracing) and blood samples if necessary. Most concerns can be addressed at this appointment but if you have further questions relating to your operation, you can contact your colorectal specialist nurse or one of the stoma team (Contact numbers are at the end of the leaflet)

You will be admitted on the day of your operation. You must not eat anything for 6 hours prior to your surgery, you can continue to drink water up to two hours before your operation. It is important that you drink plenty of fluids and eat well during the previous day.

The operation usually takes around 90 minutes. After your operation you will be taken to the recovery area for close observation before returning to your hospital ward.

What to expect after surgery

You may have a drip in your arm to give you fluids until you are drinking. Once you are awake you can eat and drink normally, you may find small, light, low fibre meals are better tolerated.

Most people are moderately sore at the reversal site afterwards, but this can be managed with pain killers. You may feel distended following the procedure, some patients describe this as a feeling of being “bruised and bloated” but as the swelling decreases this discomfort will ease.

On discharge from hospital you will be given some pain killers and a low fibre diet sheet to take home with you. You will also be provided with contact numbers for who to call if you encounter any problems.
Possible complications following surgery

As with any surgery, the operation to close your stoma has some risks which you need to be aware of. Your surgical team will take all possible steps to prevent them from happening.

General complications that can happen after surgery include:

- **Deep vein thrombosis** (DVT) is a blood clot in the leg which can occasionally move through the blood stream and into the lungs causing a pulmonary embolism (PE). Whilst you are in hospital you will have an anti-clotting injection daily and support socks to prevent this happening.

- **Chest infection**

- **Urinary tract infection** (UTI)

These complications are avoided by early mobilisation and deep breathing. Getting up and walking around and out of hospital quickly can help prevent these problems.

- **Wound Infection**

- **Bleeding** from the operation site

- **Formation of a fluid or blood collection under the scar** (seroma or haematoma)

These complications are not serious but are the most common. Infection would be treated with antibiotics and a collection of fluid will either be reabsorbed by your body or discharged through the wound. Wound infection would usually occur after you have gone home so if the wound becomes hot, red and sore please see your GP or practice nurse for further advice.
Complications following reversal of stoma:

- **Hernias** A hernia occurs when the bowel protrudes through the muscles of your abdomen causing a bulge beneath the skin. The hernia may reduce or increase in size when lying, sitting, or standing. Hernias occur at sites of potential weakness (the stoma reversal site or at the scar of the first operation). The risk of a hernia formation is small but is more likely in frail, older and overweight patients. It's also seen more frequently in those who have strained their bodies or have undertaken too much exercise in the first few weeks following surgery. Management includes supporting your hernia with a belt or binder. This helps with decreasing the protrusion and assists in maintaining a good posture.

Most hernias appear over subsequent months, generally developing within the first two postoperative years. Surgical repair may however be necessary in a proportion of patients.

**Less common complications:**

- **Anastomotic leak:** A leak from the stitching where the bowel is joined back together. This happens in 1 in 250 cases of stoma reversals. This is a more serious complication which usually requires further surgery. If this happens your stoma might need to be reformed. This does not mean that it will be permanent as depending on your general health, it is still possible for another attempt at reversal in the future.

  If there is a leak, you will probably experience a dull pain in your pelvis (the area below your belly button and above your hips), have a fever, and feel lethargic.
- This complication usually presents within a few days after the operation and can make you feel generally unwell.

- **Abdominal Collection:** This refers to a collection of infected fluid inside the abdomen and presents as worsening pain and bloating. You may also have a high temperature and either frequent loose stools or the bowels stop working. The management of this condition involves antibiotics and drainage of the collection using either an ultrasound or CT scan.

- **Ileus and bowel obstruction:** Initially after the surgery there is the risk of the bowel not working properly. This is because of a delay in the bowel movement or contractions known as peristalsis. The cause of this condition is generally due to the handling of the bowel during the surgery and the bruising which creates swelling. It can take a few days before the bowel movements occur normally again and you start to pass both wind and stool from your back passage.

If an ileus or bowel obstruction occurs and your bowels temporarily stop working you may experience increased bloating, abdominal pain, nausea and vomiting. This can be managed by stopping dietary intake and allowing your bowel to rest. It may also be necessary to pass a small tube through your nose into your stomach to relieve the symptoms. Keeping mobile and chewing gum will help prevent an ileus. You can return to normal diet once your bowels start working again. We will not expect you to necessarily have opened your bowels before you go home, but we would expect you to be eating and drinking without significant abdominal bloating, nausea or vomiting.
Similar symptoms may occur in patients who develop a blockage in their bowel (bowel obstruction). An obstruction after surgery is generally caused by adhesions (sticking of bowel tissue) or kinking of the bowel. In most cases the initial management is the same as described above for an ileus. In the majority of cases the bowel obstruction will also settle down on its own. A small percentage of patients will require a further operation or intervention.

- If you are at home and are worried about any of the symptoms or complications described please contact us on the numbers provided in this leaflet for further advice. Readmission to hospital may be necessary if your symptoms are causing you to feel unwell and there is a suspected deterioration in your health, such as you can no longer tolerate fluids.

- **Fistula formation** – A fistula is an abnormal connection between two parts of the body, in this case it is often from the bowel to the surface of the skin. In rare cases problems from the join made during the first operation can occur once the stoma is reversed and continuity of the bowel is restored. The most common problem is caused from an infection around the rectal anastomosis (join) which can present as a fistula. Some fistulas can heal on their own but surgery may be considered if the fistula does not close within a few months.
Possible side effects after stoma reversal

- **Diarrhoea** - After the reversal it is common to experience liquid bowel motions for the first few days up to a few weeks before it settles down. In a small percentage of patients it can take up to 6 months before the bowel motions become more firm. It is fairly common to pass looser and more frequent stools than you may have been used to previously. Adjusting the food you eat and taking bowel slowing medication can help with this.

- **Frequency and urgency** – It is normal to have erratic bowel movements for several weeks after this operation. You may find that you need to go to the toilet more urgently and also more often. This can be more of a problem for those who have had a low join or anastomosis in the bowel and for those who have had pelvic radiotherapy and/ or were already suffering from a weak sphincter muscle. The patients who have weak pelvic floor and anal sphincter muscles may leak gas, liquid or solid stools.

Performing pelvic floor exercises may help to regain continence but need to be practiced at least five times a day and over a few months to be of benefit. (Separate leaflets on how to exercise the pelvic floor are available). When done correctly, these exercises can build up and strengthen the muscles to help you to hold both gas and stool in the back passage.

Good hygiene and a light barrier cream may be useful to prevent the skin becoming sore if you are experiencing loose and frequent stools.
How long will you stay in hospital?

Our aim is that most patients who have an ileostomy reversal would go home after staying one night in hospital. You will be seen by your team of doctors the morning after your operation and a decision will be made to send you home if you are ready for discharge. This would usually be in the afternoon or early evening, but this may be earlier if you are well.

As long as you are tolerating fluids and light diet, are mobile, have passed urine and are reasonably comfortable on pain killing tablets then you can go home.

Symptoms to look for once discharged home

Occasionally patients need to be re admitted to hospital following discharge home due to complications such as an anastomotic leak, abdominal collection or obstruction.

Acute and persistent symptoms will require further observation and investigation.

The symptoms which should alert you include:

- Progressive and worsening abdominal pain
- Increased bloating and abdominal discomfort
- Persistent nausea and vomiting
- High temperature
- Breathing difficulties
- Feeling generally unwell
- Unable to eat and drink sufficiently
- Persistent loose stools and diarrhoea
- New difficulty with passing urine
Early detection of a serious complication leads to a better recovery, so if you feel unwell please contact The Enhanced Recovery Team for advice (contact numbers on the back of this leaflet). Out of office hours, please contact the surgical admissions unit.

We would prefer that you talk to us in the first week after discharge rather than your GP so we can identify problems early and bring you back to hospital if needed. Where possible, we will ask your GP to help to save you a trip to hospital.

**Eating and drinking**

Once you home, you should gradually build it up to normal diet. In general, you are advised that for the first couple of weeks after your operation you should reduce the amount of fruit, salad and vegetables that you eat. These types of food contain fibre and will be hard for your bowel to digest initially. Mid meal snacks like crisps and biscuits are good to nibble on when you start eating. The main advice is to eat little and often until your appetite returns to normal and you feel able to return to a healthy balanced diet.

You may find your sense of taste and smell is altered following the surgery. This can be because of the antibiotics, anaesthetics and painkillers. Be reassured that your taste and appetite will return to normal within approximately six weeks.

A good fluid intake of eight cups a day (some of which should be water) is advised. However if you experience constipation, you may need to drink more.

If any particular food does seem to cause problems (such as frequency) just stop eating it for a while, then try again at a later date.
Caring for your wound

It is good idea to inspect your wound daily once you are home. Keeping the wound dry and clean will help prevent infection. You may apply a dry dressing for the first week, which is usually changed after showering. The nursing staff will be able to provide you with a small supply if required. If you are worried about possible infection, please call the ward for advice.

Signs of infection could be:

- Increased pain, swelling or inflammation.
- Redness around the wound.
- Discharge of fluid or pus from wound.

Exercise

It is very important that you start to walk around as soon as you can after the surgery, as this helps your breathing and circulation, as well as helping you to regain your strength. It is normal to feel tired after surgery so consider what help or support you may need when you go home.

When you first get home after your operation, initially plan your day to have a rest in the afternoon. It takes time to regain your normal strength, so try to build up to the amount of exercise you do slowly. Some people find it helpful to set goals to reach each week, for instance start by going for a short walk each day and increase this distance once you feel able. The level of exercise you will be able to do will vary dependant on your level of fitness before surgery. If you participate in strenuous sports or exercise, you should generally wait six weeks and then introduce this back into your lifestyle gradually.
Having had surgery on your abdomen, you are advised not to lift for the first six weeks. It is important that you do not do any heavy lifting (no heavier than a half-filled kettle) for at least two weeks following the operation, and build up gradually. The concern is that if you put too much stress on your abdominal muscles, you may cause a permanent weakness, which may lead to a hernia in the old stoma site.

**Driving**

You can drive as soon as you are able to concentrate fully and can make an emergency stop without discomfort in your abdomen. A minimum of two weeks is suggested however it is advisable to check with your own insurance policy as some insurance companies state that you will not be covered for six weeks after any abdominal surgery.

**Returning to work**

You can return to work when you feel ready to. However you may be surprised at how tired you feel after this operation, so it is advisable to consider returning to work on a part-time basis for a few weeks. If you have a physically demanding job or involves heavy lifting, it is preferable not to consider going back to work for six weeks, and to request lighter duties if possible. This will initially allow you to build up to your stamina and strength for normal duties.
Resuming sexual intimacy

The anxiety and all the stress your body has been through with this operation often reduces your sex drive. This is quite normal and in time it should return. It is important that you and your partner share time talking about your feelings, being close and enjoy being intimate without necessarily having penetrative sex.

Once your body feels fitter and more relaxed, you may feel more confident resuming your usual sexual activity again. If you do experience any problems in having sex with your partner, please do discuss this with your doctor.

Follow up care

When you are initially discharged home, some people find it helpful to have family member or friend to stay. Extra help for this first week at home will allow you to rest when you will feel tired and may help you recover sooner. After this, you may still need help with the shopping, cooking and cleaning for a couple more weeks. But remember it is important for you to stay as active as possible.

If you have any queries or questions, do not hesitate to contact your surgical team or GP.
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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