Examples of Colon or Rectal Procedures

Right Hemicolectomy. Part or all of the ascending colon, appendix, and cecum are removed. The colon is then reconnected to the small intestine.

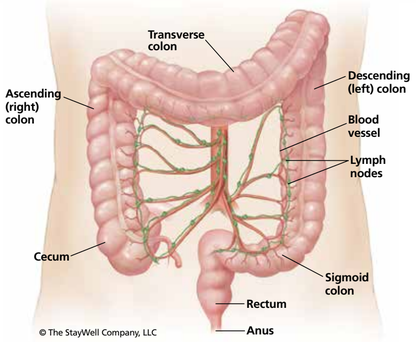
Left Hemicolectomy. Part or all of the descending colon is removed. The transverse colon is then reconnected to the rectum.

Sigmoid Colectomy. Part or all of the sigmoid colon is removed. The descending colon is then reconnected to the rectum.

Low Anterior Resection. The sigmoid colon and a portion of the rectum are removed. The descending colon is reconnected to the remaining rectum.

Abdominal Perineal Resection. Part or all of the sigmoid colon and the entire rectum and anus are removed. A colostomy is then performed.

Parts of the Colon and Rectum



Preparing for Colon or Rectal Surgery

A successful surgery starts with planning

OUR MISSION

As expressions of God's healing love, witnessed through the ministry of Jesus, we are steadfast in serving all, especially those who are poor and vulnerable.

OUR VALUES

Compassion, Dignity, Justice, Excellence, Integrity

Please visit our website to watch a video about preparing for your colon or rectal surgery:

Providence.org/surgery

PROVIDENCE Health & Services

Providence Portland Medical Center
4805 NE Glisan St. • Portland, OR 97213

Providence St. Vincent Medical Center
9205 SW Barnes Road • Portland, OR 97225

Providence Milwaukie Hospital
10150 SE 32nd Ave. • Milwaukie, OR 97222

Providence Willamette Falls Medical Center
1500 Division St. • Oregon City, OR 97045

Providence Hood River Memorial Hospital
810 12th St. • Hood River, OR 97031

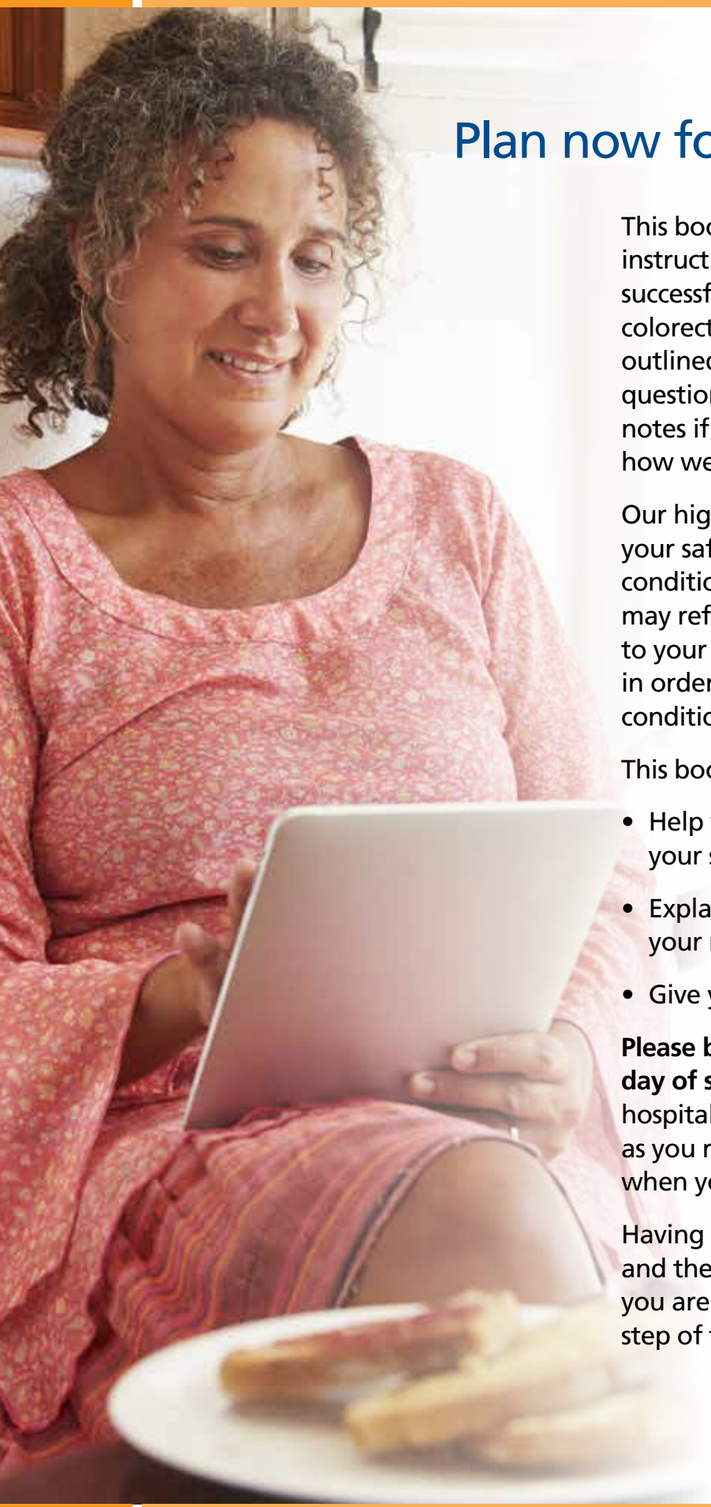
Providence Newberg Medical Center
1001 Providence Dr. • Newberg, OR 97132

Providence Seaside Hospital
725 S. Wahanna Road • Seaside, OR 97138

Providence Medford Medical Center
1111 Crater Lake Ave. • Medford, OR 97504

12/2018 SB

PROVIDENCE Health & Services



Plan now for successful surgery

This booklet supplements your surgeon's instructions and is intended to help you successfully recover from your upcoming colorectal surgery. We hope the information outlined here will answer some of your questions and ease your stress. Please make notes if you have questions, and let us know how we can help.

Our highly skilled surgeons want to ensure your safety. If you have chronic medical conditions, such as diabetes or anemia, we may refer you to a perioperative specialist or to your primary care provider before surgery in order to help fine-tune your medical conditions to optimize your outcome.

This booklet will:

- Help you understand and prepare for your surgery
- Explain how you can play an active part in your recovery
- Give you daily goals to achieve

Please bring this booklet with you on the day of surgery. Use it as a guide during your hospital stay. Hospital staff may refer to it as you recover, and may review it with you when you go home.

Having surgery can be stressful for patients and their families. The good news is that you are not alone. We will support you each step of the way.

Before surgery

THE MONTH BEFORE SURGERY

Please watch our online video to help you prepare for your colorectal surgery: visit **Providence.org/surgery** and click on "Preparing for Colon or Rectal Surgery" at the bottom of the page.

If an ostomy is planned, educate yourself about your ostomy by visiting http://muhcguides.com/module/ostomy.

We also recommend the following to optimize your health in preparation for surgery:

- **Stop smoking.** This is the most important thing you can do. Stopping for at least four weeks before and after surgery will improve your recovery and reduce the risks of surgery. Continued smoking increases your risk for infection and can lead to pneumonia. Here are resources to help you quit smoking:
  - Providence Resource Line: 503-574-6595
  - Quit for Life: 1-866-QUIT-4-LIFE
  - Providence.org/stopsmoking
  - American Lung Association: FFSonline.org
- **Stop or reduce your alcohol intake.** Eliminating alcohol four weeks prior to surgery is ideal. If you do not feel you can do this, reduce your intake to one drink (5 ounces of wine, 1.5 ounces of hard alcohol, or 12 ounces of beer) daily. If you need assistance with this, we can arrange an appointment with our specialist or your primary care provider. If you drink alcohol daily, or heavily, it may not be safe to simply quit. We will work with your primary care provider to help you reduce your intake safely.
- **Exercise.** Exercising prior to surgery can improve your recovery time and pain levels. Any type of exercise or movement is beneficial. The goal is 30 minutes, five times a week.
- **Eat well.** Good nutrition is key to a successful surgery outcome. Paying extra attention to nutrition in the weeks leading up to your surgery will help you do better during and after your surgery. A balanced diet with extra protein can help you:
  - Build strength to get ready for surgery
  - Recover faster after surgery
  - Heal wounds and bones
  - Avoid infections

Even small changes in your food choices and eating patterns can make a big difference. Here are some tips:

- Eat foods from all of the food groups, including protein, dairy, vegetables, grains and fruit.
- Aim to eat three meals a day:
  - Include protein in every meal. Good sources of protein are fish, beans, chicken, meats or meat substitutes, milk or fortified milk substitutes, cheese, yogurt, nuts and seeds.
  - Add one to three healthy snacks or protein shakes (like Boost, Ensure or Instant Breakfast) each day if you need more energy or are not healing.
  - Try to eat five servings of vegetables in a rainbow of colors every day.
  - Aim for fats from food sources like olive oil, nuts and avocados.

  If you think you will need help after your surgery, discuss temporary meal assistance and social services with your nurse or doctor.

If you have high blood sugar, diabetes or prediabetes, it is important to keep your blood sugar in a safe range before and after surgery. If you are struggling to manage your blood sugar, your doctor can connect you with experts who can help.

If you are weak or underweight, talk to your doctor about a referral to a registered dietitian.

Get more details at Providence.org/nutrition.

BEFORE SURGERY (continued)

- **Relax.** It is normal to feel nervous about surgery, but the more relaxed patients are, the better their outcomes tend to be. Techniques like breathing exercises and meditation can be helpful.

  You may consider Peggy Huddleston's program Prepare for Surgery, Heal Faster. It can help you feel calmer, recover faster, have less pain and strengthen the immune system. Huddleston's book and CD can be bought online, or call Providence Cancer Institute at 503-215-6014 to access a free copy in our library at Providence Portland Medical Center.

3-4 WEEKS BEFORE SURGERY

You will have a phone call or visit with the hospital preoperative clinic, and you may be asked to:

- Review your medical and surgical history
- Have labs and other necessary tests done
- Review this booklet
- Review your medications and supplements. You may be asked to discontinue certain medications (such as aspirin or other blood thinners) prior to surgery.

Sometimes, based on this visit, you will be asked to see a specialist, such as a cardiologist, to evaluate you prior to surgery.

You also may be given an incentive spirometer to use before and after surgery to exercise your lungs. See "After surgery" for information on how to use an incentive spirometer.

1 WEEK BEFORE SURGERY

Plan now for your discharge from the hospital:

- **Prepare your home.** Look around your home and identify any potential hazards that could prevent you from moving around safely. You may need to rearrange your furniture. Remember that you should not lift more than 10 to 15 pounds after surgery, so making sure things are in place before surgery will make life easier during your recovery phase.
- **Line up support.** Arrange for someone to drive you home after your surgery, and for someone to stay with you the first night that you're back home, and coordinate with your family and friends to make sure they'll be available to help you during your recovery. If you feel that you don't have adequate support at home, inform your surgeon, who may refer you to resources that can help.
- **Plan meals ahead of time.** Before you come to the hospital, do your grocery shopping and prepare and freeze several meals so you'll have food ready to eat when you get home from your surgery.
- **Take care of employer paperwork.** If your employer requires paperwork in order to accommodate your absence from work, send it to your surgeon's office before your surgery.
- **Check your supply of acetaminophen and ibuprofen.** You will need these (If your surgeon says you can take them) for your postoperative recovery period.
- **Fill prescriptions**. Fill any prescriptions that you received for your postoperative recovery period now.
- **Purchase Impact Advanced Recovery, if advised.** If you have experienced problems with eating or you are underweight, your doctor may advise you to drink Impact Advanced Recovery (an immunonutrition drink) three times a day for five days before and five days after your surgery. To learn more, visit Nestlehealthscience.us/brands/impact. Impact Advanced Recovery is available at the following Providence locations for about $35 for a five-day supply:
  - Providence Portland Medical Center campus
    - Gastrointestinal & Minimally Invasive Surgery 6th floor of Cancer Center tower, Suite 6N60
    - Pharmacy, Providence Plaza Suite 142
  - Providence St. Vincent Medical Center, Pharmacy Medical Office Building, first floor lobby
  - Providence Medford Medical Center, Emilie Café
  - Providence Milwaukie Hospital, Café
  - Providence Willamette Falls Medical Center, Café
  - Providence Newberg Medical Center, Café
  - Providence Hood River Memorial Hospital, Café

Outside of Providence (prices vary):

- Amazon.com
- Nestlenutritionstore.com
- CWIMedical.com

THE DAY BEFORE SURGERY

- Stay hydrated! Try to drink as much as you can the day prior to surgery. Continue to drink clear liquids (water, tea, coffee, apple juice) until two hours before arriving at the hospital. Please note: Juices with pulp and drinks with cream are not clear liquids.
- If your surgeon has ordered a bowel prep, follow the surgeon's instructions for solid food the day before surgery.
- Do not eat anything (including gum, candy or mints) after 10 p.m. the night before surgery.
- Shower and wash with Hibiclens or a good antibacterial soap the evening before surgery.
- Do not shave the area where you will have surgery.
- Be sure you have everything you need at home: food, books, movies and help.
- Get some rest!

THE DAY OF SURGERY

Before you leave home:

- Shower according to your surgeon's instructions, using antibacterial soap or a 4% chlorhexidine gluconate (CHG) antiseptic solution, such as Hibiclens.
- Remove jewelry, including body piercings, and leave them at home.
- Take your regular medications as instructed by your surgeon with a sip of water, unless you were instructed to hold these medications.
- You may drink clear liquids until two hours before your arrival at the hospital. Clear liquids are: water, pulp-free juices (apple or cranberry), Sprite, and coffee or tea without milk or cream.
- Do NOT eat anything solid on the day of surgery.
- If you use a CPAP machine, bring it with you to the hospital.

When you arrive at the hospital:

Check in at the surgical services desk. A nurse will bring you to the preoperative surgical area. While there, you will:

- Have an IV placed
- Review what medications you take and when you last took them
- Meet your operating-room team
- Meet your anesthesiologist
- Put on a warming gown to help prevent low body temperature in the operating room
- Have compression devices placed on your lower legs to help prevent blood clots
- Receive pain medication to help reduce your post-op pain
- Wait… Surgical times can be unpredictable. Bring a book or an electronic device to ease your wait time.

DURING SURGERY

- You will receive a general anesthetic. In addition, you may receive a nerve block to minimize postoperative pain.
- Your warming gown will be kept on you to keep your body temperature normal during surgery.
- Your compression devices will be turned on to help prevent postoperative blood clots.
- You will receive IV fluids to keep you hydrated.
- You will receive medication to help with pain and nausea.
- You will have a catheter placed in your bladder. The catheter typically is removed a day or two after surgery, but in some cases, it is removed right after surgery.
- Your skin will be cleansed with an antiseptic to help prevent infection.

After surgery, you will be taken to the Postoperative Anesthetic Care Unit (PACU). Most patients remain in the PACU for about one hour and then are either assigned a hospital room or returned to their preoperative room.

After surgery | IN THE HOSPITAL

In the PACU, you will be given:

- Additional pain medication, if needed
- Anti-nausea medicine, if needed

Once you are awake, you will be moved to your recovery room, where you will:

- Be given fluids to drink and food to eat once you are hungry. In some cases, your surgeon may have you wait to start eating solid foods.
- Get out of bed (with help). Moving soon after surgery helps speed your recovery and prevents complications like blood clots and pneumonia.
- To help prevent blood clots, you will also receive a blood-thinning injection beneath the skin at least once a day.
- Advocate for yourself! Ask your nurses to help you get up to walk. The goal is to walk at least three times a day for 10 minutes each time.
- Be helped to the bathroom to urinate once your catheter is out, usually a day or two after surgery.
- Start using an incentive spirometer to keep your lungs open. See instructions, below.

Depending on the type of surgery you've had, you could go home as early as one to four days after surgery, but in some cases, longer stays are required. Please discuss the anticipated length of your hospital stay with your surgeon and plan accordingly.

How to use an incentive spirometer

1) Sit on the edge of your bed or in a chair.
2) Hold the spirometer in an upright position.
3) Place the mouthpiece in your mouth and seal your lips tightly around it.
4) **Breathe in slowly** and as deeply as possible. Notice the yellow piston rising toward the top of the column. The yellow indicator should reach the blue outlined area.
5) Hold your breath as long as possible. Then exhale slowly and allow the piston to fall to the bottom of the column.
6) **Rest for a few seconds** and repeat steps one to five at least 10 times every hour.
7) Position the yellow indicator on the left side of the spirometer to show your best effort. Use the indicator as a goal to work toward during each slow, deep breath.
8) After each set of 10 deep breaths, cough to be sure your lungs are clear. If you have an incision, support your incision when coughing by placing a pillow firmly against it.
9) Once you are able to get out of bed safely, take frequent walks and practice the cough.

Pain after surgery

Incision pain: Pain from the incisions is normal. We do not expect you to be completely pain-free. Your pain will vary from day to day and with activity level, but should gradually decrease over time. Our goal is to keep you comfortable enough to take deep breaths, cough and move. Keeping your pain well controlled with a combination of over-the-counter medications and low-dose opiates, as needed, will speed your recovery. The most important component to good pain control is being proactive with pain, not reactive.

Pain medication: Pills control pain better than intravenous (IV) medication. If you are eating, IV medication should be the last option for pain control and used only in limited situations.

Aches in the shoulders or abdomen: If you had a laparoscopic surgery, you may have aches in your shoulders and abdomen. This is due to the carbon dioxide placed inside your abdomen during the surgery. This is harmless and will disappear within a few days. You also may notice some small air bubbles under the skin of your abdomen or chest that crackle when pushed on. This is also normal and will resolve itself in a few days.

Cramping and bloating: Crampy abdominal pain and bloating is common. This also should improve slowly over time. Eating small frequent meals (as opposed to large infrequent meals) may help prevent bloating.

Gas pains: As the bowels are recovering, it is common to get occasional sharp gas pains that travel across your abdomen. Walking will significantly relieve this discomfort. Taking opiates for gas pains is not effective, because the pains come and go too fast for the medicine to have time to work. Opioids also slow down bowel function and could make things more uncomfortable. When walking is not an option, some patients find that simethicone products, like Gas-X, are effective.

Going home

You will be discharged from the hospital when:

- You can tolerate your diet without nausea or vomiting
- Your pain is controlled with oral medicine only
- You've had bowel function (passing gas or having ileostomy output), if required by your surgeon

After surgery | AT HOME

Pain management

Over-the-counter medications are very helpful for controlling postoperative pain. If you received these in the hospital, you should continue to use them at home until your pain improves. Acetaminophen and ibuprofen (if your surgeon approves) are the medications that reduce the inflammation that is the primary source of postoperative pain. Using these medicines as the first line of defense for pain control will significantly improve your recovery and reduce the need for opioids.

Acetaminophen (generic Tylenol): Take 650 mg (2 pills, 325 mg each) every six hours or up to four times per day. DO NOT USE if you have liver problems. If your prescription opioid contains acetaminophen, do not exceed a total of 4 grams of acetaminophen from all source in a 24-hour period (3 grams if you are 65 or older).

Ibuprofen (generic Advil or Motrin): Take 600 mg (3 pills, 200 mg each) every six hours or up to four times a day. Use only if instructed by your surgeon. DO NOT USE if you have kidney or stomach problems or a history of ulcers. If you are over 75, discuss use of Ibuprofen with your doctor before using.

Prescription pain medication: You may be sent home with prescriptions for opioid pain pills that are the same as or similar to what you received in the hospital. Opioid pain medication (e.g., tramadol, oxycodone, Vicodin or Norco) should be used sparingly, and only if over-the-counter medications are not adequate. Try to stop the opioids as soon as possible after surgery to avoid constipation, nausea and dependency issues. Use acetaminophen and ibuprofen if you're able – these are the "workhorses" for pain control, because they reduce the inflammation that causes pain.

Staying ahead of pain: The best way to control pain is to "leapfrog" between different pain medications roughly every three hours, so that you have consistent coverage. That way, as one medication is wearing off, the other is kicking in.

If your surgeon has recommended postoperative use of acetaminophen and ibuprofen, an example schedule would be:

AFTER SURGERY AT HOME (continued)

7 a.m.	650 mg acetaminophen (add opiate if severe pain)
10 a.m.	600 mg ibuprofen
1 p.m.	650 mg acetaminophen
4 p.m.	600 mg ibuprofen
7 p.m.	650 mg acetaminophen
Bedtime	1-2 opiate

Refills: We typically prescribe a week of opioids with the expectation that every day you will have less pain than the day prior. Opioid refill requests are not filled automatically; they will be decided on a case-by-case basis. Ideally, you should wean off opioids within a week of surgery, with pain usually improving by day three.

If you need refills that are not included with your original prescription, please call your surgeon during office hours (M-F, 9 a.m. to 4 p.m.) to request a refill. Refills will not be given on weekends or nights by the on-call physician. Allow at least 48 hours for a refill to be processed.

Other pain-management techniques: It is OK to use heat or ice if that helps. The relaxation techniques that you learned before surgery also may help.

Call your surgeon if:

- You have severe abdominal pain that does not improve over time
- You have crampy abdominal pain associated with vomiting

Chronic pain medications

Your surgeon's office will not refill chronic pain medications prescribed by other doctors for other conditions. If you are receiving pain medications (opioids) for other conditions, inform your prescribing physician about your surgery and keep in touch with that provider to make sure your baseline medications are provided by them.

Activity

- Stay active! Walking will improve your stamina and reduce postoperative complications.
- On the first day after surgery, walk at least four times for 10 minutes each. Try to increase the distance that you walk on a daily basis.
- You may find that you fatigue easily. Taking naps or rest periods one to two times a day for the first week or two will help.
- You may climb stairs as necessary.
- Avoid lifting more than 10 pounds for the next six weeks (for example, a gallon of milk weighs 8 pounds). Avoid any strenuous household activities, such as raking, mowing, vacuuming or anything that makes you bear down and strain your incision.
- You can add additional exercises, like biking, after two to four weeks if you are feeling well and it's approved by your surgeon. Do not do any activity that puts pressure on your incision or core for six weeks.
- Keep using your spirometer for 10 breaths twice a day (or more) for the first two weeks.

Driving

You will need someone to drive you home from the hospital. Pain and the use of opioid pain medication will impair your ability to drive safely. You may feel that it's safe, but let someone else drive you. DO NOT DRIVE WITHIN 24 HOURS OF TAKING OPIOID PAIN MEDICATION. Driving under the influence of drugs can be dangerous and is illegal.

Incision care

Cleaning: Wash your hands before and after you change your gauze dressing or touch your scar. Remove your bandages by postoperative day two. Unless told differently, you may shower when you feel up to it after surgery. Do not soak in water for two weeks after being discharged from the hospital. Do not scrub incisions. To clean, let soap and water flow over them, but do not scrub. Make sure to rinse your body well. Pat dry with a clean towel or gauze.

Keep your incision clean and dry all day. Do not use ointments, creams or lotions on incisions.

Drainage: Minor drainage of clear yellow or red-yellow fluid from the incision is normal. Thick, opaque, dark yellow fluid or redness spreading beyond the incision site on the skin may be associated with infection. Please call if this occurs.

Bruising: Bruising around an incision site is normal and will resolve on its own with time. If bruising increases in size after discharge, call your surgeon to discuss it.

Discharge: Bloody rectal discharge is also normal.

Protecting your incision: You do not need to keep the incision covered. However, if you are still having some drainage from the incision, a gauze bandage will help protect clothing.

Sutures and staples: Many incisions are closed with absorbable sutures that do not need to be removed. These incisions may be covered with a surgical glue that will begin to fall off within a week or two after surgery. Once the glue begins to loosen, it is OK to peel it off. If surgical staples or non-absorbable sutures are used, they will be removed at your follow-up visit in 10 to 18 days, depending on your specific surgery.

Scarring: Most healing takes place within six weeks after surgery, but the scar will still soften over time. The final appearance of the scar may not be apparent until one year following surgery.

Nutrition

After surgery, if you don't feel hungry, try to eat anyway – it's important for your recovery.

- You may find it easier to eat smaller meals and snacks more often, rather than the typical three large meals.
- Eat with a friend or family member – adults who share meals together tend to eat better.
- You may be asked to avoid crunchy vegetables and raw fruits and to remain on a low-fiber diet for the first two weeks following major abdominal surgery. After two weeks, slowly reintroduce vegetables and fruits back into your diet, unless directed otherwise.
- Chew food well.
- It is important to drink enough fluid to stay hydrated. A good rule of thumb is to drink enough to keep your urine a light-yellow color (usually at least 6-8 glasses daily).
- Avoid alcohol and caffeine – they can cause dehydration.
- Snacking on protein foods like eggs, peanut butter and cheese, or drinking nutrition supplements with protein (Impact, Ensure, Boost, and Carnation Instant Breakfast) will help with recovery.
- If you are struggling to heal or to manage your blood sugar, or if you are weak or underweight, talk to your doctor about a referral to a registered dietitian.

Bowel movements

After surgery, it is normal to have changes in your bowel function, including constipation (often a result of opioids). Immediately after intestinal surgery, bowel movements may be more frequent and unpredictable. It is common to have loose, watery stools for several days.

- Powdered fiber supplements such as Metamucil (psyllium husk), Citrucel, Konsyl, Fibercon and Benefiber are all quite helpful. These products are not laxatives. They work by absorbing water into the stool to increase its bulk. They can help with loose stools as well as constipation. Be sure to drink enough water (6-8 glasses a day) to allow the fiber to work in the intestine.
- The best way to avoid post-operative constipation is to minimize opioid use by using over-the-counter medications (see "Pain management") and to remain active. If constipation remains an issue, discuss it with your surgeon.
- If watery diarrhea persists for more than a few days, please call your surgeon. It may be a sign of an imbalance of bacteria in the intestine, which may need to be treated with an antibiotic.

AFTER SURGERY AT HOME (continued)

- If you have abdominal pain, bloating, nausea or vomiting and you are unable to pass gas or to have a bowel movement, these may be signs of intestinal obstruction (blockage). Call your surgeon or go to the Emergency Room if this occurs.

Depending on what surgery you had, your bowel function may not return to its preoperative state. It almost always improves with time, but it may require a discussion with your surgeon.

Enoxaparin injections

Your surgeon may have ordered medication for you that needs to be injected to help prevent blood clots after surgery. This will be injected into the skin daily or twice daily for 14 to 28 days, depending on your surgery. Instructions will be provided before you are discharged from the hospital.

Steroids

If you were taking steroids (prednisone, etc.) in the months prior to your surgery, you may also need to take them for a short period of time following surgery (typically 3-4 weeks). Your surgeon will direct you on dose changes.

Urination

If you had a catheter placed into your bladder at the time of surgery, you might experience minor discomfort during urination for several days after the catheter is removed. If this discomfort persists or worsens, call your surgeon, as this may be a sign of infection.

Occasionally the bladder does not empty properly after surgery. This is usually a temporary problem. If you are urinating small amounts frequently (every hour or so), call your surgeon. Sometimes it is necessary to replace the catheter for a few days.

Sleep

Having major surgery and being in the hospital can disrupt sleep patterns. They usually return to normal over time. We do not routinely recommend sleep medication for home use. If you use a CPAP, you should continue using it at home while napping during the day or sleeping at night.

Work

Unless otherwise instructed, you may go back to work, as tolerated, as long as your occupation does NOT involve heavy lifting. Please ask your surgeon or the clinic about any FMLA forms that need to be filled out related to work, insurance or disability issues.

About ostomies

What is a "stoma"?
Depending on the type of surgery you have, you may need an ostomy, also known as a "stoma" or a "bag." An ostomy is when the intestine is brought up through an opening in the abdomen to allow for removal of stool. When it is made from the colon, it is called a "colostomy." When it is made from the small intestine, it is called an "ileostomy."

Will I need one?
Your surgeon will decide whether an ostomy is medically necessary for you. If it is, an ostomy nurse will set up an appointment with you to teach you how to care for the ostomy, to counsel you and to answer your questions. This nurse will also visit you in the hospital. These nurses are excellent resources. There are many online resources, as well, including: www.ostomy.org or www.ostomy.inspire.com.

Is it permanent?
It depends on the reason it was created. Most of these are "loop ileostomies" to protect a colon or rectal "hookup" (i.e. anastomosis) downstream, with the plan for reversal in 3-6 months if everything has healed.

Caring for a stoma
You will be instructed in how to care for your stoma while you are in the hospital, and you should feel comfortable with its care by the time you are discharged. Learning to live with an ostomy will take an adjustment. It is almost like re-toilet training.

What to bring to medical visits
Always bring an extra stoma wafer and bag to all medical visits.

Stoma output

- All ostomy output must be recorded. If you empty it yourself while in the hospital, please empty it into the canister that is provided and leave it for the staff to measure and record.
- Colostomy output varies, as it is typically solid stool. You might not have colostomy output every day – this is normal.
- If you have an ileostomy: it is very important to keep yourself well hydrated to compensate for the loss of fluid through the stoma. A good rule of thumb is to drink enough to keep your urine a light-yellow color.
- The goal for ileostomy output is under 1200 mL (approximately 1 liter or 1 quart) per day. You should measure this for the first two weeks after surgery to make sure that you are in this range. **You need to be aware of your output.** Too much output can dehydrate you very easily.
- Ileostomy stool consistency will vary based on what you eat. The goal is a consistency like thin applesauce. If it is too thin, start eating thickening foods, such as peanut butter, marshmallows or the BRAT diet (bananas, rice, applesauce, toast). A dietitian or ostomy nurse can help.
- If your ileostomy has too little output, there may be a blockage. If you haven't had any output in 12 hours, or if the stoma becomes swollen and isn't producing, call your surgeon immediately or go to the local emergency room. Sugary drinks, such as juice and Gatorade, will help increase and/or thin your ileostomy output.

Call your physician if:

- You have difficulty keeping a pouching system on for at least 24 hours
- You have recurrent bleeding
- You have severe pain
- There is swelling around the stoma
- The stoma stops functioning
- Stoma output is more than 1200 mL in 24 hours.

WARNING SIGNS

Please call us:

- If you have a fever (temperature >100.4°F)
- If you are unable to eat or drink
- If you have vomiting or severe diarrhea
- If you have not had a bowel movement by day four
- If you are unable to urinate
- If you have severe abdominal pain
- If your incision is red, open, hot or draining pus

Go to the emergency department or call 911 if you think you are experiencing a life-threatening condition.

If you have questions or concerns, call your surgeon. Most urgent medical issues can be handled by your surgeon in the clinic during regular business hours. Calling your surgeon first may help you avoid long, unnecessary waits in the emergency department.

Colorectal surgery checklists

for your nurse and surgeon to complete.

SURGEON'S OFFICE

Decision to Surgery

- ❑ Booklet provided
- ❑ Referral to Preoperative Clinic/PAT
- ❑ Fasting Glucose, HGA1C, CBC to screen for anemia and hyperglycemia
- ❑ Consider stopping HRT/OCP
- ❑ Previous surgery >30 days, if feasible

Pre-Op Visit

- ❑ Review booklet
- ❑ MBP + OAB
- ❑ Nutrition plan (+ Impact AR)
- ❑ Constipation
- ❑ Hydration Plan
- ❑ Smoking/alcohol cessation
- ❑ Discharge plan
- ❑ Assess VTE risk (Caprini)
  - Low to Mod- SCD's
  - High- SCD's and LMWH
- ❑ Complete orders and H&P in Epic or fax to PAT
- ❑ Sign consent, fax to PAT
- ❑ Give prescriptions
- ❑ Medications to take/hold for DOS if not directed by PAT
  - For Diabetic meds use ucsf.logicnets.com

CAREGIVER INITIALS_____

PAT/PREOPERATIVE CLINIC

- ❑ Patient History/Assessment
- ❑ Medication reconciliation
- ❑ Teaching
  - Incentive Spirometry
  - Hydration plan
  - Hygiene plan
  - Pain Scale/expectations
  - Medications to take/hold
  - Support Systems
  - Sequence of events
  - Discharge Plan
- ❑ CBC/BMP (CMP >75) for all within 6 months of surgery (repeat sooner for clinical changes)
- ❑ EKG for >70 (within 6 months)
- ❑ HGA1C within 3 months DM/pre-DM/BMI >30
- ❑ Cardiac risk assessment

CAREGIVER INITIALS_____

PHASE II

- ❑ Early feeding: clear liquids POD 0, adv diet as tol to low fiber diet, ad lib gum chewing
- ❑ Early mobilization POD 0, ambulating >3x daily, up in chair for meals
- ❑ Saline lock as soon as taking PO fluids (goal: by POD 1)
- ❑ Foley removed by POD 2, per order
- ❑ Incentive Spirometry
- ❑ Monitor blood sugars per order
- ❑ Opiate-sparing pain regimen: Acetaminophen & ibuprofen RTC, minimal opiates prn
- ❑ Reinforce Teaching
  - Pain Control
  - Nausea Control
  - Activity
  - Avoid Constipation
  - Dressing/wound care

Discharge criteria met:

- ❑ Tolerating diet without N/V
- ❑ Pain controlled with oral meds
- ❑ Able to ambulate
- ❑ Able to Void
- ❑ Ostomy output (if applicable)

CAREGIVER INITIALS_____