Urostomy Patient Handbook
Surgery, Recovery and Living with Your Urostomy

Department of Urology
Neurourology and Pelvic Reconstructive Surgery (NPR)

MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN
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When and how to call your doctor

For any symptom management and non-emergency, call the U-M Urology clinic at (734) 763-7030 Monday through Friday from 8:00 a.m. to 5:00 p.m.

For urgent or emergency situations 24 hours a day, call the paging operator at (734) 936-6267. They will call the “on call” urologist for you.

When should I call the doctor?

• Your incision becomes red, swollen or open, or if you experience pus-like drainage.
• The skin around your incision hotter to touch compared to elsewhere.
• You develop a fever (101 degrees Fahrenheit or higher) or chills.
• Your stoma becomes much darker in color (maroon, brown or black).
• You have severe pain that is not relieved by pain medication.
• If you develop severe shortness of breath at rest or with minimal activity.
• You have pelvic, flank or calf pain that does not go away.
• You notice bright red blood or large blood clots in the urine.
• There is no urine in the ostomy bag.
• You have nausea, vomiting, diarrhea or cannot eat or drink.
• You lose more than 10 pounds of weight.
• You are more fatigued.

If you have any questions or concerns, call your urology care team at (734) 647-8903.
## Important phone numbers

### University of Michigan programs and services

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med Inn (hotel accommodations at U-M Hospital)</td>
<td>(734) 936-0135</td>
</tr>
<tr>
<td>Patient Education Resource Center</td>
<td>(734) 647-8626</td>
</tr>
<tr>
<td>Patient and Family Support Services</td>
<td>(877) 907-0859</td>
</tr>
<tr>
<td>Patient and Visitor Hotel Accommodations Program</td>
<td>(800) 544-8684</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>(734) 936-7070</td>
</tr>
<tr>
<td>Social Work</td>
<td>(800) 888-9825</td>
</tr>
<tr>
<td>University of Michigan Guest Assistance Program</td>
<td>(800) 888-9825</td>
</tr>
<tr>
<td>University of Michigan Sexual Health Clinic</td>
<td>(734) 647-8903</td>
</tr>
</tbody>
</table>

### Appointments

<table>
<thead>
<tr>
<th>Appointment</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ostomy Nurse Appointments</td>
<td>(734) 936-7030</td>
</tr>
<tr>
<td>Urology Appointments</td>
<td>(734) 763-7030</td>
</tr>
<tr>
<td>Physical Medicine &amp; Rehabilitation Clinic</td>
<td>(734) 936-7070</td>
</tr>
</tbody>
</table>
## Checklist # 1: Before surgery

<table>
<thead>
<tr>
<th>Description</th>
<th>Check when done</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have read this booklet about my surgery.</td>
<td></td>
</tr>
<tr>
<td>If I need preoperative (pre-surgery) evaluation of heart, lung or other health issues, I made sure that my doctors have faxed their report plus any lab results to my Urology doctor. All results should be faxed to (734) 763-2572</td>
<td></td>
</tr>
<tr>
<td>I have improved my health by being healthy, eating healthy foods, and quitting smoking 6 weeks before surgery.</td>
<td></td>
</tr>
<tr>
<td>I have identified someone to drive me to and from the hospital.</td>
<td></td>
</tr>
<tr>
<td>I have identified someone to help me after I get home.</td>
<td></td>
</tr>
<tr>
<td>If I care for someone or have pets or livestock, I have made sure someone else will take care of them for me for at least 2 weeks after surgery. If the care involves lifting more than 10 pounds, I made sure someone will take care of it for up to 6 weeks after surgery.</td>
<td></td>
</tr>
<tr>
<td>I read the sections about pain management at home after surgery.</td>
<td></td>
</tr>
<tr>
<td>I had a history and physical done by the preoperative clinic or my primary care physician within 30 days of surgery.</td>
<td></td>
</tr>
<tr>
<td>I made a list of all of my medications, the full name and the dose and how often I take the medication and I brought this list with me to the preoperative clinic.</td>
<td></td>
</tr>
<tr>
<td>I had labs (blood work) that my surgeon requested performed at least 1-2 weeks before surgery. These results have been faxed to: (734) 763-2572.</td>
<td></td>
</tr>
<tr>
<td>I had a urine culture performed 1-2 weeks before surgery. These results have been faxed to: (734) 763-2572.</td>
<td></td>
</tr>
</tbody>
</table>
### Checklist # 2: 1 week before surgery

<table>
<thead>
<tr>
<th>Task</th>
<th>Check when done</th>
</tr>
</thead>
<tbody>
<tr>
<td>I read all the preop instructions I received at the Preop Clinic visit</td>
<td>✔️</td>
</tr>
<tr>
<td>If I had any of the following I have called to notify my surgeon.</td>
<td></td>
</tr>
<tr>
<td>- A visit to the Emergency Room (ER)</td>
<td></td>
</tr>
<tr>
<td>- A new diagnosis</td>
<td></td>
</tr>
<tr>
<td>- A hospital stay</td>
<td></td>
</tr>
<tr>
<td>- New illness within 30 days of my surgery</td>
<td></td>
</tr>
<tr>
<td>I made an appointment with the ostomy nurse clinic to mark a suitable site for my urostomy within the week before surgery</td>
<td></td>
</tr>
<tr>
<td>I followed the instructions I received at the Preop Clinic visit about my medications and stopped everything I was told to stop before surgery.</td>
<td></td>
</tr>
<tr>
<td>If I was told to do a bowel prep at the Preop Clinic visit I followed all of the instructions.</td>
<td></td>
</tr>
<tr>
<td>(If you have chronic constipation or neurogenic bowel, discuss your postoperative bowel management plan with your surgeon.)</td>
<td></td>
</tr>
<tr>
<td>If I was told to drink only clear liquids at the Preop Clinic visit, I did this for 3 days before surgery.</td>
<td></td>
</tr>
<tr>
<td>The night before surgery I showered with anti-bacterial soap.</td>
<td></td>
</tr>
<tr>
<td>Checklist #3: Day of Surgery</td>
<td>Check when done</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>I did not eat anything after midnight.</td>
<td></td>
</tr>
<tr>
<td>I followed the instructions I received at the Preop Clinic Visit and did <strong>not</strong> take the medications I was told not to take on the day of surgery. I did take my other medications.</td>
<td></td>
</tr>
<tr>
<td>I left all valuables, including jewelry and money, at home.</td>
<td></td>
</tr>
<tr>
<td>If I use a CPAP or a BiPAP, I brought it with me.</td>
<td></td>
</tr>
</tbody>
</table>
Introduction

If you are reading this handbook, you or someone you love is considering urinary bladder removal as a next step in the management of bladder symptoms.

As you read through this handbook, you’re likely feeling overwhelmed. If so, you’re not alone. Most patients and family members feel that way as they are introduced to the new concepts, tools, techniques and resources involved in treatment.

You and your surgical team have decided that a urostomy or ileal conduit is the best urinary diversion choice for you. A urostomy is an opening (also called an ostomy) that is surgically made to allow urine to empty out of the body once the bladder is removed.

You will learn new skills and routines to care for yourself. These pages have the information you will need to help you make the transition to life with a new urostomy. People who have the greatest success with this procedure are those who choose a positive outlook and make a firm commitment to learning and practicing new things. Remember: You are not alone. We are here to help each step of the way. Our best advice to you is to be patient with yourself and do not hesitate to ask any questions.
What is a urostomy or urinary diversion?

A urostomy or urinary diversion is a surgery that is performed to allow urine to safely pass from the kidneys into a pouch on a person’s abdomen (belly). It is one of the surgeries that are most often used for the treatment of bladders that no longer function for a variety of reasons. A urinary diversion surgery is performed in the operating room under general anesthesia, which means you will not be awake for the procedure. The procedure can take between 5 and 6 hours; based on its complexity. The goal of this procedure is to improve a person’s long-term health and quality of life. It is important to understand the normal function of the urinary system before understanding a urinary diversion.

How a normal urinary system functions (Figure 1):

Kidneys: The kidneys are two bean-shaped organs that remove waste from blood, form urine and maintain the fluid, electrolyte and acid/base balances of the body. They are located against the back muscles in the upper abdominal cavity.

Ureters: The ureters are tubes from the kidneys approximately 10-12 inches in length. They carry urine from the kidneys by gravity and waves of contractions down to the ureters into the bladder.

Bladder: The urinary bladder holds urine.

Urethra: The urethra is a tube from the bladder that drains the urine to the outside of the body.

Figure 1 – Normal urinary system
© Shayne Davidson Illustration
An overview of the surgery

There are two parts to your surgery. First, your bladder is surgically removed. This is called a **cystectomy**.

The second part of the surgery is the creation of a new place for the urine to drain from the kidneys. This is the **urostomy or ileal conduit**.

1. After the cystectomy, your surgeon separates a segment of small intestine from your bowels.
2. The bowels are then reconnected so you will have normal bowel movements after surgery.
3. The ureters are connected to the separated segment of small intestine (ileal conduit) pronounced: ILL-ee-ul KON-doo-ut (Figure 2).

![Diagram of the urinary system with labels: Kidney, Ureter, Stoma (urostomy opening), Ileal conduit (small piece of bowel used to carry urine), Small bowel (ileum), Large bowel (colon).](image)

**Figure 2**- ureters connected to the ileal conduit.
4. The end of this ileal conduit is then brought out through the abdominal wall and the stoma is formed above the surface of your skin, most often on the right side of your abdomen (Figure 3). Urine will drain from the kidneys, down the ureters, through the ileal conduit, and out of the stoma.

![Figure 3 - Urostomy without pouch](image)

The conduit will not store urine. It will continuously drain urine out through the stoma. The urine is collected in a pouch that sticks to your skin and is worn over the stoma. For 7-21 days after surgery, you will have flexible tubes (stents) in the stoma that drain urine into the pouch (Figure 4). These tubes are most often removed at a clinic appointment after you are discharged from the hospital.
What is a stoma?

A stoma is the end of the urostomy or urinary diversion that protrudes through your abdominal wall to the outside of your skin (Figure 5). The stoma is red, moist and soft and has no nerve endings or feeling. Each stoma is unique. You will meet with an ostomy nurse (a nurse who gives specialized care for patients with ostomies) before surgery to find the best location for your stoma. You will get education on stoma and skin management and your nurse will show you samples of a pouching system that you can use to manage your stoma after surgery.
Preparing for your surgery
Most people undergoing surgery have some level of stress. You are preparing for major abdominal surgery that will greatly change your life – it is perfectly normal to feel anxious. Information is one tool you can use to counter the worry and doubt and help you and your loved ones feel ready for the road ahead. This section of the handbook gives an overview of what will happen before, during and right after your surgery and the steps you can take to safely prepare for your procedure.

Before surgery clinic appointments
Before your surgery is scheduled, you will meet with your surgeon in the clinic. Together, you will review your information and confirm that the urostomy surgery is the best choice for you. At that time, appointments with other members of your care team and an ostomy nurse, will be scheduled for you. You will also meet with hospital staff members who will gather your health history, complete a physical exam, and prepare the paperwork for surgical clearance. Additional testing, including computed tomography (CT) or magnetic resonance imaging (MRI), may also be scheduled.

When possible, we prefer that all of these steps be completed at the University of Michigan, but we will work with providers in your community if that is not possible.

Before your surgery, you may see a Michigan Medicine anesthesia provider. They will talk to you about your choices for anesthesia including the risks and benefits of each. This talk may take place by phone or in person. If you do not talk to them before the day of your surgery, you will definitely talk to them on the day of your surgery.
These tips will help you get the most out of your pre-surgery appointments:
1. Bring a list of your questions to your clinic appointment.
2. Bring a list of your medications, along with dose and frequency. If medications are added, change your list before each visit. Your list should have vitamins, herbal supplements and over-the-counter drugs, too.
3. Before you leave your preoperative appointments, a clinic staff member will give you a list of instructions to follow before you come to the hospital for surgery. If you have any questions, please ask your doctor or nurse.
4. You will need to find someone who can help you during the first few weeks after surgery. If possible, that person should come with you to your pre-surgery clinic appointments.

Plan for your Medications
Some medications need to be stopped before surgery. These include:

Blood thinners: If you take blood thinners (aspirin, warfarin, Plavix, etc.) you will need to stop these before your surgery. You will need to work with the doctor who prescribes the blood thinner to make sure it is safe for you to stop the blood thinner. This plan must be shared with your surgeon. Your surgeon will advise you on when to resume blood thinners.

Steroids or other anti-inflammatory medications: If you take steroids (like prednisone) for conditions like arthritis, you may need to stop or decrease your dose before surgery. Let your surgeon know that you are taking these medications so that they can work with your prescribing doctor on an appropriate medication plan.

Taking care of yourself before surgery
Developing healthy habits will help you recover and thrive after surgery. It is best to make lifestyle changes several weeks before surgery to allow your body
time to adjust. We suggest that you eat a well-balanced diet, get regular exercise and get enough rest. Making small changes to your daily routine can have a big effect on how well you recover after surgery. The Michigan Surgical and Health Optimization Program (MSHOP) can help you maintain or improve your health in these four areas: physical activity, lung health, nutrition and relaxation. For more information on how you can prepare for surgery, visit: http://careguides.med.umich.edu/mshop

**Physical activity**

- Your best plan is to stay as active as you can both before and after surgery. If you are able to walk, we suggest a simple walking program – one that focuses more on minutes rather than miles. If you are already walking daily, continue to do so. The table below shows a gradual 5-week walking program to help you walk more.

<table>
<thead>
<tr>
<th>Week</th>
<th>Times per week:</th>
<th>Minutes walked each walk:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Walk or out of bed into chair 3 times per week</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Week 2</td>
<td>Walk or out of bed into chair 3 times per week</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Week 3</td>
<td>Walk or out of bed into chair 3 times per week</td>
<td>13 minutes</td>
</tr>
<tr>
<td>Week 4</td>
<td>Walk or out of bed into chair 3 times per week</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Week 5</td>
<td>Walk or out of bed into chair 4 times per week</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>

Week 6 and beyond: Slowly increase the amount of times and the duration you spend walking or getting out of bed until you reach 30 minutes at each walk, 5–7 days of the week.
• If you are unable to walk, we suggest talking to your primary care physician, physical medicine and rehabilitation physician or physical therapist. They can help you create an exercise plan before surgery. If you do not have established care with these clinicians, let us know and we can help find the right option for you.
• If you already have a regular exercise routine that your primary care doctor has approved, we hope you will maintain it. Check with your doctor if you make changes to your routine.
• It is very important to practice coughing and deep breathing before your surgery. You will find descriptions of these exercises on Page 57 of the Appendix.

**Tobacco and alcohol**
Smoking can greatly impact your surgical risk and recovery. If you smoke, we strongly encourage you to quit. We do not suggest that you simply stop smoking (“cold turkey”) without help, as this can also be harmful to your health. There are many stop smoking programs available to you. Talk to your health care team about quitting smoking. If you would like help to quit smoking or the use of other tobacco products, please call the MHealthy Tobacco Consultation Service at (734) 998-6222 or visit: [www.mhealthy.umich.edu/tobacco](http://www.mhealthy.umich.edu/tobacco). Along with quitting smoking, we suggest that you drink alcohol only in moderation.

**Diet**
A well-balanced diet is important to promote healing. Focus on eating small, frequent meals (up to 6 per day). You will return to normal eating habits over time. Since the intestinal tract is recovering from a major operation, it is recommended to begin by eating small, frequent meals with a low-residue (low fiber) diet. Over time, your meal size may increase, and you can add additional foods to your diet as tolerated. Much of the diet is regulated by what you prefer
and can tolerate. General guidelines are listed below, if you have specific dietary needs (diabetic or food intolerance), discuss these with your surgeon.

- Eat plenty of fruits and vegetables once you can tolerate the low-fiber diet.
- Eat plenty of bread, rice, potatoes, pasta and other starchy foods (choosing wholegrain varieties most often when you can tolerate the low fiber diet).
- Drink/eat milk and dairy foods (choose lower-fat varieties when possible).
- Eat other sources of protein for healing such as lean meats (including fish, chicken and turkey), eggs, nuts and nut butters (if tolerated), beans and whole soy foods (tofu and tempeh).
- Limit the amount of foods high in fat and sugar.
- Drink plenty of water. Your water needs depend on many things, including your health, how active you are and where you live. The general rule of “8 by 8” is easy to remember - drink eight 8-ounce glasses of fluid a day. All fluids count toward the daily total.
- If you are diabetic and your blood sugar is not well managed, work with your primary care doctor or a registered dietitian on strategies to improve your blood sugar control.
Before going to the hospital: helpful tips

1. Buy supplies
You will need to stock your home with many items to help you recover. A list of the most common items ostomy patients use can be found on Page 48 of the Appendix. We suggest getting these supplies before you leave the hospital. This is a good time to check with your insurance company to find out the specific coverage you have for ostomy supplies, as well as which medical supplier you can use.

2. Arrange transportation
Before surgery, you will need to find someone who can drive you for the first few weeks of your recovery.

3. Arrange for time off from work/activities
You will need to take time off from work or other activities to recover from surgery. For the most part, patients need to schedule about 6 weeks off. You and your doctor will decide the length of time you will need.

4. Prepare Advance Directives
- Advance Directives are legal documents that allow you to write out your wishes about end-of-life care. Doctors suggest that all patients prepare these papers before surgery, no matter their condition or the kind of surgery/procedure.
- Your Advance Directives, which include a living will and Durable Powers Of Attorney For Health Care (DPOA-HC), help your family, friends and health care professionals know your wishes in advance, if you become unable to communicate those wishes.
- Be sure to tell your health care team that you have completed an Advanced Directives document.
• If you do not have Advance Directives, think about preparing them. Ask your doctor or nurse for information. Michigan Medicine forms can be found online. Visit: https://www.uofmhealth.org/patient-visitor-guide/advance-directives to learn more about the booklet and forms, or visit http://michmed.org/5LZKj to go directly to the fillable booklet and forms.

5. Get to know the online patient portal, www.MyUofMHealth.org
• If you are not yet registered on the portal, you will get instructions on how to set up your account. If you do not have access to the internet, patient instructions (education) will print with your “After Visit Summary” that you get at checkout.
• The “Health Library” section of the portal has more information and tips to help you prepare for surgery, along with other topics.
• You can access your own medical records through the portal and talk with your care team.
The day of surgery

Before you leave for the hospital

- It is very important that you follow the directions from your preoperative appointment about when to stop eating and drinking fluids. **Your surgery may be canceled if you do not follow these directions.**
- Your preoperative instructions will also point out which medications you can and cannot take on the day of surgery. Please take any allowable medications with only a sip of water.
- On the night before surgery and the morning of your surgery, take a shower using anti-bacterial soap such as Dial®, Safeguard® or Lever 2000®. If you are unable to shower, please notify the preoperative team and they will provide you with other options.
- Do not take a tub bath.
- After you shower, on the day of surgery, do not put anything on your skin or hair, including:
  - make-up
  - lotion
  - powder
  - hairspray
  - perfume
  - aftershave
  - deodorant
  - antiperspirant
  - nail polish
- Do not shave the surgical site.
- Remove all jewelry, piercings and contact lenses.
- Leave all valuables at home.
- Bring your driver’s license or other picture ID.
At the hospital

- You will check-in on the first floor of University Hospital at the Admissions desk 2 hours before your scheduled surgery.
- Before surgery you will be asked to repeat information, including your full name, the part of your body being operated on and the type of surgery you are having.
- A nurse or staff member may mark the area of your body where the surgery will be performed.
- A small tube (called an intravenous tube or IV) will be placed into a vein to give you fluids and medicine to help you relax.
- Your anesthesia provider will keep you comfortable and safe before and during the procedure.
- As you wake up in the recovery room after the surgery, a nurse will check to be sure you are stable and comfortable. It is important to let your doctors and nurses know how you feel. Share any questions or concerns you may have.
Recovering from surgery in the hospital

On average, urostomy patients stay in the hospital for 4 to 7 days after surgery. During this time, your focus will be on:

- Taking care of yourself and starting the healing process.
- Learning how to care for your new ostomy by yourself.
- Managing pain.
- Maintaining lung function to reduce the risk of developing pneumonia.
- Being active to reduce the risk of blood clots and problems.

An introduction to your care team: “Rounds”

During your hospital stay you will meet many people who are involved in your care. The University of Michigan is a teaching hospital, meaning that the Department of Urology is dedicated to training resident doctors. Residents are medical doctors at various stages in their training. Residents make “rounds,” seeing each patient to address immediate needs and carrying out the plan of the attending doctor (your surgeon). You will also see several nurses, including an ostomy nurse, along with other staff members after your surgery.

At U-M, we believe strongly in a team approach to medicine. The nurses, residents and other medical professionals all work together with you to carry out the attending doctor's plan and ensure safe, high-quality postoperative care.

Communicating with your care team: The Whiteboard

After surgery you will spend some time in the recovery room, then you will be transferred to your room. Your primary job is to play an active role in your recovery. Over the course of your stay, you will have questions for your care team, and they will need to talk with you as well.
To improve communications between patients, family and care team members, dry-erase “whiteboards” are placed in all rooms in University Hospital. During morning rounds, the boards are used to support what is discussed with the patient, including goals for the day and scheduled times for ostomy teaching before discharge.

At each shift change, boards are updated with the names and contact numbers of care team members on duty. You and your family members can also use the board to write questions for your care team. We encourage you to refer to the whiteboard in your room often. Do not hesitate to write questions, comments or concerns on it for follow-up by your care team.

**Managing pain**
- After surgery you will get pain medication. Your health care team will use a variety of pain medications that are tailored to control your pain and help in your recovery.
- Oral medications should be taken *before* pain becomes more than you can stand.
- You can also use alternative therapies to help control pain, including:
  - relaxation techniques
  - massage
  - listening to music
  - using a heating pad and warm blanket
- Avoid any bending, stretching or reaching that causes pain for 4 weeks after surgery.

**Advancing your diet during the hospital stay**
Since this surgery involves removing a part of the bowel and reconnecting them, it will be a few days before your bowels “wake-up” and start working normally. This can be 3-4 days, but in some people, especially those who have
constipation or neurogenic bowels, it can take a week or longer. It can be uncomfortable if we let you eat before your bowels are ready to digest food and it can result in you feeling sick, nauseated, or throwing up.

For this reason, we will slowly advance your diet based on how you feel, your physical exam, and when you start to pass gas (fart) or have bowel movements. Often the timeline will be something like this:

- First day after surgery: no eating anything
- Second day after surgery: have some sips of liquids
- Third day after surgery: Have clear liquids (broth, water, Gatorade, popsicles)
- Fourth day after surgery: Starting to eat solid foods

Everyone is different, and it is important to know that we make decisions based on how your body is responding. This is done on an individual basis. For instance, if you are feeling sick and throwing up, we will place a tube in your nose to help empty your stomach until your bowels “wake-up”. This is called a nasogastric tube.

Drains
A drain (called a Jackson Pratt or JP drain) will be placed in your abdomen or side during surgery to drain excess fluid from the surgical site. It is not unusual for there to be a lot of fluid coming out of the JP drain. A nurse will maintain the drains during your hospital stay and record the amount of drainage. Your doctor will decide when the drains can be removed most often before you are released from the hospital. The fluid coming from the drain may be tested before it is removed. If you are sent home with a JP drain, the nurse will teach you how to care for it and check drainage. **Do not remove a drain on your own.**
**Stents**
During surgery, ureteral stents were placed in the opening of your stoma. These stents are thin flexible tubes that help drain urine from the kidneys and allow the connection between the ureters and urostomy to heal. Your stents may be removed before you go home or you may be sent home with the stents. If you are sent home with stents, your nurse will give you more information on how to care for them.

**Preventing postoperative complications**
After surgery, patients are at risk for several serious complications including pneumonia and blood clots. To reduce your risk of these complications during your hospital stay, it is important that you maintain good lung function and circulation in your legs.

**Sequential Compression Devices** (SCDs) may be used while you are in the hospital to prevent blood clots and maintain good circulation in the legs. Shaped like sleeves, SCDs wrap around each leg. Alternating between the right and left leg, SCDs are inflated and deflated with air, imitating the circulation that occurs while walking and helping to prevent blood clots. You will wear SCDs while in bed the entire time you are in the hospital.
Swelling
After surgery, you may have swelling for up to 1 month in the groin and genitalia area; this can be normal and for men it can be helpful to elevate the scrotum with a rolled towel. If you have any new swelling in the legs that develops after you leave the hospital, contact your doctor.

Your hospital care team will include nurses, and in some cases a respiratory therapist, who will teach you how to reduce your risk of developing pneumonia by performing exercises with your lungs by using a device called an Incentive Spirometer. You can also refer to Page 57 of the Appendix for instructions and exercises.

To prevent falls, ask for help getting in and out of bed. Your nurse will review the factors that put you at an increased risk of falls during your hospital stay. You will likely be required to have help getting in and out of bed or with toileting after surgery. For more information on preventing falls, see the handout, “How to Prevent Falls: Tips for Patients and Caregivers” found at this link: http://www.med.umich.edu/1libr/FallsPreventionCommittee/PreventingInpatientFalls.pdf

Learning about urostomy care
After surgery, an ostomy nurse will teach you how to care for your urostomy. You will learn how to empty and change the pouching system and how to use the night drain bag system. We encourage you to take advantage of this so that you are comfortable managing your urostomy before you go home. You will receive some ostomy supplies to start with at home, along with a folder of helpful ostomy resources that will help reinforce what you have learned.
We strongly recommend that you designate another person – someone who lives with you or will be staying with you after you are discharged – to participate in this teaching while you are in the hospital. You may need both assistance and reminders to change the appliance on a set schedule (twice per week) when first starting out. The goal is for you to become independent managing your own urostomy.

**Before going home**

Once your doctor has determined that you are ready to be discharged from the hospital, there are a few more steps you’ll need to take to get ready to go home.

- Be sure you have arranged for someone to drive you home. For your safety, you will not be allowed to drive until you are no longer taking narcotic (opioid) pain medicines and you can move and react normally while driving.
- Arrange for extra help at home after surgery, especially if you live alone or provide care for another person.
- Decide where you want your prescriptions filled and bring your insurance card. For your convenience, we suggest getting your medications at the Ambulatory Care Pharmacy Taubman Center, first floor, Reception F, the day before you are discharged.
- Before you are discharged, you will receive more specific instructions about your continuing recovery, including when you can return to work and regular activities.
- A nurse case manager will meet with you while you are in the hospital to assist with discharge planning. They will help arrange for a home care nurse to continue your plan of care and ostomy teaching. Based on your specific needs and your support system at home, arrangements could be made to stay at a rehabilitation facility to provide you with additional support while you recover.
If you were not able to purchase the items needed before going to the hospital, arrange for someone to shop for these items for you. You will find a list of useful items in the Appendix on Page 48.
Recovery at home

The first weeks after your hospital stay are an important time in your recovery. You will have many new skills to learn and new tasks to complete one or more times each day.

Here’s a summary of what to expect when you first return home:

- Don’t be surprised if you feel very tired when you get home. You have had a major operation with general anesthesia. You will need help with some daily activities.
- It is normal to have vaginal or penile drainage for 4 to 8 weeks. For this reason, you may want to wear adult diapers. Please call the clinic if you have any drainage.
- Your homecare nurse will visit you and can be helpful in guiding you through the process of caring for yourself independently. They will call your doctor's office if any medical issues come up.
- Your primary care doctor may suggest that you take a multi-vitamin.
- Follow the hygiene and dietary suggestions that you received at discharge. A registered dietitian can help make sure you know which foods are healthy and promote healing.
- Do not drive until you are no longer taking narcotic pain medication.

Physical activity

- To help you build strength, continue walking. If you cannot walk, discuss what exercises you can perform with your doctor. When you return home, gradually increase the duration of the activity.
- Listen to your body and do not become overly tired. Plan to take time for regular rest periods during the day.
• You may walk up and down stairs when you return home, but go slowly. Plan your activities so you only need to go up and down stairs a few times a day.

• Avoid heavy lifting (greater than 10 pounds) or strenuous activity for about 4 weeks. Heavy lifting can cause increased abdominal pressure which can strain your incision, possibly leading to a hernia at your incision or around your stoma. If you perform your own transfers, talk to your doctor and your physical therapy team in the hospital about creating a plan for transfers while you recover since this could also lead to a hernia.

• If you must pick something up, bend at the knees (not at the waist) and squat to pick up the object for 4 weeks after surgery.

Driving

• Do not drive if you are taking narcotic pain medications. A good rule is to not drive until you are pain-free, as pain can be distracting and may slow your reaction time.

• When riding in a car for long periods of time, take a break every 2 hours to stretch your legs. This will help you avoid circulation problems.

Mucus Production

Your urostomy is constructed from a segment of your small intestine. Because the cells lining the intestines produce mucus, you will notice mucus draining out with your urine. This is normal. It is important to drink plenty of fluids to dilute your urine. This prevents urine from clogging the spigot on the bottom of your ostomy pouch.

Other activities to avoid

• Do not operate any motorized vehicle, make major decisions or sign legal documents while taking narcotic pain medications. These medications may affect your judgment.


**Preventing blood clots and pulmonary embolism**

Having major surgery increases your risk of developing blood clots. Blood clots can lead to serious complications, including deep vein thrombosis (DVT) and pulmonary embolism.

Based on risk, you may be sent home on Lovenox® to prevent blood clots and pulmonary embolism. Patients are usually on subcutaneous heparin while in the hospital (administered under the skin with a needle by the nurse).

- **A DVT** is a blood clot in a vein of the leg, pelvis or arm. Without prompt attention, DVTs can enlarge, break loose and travel through the bloodstream to the lungs.

- **A pulmonary embolism** is a sudden blockage of an artery in the lung by a blood clot and can be life-threatening.

Please review the detailed information on blood clots, pulmonary embolism and related complications in the appendix of this handbook on Page 50.

**Hygiene**

- **Bathing:** Once your surgical dressing has been removed, you will be able to take a shower or sponge bathe. Do not soak in a tub or swim. Avoid these activities until your incision has fully healed and you are cleared by your doctor. We recommend using unscented anti-bacterial soap, as scented soaps can irritate the incision. Do not put any kind of ointment on the incision. Keep the incision clean, dry and open to air.

- **Cleaning your incision:** Gently wash your incision with unscented antibacterial soap by wringing a soapy wash cloth over the incision, rinsing and patting dry. Do not apply ointments or bandages. If you have white strips called “steri-strips” on your incision, they should fall off in about 7 days. If they do not, you may remove them after 7 days.
Diet

- Return to your normal eating habits. A healthy, well-balanced diet promotes healing.

- Drink plenty of water. The general rule of “8 by 8” is a phrase to help you to remember that you should drink eight 8-ounces glasses of fluid a day. All fluids count toward the daily total.

Preventing constipation

After surgery, you may experience constipation (when bowel movements are less frequent than usual or stools are so firm that they are difficult to pass). Constipation can be caused by narcotic pain medications, the things you eat and drink, and lack of physical activity. Make sure to let your doctor know if you are experiencing constipation.

It is important to discuss long-standing constipation or other difficulties with bowel movements with your doctor before surgery. This will help develop an individualized Pre and Postoperative Bowel plan for you.

To prevent constipation and to keep your bowels working easily, we recommend the following:

- Stay hydrated.
- Drink prune juice or eat prunes.
- Eat whole wheat/whole grain bread.
- Eat rolled or steel-cut oatmeal.
- Eat bran cereals.
- Eat a variety of fruits and vegetables.
- Drink 6 - 8 ounce glasses of water every day.
- Walk to stimulate bowel activity.
- Use a daily laxative, like MiraLAX, if this has been recommended to you.
All of this may seem overwhelming at first. You are not alone. This is a challenging time for all urostomy patients. It is important to remember to relax and to be patient with yourself. Do not hesitate to call the Urology Clinic at (734) 763-7030 if you have any questions or concerns.

**Home self-care tips**

- Watch closely for any changes in your health. Contact your doctor if you are having problems or are not recovering as expected.
- Be sure to make and keep all clinic appointments, and call your care team if you are having problems.
- Do the following to make sure you and your care team are working with the same up-to-date information:
  - Keep track of your test results
  - Maintain an updated list of all medications you are taking
  - Write down any questions or concerns as they come up so that you can review them with your care team.

**Getting ostomy supplies**

You will be discharged with a few days of ostomy supplies. You will receive copies of your prescription for future supplies.

- If you have Medicare and are receiving home care services, give the nurse a copy of your prescription so they can order supplies. Home care is responsible for providing you with ostomy supplies while you receive their service.
- If you have private insurance or you choose not to receive home care services, you will be responsible for getting your own supplies from a durable medical equipment (DME) company. The nurse case manager can
also help you find one that takes your insurance before you leave the hospital.

- If you go home without identifying a supplier, use the list of DME suppliers that was provided in your yellow folder to help you find one. You may also contact your insurance company to find out which one is in your network.

**Ostomy pouching systems**

The pouching system that you will use in the hospital is a basic 2-piece system. It consists of a pouch and a skin barrier. After you are home you might want to try different styles or brands to find the one that works best for you. Although there are different styles, they will all have a **skin barrier**, which is the adhesive portion that helps protect your skin and sticks your pouch to your abdomen. All of the urostomy pouches have a **drain valve or spigot** at the bottom. Empty your pouch when it is one third to one half full. The pouching system is typically used for about 3 to 4 days and then thrown away. It is **not** recommended that you clean them out and re-use them. **The next pages have photos and descriptions of the pouching system parts.**

<table>
<thead>
<tr>
<th>Part:</th>
<th>Purpose:</th>
<th>What does it look like?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Barrier</td>
<td>This is the piece of the pouching system that sticks to your body. It helps prevent leakage and protects the skin around your stoma from damage.</td>
<td><img src="image" alt="Image of skin barrier" /></td>
</tr>
<tr>
<td>Urinary Pouch</td>
<td>This pouch attaches to the skin barrier and collects urine from your stoma.</td>
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<tr>
<td>Assembled pouching system with stoma</td>
<td>The skin barrier attaches to the urinary pouch, holding it in place over the stoma.</td>
<td></td>
</tr>
</tbody>
</table>

**Night/bedside drainage bags**

The bedside drainage bag can be attached to your ostomy pouch to allow for the collection of a larger amount of urine. This can be useful for:

- Travel
- Long car rides
- When you are inactive
- Sleeping
How do I empty urine from the large/nighttime drainage bag (Figure 6)?
A. This is where the bag’s tubing inserts into the ostomy pouch spigot.
B. The “clip port” works like a clothes pin to pull the tube out of the holder.
C. The “snap port” flips open to empty the urine.
D. The ostomy pouch connector (see figure 7 below) connects the end of the tubing to the ostomy pouch spigot.

Ostomy pouch connector
- At night, a length of flexible tubing can be attached to the drain valve on your pouch. This allows the urine to flow into a bedside collector while you sleep so you don’t have to get up to empty the pouch at night.
- Always keep the night bag below the level of your hip to help the urine to drain by gravity.
• Each time you empty the bag, wash the connector with soap and water and cover it with the cap provided.

• If you are not using the cap or connector, wash them with soap and water and store in a dry place. Rinse the cap or connector with warm water before being placed back on the bag.

• If you maintain them properly, urinary collection bags can be reused for up to 1 month. See Page 55 of the Appendix for instructions on keeping reusable urinary collection bags clean and free of bacteria and odor.
Follow-up appointments and ongoing monitoring

Your first follow-up
Approximately 2 weeks after your surgery, you will have your first follow-up visit at the U-M Urology Clinic. You will schedule the follow-up appointment before you leave the hospital. It may be more or less than 2 weeks depending on your recovery, and the days your doctor is in clinic. During your appointment you can expect the following:

• Your nurse will make sure you are recovering well after your surgery.
• You may have your blood drawn.
• Your surgical incision will be checked and your skin staples will be removed if present.
• If you still have stents, they may be removed.
• The nurse will answer any questions you have.
• If you are having any issues with your ostomy, please call ahead so arrangements can also be made to see an ostomy nurse.

Additional follow-up appointments
You will be seen in the clinic again in 6-12 weeks based on your clinical needs. At that time, you can expect the following:

• You will have a consultation with your doctor
• You may have a kidney ultrasound
• You will have blood drawn.
• You will have a consultation with an ostomy nurse.

As time goes on, you should see your primary care doctor to address any additional concerns. In addition, we would like you to keep in touch with the U-M Urology Clinic so we can follow your progress.
Managing your urostomy

Having a urostomy will allow you to continue living your life to the fullest.

Your stoma will be swollen after surgery. It will take about 6 to 8 weeks for the stoma to shrink to its permanent size. It is important to measure your stoma, to make sure the ostomy appliance is fitting correctly, and protect the surrounding skin. The ostomy nurse will show you how to do this. The stoma is red in color, moist and has blood vessels inside. It is normal for your stoma to bleed slightly after pouch changes. If the stoma color becomes purple, blue or black or if bleeding is prolonged, you need to call your doctor. There is no pain associated with the stoma.

Helpful ostomy care tips:

- Be sure to wash your hands before and after the care of your ostomy.
- Empty the ostomy pouch about every 3 hours, or when it is about one-third to half full. Always empty it before you change the pouching system.
- When planning your appliance change, first organize the supplies you will need so they are within easy reach.
- Make sure you have good lighting and a tilt-style mirror. If needed, wear glasses so that you can see your stoma. It is best to stand while changing your appliance.
- To keep your skin healthy, it is important to change the pouching system on a regular basis- about twice per week.
- Change your pouching system if you have discomfort, itching, burning or leakage, even if it is not your scheduled day to change. This will help prevent skin irritation.
• Carry an “on-the-go” travel kit with you that has all of your basic ostomy supplies, just in case you need to change your pouching system when you are away from home.

With many new skills and habits to master, it’s natural to feel overwhelmed – most urostomy patients feel this way at first. With patience and practice, you will adapt to these changes and develop a routine that works best for you.

Caring for the skin around your stoma
Each time you change your pouching system, thoroughly check the skin around the stoma. It is not unusual for the skin to turn slightly red after you remove the adhesive barrier; however, this redness will disappear in a few minutes.

Helpful skin care tips:
• When you change the pouching system, gently clean the skin surrounding the stoma with plain water.
• If you choose to use soap for cleansing, it should be mild and pH balanced. We do not recommend using soaps that contain moisturizing creams or lotions. They can leave a residue on your skin that may prevent the appliance from sticking. Rinse well and dry the skin before the new appliance is replaced.
• After you apply your new pouching system, gently press and mold the skin barrier against your body for 30-60 seconds. The warmth and pressure will help activate the adhesive.
• If your skin becomes red, irritated or sore, or your pouching system is not staying in place, call your home care nurse or call the Urology Clinic for more instruction.
• Check the sutured area around the stoma as well. The skin should be snug against the stoma. If there is a gap you should contact your home care nurse or the Urology Clinic for more instruction.

Preventing peristomal skin irritation
Keeping the peristomal skin (around the stoma) clean, cutting the skin barrier to the correct size, and maintaining a good seal, are the best ways to keep your skin healthy. It is not normal to get skin irritation, but it can occur if there is moisture underneath your barrier. This is called peristomal skin irritation, it is often caused by a poor-fitting pouching system or postoperative surgical changes to the skin around the stoma.

The most common form of peristomal skin irritation looks like a rash. This type of red or pink rash is caused by urine coming into contact with the skin. The skin around the stoma may turn gray or white and it may be moist. You may feel a burning sensation or it may even bleed.
• Use the stoma powder and skin prep (barrier film) you received to treat irritation.  
  o To treat, apply a light dusting of stoma power onto the affected area.  
  o Rub it into the skin, then brush off the excess.  
  o Next, dab skin prep (barrier film) over the powder to seal it in.  
  o Allow to dry completely.  
  o You may repeat the process to form a “crust,” which will produce a dry pouching skin surface.  
  o Then replace the appliance.

Whenever there is a rash present, you may need to change your appliance more often to retreat the skin. Only use powders and skin prep when your skin is irritated. Once the skin rash has improved, you do not need to keep using these products.
If a skin rash lasts more than 2 weeks without improvement, you should call the Urology clinic. You may need more recommendations for care. An appointment may be necessary with your ostomy nurse to address any skin or pouching issues.

**Odor**

Odor from urine is a concern for many people. The urostomy pouches are made with odor-barrier film, so there is usually no noticeable odor when the urine is contained in the pouch. Urine is normally very acidic and has a mild odor. If you notice a strong ammonia odor, your urine may have lost its acidity. When this happens, it will irritate the skin around your stoma. It may also cause white, crystalline deposits to form on or around the stoma.

- These deposits can be dissolved by using a mixture of half vinegar and half water (50/50) to wash the stoma and the surrounding skin.
- Drinking cranberry juice or taking a vitamin C supplement can help maintain the natural acidity of your urine. Check with your doctor whether it is okay for you to take vitamin C.
- Some foods, nutritional supplements or medications can cause urine odor. Be mindful of what you are taking and eating that may cause an odor in your urine. If you notice that your urine has a bad odor or smell, this does not mean that you have a urinary tract infection- the odor is more likely to be due to changes in acidity, or what you are eating or drinking.

**Urinary tract infections**

Urinary tract infections can be a problem for people who have a urostomy. Take precautions such as washing your hands before and after ostomy care, drinking plenty of water and emptying and changing your pouch regularly to avoid them. It is important to get a new night drain bag at least monthly and clean it daily (See Page 55 in the appendix for cleaning reusable urinary drainage systems).
It is also important to be aware of some of the warning signs of a urinary tract infection. These include:

- Back pain
- Flank (between ribs and hip) pain
- Fever
- Chills
- Loss of appetite
- Nausea or vomiting

If you notice these symptoms, please call the Urology Clinic. You may be instructed to give a urine sample from a clean pouch so it can be tested for an infection. If you come into the clinic for the nurse to collect the urine, it may be obtained by using a clean catheter placed into the stoma. Do not give a urine sample from a pouch as you will not have accurate results.

**Troubleshooting**

If you are having any issues with leaking or the adherence of your appliance, first call your home care nurse for help. They are your closest resource at home. If you are having ongoing issues, do not hesitate to call the Urology Clinic for more direction. The clinic works closely with the outpatient ostomy nurses and can determine whether an appointment is needed.
Overcoming challenges

Support and coping

Having support after surgery can be a major source of your healing. Our goal for you is to live a normal, active life and to go back to doing all of the things that you enjoyed doing before your surgery. Having an ostomy should not change that. There are also many support groups for ostomates (people with ostomies) across the country. Talk with your ostomy nurse about how to locate a group in your area.

Sexual health

No two people are alike, and it is not possible to predict exactly how this surgery will affect your sexuality and sex life. Your desires and abilities may change, and you may have new feelings about your body image after having a urostomy. How you choose to approach these changes is a very personal decision. If you have a spouse or partner, this surgery will affect both of you. Give yourself and your partner time to adjust to the “new normal.”

At first it may be difficult to believe that an intimate relationship is still possible. Do not assume your partner is “turned off” by your stoma or pouch. Talk about your feelings and your new urostomy. Let your partner know that being intimate and resuming sexual activity will not hurt you or your stoma, although you never want to use your stoma for intercourse.

Tips for successful intimacy and sexuality after surgery:

- Empty your pouch first.
- Be sure that your pouching system is secure.
- You may choose to wear a beige pouch or pouch cover to hide the pouch contents.
- Intimate apparel can hide the pouch and keep it close to your body. Ask your ostomy nurse about options and where to find resources.
Please speak with your ostomy nurse or doctor about any sexual concerns you have. They can assist you with some of these very important issues and questions.

It is important to maintain a dialog with your doctor about how bladder removal is affecting your sexuality. Begin that conversation before your surgery and address the topic again when you return to the clinic for your first post-surgery check-up. Be sure to ask your doctor or nurse any questions you have about body image or function. They may refer you to a program dedicated to sexual health after surgery or to a support group.

Find out more
The Michigan Medicine Department of Urology has certified sexual counselors and sexual therapists who are available for consultation. Your doctor or nurse can refer you to these counselors.

Ostomy resources
To find an ostomy nurse closer to your home:
- Visit the Wound, Ostomy and Continence Nurses Society (WOCN) to find a nurse in your area: https://www.wocn.org/page/Nurse_Referral

Online resources
- United Ostomy Association of America: https://www.ostomy.org/
- Urology Care Foundation: https://www.urologyhealth.org/
- The American Association of Sexuality Educators Counselors & Therapists (AASECT) (http://www.Aasect.org) is a website where you can find information about sexuality educators, counselors and therapists.
Shopping for ostomy apparel:

- Finding ostomy clothing is easy using the Internet. Many companies sell briefs with built-in pouches, lingerie and other types of intimate clothing. Type in the key words “Ostomy Apparel” in your web browser.

Sites for travel tips:

- United Ostomy Associations of America (UOAA): Air Travel Tips From UOAA And TSA- http://www.ostomy.org/Ostomy_Travel_Tips.html
- Visit the Hollister website below and choose “Travel” from the topics list: https://www.hollister.com.au/en-au/ostomycare/articles

Other ostomy products:

If you are interested in additional ostomy product samples or information, below are some helpful web sites:

- Hollister, Incorporated: www.hollister.com/us/ (800) 808-7456
- Convatec, Incorporated: www.convatec.com (800) 422-8811
- Coloplast, Incorporated: www.coloplast.fr (800) 533-0464
- Marlen: www.marlenmfg.com (216) 292-7060
- NuHope: www.nuhope.com (800) 899-5017

Patient to patient

You can also benefit from the experience of other patients who are successfully recovering and managing their urostomy. See “Recovery Tips for Patients from Patients” found on Page 49 of the Appendix.
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Pre-surgery shopping list

To make the transition easier when you return home from the hospital, you may want to purchase the following items before your surgery:

- Men: After surgery you may need larger size pants/shorts. Purchase items with elastic waistbands. Some men find suspenders work well.
- Women: After surgery you may need larger size clothes. Shift dresses, stretchy “yoga” pants and shorts with an elastic waist band are all good comfortable choices.
- Slip-on shoes.
- Waterproof, washable mattress pad(s) to protect your mattress from accidental leaking.
- Additional set of bed sheets.
- A shower chair or bathtub bench if standing is difficult.
- A 5-gallon plastic bucket is useful for holding your nighttime drain bag.
- Plain, white paper towel or several less expensive washcloths for ostomy care.
- Tilt-style mirror to help you see your stoma during ostomy care.
- An electric razor to use the first few days after surgery.
- A handheld device for picking things up without bending or reaching.
- A watch, timer or phone with alarm to remind you to stand and move around often.
- Friends and family email or phone list so you can keep them updated on your progress.
- Milk of Magnesia® or Miralax® to help relieve constipation.
- Food items that help relieve constipation (see Page 32).
- Nutritional oral supplements such as Boost® or Ensure®.
- Purchase or borrow grab bars to position along the sides of the toilet.
- Have enough easy-to-prepare, healthy food on hand for the first 2 or 3 weeks after surgery.
- A digital thermometer (that you can read) to keep track of your temperature.
- A cane or walking stick might be useful for support.
Recovery tips for patients, from patients

Chances are that other survivors have already dealt with many of the challenges you will face after bladder surgery.

Below are some practical tips from bladder surgery patients treated at Michigan Medicine. From recovering at home, to getting used to new equipment, to developing new habits, we hope you can learn from their experiences:

- Wear your ostomy appliance outside your pants/skirt with a longer shirt to cover the pouch, for ease in emptying the urine while you are adjusting to having an ostomy.
- Make sure you always have ostomy supplies at home. You do not want to run out, because you cannot buy them at your local drug store.
- While in bed, you can hang the bag from a plastic coat hanger slid between the mattress and box spring, or you can place the bag in the bucket on the floor.
- To steady yourself when getting out of bed, place a chair next to the bed with the back facing the bed so you can hold onto it. Experiment with getting in and out of bed with chair support before your surgery to make sure that you have the right chair placed in the right position.
- Keep a pillow handy to hug when you laugh, cough or sneeze.
- Make plans to find and attend support group meetings.
Preventing blood clots and other complications

Following major surgery, you are at an increased risk of developing blood clots. Blood clots can lead to serious complications including, deep vein thrombosis (DVT) and pulmonary embolism.

- **A DVT** is a blood clot in a vein of the leg, pelvis, or arm. Without prompt attention, DVTs can enlarge, break loose and travel through the bloodstream to the lungs.

- **A pulmonary embolism** is a sudden blockage of an artery in the lung by a blood clot. This can be life-threatening.

What factors will put me at risk for blood clots?

- Recent surgery that involved the legs or belly.
- Staying in bed for 72 hours or more after surgery or a serious illness.
- Remaining inactive for long periods of time, or remaining seated for 6 or more hours, such as during a long flight or car trip.
- Illnesses such as cancer, heart failure, stroke or a severe infection.
- Smoking.
- Being overweight.
- Having blood that tends to clot easily, a condition that may be hereditary.
- Taking birth control pills or hormone therapy.
- Pregnancy and childbirth (especially after a cesarean section).

Preventing blood clots, DVT and pulmonary embolism:

- If you are prescribed anticoagulant medicines, take them exactly as directed.
- Get up out of bed as soon as possible after your surgery.
- Exercise to keep blood circulating in your legs.
- Do not stay seated for long periods of time.
  - If traveling by car, stop every 2 to 3 hours, get out and walk around.
• If traveling by bus, train or plane, walk up and down the aisles every hour or so.

• Do leg exercises while seated. Pump your feet up and down by pulling your toes up toward your knees and then pointing them down.

  • Ask your doctor about wearing compression stockings to help prevent blood clots in your legs. You can buy these with a prescription at medical supply stores and some drugstores.
  
  • Do not smoke. If you need help quitting, talk to your doctor about stop-smoking programs and medicines that can increase your chance of quitting for good.

  • Check with your doctor before using birth control pills or hormone replacement therapy.
How to prevent falls: tips for patients and caregivers

What are the risk factors for falling?

Anyone can fall, but some factors can make it more likely for you to fall. Some risk factors for falls are:

- If you have fallen before
- Being fearful of falling
- Feeling weak, tired, or forgetful
- Numbness or tingling in the feet or legs
- Difficulty walking or unsteady walking
- Having poor vision
- Feeling lightheaded, disoriented or dizzy
- Being dehydrated and having poor nutrition
- Using a cane or walker
- Having anxiety or depression
- Taking many medications
- Mixing alcohol and certain medications
- Taking certain medications such as:
  - Medications that make you feel sleepy, such as Nyquil®, Tylenol PM®, Sudafed®, and other over-the-counter medications and herbal supplements
  - Sleeping pills
  - Fluids into a vein (called IV or intravenous fluids)
  - Laxatives
  - Medications to prevent seizures
  - Pain medications
  - Some antidepressants
  - Water pills (diuretics)
How to prevent falls while you are receiving treatment:
- Bring someone with you who can help you get around.
- Ask for a wheelchair to use while you are receiving treatment.
- Have someone help you while you're in the dressing room or bathroom.
- When getting up from a lying position, always sit at the side of the bed or exam table for a few minutes before you stand up.
- If you use a cane or walker, bring it with you and use it when you come for treatment.

If you feel dizzy or weak, let someone know you need help!

How to prevent falls while you are at home:
- Set up your furniture so that you can walk around without anything blocking your way.
- If your lighting is dim, use brighter light bulbs.
- Use a nightlight or keep a flashlight close to you at night.
- Secure electrical cords.
- Remove throw rugs or other loose items from your floor. If you have an area rug covering a slippery floor, make sure the rug does not have any loose or fringed edges.
- Add handrails to stairways.
- Install raised toilet seats.
- If your bathroom is not close to your bedroom (or where you spend most of your time during the day), get a commode. Place it near you so you do not have to walk to the bathroom.
- Install grab bars and handrails next to your toilet and inside your shower.
- Never use towel racks to pull yourself up because they are not strong enough to hold your weight.
- Apply anti-slip stickers to the floor of your tub or shower.
- Buy a shower chair and a hand-held shower head so you can sit while taking a shower.
- When getting up from a lying position, always sit at the side of the bed or couch for a few minutes before you stand.
- Arrange items in your kitchen and bathroom cabinets at shoulder height so that you don't have to bend too low or reach too high.
- Wear shoes with low heels and slip resistant soles inside and outside the house; avoid going barefoot or wearing slippers.
- Be careful of pets, have them wear metal tags or bells so that you can hear them.

**Other things you can do to prevent falls:**
- Exercise regularly. Exercise makes you stronger and improves your balance and coordination.
- Eat nutritious foods and stay well-hydrated.
- Avoid alcohol.
- Have your doctor or pharmacist look at all of the medicines you take, including over-the-counter medicines, herbs and supplements. Some medicines can make you sleepy or dizzy.
- Have your vision checked at least once a year by an eye doctor. Poor vision can increase your risk of falling.

**Other safety tips:**
- Keep emergency numbers in large print near each phone.
- Put a phone near the floor in case you fall and can’t get up. Think about wearing an alarm device that will bring help in case you fall and can’t get up.
Caring for reusable urinary drainage systems

Urinary drainage bags require routine cleaning to dissolve deposits that build up and help reduce bacterial growth and odor.

Follow these steps to keep bags clean:

1. Wash your hands. If a caregiver is washing your drainage bag, they should also wash their hands and wear sterile gloves.
2. Drain the urine from the bag into the toilet or container.
3. Fill the bag with clean water and shake vigorously to rinse, then drain.
   Perform this step twice.
4. Make a diluted solution of chlorine bleach using 1-part bleach to 10 parts water. To make a 1:10 solution, you need 1-part bleach for every 9 parts water. A good amount to start with is:
   - ¼ cup bleach
   - 2 ¼ cup water
      - First, carefully pour the bleach into a jar then add the water. Mixing the solution in this order will prevent the bleach from splashing on you. If you do get any bleach on your skin, wipe it off immediately with the damp cloth.
      - If you need to make a larger amount of disinfectant solution, increase the amounts of bleach and water accordingly, using the table below:

<table>
<thead>
<tr>
<th>Bleach:</th>
<th>Water:</th>
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<tbody>
<tr>
<td>¼ cup</td>
<td>2 ¼ cups</td>
</tr>
<tr>
<td>½ cup</td>
<td>4 ½ cups</td>
</tr>
<tr>
<td>¾ cup</td>
<td>6 ¾ cups</td>
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<tr>
<td>1 cup</td>
<td>9 cups</td>
</tr>
<tr>
<td>1 ¼ cup</td>
<td>11 ¼ cups</td>
</tr>
<tr>
<td>1 ½ cups</td>
<td>13 ½ cups</td>
</tr>
<tr>
<td>1 ¾ cups</td>
<td>15 ¾ cups</td>
</tr>
<tr>
<td>2 cups</td>
<td>18 cups</td>
</tr>
</tbody>
</table>
5. Pour the solution onto the drainage spigot, spigot hub, cap and connector.
6. Using a funnel or a water bottle with a spigot, pour the bleach solution through the tubing and into the empty drainage bag and shake for 30 seconds to 1 minute.
7. Allow it to drain out the drainage port.
8. Allow to air dry thoroughly.
9. Wash and dry your hands well when cleaning is complete.
10. Remember to cover the end of the tubing after it is dry to prevent contamination.

Follow the cleaning process above at least every other day. If the bags are routinely cleaned, they can be used for 2 weeks to a maximum of 1 month.
**After surgery exercises and tips**

**Using an incentive spirometer**

An incentive spirometer is a device that helps you keep your lungs clear. During the days immediately after surgery, you will be less active than normal; the spirometer provides exercise for your lungs until you can resume your daily activities.

1. Sit on the edge of your bed if possible, or sit up as straight as you can in bed.
2. Hold the incentive spirometer in an upright position.
3. Place the mouthpiece in your mouth and seal your lips tightly around it.
4. Breathe in as slowly and deeply as possible.
5. As you inhale, a yellow piston will rise toward the top of the column. The yellow indicator should reach the blue outlined area.
6. Hold your breath for 3 to 5 seconds to achieve full lung expansion.
7. Slowly exhale, allowing the piston to fall to the bottom of the column.
8. Rest for a few seconds, then repeat steps 1-7 at least 10 times every hour.
9. After each set of 10 breaths, cough to be sure that your lungs are clear. If you have a surgical incision, support your incision when coughing by placing a pillow firmly against it.

**Plantar extension/flexion exercise**
This exercise will help you maintain muscle tone in your legs.
1. While lying in bed, point your toes toward the end of the bed.
2. Next, point your toes up toward your face.
3. Repeat at least 100 times an hour while you are awake.

**Walking**
Within 1 to 2 days after surgery, a member of the physical therapy team will come to your room and evaluate you to make sure it safe for you to begin walking. Walking soon after surgery promotes breathing, improves circulation, prevents joint stiffness, relieves pressure and encourages the return of bowel function.

You will be instructed to get out of bed and walk at least six times a day during your hospital stay and to continue a walking regimen when you return home.

**Getting out of bed**
To get up safely from a lying position, we recommend doing a “log roll.” Here are the log roll instructions:
- Roll over onto your side.
- Bend your knees until your legs are almost hanging over the side of the bed.
- Use your arms to lift your upper body up so that you are sitting on the edge of the bed.
• Push off with your arms to help you stand up. To view a video of log roll, go to YouTube: www.youtube.com/watch?v=1xioiSDHaWM

Notes
Faculty and staff from these programs supplied facts for this handbook: Ambulatory Care Ostomy Nursing Services, Cancer Patient Education, HomeMed® Nursing, Medical Urology Oncology, Urology Oncology Nursing.

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