#### **Methodist Health System**

Enhanced Recovery After Surgery (ERAS) for

# Pancreatic Surgery



## **Helpful Phone Numbers**

•	Methodist Dallas general operator	214-947-8181
•	Outpatient registration (2nd floor Pavilion II)	214 947-3440
•	Presurgery Assessment Center (Pavilion II)	214-947-3888
•	Radiology scheduling	214-947-3441
•	Hospital billing	214-947-6300
•	8th floor Schenkel Tower (surgery)	214-947-8099
•	9th floor Schenkel Tower (orthopedics)	214-947-9099
•	10th floor Schenkel Tower (gynecology)	214-947-1099
•	ICU (4th floor Sammons Tower)	214-947-3399
•	Cancelling, days prior to surgery	contact your surgeon
•	Cancelling, morning of surgery	214-933-6308

Surgeon:	
Office phone:	
Scheduled surgery date:	
Please arrive at the hospital by:	

Please check in at Outpatient Services on the 2nd floor in Pavilion II.

## **Enhanced Recovery After Surgery Guide**

## We are excited to join your team!

You have been referred to Methodist Dallas Medical Center for pancreatic surgery. Methodist Dallas is one of the nation's highest-volume, highest-quality treatment locations. We care for more than 100 pancreatic cancer patients each year and perform approximately 120 pancreatic surgeries, including 60 Whipple procedures (pancreaticoduodenectomy). Studies show that pancreatic surgeries have better outcomes and fewer complications if done at a hospital that performs these specialized surgeries more frequently.



At Methodist Dallas Medical Center, you are being cared for by a multidisciplinary team that has increased skill and expertise in this specialty. This team includes surgeons, nurses, radiologists, internal medicine doctors, pathologists, cancer doctors, and other specialized caregivers.



#### **Our Goal**

We want to help you through your treatment from beginning to end with as few complications as possible. This guide book will help you learn about what to expect before and after surgery so you and your family will know how to play an active part in your recovery and healing.

## **Enhanced Recovery After Surgery (ERAS)**

ERAS is an evidence-based recovery program developed to minimize the stress of surgery and help you recover as soon as possible. Methodist Dallas is the first hospital in Dallas to institute an ERAS program for pancreatic surgery.

Unique areas of focus for ERAS include:

- Preparation for surgery
- Preoperative diet
- Surgical techniques
- o Pain relief and anesthesia options
- Nausea prevention
- o Mobility and rehabilitation.

### **Your Team**

During your hospital stay, your day-to-day support team will consist of many different professionals working together to provide coordinated care.

#### Coordinator

Methodist Dallas provides additional coordination, education, and support through its **pancreas nurse coordinator** whom you will meet in your surgeon's office. This coordinator will review the entire process with you and act as a resource before, during, and after your stay with us.

#### Nurse

You will meet a number of specially trained nurses throughout your visits to Methodist Dallas, beginning with presurgery assessment and continuing on the day of surgery with our perioperative nursing staff. After surgery, your floor nurse will check on you multiple times a day to give you medications, monitor your wounds, monitor your vital signs, assess your condition every few hours, and report changes to your doctor.

#### Surgeon

Your surgeon will formulate and carry out a surgical plan to give you the best chance of success in dealing with your health problem. After surgery, they will check on you at least once per day and guide you through your surgical progress from start to finish.

#### Anesthesiologist

Your board-certified anesthesiologist will work with you to develop a strategy to minimize your surgical risk while providing optimal postoperative pain relief.

#### Residents and interns

These are doctors who have finished medical school and are being trained at Methodist Dallas by your surgeon. They will be around frequently to keep a close watch on your progress and report to your surgeon, if needed. They are in the hospital 24 hours a day, so if an issue arises, the residents and interns are easily available.

#### Dietitian

A registered dietitian is available to see you before and after surgery to help you manage your diet at home, speed healing through improved nutrition, and maintain muscle mass despite the challenges posed by systemic chemotherapies, which may be required before or after surgery. They will give guidance to the surgeons as to which diet and supplements are best for you.

#### Social worker

Case managers will help to arrange home health services, physical therapy, and/or skilled nursing after discharge, depending on the needs that you have.

#### Patient care technician

Your patient care technician (PCT) will check on you frequently and help with going to the bathroom and daily bathing. He or she will also change your linen changes, monitor your vital signs, draw blood if needed, and perform other necessary tasks.

#### Physical therapist

A physical therapist will try to meet with you on your first day after surgery to design a rehabilitation schedule that best fits your needs. He or she will teach you exercises and other skills to help get you up and walking. This helps to speed the recovery process and prevent complications.

## **Basic Anatomy and Types of Surgery**

#### The Pancreas

The pancreas is a gland that sits behind the stomach and is attached to the small intestine.

#### What does the pancreas do?

The pancreas has two jobs:

- 1. It **makes enzymes** that are sent into your intestines to help break down fats and other food.
- 2. It **produces insulin**, which controls the level of sugar in the blood. Lack of insulin causes diabetes.

The pancreas is in contact with very important veins and arteries as well as other organs. All of these have to be considered when operating on the pancreas.

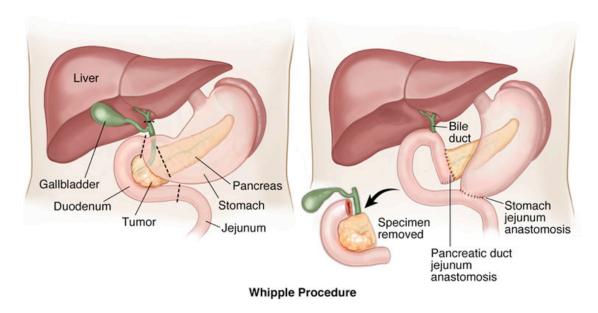
#### Why is this surgery done?

This surgery is used to treat many different diagnoses, including:

- Intractable pain associated with chronic pancreatitis
- Neuroendocrine tumors
- Premalignant lesions or invasive cancer
- Intraductal papillary mucinous neoplasia with ductal involvement (IPMN).

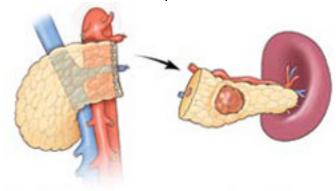
#### Partial Pancreatectomy

The pancreas has three parts: head, body, and tail. The **Whipple procedure** (pancreaticoduodenectomy) — a common treatment for pancreatic cancer — involves the removal of the **head of the pancreas**, gallbladder, bile duct, part of the stomach, and part of the small intestine.



A **distal pancreatectomy**, also known as a **pancreatic tail resection**, is performed primarily for benign, precancerous, or cancerous conditions of the pancreas — usually to remove a tumor, a cyst, or parts of the pancreas damaged by pancreatitis.

The tail and a portion of the body of the pancreas are removed. **The spleen could also be removed** as it is attached to the pancreas.



Depending on the reason for surgery and exact location of the problem, this surgery can be performed either laparoscopically (surgery performed through several small incisions using a with camera with a light and specialized surgical instruments) or as open surgery using a larger incision. Your doctor will let you know which type is planned for you.

## How will my lifestyle be affected with a portion of my pancreas removed?

- There is a small risk of developing diabetes after removing part of the pancreas. In most cases, if you are not diabetic before the surgery, you won't be after it. However, if you are diabetic before the surgery, additional insulin or medication may be needed.
- The enzymes that the pancreas makes to help digest food may be affected after this surgery. A symptom of this is passing loose, greasy-looking stools more than three times a day. If this happens, your doctor will prescribe enzyme supplements to take with your meals. Although you will need time to recover, almost all patients who have this surgery get back to living their normal life, including eating and drinking as usual and getting back to their regular activities.

#### Benefits of Surgery for Cancer Patients

Cancer patients undergo potentially curative surgery when tests suggest that all the cancer can be removed. **The aim of this surgery is to remove all of the visible tumor or growth.** In general, patients treated with surgery survive longer.

#### **Splenectomy**

The spleen is a fist-sized organ located in the upper-left side of your abdomen. It helps to fight infections, gets rid of old or damaged red blood cells, and stores blood for your body. You can live without a spleen, but you may be more susceptible to certain bacterial infections.

**Splenectomy** is the name of the operation that removes the spleen. If you undergo a **distal pancreatectomy**, the spleen will be removed at the same time as your pancreas since the two are connected. If there is a possibility that you may need to have your spleen removed, your surgeon will recommend some additional preparations before surgery.

### Vaccines Before and After Surgery

You will need these vaccinations to help prevent infections. You can get them from your primary care physician, Dallas County Health and Human Services, or Passport Health.

Pneumococcal vaccine polyvalent	Revaccinate every six years
(Pneumovax® 23)	
Age 55 and older: Meningococcal	Revaccinate every three to five years
polysaccharide vaccine (Menomune® –	
A/C/Y/W-135)	
Ages 16 to 55: Meningococcal	May need revaccination every three to
polysaccharide diphtheria toxoid	five years
conjugate vaccine (Menactra® –	
A/C/Y/W-135)	
Haemophilus influenzae type b	No revaccination needed
conjugate vaccine	

Vaccines need to be done at least 14 days before surgery, and revaccination should be done according to the list above.

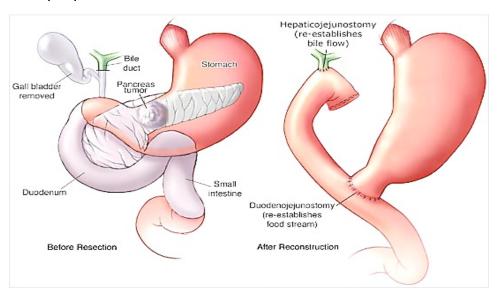
It is important that you see a doctor IMMEDIATELY if you have any of the following symptoms:

•	Fever	•	Achy or weak feeling
•	Chills	•	Cough
•	Abdominal pain	•	Vomiting
•	Skin rash	•	Diarrhea.

#### **Total Pancreatectomy**

A **total pancreatectomy** is an operation to remove your entire pancreas. This operation will result in major changes to your life. Because of the location of the pancreas, other portions of organs will be removed as well, including a small portion of the stomach, the duodenum (first part of the small intestine), the end of the common bile duct, the gallbladder, and the spleen. The surgeon will reconnect your stomach and the remaining portion of your common bile duct to the jejunum. The jejunum is the second part of the small intestine. This ensures that food and bile flow into your small intestines.

The areas in purple will be removed.

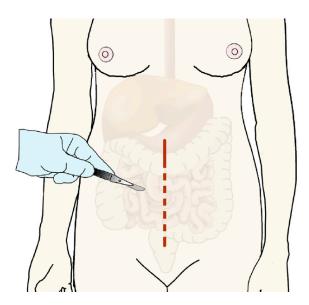


#### How will my lifestyle be affected after my entire pancreas is removed?

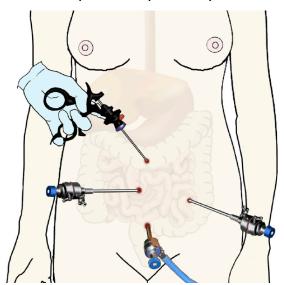
- You will be diabetic and will need to manage your blood sugars with insulin after surgery. You and a care partner will slowly learn how to manage your diabetes. When you go home, you will need to have a doctor to manage the diabetes. It can be your internist or an endocrinologist. You can discuss this with your surgeon.
- You will no longer produce the pancreatic enzymes that help in digestion and are needed to digest fat. After the operation, you will need to take a pill with your meals that contains enzyme replacement. Although you will need time to recover, almost all patients who have this surgery get back to living their normal lives. You should be able to eat and drink normally and resume your usual activities.

## **Surgical Terms**

• Laparotomy: This is an incision made through the skin up and down on the upper abdomen to provide optimal exposure of the surgical site. The skin will be closed with staples or suture under the skin.



■ Minimally invasive surgery or laparoscopy: This type of surgery is done through very small incisions in your abdomen through which a camera and other tools are placed during surgery. Your abdomen is filled with a gas called carbon dioxide to provide space to perform the surgery.



This type of surgery may be done with the use of the robotic **da Vinci Surgical System**® to provide improved recovery and less postoperative pain. Not all patients are good candidates for robotic surgery; your surgeon will discuss your best options with you.

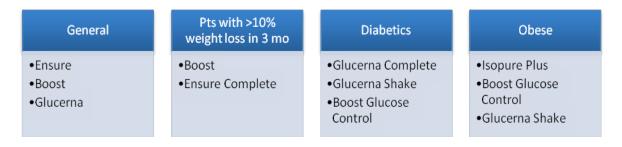


## **How to Prepare for Your Surgery**

**Nutrition** plays a key role in helping your body recover from surgery. Proper preoperative nutrition has been shown to improve the surgical outcome and shorten your length of stay in the hospital. It is important that you begin to prepare your body for surgery several weeks prior to your scheduled surgery date.

- We encourage you to drink two protein drinks per day, in addition to your regular meals as prescribed by your physician and registered dietitian. We recommend starting two to four weeks before your surgery. If your surgery date is in less than two weeks, you can still make a positive impact on your outcome by drinking two protein shakes a day in addition to eating a balanced diet. By increasing your protein intake, you will increase your muscle strength and prepare your body to handle the stress of surgery.
- Our nutrition experts recommend eating five servings of fruits or vegetables per day to maximize your nutrient status prior to surgery.
- If you are diabetic, please ensure that you obtain a protein drink appropriate for glucose control. You may need additional insulin or you could run the possibility of higher glucose levels during this time.
- Your surgeon and registered dietitian will choose the type of drink that is best suited for you based on a number of factors, including any recent weight loss, obesity, or disease state.

#### Recommended protein drinks:



It is important that you try to make yourself as fit as possible before surgery by **exercising daily** or as much as you are able to tolerate. You can start with a 15- to 30-minute walk three times a week and increase the length of time and/or number of days when you feel you are ready. Please keep your routine simple and set realistic goals.

- We strongly recommend that you stop smoking at least one month before your surgery in order to decrease the risk of serious complications during and after surgery. Possible complications related to smoking include:
  - Formation of blood clots in your veins
  - Difficulty breathing during and after surgery
  - Increased risk of infection
  - Increased risk of stroke or heart problems
  - Significant delay in surgical healing and increased breakdown of wounds.
- Do not drink alcohol for 24 hours prior to your surgery. The consumption of alcohol may also lead to serious complications such as:
  - Increased risk of bleeding
  - Increased risk of tolerance to pain medications, increasing the likelihood of postoperative pain and complications
  - Interaction with certain medications in ways that can be very dangerous to your health
  - Dehydration and increased kidney problems.
- Vitamins and herbal supplements should be stopped two weeks before your procedure.
- Please stop all NSAIDs (ibuprofen, Motrin®, Aleve®, and aspirin) one week prior to surgery. If you are taking other anticoagulants such as Coumadin® (warfarin), Eliquis®, or argatroban, you will need to contact your surgeon's office for instructions regarding stopping these medications. If you are taking medications for chronic pain, you may continue these up to the day of surgery.

■ Prepare in advance. You may need additional help from family and friends for the first few days with meals, chores, bathing, etc., so please try to make arrangements with your support system at home. If your bedroom is upstairs, then try to move essential items to a downstairs area where you might sleep and recover safely rather than attempt stairs until you are stronger. Stock your house with the foods that you like to eat in the event that you might not feel up to going shopping for the first week at home.

## **Preoperative Visit**

About a week before surgery, you will be called to make a pre-op appointment at your surgeon's office. During this appointment, your healthcare provider will record your medical history and draw your blood.

- Please bring your medicine bottles with you to your appointment. This will give you the opportunity to review your medications with your surgeon and discuss how to best prepare for surgery.
- Your surgeon may order a variety of tests (for example, lab tests, X-rays, and/or an EKG) in preparation for your surgery.
- You may be referred for an evaluation by a heart or lung specialist.
- You will likely be given a prescription for gabapentin (Neurontin®) to be started and increased over several days immediately prior to your scheduled surgery date. This drug will likely be continued after your surgery to help with pain.
- Please visit the Presurgery Assessment Center for evaluation by an anesthetist at least two weeks before your surgery; call 214-947-3888 to schedule an appointment. Please bring your medication bottles to this appointment. The anesthesia personnel will review your medications and provide additional information regarding anesthesia and advanced procedures used to control surgical pain postoperatively.
- You will receive an education booklet and additional information related to your plan of care during your hospital stay.

## **Before Surgery**

Please shower with the antibacterial soap (chlorhexidine) before you go to bed and again in the morning of your surgery to cleanse your skin and decrease the risk of infection.

You can continue to eat a normal diet until 24 hours before your surgery.
During the 24 hours before your surgery, you may only have clear liquids.
Examples include chicken broth, Jell-O®, water, ClearFast®, Gatorade®, and apple juice. Do not drink anything red or purple.

- You may be instructed to take a laxative the day before surgery.
- The day before surgery, please drink one bottle of the ClearFast before 8 p.m. and another at bedtime.
- You may continue to drink additional clear liquids only throughout the night. Please drink the final bottle of ClearFast the morning of surgery up to two to four hours before your scheduled procedure time. For example, drink it at 5 a.m. for a 7 a.m. scheduled surgery. The decision about when to stop drinking will be made by your surgeon and/or anesthetist.

Please write down the times you drank your ClearFast bottles and report them to the nurse upon your arrival to Methodist Dallas.

Times:	
Bottle 1 (by 8 p.m. (ex. dinner)/day before surgery):	
Bottle 2 (right before bedtime/day before surgery):	
Bottle 3 (on the way to the hospital/day of surgery):	

If you are diabetic and taking insulin, then please test your sugar level prior to leaving for the hospital. If your glucose level is greater than 180, then treat this as you would normally treat the blood sugar level and report your insulin dose to the nurse. If you take pills for your diabetes, please remember to stop this medication the day before surgery.

## **Day of Surgery**

- Arrive 2½ hours before your surgery. This will give you time to register in Outpatient Services on the 2nd floor of Pavilion II and give the staff enough time to carry out any additional tasks and provide any needed medication prior to your surgery. You may park in garage A or B and follow the signs to Pavilion II. Once in Outpatient Services, you and your family will be escorted to the operating room.
- Please bring your home CPAP if you use one.
- Do not chew gum, eat hard candy, or use chewing tobacco the morning of surgery.
- Please bring a copy of your advanced directive form if you have completed one.
- Please bring a book or something to read while you are waiting.
- You will need your toiletries and a change of clothes for discharge.
- Please bring a list of your medications.
- You may receive a packet of antibacterial wipes to cleanse your skin with after changing out of your clothes. Please use these wipes before putting on the hospital gown that will be given to you.
- Your surgeon, anesthetist, and pancreas nurse coordinator will see you prior to your surgery. This is a good time to voice any remaining questions you or your family may have.
- Your anesthetist will discuss which techniques will be used and your options to minimize pain and nausea.

## **Immediately After Surgery**

Depending on the type of surgery performed, you will either be transferred to the intensive care unit (ICU) for a few days or to the recovery room for about an hour, until you are able to wake up. During this time, your loved ones will be updated by the surgeon on how your surgery went. Once you are in your hospital room, your loved ones can visit. You will usually stay on the surgical floor (8th floor Schenkel Tower) until you go home.

## On the Postsurgical Ward

#### **Tubes and Drains**

You will have one drainage tube on the right side of your abdomen that is connected to a little bulb. This is called a Jackson-Pratt drain. This tube will drain the extra fluid in the area where surgery was done. This tube will stay in after you go home and will be removed in your doctor's office at your first follow-up visit after surgery.

You may also have a feeding tube placed during surgery (gastric tube or jejunostomy tube). If needed, this can be used to give you nutrition during your hospital stay and after discharge. Your surgeon will remove the tube in the office at your first follow-up visit or when he or she feels you're eating enough and able to maintain your weight.

Depending on the type of procedure, you may have a urinary catheter or some other type of drain in place after surgery. This catheter is usually in place for two to three days and is removed as soon as you are getting in and out of bed freely. Once removed, you are expected to urinate on your own within six hours of removal.

#### **Eating and Drinking**

The pancreas lies just behind the stomach, so it is not uncommon for the surgeon to retract or handle the stomach to obtain proper exposure of your pancreas. Thus, your stomach may take a few days to begin to work again. If your surgery was done laparoscopically, you will be started on a clear liquid diet the day after surgery. If it was done with an open incision, you will not have anything to eat or drink for the first day.

Fluid to keep you hydrated will go through an IV catheter in your arm into your veins. During this time, you may have ice chips, sugar-free gum, and hard candy.

**Chewing gum and hard candy** have been shown to stimulate your bowels and get them working again. Regardless of whether you had an open or laparoscopic surgery, once you are fully awake following surgery, you are encouraged to chew gum for 30 minutes every four hours.

Once you pass gas, you will try water and other clear liquids. If you are able to drink these without feeling sick to your stomach, you will be given heavier liquids and then soft food. These steps will take place over several days.

A **registered dietitian** will also visit you in the hospital and work with your surgeon to develop the best dietary plan for you.

It may be hard to eat and drink at first because of feeling sick to your stomach. This is not unusual. Please let your nurse know and he or she will give you medicine to help with your stomach sickness.

# After Surgery: Pain Expectations and Management

#### What kind of pain should I expect after surgery?

Everyone's pain experience after surgery is different and unpredictable due to opioid tolerance, previous experience, comorbidities, age, gender, type of surgery, and type of anesthetic.

#### Will I be pain-free?

The goal of pain management is to restore function after surgery. We will work with you to establish a safe level of pain relief. Your discomfort level may not go down to 0 out of 10, but we want to do everything we can to make you as comfortable as possible without over sedating you.

#### Why is pain management important?

With good pain management, you get well faster. You can start walking, do your breathing exercises, and regain your strength more quickly. Good pain management has been shown to speed recovery and increase good outcomes by allowing the patient to meaningfully participate in postsurgical recovery activities.

#### How can I participate in my pain management?

Ask about the schedule of pain medicines. Some medicines are scheduled and will be brought at a set time. Other medicines are brought to you only when you request them. Please inform your nurse if your pain is not being well controlled.

#### Can I get addicted to pain medicine after surgery?

As long as you take pain medication when there is actual pain and not for other reasons, addiction should not be an issue. Addiction to pain medication can happen if the medications are used improperly. Each week your need for pain medication will decrease as your incision heals.

#### How will my pain be managed?

#### **During surgery**

Your anesthesiologist and surgeon will work together and decide which pain management options would be best for you, depending on the type of surgery and your physical anatomy. You may have a pain medicine injected into your back immediately before surgery while under sedation. This is known as **spinal morphine** and works well during the first day after surgery to allow you to participate in your rehabilitation. Another option your surgeon may choose is inserting an **On-Q® pain pump** into the surgical incision. This small catheter releases numbing medicine to the surgical site over several days. A final option would be to perform a **TAP block** while you are asleep, using a long-acting numbing medicine that may last up to three days.

#### After surgery

**IV narcotics**: After surgery, you will receive intravenous (IV) pain medications to treat any severe pain. The most common are morphine or hydromorphone (Dilaudid®).

**Oral narcotics**: Once you are able to eat a solid diet, you will receive oral pain medications will be used to treat pain. Common oral medications are hydrocodone (Norco®) and tramadol (Ultram®).

**Non-narcotics**: In addition to narcotics, your physician will order other medications to assist with pain relief. A common myth is that mild medications like Tylenol® or ibuprofen cannot treat pain better than strong narcotics. The truth is that they work very well when used together and can greatly improve pain relief while reducing the amount of narcotic that you will need; narcotics can keep your intestines from working and prolong your hospital stay. Using the latest ERAS protocols, we also often use gabapentin (Neurontin®) or pregabalin (Lyrica®), both which have been shown to be effective in improving your pain control. While these drugs have traditionally been used as antiseizure medications, they also are used by pain physicians to treat acute and chronic pain.

#### What alternatives are there to medications?

- Relaxation: Simple techniques can help to increase comfort.
- Music: Music can provide relaxation and distraction.
- Physical agents: Heat or cold therapy, massage, rest, and good body alignment may help to lessen pain.

#### Will I have pain management help after going home?

You will go home with a prescription for oral pain medication if needed at the time of discharge.

## **After Surgery**

#### **Preventing Problems**

**Blood clots:** After surgery, you will receive a daily injection of a blood thinner until you go home. You will also have blue wraps on your legs that pump up to help your blood circulate. The risk of blood clots goes up if these wraps are not used.



Pneumonia: You will use a breathing device called an incentive spirometer. You suck on this like a straw, and it will help you take deep breaths. It may make you cough as well, which is good for your lungs. You should take 10 breaths with the incentive spirometer every hour (while you are awake) to reduce the risk of getting a lung infection and decrease the use of the oxygen supplement. Some patients find it useful to use each commercial they see on TV as a reminder to perform their incentive spirometry.

**Getting out of bed and walking:** You can bring a robe from home for walking in the halls. After you have your Foley catheter removed, you can wear your own pants or pajama bottoms.



#### **Activity Plan**

**Day 1:** Spend at least two hours out of bed in the chair. Walk at least once outside the room in the hallway with assistance.

**Day 2:** Spend four hours out of bed in the chair. This can be done one hour or two hours at a time if you need breaks. Complete two walks outside the room with assistance.

Day 3: Spend six hours out of bed. Your walks should be getting longer.

**Day 4:** Take three or more walks around the halls from this day forward.

## ALWAYS WAIT FOR STAFF TO ASSIST YOU BEFORE GETTING OUT OF BED.

We recommend the above activity plan to help with recovery. Incomplete participation in out-of bed activities can lead to a slower recovery time, a delay in normal digestion, and possibly more serious problems. For medical reasons, your surgeon may temporarily instruct you to slow down or stop your out-of-bed activity for one to two days.

## **Discharge Home**

#### You are getting close to discharge when:

- You are able to eat solid food and drink fluids on your own without the need for IV fluids
- Your pain is controlled with pain pills
- You are able to walk around the postsurgical floor with limited, or no assistance
- You are able to use the bathroom without difficulty
- You do not have fever or signs of infection.

With a **distal pancreatectomy**, most patients go home three to five days after laparoscopic surgery and five to seven days after open surgery. **Whipple procedure** patients usually go home five to seven days after laparoscopic surgery and seven to 10 days after open surgery. With a **total pancreatectomy**, most patients go home within 10 to 14 days.

- Please make arrangements for transportation home prior to the day of discharge.
- We ask that you gradually resume your exercise program once you have been given clearance by your surgeon.
- Prior to discharge, nursing staff will review your medications with you and answer any questions you have regarding your postoperative care. Fill your pain medication prescription as soon as possible and follow the directions on the bottle.
- Please schedule your follow-up appointment with your surgeon's office prior to leaving the hospital
- When you go home, we can help arrange for you to have resources close to your home to help you as you continue to learn how to manage blood sugar control and enzyme replacement

If you have any other questions, please contact your pancreas nurse coordinator or your surgeon.

#### Follow-Up

You should make a follow-up appointment with your surgeon for one to two weeks after your discharge. Your staples, tubes, and abdominal drain will be removed in the office at that time.

#### **Further Treatments**

If your surgery was to remove a tumor or growth, a sample was sent to the lab to look for cancer cells. If cancer cells were found, your surgeon will talk with you at your follow-up appointment and will assist with making an appointment with an oncologist (a cancer specialist), who will discuss with you if chemotherapy is recommended.

#### **Further Testing**

You will need to visit your surgeon's office every three months to monitor your recovery progress. If cancer was found, it is important that you also have a CT scan every three months. Please bring the CT scan disk with you to your follow-up appointments.

#### **At Home**

#### When to Call Your Doctor

**Complications** after surgery can occur, and while we never want this to happen, we do want you to know what to look for. If at any time you are worried about one or more of the symptoms below, please contact your surgeon's office immediately.

#### Severe Abdominal Pain

Severe, unbearable pain that lasts for several hours can mean something serious is wrong. Fluid could be leaking inside at the surgery site. If this happens, you will likely have a fever with the pain and will generally not feel well. Please contact the doctor's office as soon as possible. It is normal to have medium to strong abdominal pain during the first few weeks after surgery. This may be related to your incision or gas cramps with eating.

#### **Wound Infections**

Look at your wounds every day to watch for signs of infection: redness, swelling, oozing or liquids leaking out, warmth, or fever. These can start two days to three weeks after surgery. The infection can spread deeper in the body if it is not treated. An infection can also cause your wound to reopen.

#### **Bleeding**

If your wound suddenly bleeds, apply pressure and seek emergency care.

#### Leg or Chest Pain

Walking helps to prevent blood clots in your legs called deep vein thrombosis. However, if at any time you notice pain or swelling in the back of your legs or if you become short of breath with chest pains, you should contact your doctor or go to the emergency room right away.

#### Fever

Any temperature higher than 101 degrees Fahrenheit should be reported to your doctor immediately. If you notice yourself sweating, having chills, or feeling warm, check your temperature.

#### Persistent Nausea or Vomiting

If you cannot keep food and liquids down, you can get dehydrated. Contact your doctor if nausea or vomiting happens multiple times.

Please call 911 if you think you are having any problems that you think are an emergency.