Total Shoulder Replacement Education Manual



Please bring this booklet with you to:

- Every office visit with your doctor
- The hospital when you are admitted
- Every follow-up visit with your doctor
- Your physical therapy appointments



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Appointments for Your Total Shoulder Joint Replacement Surgery

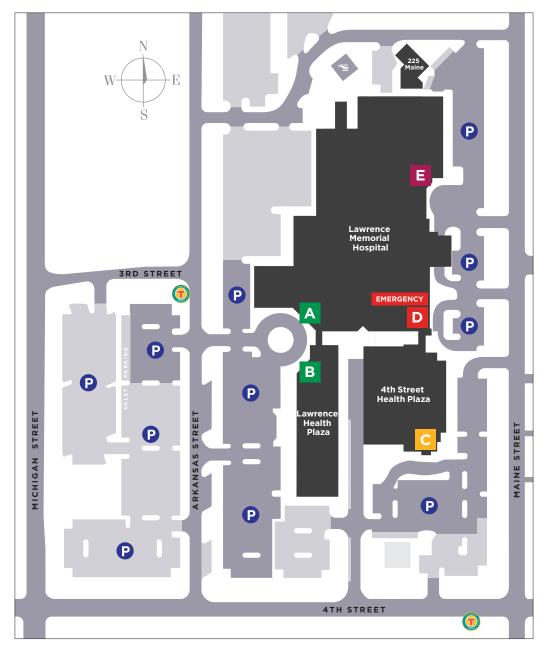
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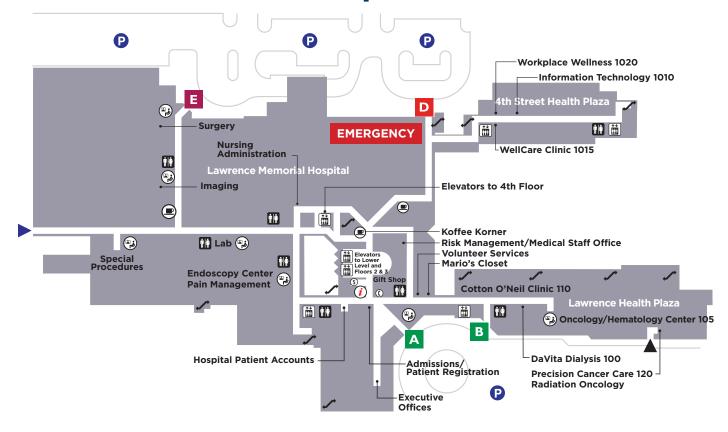
Important Phone Numbers and Maps

OrthoKansas	785-843-9125
LMH Health surgery department	
Surgery pre-admission nurse	
OrthoKansas schedulers:	
(for an individual scheduler's phone number, see their business card)	785-843-9125
OrthoKansas nurse navigator	785-838-7815
Primary care physician	
Dr. Stull and team voicemail	

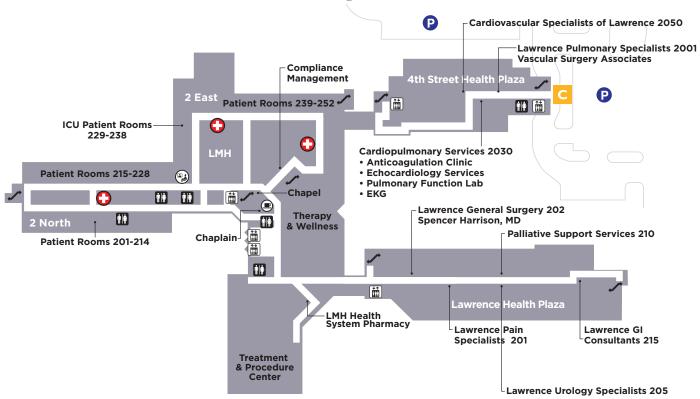
LMH Health Main Campus Parking



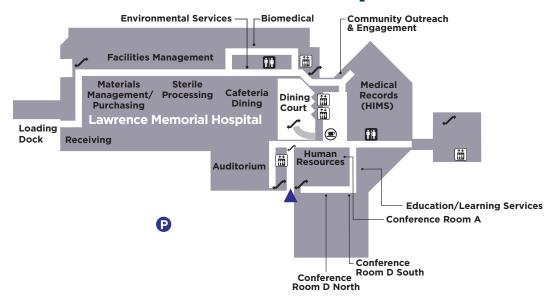
LMH Health Main Campus First Floor



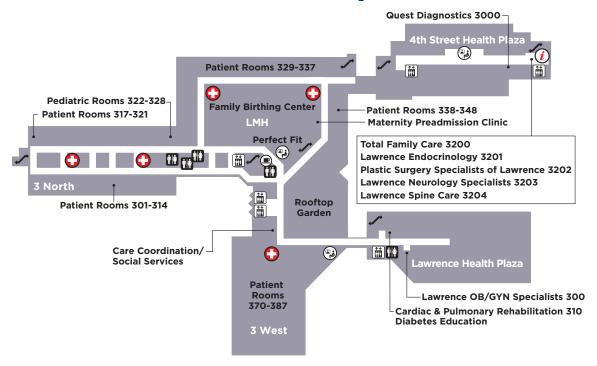
LMH Health Main Campus Second Floor



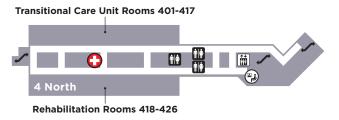
LMH Health Main Campus Lower Level



LMH Health Main Campus Third Floor

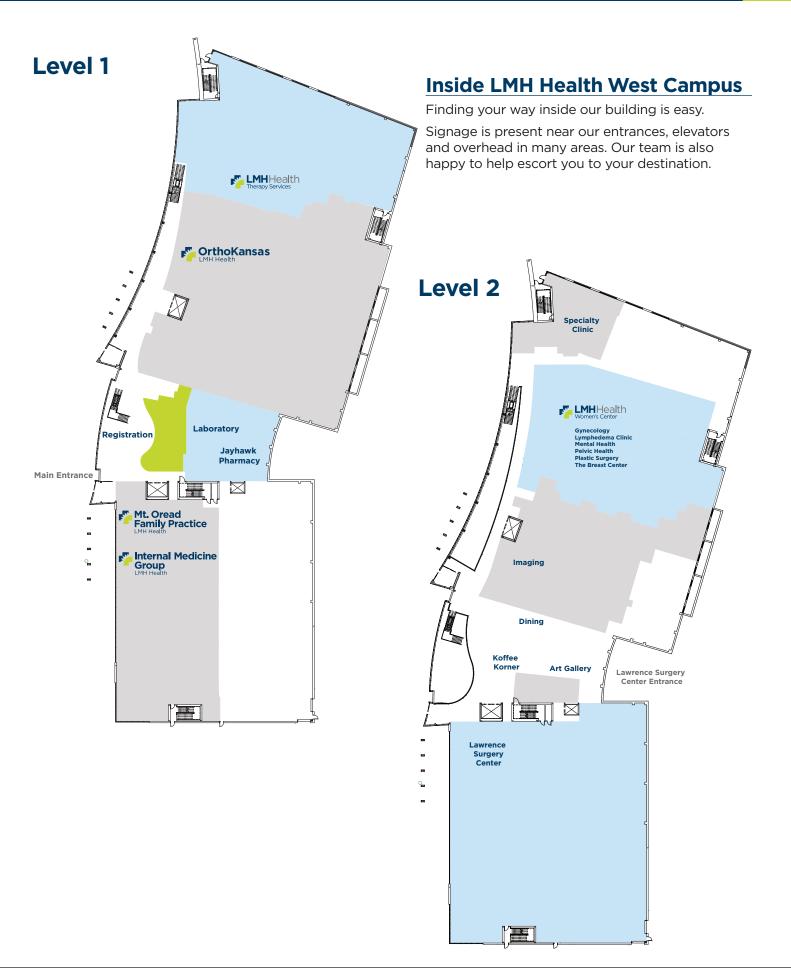


LMH Health Main Campus Fourth Floor



LMH Health West Campus





Dear Patient:

Many patients find it helpful to learn as much as they can about their surgery before it actually happens. We have created this book to help you prepare for your upcoming surgery and guide you through the recovery process. We encourage you to read through these pages before your pre-operative appointment at OrthoKansas. Read it at your own pace. Write your questions down in the space provided and bring it with you as a reminder of what questions to ask or have clarified.

As you prepare for your shoulder surgery, hospital stay and recovery, your healthcare team will work with you and your family to assist you along your journey. Members of your team will include Dr. Stull and his staff at OrthoKansas along with the staff at LMH Health, including anesthesia providers, hospitalists to help manage your medical needs, nurses, physical and occupational therapists and other key staff. Our goal is to provide high quality care that is unparalleled in skill and kindness, supported by evidence-based literature and best case practices, medical knowledge and advanced technology. We want your experience with us to be the very best possible!

Joint replacement is an elective surgery, meaning that it is a choice you make after consulting with your orthopedic surgeon. The decision to proceed can be difficult to make and should not be taken lightly as it is considered a major operation, and recovery can be painful and challenging. The goals of this surgery include relief from pain, improved mobility and restored function - all of which can provide you with a new outlook on life.

The information in this book will help you through the process by explaining general and specific medical and surgical risks and by answering questions related to pre- and post-operative care and the healing process.

You are a partner in this process with your care team. You play a large role in shaping the outcome of your surgery. Support from your family and friends is also important. Each surgical experience is unique. Our main focus is on your safety and well-being. Please do not hesitate to ask questions.

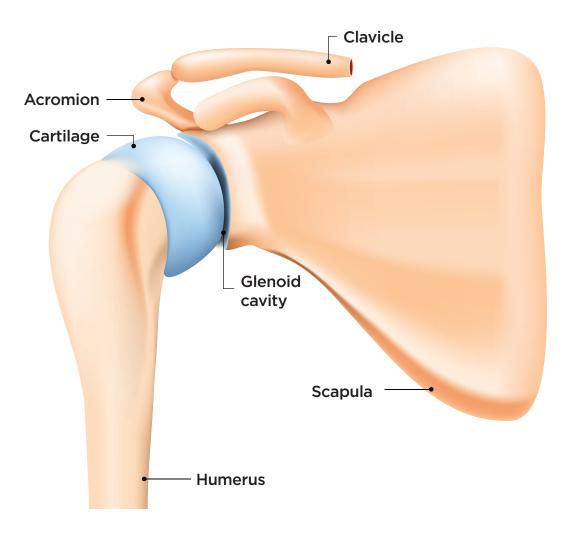
Individuals have the capacity to heal themselves to one degree or another. This varies and depends on multiple factors such as nutrition, weight, exercise and level of fitness, smoking and use of alcohol as well as overall general health.

Attitude is everything! The most important factor in a successful recovery is your overall attitude, motivation and efforts. A positive, can-do attitude and willingness to work hard will greatly increase your potential for a successful joint replacement and renewed outlook on life.

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Understanding the Shoulder

SHOULDER JOINT



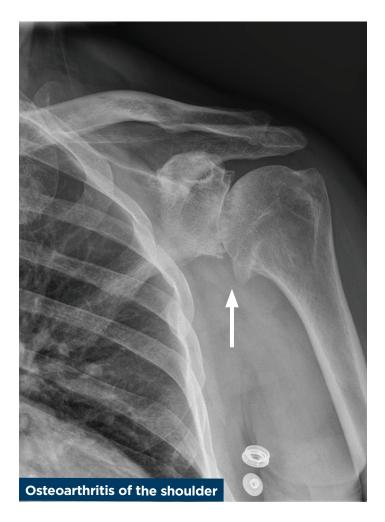
Your shoulder is one of the most mobile joints in your body. This flexibility allows you to move your arm in many positions: to the front, above, to the side and behind your body. Your shoulder has a lot of flexibility because it is a ball-and-socket joint.

The shoulder is made up of three bones. These are the upper arm bone called the humerus, the shoulder blade called the scapula, and the collar bone called the clavicle. The glenohumeral joint is the primary joint that we are discussing. This joint is made up of the head of the humerus that fits into a socket that comes from the scapula called the glenoid.

The shoulder joint is also made up of ligaments, muscles and tendons. The joint capsule is a group of ligaments that surrounds the shoulder joint. The rotator cuff is a group of four muscles and tendons that help hold the ball in the socket. The muscles of the rotator cuff surround the shoulder joint and sit just outside of the joint capsule. The muscles attached to the rotator cuff help you to lift and rotate your arm, reach overhead, and take part in activities such as throwing or swimming. The bursa is a sac-like membrane found on top of the rotator cuff. It cushions and helps lubricate the motion between the rotator cuff and surrounding bone.

Shoulder arthritis and cuff arthropathy

Over time wear and tear can lead to primary arthritis of the shoulder, also known as osteoarthritis. This is the most common type of arthritis in the shoulder and typically develops in older patients with a lifetime of wear and tear. Other forms that can develop are rheumatoid arthritis, which is an autoimmune disease that leads to joint destruction from inflammation, and post-traumatic arthritis that usually occurs after a broken bone or other type of injury. If the muscles of the shoulder joint become damaged, this can lead to increased and abnormal wear on the articular surfaces of the shoulder joint that may lead to an arthritic condition known as rotator cuff arthropathy.





Osteoarthritis of the shoulder

There is no space between this shoulder's ball and socket, indicating that the normal surfaces have likely been destroyed. Also, the large bone spur (arrow) extending from the ball is probably causing additional pain and stiffness. Often, rheumatoid arthritis of the shoulder will present in much the same way.

Rotator cuff arthropathy

In some cases, the head of the humerus has moved up and is no longer in good position to the socket. This usually indicates that the muscles of the rotator cuff have been damaged beyond our ability to repair them.

Shoulder Replacement Surgery

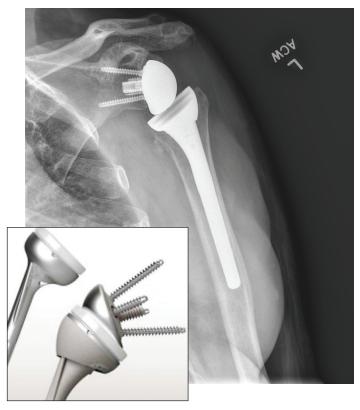
Anatomic total shoulder arthroplasty

Total shoulder replacement (arthroplasty), also known as anatomic shoulder replacement, replaces the ball and socket with an artificial joint (prosthesis). There are two parts: an artificial ball (also called a "humeral component") and an artificial socket (also called a "glenoid component"). These prosthetics come in many different sizes. This allows us to use the right size for your body. With an anatomic total shoulder replacement, the rotator cuff is left intact. This is meaningful because a healthy rotator cuff is important for this type of prosthesis to work well. The artificial ball is made of metal, usually a very durable alloy. The ball is attached to a stem that fits into the upper arm bone. The artificial socket is made of a thick, wear-resistant plastic (polyethylene). It is attached to the glenoid by several small stems that are held in place with cement.

Reverse total shoulder arthroplasty

Reverse shoulder replacement is for people who have advanced shoulder arthritis and whose rotator cuff is either torn beyond repair or does not work for some other reason, such as significant trauma with a complicated fracture of the humerus. Reverse shoulder replacement has a socket where the humeral head (ball) is normally located and a ball where the glenoid (socket) is normally located. The humeral component is made up of a stem that is placed into the shaft of the humerus, and then a plastic (polyethylene) socket is secured on top. The glenoid component has a metal base plate that is secured by screws into the glenoid, and a metal alloy ball that is secured to the plate.





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Preparing for Surgery

Verify insurance benefits and coverage

It is important to verify benefits and coverage and obtain authorization when necessary prior to your surgery.

You will receive statements for charges from multiple entities including, but not limited to: LMH Health Physician Billing, LMH Health, radiology and anesthesia.

OrthoKansas will provide you with a written estimate of the charges that our office will submit to your insurance if you have a non-Medicare insurance plan. These charges include all care provided by OrthoKansas doctors and physician assistants for what is known as the global period. This period starts on the day of your surgery and continues for a set number of days after surgery. You will be requested to pay any out-of-pocket costs prior to scheduling your surgery. Our financial counselor will review these costs with you.

If you have Medicare with a supplemental plan, you will not need to meet with the OrthoKansas financial counselor. However, if you have Medicare with no supplemental plan, you will be requested to pay any expected out-of-pocket expenses prior to scheduling surgery. If you have questions, vou can contact the OrthoKansas financial counselor at 785-838-7854.

Obtain medical clearance for your surgery

You will need to have a complete physical exam conducted by your primary care physician approximately one month before your surgery to assess your general health and rule out any conditions that could interfere with your surgery. You also may be required to obtain clearance

from any specialist you see such as a cardiologist (heart doctor) or pulmonologist (lung doctor). It is important to have these exams and all testing done in a timely manner to avoid lastminute delays or cancellations. Several tests, including a blood test, an electrocardiogram (EKG) and a urine test will be performed to help your physician determine your ability to undergo surgery safely. You should review your medications with your physician to determine if there are any that you will need to stop taking prior to surgery.

The following medications should be stopped seven days prior to surgery. These are known as anti-inflammatories. If you feel that stopping these will cause undue increased pain, please talk with your surgeon.

- Celebrex
- Voltaren (diclofenac)
- Mobic (meloxicam)
- Relafen (nabumetone)
- Aleve (naproxen)
- Naproxyn, Motrin/Advil (ibuprofen)
- Feldene (piroxicam)
- Clinoril (sulindac)
- Lodine (etodolac)
- Toradol (ketorolac)
- Indocin (indomethacin)

If you take medications such as aspirin, Coumadin (warfarin), Jantoven, Plavix, Effient, Brilinta, Pradaxa, Xarelto, Eliquis, or any anti-coagulant or anti-platelet medication, you need to check with your primary physician or cardiologist about when to stop this medication prior to surgery. This will be resumed after surgery when your surgeon decides it is safe to do so.

If you take medications that suppress your immune system such as: Humira, Remicade, Enbrel, Methotrexate, or Otezla, you may need to discontinue use weeks prior to surgery. You surgeon will discuss this with you and your prescribing provider.

Medications for weight loss such as Phentermine and Contrave need to be stopped two weeks prior to surgery. If you are taking fish oil, garlic, turmeric or any other herbal medications, discuss this with your healthcare team as these will need to be stopped prior to surgery.

Please notify the OrthoKansas nurse navigator of any medication changes prior to surgery.

Risk factors and complications associated with shoulder arthroplasty

With any type of surgery, not just shoulder arthroplasty, there are risks associated and complications that may develop. The risks are not necessarily higher for this type of surgery, but they are real risks that need to be discussed. You will be receiving a general anesthesia along with a nerve block to help control pain. Risks associated with anesthesia can include stroke and/or heart attack.

Infection

Anytime there is a procedure done where the integrity of the skin is broken, there is a risk of infection. We do everything we can to minimize or eliminate this risk, from having you use a special soap on your shoulder before surgery. to our meticulous sterilization and use of sterile technique in the operating room. The risk of infection does not stop after your surgery. For a period of one year following your surgery we will ask that you take an oral antibiotic prior to having any other procedures done, such as dental work,

or screening procedures such as a colonoscopy, to reduce or eliminate the risk of infection.

Dislocation

Any shoulder replacement, whether it is anatomic or reverse, has a risk of dislocating after surgery, especially within the first few months. Fortunately, this complication is rare and there are several things you can do to help prevent it from occurring. The most important thing you can do is to wear your sling as directed. Move with caution during the first few weeks to help reduce the risk of a fall or other type of injury that could dislocate your shoulder. It is especially important to wear your sling while you are sleeping to reduce the risk of dislocation. If your shoulder becomes dislocated it is important to notify us at once. We will give you instructions on how to get immediate help.

Bleeding

Any surgery carries with it some risk of bleeding and damage to blood vessels. This is why it is important for you to inform us of any medications you are taking that may increase this risk. The type of approach we take during surgery minimizes the risk of blood vessel damage, and we take every necessary precaution to ensure that bleeding is kept to a minimum.

Nerve injury

With any surgery, especially orthopedic surgery, nerve damage can occur. The risk of this happening is very low. You will be asked while you are in the hospital about your ability to move your hand and elbow, as well as if feeling has returned to your hand. Because of the nerve block, this may take some time to return fully.

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Implant wear and loosening

The materials used for your shoulder replacement are manufactured and engineered to last a long time. It is important to understand that over time, your implant may begin to wear to the point that it has to be replaced. In general, most typical shoulder replacements should last 15 to 20 years. In order to maximize the life of your new shoulder, it is important to avoid strenuous or repetitive overhead activities. This includes lifting heavy weights overhead for long periods of time. If you have specific concerns about activities, it is good to discuss those with us.

Pre-operative visit

One to two weeks before your surgery you will have a pre-operative appointment with us to review questions you may have. We will discuss your health history and current medications including any over-the-counter medications such as vitamins, minerals and any herbals or other supplements. It is important that we have a detailed list of every medicine and supplement you take. We will review the surgery timeline for pre-operative and post-operative care, and ensure all necessary testing and labs are ordered and completed. You will be fitted for a sling that you will receive on the day of surgery. We also will discuss the importance of using cold therapy after surgery, and the opportunity to purchase a cold therapy unit if you wish.

Pre-operative instructions

A representative from the LMH Health surgery department will contact you by telephone prior to your surgery date. You will be given final preop instructions regarding when to stop taking medications the day before surgery. You will be instructed not to take anything by mouth after midnight the night before surgery. This includes

fluids, gum, candy, tobacco and alcohol. You also will be instructed what time to arrive at the hospital the day of surgery. In rare instances, your arrival time may need to be changed due to a change in the surgery schedule. If this happens, you will be notified of your new time.

Before your surgery we will have you start using a special soap on your operative arm. We recommend using a benzoyl peroxide cleanser to help significantly reduce the risk of infection from specific skin bacteria. You should start using this daily, three days before surgery, focusing on cleansing the underarm, upper arm and back of the shoulder. Apply the cleanser to a washcloth and scrub each area for approximately one to two minutes before rinsing. You can obtain this wash solution at Jayhawk Pharmacy located at the LMH Health West Campus or at the LMH Health System Pharmacy located on the second floor of the hospital.

Avoid using nail polish on your fingernails and toenails unless it is clear polish.

Practice or review breathing exercises. These exercises will be important after surgery to keep your lungs clear and reduce your risk of infection. You will receive an incentive spirometer after surgery for use in the hospital and at home, but practicing deep breathing and forced coughing before surgery will be helpful. Practicing in advance without the spirometer will strengthen the muscles of your abdomen and chest.

For deep breathing:

- Breathe in through your nose as deeply as you can.
- Hold your breath for 5-10 seconds.
- Breathe out as if you were blowing out a candle. Try to breathe out for 10-20 seconds.
- Take a break between breaths then repeat this exercise 5-10 times.

Coughing:

- Take in a slow deep breath through your nose, filling lungs completely.
- Breathe out through your mouth and concentrate on emptying your lungs completely.
- Repeat breathing in, but this time hold your breath and then cough hard. When you cough, focus on emptying your lungs.
- Repeat these steps 3-5 times.

Preparing your home

There are many things you can do before surgery to prepare yourself and your home for a safe recovery.

Safety

- Put items you use often on counters or shelves that are easy to reach.
- Make sure stair railings are secure.
- Be aware of all floor hazards such as pets. power cords and uneven surfaces.
- Remove all throw rugs from your walking or standing path.
- Install night lights in bathrooms, bedrooms and hallways.
- Have support lined up, especially if you live alone.

Comfort

- Shop ahead. Freeze meals for use after surgery. Consider stocking up on foods and beverages that will be easy to eat or drink when your appetite is poor, or you have nausea or bowel problems.
- Arrange for care of pets and collection of mail.
- Clean your house.
- Do laundry and put it away.
- Put clean linens on the bed and in the bathroom.
- Have yard work done as needed.

What to bring to the hospital

- Personal hygiene items (toothbrush, toothpaste, deodorant, battery operated razor, comb, etc.)
- Loose-fitting clothes (sweats, shorts, t-shirts, bathrobe)
- Slippers with non-stick soles; flat shoes or tennis shoes
- Cases for glasses, dentures, hearing aids and extra batteries
- Copy of your Advance Directives (if you have one)
- This handbook
- Your photo ID and insurance card
- A form of payment for Meds to Beds should you decide to use this service

What to leave at home

- Home medications, except inhalers (check with the hospital pharmacist for more information)
- Valuables including money and jewelry

Stop smoking

- Decide to quit.
- Choose the date.
- Talk with your primary doctor about smoking cessation resources and medications.
- Limit the area where you smoke; don't smoke at home.
- Throw away cigarettes and ashtrays.
- Don't put yourself in situations where others smoke.
- Reward yourself for each day without cigarettes.
- Stay positive.
- Take it one day at a time. You might slip, but if you do, get back to your decision to guit.

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Therapy preparation

Many patients with arthritis tend to limit how much they use a painful extremity. With less use, muscles become weaker which leads to a slower and more challenging recovery. If you are able, you should perform light endurance activities to benefit your heart and lungs. Try walking or cycling for 10-15 minutes each day. Pool exercise is a good alternative if walking or cycling are too painful.

To help your physical therapist better prepare you to return home after surgery, please answer the questions below prior to surgery.

- 1. Have you practiced your daily care activities with your non-surgical arm?
- 2. Which side of the bed do you get in and out of?
- 3. What is the height of the top of your bed mattress from the floor?
- 4. What is your tub/shower design?
- 5. Do you have railings on your stairs? On which side are the railings?

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Your Stay in the Hospital

The day of surgery

Remember not to eat or drink anything after midnight.

Arrive at the LMH Health east entrance (Maine Street) promptly at your designated time. If there is a change to your arrival time you will be notified by a member of the hospital staff. If you have any last-minute issues that will prevent you from arriving at your scheduled time, please contact the surgery department at 785-505-6482.

A nurse will complete your admission activities and any additional necessary preparation. The nurse will ask you which, if any, medications you took today and the last time you ate or drank anything.

You will change into a hospital gown. Compression devices will be put on your lower legs to help prevent blood clots. A representative from the laboratory will draw your blood to check your blood type. Should you need a blood transfusion, compatible blood will be available.

You will be asked to sign a surgical consent which details your surgical procedure.

An IV will be started for administration of fluids and medications. Be sure to mention any allergies to medications. If you have allergies, a special bracelet will be placed on your arm to alert staff.

An anesthesiologist will visit with you prior to going to the operating room. He or she will consider which type of anesthesia will be best for you, taking into account your health history and preferences.

A regional block (interscalene) will be used as part of your anesthesia. It will help control your pain for 12 to 24 hours. It will take that long for you to recover full sensation and active control of the muscle groups in your arm that was operated on. Don't be alarmed if you are still having some numbness and weakness the next day after surgery.

Your surgeon will visit you before you are taken into surgery. He will talk with you and review the planned surgery.

When you go to the operating room, your family will be directed to the surgery waiting room. They will be given instructions on how to check your progress and know when surgery is complete.

Some people experience anxiety prior to surgery. We encourage you to ask questions and talk with the surgery staff if you have concerns.

There will be many people in the operating room. The surgical team includes an anesthesiologist, your surgeon and physician assistant, nurses, and other professionals. They will be moving around the room before surgery making sure everything is ready for your procedure.

Once you enter the operating room and are situated on the operating table, you will be asked your name and what surgery you are having done.

You will have monitoring devices such as a blood pressure cuff and a heart monitor placed on you. The anesthesiologist uses these devices and others to monitor your condition throughout the surgery. He or she will manage your vital signs such as heart rate and rhythm, blood pressure, temperature and breathing. He or she also will monitor your IV fluid and need for blood replacement if necessary. Medication will be given to help you feel more comfortable.

The entire surgery takes approximately one and a half to two hours. Once complete, your surgeon will visit with your family.

After surgery -Post Anesthesia Care Unit

Following surgery you will be taken to a recovery room in the Post Anesthesia Care Unit where you will wake to find your operated arm protected in a sling. Once you are fully awake, you will be moved to the orthopedic floor.

Depending on the type of anesthesia used, you may experience nausea, dry mouth, chills or other symptoms.

Medication will be given by mouth or by IV to help control your pain and other symptoms as needed.

When you are awake, your vital signs are stable and your pain is controlled, you will be transported upstairs to your room on 3 West.

Care while you are in the hospital

Most patients usually require one day in the hospital after shoulder replacement surgery. While you are in the hospital, you will receive medication to control your pain, and your health will be carefully monitored. In addition, you will likely begin exercises to regain shoulder motion with the help of physical and occupational therapists if you underwent an anatomical arthroplasty. If you had a reverse arthroplasty you will wait about four weeks before beginning therapy for your shoulder. You also may have visits from other healthcare providers and team members.

General care

The following post-operative regimen should be strictly followed to avoid complications. Soft tissue needs time to heal and excessive use may complicate your recovery. Your arm will be placed in a sling and it is important that it remains in the sling at all times except when you are bathing, changing clothes and completing occasional range-of-motion exercises that you

will do to keep the elbow, wrist and hand flexible. You should not lift anything heavier than a few ounces, about the weight of a television remote or cell phone.

Respiratory care

You were given a general anesthesia during your surgery, so your lungs may have become "lazy," causing congestion. Coughing and breathing exercises help to loosen the mucus in your lungs and prevent pneumonia. Keeping your lungs clear is very important. Your nurse may instruct you on special breathing exercises or if necessary, you may receive respiratory therapy.

Circulation and sensation

Increasing the amount of fluid you drink and exercising your legs will help prevent the formation of blood clots. Beginning at the time of your surgery and for the first 24 hours after, sequential compression stockings along with TED hose or compression stockings will be applied to your legs to help prevent blood clots from forming. Once you are up and walking around consistently, the sequential compression stockings can be removed. You may continue to wear the compression stockings if your feet or legs are swelling. They should not be worn all the time and need to be removed periodically if you are directed to wear them at home after you are discharged. In addition, you will be asked to take a baby aspirin (81 mg) twice a day for two weeks after your surgery. This also will help reduce the risk of blood clot formation.

Diet

You will begin on a light, perhaps liquid diet after surgery. Once that is tolerated well, you will be advanced to a regular diet. We encourage you to drink plenty of water and stay well hydrated.

Exercise

During the first day after your surgery, it is not unusual to feel weak, light-headed and drowsy. Within 24 hours, these feelings should disappear

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and you will be able to gradually increase your activity level. Initially, we would like to help you out of bed the first few times to make sure you don't fall. Please contact your nurse for help.

Bowel management

Some patients become constipated from pain medications and being inactive. Increasing water intake as well as dietary fiber, fruits, and vegetables will help to avoid constipation. Try to avoid fast foods, refined sugars such as high fructose corn syrup, and foods that may be constipating for you. If necessary, you may be instructed to use a stool softener, laxative or even an enema to help relieve constipation.

Physical therapy

On the day of surgery or the day after, depending on the time you get to the floor, a physical therapist and/or occupational therapist will talk with you about your therapy program. While you are in the hospital, the physical therapist may work with you one or two times each day. He or she will help you understand how to use the sling, perform activities of daily living including showering and other personal care, and review range-of-motion exercises if appropriate.

Pain control

Pain control is a priority while you heal. With less pain you may be able to start walking, perform breathing exercises and possibly get your strength back more quickly. During your surgery, your pain will be controlled through a general anesthesia and a pain block. After surgery, various pain control methods will be used including ice, positioning, oral pain medication, IV pain medication (if needed) and the longacting block you received before surgery. Ice often will be applied to your shoulder and can be one of the most effective ways to control your pain. You may have purchased a cold therapy unit that can be used. If you are using a cold therapy unit, it is important to remember that you must not put the pad directly on your skin. Doing this could cause frostbite.

Tips for controlling pain after surgery

There are many effective ways to control postoperative pain. A special nerve block is used to help decrease pain initially after your surgery. In order to help your healthcare team "measure" your pain, you may be asked to rate it on a scale of 0-10. Levels one through three are an "annoying" pain. Levels four through six are moderate pain, meaning that you have pain, but can ignore it or be distracted from it for a little while. Pain at a levels seven through nine is severe, meaning it is interrupting your life, can't be ignored and is keeping you from walking, sleeping and living normally. Level 10 pain is the worst pain you can possibly imagine. Describing your pain will help your team understand the level of discomfort you may be experiencing. If you let your pain increase significantly without notifying your medical team, it may become difficult to quickly relieve and keep under control. Don't forget, the use of ice can be one of the best ways to stay on top of pain.

Antibiotics

You will be given antibiotics just before your surgery, and two additional doses after your surgery as a routine precaution to avoid infection. If you have allergies to antibiotics, please let us know so we can plan accordingly.

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Recovery after Discharge

Care at home after your surgery

In most instances, you will go home from the hospital on the day after your surgery. You will be discharged with a sling and information about medications, follow-up visits, restrictions for your shoulder and more. This section will help you to be prepared for what you can typically expect after discharge.

Pain

Pain management is an important part of your overall experience. You will be going home while taking medications to help manage your pain. Generally, the worst of the surgical pain lasts three or four days and can usually be managed well with ice and strong pain medications. The trick is to follow the instructions closely and not get behind on your pain. It is more difficult to manage once it becomes severe. We will direct you on how to take the medications you are prescribed. Additionally, you will be instructed on use of ice, range-of-motion exercises and the use of acetaminophen to help control pain. The pain medication that will be prescribed for you likely will contain acetaminophen so remember to limit any additional acetaminophen so that you do not exceed 3,000 mg per day. Typically, the prescribed pain medication has 325 mg of acetaminophen in each pill. This means that if you take one of the "pain pills" every four hours you will take six pills a day, which is a daily total of 1,950 mg of acetaminophen.

Diet

We encourage you to resume your regular diet. It is important to eat a healthy, well-balanced diet that includes good, nutritious foods. It is also important to drink plenty of water. Caffeine intake is OK, but should be kept to a minimum during the first few weeks after surgery. Alcohol intake should also be limited until your body has had time to adjust and heal. We recommend waiting a few

weeks before drinking alcohol, especially if you continue to take any opioid pain medications.

Self-care

You will be going home from the hospital in a sling. While you are in the hospital, occupational therapy and physical therapy will show you how to use the sling, as related to activities of daily living. This includes removal for dressing and undressing as well as performing daily hygiene. To protect your shoulder, it is important to follow the guidelines that were given to you. Remember that when you are putting clothes on you should start with your affected (post-operative arm). When you are taking clothes off you should start with your unaffected arm, leaving your affected arm for last. When performing hygiene, or taking a bath or shower, remember that it is important to keep your shoulder dry until the sutures are removed. You will be going home with a bandage that is suitable for this. If it becomes loose or shows signs that it is not intact, you may use kitchen plastic wrap over the dressing to help keep it dry while bathing. If you have concerns, please contact our office so that we can give you further instructions.

Bowel management

You will go home on strong medications to help control your pain for the first several days after surgery. These medications can cause constipation. Eating a diet high in fiber and drinking plenty of water is important to help control this. You also may be asked to take a stool softener to help avoid becoming constipated. If you do develop mild to moderate constipation, starting a stool softener and increasing fluid intake, walking and eating high-fiber foods may help to resolve it. If the constipation becomes severe, contact our office. We will talk with you about appropriate home treatment or direct you to the emergency department for further care.

Medications

Your routine medications can be resumed the day after surgery. You may have new medications to take as well. These will be reviewed with you before you go home.

Blood clots and lung health

While you are in the hospital, you wore special stockings and compression devices on your legs. These devices helped prevent the formation of blood clots. It is important to maintain good circulation in your legs after you have been discharged. Once you are home, moving about regularly is the best defense against developing blood clots. You may need to use your compression hose for a short period of time at home, especially if you are unable to walk or use your legs normally. Anytime you are sitting for long periods of time it is important to remember to exercise your legs. An easy way to do this is to pump your feet/ankles up and down 10-15 times a few times every hour. If you are watching TV, try to perform these exercises every time a commercial comes on. If you plan on extended travel, it is important to stay well hydrated and to take breaks every two or three hours to stretch your legs to help prevent blood clots forming.

It also is important to maintain your lung health. Taking deep breaths several times every hour will improve oxygenation and decrease the risk of developing pneumonia. If you are a smoker, this would be a great time to kick the habit. Smoking increases your risk for developing pneumonia and slows healing due to the effects on your circulation system.

Exercises after anatomic total shoulder arthroplasty

Most patients will begin exercising in the hospital shortly after surgery, under the supervision of our therapists. A few patients will be asked to wait until we give them the go-ahead, usually after the first office visit following surgery. In either case, it is important that you continue doing these exercises at home.

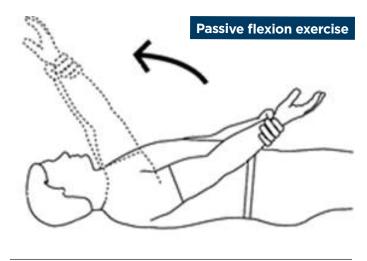
The following exercises will help maintain and increase motion of the replaced shoulder. They are best performed while lying down with your post- operative shoulder completely relaxed. Once your sutures have been removed, you can take a warm shower or apply a moist heating pad to the operated shoulder beforehand to "loosen" it before starting the exercises.

In each exercise, the arm with the replaced shoulder should be moved by the unaffected arm. This is called active assist range of motion. In other words, do not move the arm with your replaced shoulder on its own. This is necessary to avoid excessive strain on the tendons and muscles that were repaired during your surgery. Finally, it is important that you perform all exercises slowly.

If you have any questions regarding these exercises, please contact us before proceeding.

Passive flexion exercise

Lie on your back and relax your shoulders. Grasp the wrist on the operated side with the opposite hand. Slowly pull the hand on the operated side up and over your head. Use your unaffected arm to supply the power to move the operated shoulder. Relaxing the shoulder muscles is key to minimizing pain during this exercise.



Continued on page 28

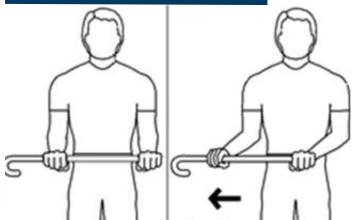
Recovery After Discharge

Recovery after discharge continued from page 27

Active assist external rotation exercise

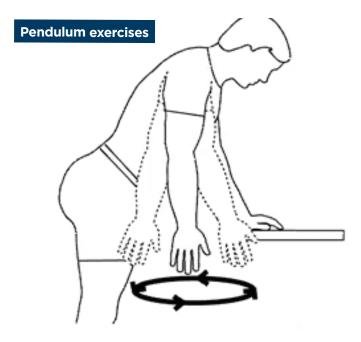
Lie on your back and relax your shoulders. With your arms close to your sides, bend your elbows so that they are at a right angle to your body. Grasp a tube or stick with both hands. With the unaffected arm, **slowly** push the arm with the replaced shoulder outward. Always use your unaffected arm to supply the power to move the operated shoulder. Relaxing the shoulder muscles is key to minimizing pain during the exercise.





Pendulum exercises

The following exercises are important for preventing stiffness in your elbow, wrist, and hand. They can be performed almost continuously. At a minimum, you should perform five sets of 10 repetitions of each exercise every day. As with all exercises, they should be performed slowly. It is okay to come out of the sling to perform these exercises.



On your operated arm

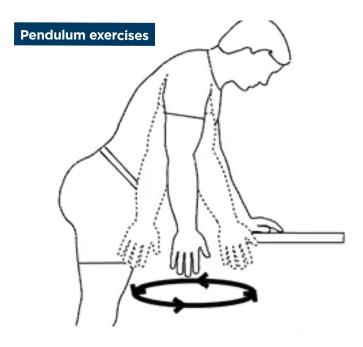
- 1. Bend and straighten your elbow.
- 2. Twist your wrist so that your palm turns up and down.
- 3. Bend your wrist up and down.
- 4. Open and close your hand.

Stand beside a table with the hand of your unaffected shoulder on the table and feet slightly wider than shoulder-width apart. Bend at the hips approximately 75 to 90 degrees and let your operated arm hang down toward the floor. Shift your weight side to side, letting your arm swing freely side to side. Shift your weight forward and backward, letting your arm swing freely front to back. Once you feel comfortable with these movements, move your body so that your arm swings in a circle, being careful not to use your shoulder muscles to create movement. Keep the circle small, less than eight inches. Continue for 30 seconds. Each day, increase the time until you can do three to five minutes.

Exercises after reverse total shoulder arthroplastv

Pendulum exercises

The following exercises are important for preventing stiffness in your elbow, wrist, and hand. They can be performed almost continuously. At a minimum, you should perform five sets of 10 repetitions of each exercise every day. As with all exercises, they should be performed slowly. It is okay to come out of the sling to perform these exercises.



On your operated arm

- 1. Bend and straighten your elbow.
- 2. Twist your wrist so that your palm turns up and down.
- 3. Bend your wrist up and down.
- 4. Open and close your hand.

Stand beside a table with the hand of your unaffected shoulder on the table and feet slightly wider than shoulder-width apart. Bend at the hips approximately 75 to 90 degrees and let your operated arm hang down toward the floor. Shift your weight side to side, letting your arm swing freely side to side. Shift your weight forward and

backward, letting your arm swing freely front to back. Once you feel comfortable with these movements, move your body so that your arm swings in a circle, being careful not to use your shoulder muscles to create movement. Keep the circle small, less than eight inches. Continue for 30 seconds. Each day, increase the time until you can do three to five minutes.

Your first post-operative visit

Your first post-operative OrthoKansas visit will typically take place around ten days after your surgery. During this visit we will focus on your incision to ensure that it is healing appropriately, remove your sutures and discuss the next steps in your healing process. X-rays will be taken so we can evaluate the stability of your new shoulder. If you had a reverse total shoulder procedure, X-rays will be taken at each appointment to evaluate the hardware. If you had an anatomic shoulder procedure, X-rays will be taken at your first post-operative visit, at three months and then again at one year.

Also during your first visit we will talk about physical therapy and provide you with the orders needed to schedule your therapy so it can begin when you come out of your sling. Reverse total shoulder replacement patients will continue to use a sling for another three to four weeks, anatomic shoulder replacement patients another five weeks. We will talk about the importance of wearing of your sling, especially when you are up and moving around, and while sleeping. It is critical that you wear your sling while you are sleeping to avoid injuring your shoulder.

We also will talk about continuing to take aspirin twice a day for another week, unless you have been told otherwise by your primary care physician or other provider, and give you the opportunity to ask questions. Take this time to mention any concerns you have about how your recovery is going. We will also talk with you about additional follow-up appointments.

Frequently Asked Questions

How long will I be on pain medication and why do I have to pick up a written prescription from my surgeon's office?

Most people are able to decrease or eliminate the use of narcotic pain medications by around four to six weeks. Refills will be at the discretion of your surgeon and based on your progress with therapy and the length of time that has passed since surgery. The strong narcotic pain medication that you received at the hospital will gradually be replaced with lower dose pain medications, and eventually you will be encouraged to use only over-thecounter medications such as Tylenol and/or anti-inflammatories. Narcotic pain medications are rigidly controlled by the Drug Enforcement Agency and per their guidelines, only written, signed prescriptions can be accepted at the pharmacy. The DEA monitors all controlled substance prescriptions written by doctors as well as prescriptions filled by individuals.

Can I drink alcohol during my recovery?

As long as you are taking narcotic pain mediation, you should avoid any alcohol consumption. Both have a sedating effect and can suppress the central nervous system. Alcohol also can also decrease your ability to walk safely and increase your risk of falling. You should avoid alcohol if you take certain prescription medications such as warfarin. Check with your primary care doctor if you have any questions about this.

Is it normal to feel depressed after surgery?

It is not uncommon to have new symptoms of depression (or worsening symptoms if you had it prior to surgery) after joint replacement surgery. This may be due to a variety of factors such as limited mobility, discomfort, temporary loss of independence, lack of sleep, feeling homebound

and medication side effects. These feelings should diminish as you begin to resume regular activities. If the symptoms persist, check with your primary care physician.

Is it normal to have insomnia after surgery and what can I do about it?

Insomnia is very common after total joint replacement surgery. Patients often report this as one of their chief complaints during their recovery. This can result from pain, too much napping, anxiety, or any number of reasons. Your surgeon will not prescribe sleep medication for you because the sedating effect of that with your narcotic pain medication can be a dangerous combination. There are natural, over-the-counter options such as melatonin that you might consider trying.

How do I get a cold therapy unit?

You will be given information when you schedule surgery about who to contact and how to make arrangements to have the cold therapy machine available prior to surgery.

How long can I use ice or my cold therapy unit?

You can use ice or a cold therapy unit 24 hours a day for as long as needed, as long as you do not allow the ice or the ice pad to have direct contact with your skin. Always have a towel or other thin layer of cloth between your skin and the ice or ice pad.

Who do I call after surgery if I have questions?

Contact the nurse navigator at OrthoKansas if you have questions or concerns. If you believe you are having a medical emergency, however, you should contact 911 or go directly to the emergency department.

What are the benefits of using **Meds to Beds?**

You will be able to purchase prescription medications, assistive devices and medical equipment such as dressings or ice packs directly from the LMH Health pharmacy.

- Your prescriptions are conveniently delivered to you.
- You can avoid an additional stop at the pharmacy on your way home.
- A pharmacist or pharmacy intern will meet with you personally to provide one-on-one discharge medication education and answer medication questions to your satisfaction.
- Remaining refills will be transferred to your pharmacy of choice and medication changes communicated to your pharmacist.
- An updated medication list will be sent to your primary care provider.

Do I need to take antibiotics if I have a dental procedure done?

Yes. We recommend that antibiotics be taken prior to any dental procedure for a period of one year after your shoulder surgery. Contact our office or ask your dentist to have these given to you.

Will my shoulder cause issues at airports with TSA?

Shoulder replacements contain metal so this is a possibility, but it depends on the sensitivity of the detector and the amount of other metal in your body or on your clothes. If you do set off the detector, you will be scanned manually. You do not need a special card or paperwork for the TSA for a metal medical implant.

When can I start driving my car?

You cannot drive while taking narcotic pain medication. It is a good idea to delay driving until you are out of your sling. This will be for four to six weeks, depending on the type of shoulder replacement surgery you had.

Will I be able to perform normal activities again?

Most people return to all of their normal activities after shoulder replacement surgery. In fact, many patients are able to do more because their motion is improved and their pain is decreased. Activities that involve significant lifting or acceleration of the arm, such as golf and tennis, can be resumed six months after surgery. In general, we recommend that you do not frequently lift more than 25 pounds after a shoulder replacement. This is not to say that it cannot be done occasionally (such as when lifting suitcase), but if someone does frequent lifting, particularly at or above shoulder level, the prosthesis is likely to wear out faster than normal.

How long will my shoulder replacement last?

Most shoulder replacements are very durable and should last 15-20 years. Avoiding repeated, heavy overhead lifting (more than 25 pounds) is a great way to help prolong the life of the components.

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