Now that you have decided to have shoulder replacement surgery, we want to help answer some questions that patients often have. Our goal is to provide you with information about what you can expect before, during and after your stay with us.

This guidebook is divided into four sections to make it easy for you to find the information you need, no matter which stage of the process you are in. Many of these subjects will also be discussed at your pre-operative visit. Please bring this guidebook with you to your appointments and to the hospital on the day of your surgery to use as a reference tool and to make additional notes.

DEPARTMENT OF ORTHOPAEDICS
SHOULDER TEAM

On the front cover: Peter White, shoulder replacement by Dr. Nutting.
You probably have many questions about how to prepare yourself for surgery. You may also want to know how to prepare your home for your return. The checklists in this section are designed to help guide you through this preparation process. For general information, you may also find our web site helpful:

patients.d-h.org/shoulder
Prepare Your Body
Use these tips to help give your body a healthy start before you head into the operating room:

■ Eat healthy foods like fruits, vegetables, lean meats and whole grains.
■ Get plenty of rest.
■ Reduce or quit smoking.
■ Reduce or stop drinking alcohol.
■ Exercise as much as your body can tolerate to improve and/or maintain your muscle strength.
■ After surgery, you will temporarily have only one arm to help with doing everyday tasks. We suggest you practice
  □ getting out of a chair with one hand; if this is difficult, consider a raised toilet seat or elevate other seats in your home.
  □ getting in and out of the shower using one arm; consider a tub bench and/or bedside commode.
  □ completing activities, such as grooming, bathing and going to the bathroom with your non-operative arm.

We highly suggest that you get your flu shot and, if you are eligible, a pneumonia shot (pneumococcal). You should get these shots preferably two weeks before your surgery. Your family and caregivers should also be vaccinated.

IMPORTANT NOTE:
If you happen to become ill within the weeks or days before your surgery, even if it is a simple cold, please contact us right away. We may need to reschedule your surgery until you are healthy again. If you get skin cuts, breaks or rashes on your hand or arm that will be operated on, please let us know immediately. Skin breaks could cause your surgery to be rescheduled.

Our Billing Policy
If you have questions about billing, insurance, financial assistance or charges for healthcare services, please contact Patient Financial Services at (844) 808-0730.

The staff in Patient Financial Services is also happy to help those patients who do not have insurance coverage.

Health Questionnaire & myD-H
At various appointments, you will be asked to take a health questionnaire so that we can track your progress and keep your health records up-to-date. You will complete this set of questions using an electronic tablet, which our reception staff will show you how to use.

If you like, you can complete this questionnaire online before your appointment. To do this, you will need to register for myD-H, a free online resource we offer our patients. This tool allows you to email questions to your healthcare providers, request or reschedule appointments and much more. To register, visit www.mydh.org. You will need to register at least two weeks before your pre-surgery appointment to allow enough time to get your password set up.

If you do not have access to a computer with Internet access, feel free to use one of the many computer terminals in the Health Education Center on Level 4 at DHMC. Staff members are available to assist you.
Additional Support After Your Surgery

Before surgery, you will be asked the following questions to help us determine if you will need special assistance following your surgery:

- Do you live alone?
- Do you need help with daily living?
- Do you have any concerns about going home after surgery?
- Have you had a history of limited mobility, poor balance or limitations with the use of your non-operative arm?
- Is it hard to get in and out of your home because of stairs, walkway, stoop, etc.?
- Would you like to learn about facilities that provide care and rehabilitation before you go home? See the end of this section for more information on this topic.

If you answered “yes” to any of these questions, one of our nurses will talk with you at your pre-operative appointment (or sooner) about going to a rehabilitation facility after your surgery. We may also refer you to talk with the Office of Care Management.

The Office of Care Management can help you

- figure out your finances and insurance coverage (including Medicare and Medicaid).
- consider alternatives to going directly home (nursing facilities or rehabilitation centers).
- cope with emotional stress.
- find lodging (or transportation) for family.
- arrange discharge plans that fit your needs and your family’s immediate and future needs.

Feel free to call the Office of Care Management at (603) 650-5758 for assistance at any time.

Your Pre-Surgery Appointment

You will have an appointment in Pre-Admission Testing within 30 days before your surgery date. This department helps patients to complete the necessary medical testing and paperwork for hospital registration.

During the appointment, you will use an electronic tablet to answer an anesthesia questionnaire. This takes approximately 20-30 minutes to complete. This is a different survey from the health questionnaire that you will take at some of your other appointments, as mentioned on page 6. Your answers will provide your anesthesiologist with your specific health information that he or she will use to recommend the anesthesia for your surgery.

After completing your questionnaire, a nurse will meet with you to discuss any special needs you have. Depending on your medical history, you may have blood work drawn, a heart tracing (EKG), and/or a chest x-ray. Your surgeon will decide which tests are necessary.
What Should You Pack for the Hospital?

Our suggestions include:

- Slip-on shoes
- A loose-fitting shirt that buttons up and is larger than the size you normally wear to easily fit over your shoulder bandages and sling
- A short, light-weight bathrobe
- Toiletries, such as a toothbrush, toothpaste and deodorant; the hospital has complimentary toiletries if you happen to forget something at home.
- Eyeglasses instead of contacts. Glasses are easier to take care of and are less likely to be lost.
- Dentures. We can give you a storage container if you need one.
- Hearing aids
- A list of your daily medications, vitamins and herbal supplements, including the dosage and frequency, plus a list of medications you stopped taking in preparation for surgery
- Telephone numbers of people that you may want to call
- A book, magazine or other one-handed, portable hobby
- A “going home” outfit like a sweat suit or other clothing that is easy to put on and take off; the top should zip or button up, not pull-over; pants should have an elastic waist.
- This guidebook to use as a reference and to make note of special instructions or questions you may have during your stay

SPECIAL NOTE ABOUT SHAVING:
Please do not shave underarms for the seven days prior to surgery. Your surgeon will inspect your shoulder the morning of your surgery and will carefully shave the area at that time. If there are breaks in your skin, your surgery may need to be rescheduled because you may be at risk of developing an infection.

Checklist for the Day/Night Before Surgery

- Enjoy a regular dinner.
- You may brush your teeth and rinse out your mouth the morning of surgery.
- You will be given a bottle of anti-bacterial soap called Hibiclens; **you will need to wash with this special soap the night before your surgery and the morning of your surgery to help decrease the chance of infection**; see the cleaning instructions at the back of this guidebook; if you did not receive the soap packet or if you misplaced it, you can use another anti-bacterial soap, such as Dial®.
- When you shower the night before and the day of your surgery, use a brush to scrub your nails.
- After your shower the night before surgery, put clean sheets on your bed and wear a clean set of pajamas.
- A nurse from the Same Day Program will call you on the day before surgery (or on Friday if your operation is on Monday) to remind you of the above instructions as well as
  - When to stop having anything to eat or drink (usually midnight)
  - Which medications to take the morning of surgery
  - What time you should plan to arrive at the hospital

If you are not at home to take the call, the nurse will leave you a message with this information.
Changes Inside Your Home

Since you will have limited mobility after surgery, there are many changes that can be made in your home ahead of time to make life easier. Many of these things should be planned well in advance of your surgery date.

Prepare Your Home

- We recommend a cordless telephone.
- Place frequently used kitchen items like glasses or a teapot in easily accessible places, such as a countertop or on the lowest shelf in an overhead cabinet.
- Buy or make individual meals that can be frozen and reheated easily.
- If you are returning home alone, we recommend that you establish a rotating support system that involves more than one person who can help you with everyday needs.
- Write down contact names and phone numbers for daily and emergency needs; post this quick-reference list in an easy to find area, such as the front of your refrigerator.
- Before surgery, practice going through your daily routine using only one arm so you can get used to potential challenges and get help ahead of time if need be to set up a system that will work for you.
- Be sure that there is a clear path to the entrance of your home:
  - Shovel snow from sidewalk/stairs.
  - Rake leaves.
  - Clean out the garage.
- Clear clutter from the floors of your home and remove small area rugs so you won’t trip and fall.
- You may be more comfortable sleeping in a recliner; before your surgery, check which side the recliner lever is on (many can be switched).
- Consider making arrangements for a friend or kennel to care for your pets for the first few weeks after you return home; they could cause you to fall and injure your new shoulder.
- Buy a simple oral thermometer.
- Pay your bills prior to surgery, as you may not be able to write checks or use a computer.
Prepare Your Shower

- You may need a tub bench or seat, particularly if you have trouble getting in and out of the shower before surgery or have had problems with your balance in the past. If you shower in your bathtub, you may need a seat without arms. If you shower in a stall, you can use any seat you like. The most important thing to remember is that your seat needs to be non-skid. This means the chair or stool should have rubber tips on the bottom of the legs, or you should put a non-skid shower mat under the chair or stool.

- Some patients find that a hand-held shower head helps. Installing one is fairly easy and may not require a plumber.

- Place your soap, shampoo and other shower items in a spot that does not force you to bend or twist to reach them.

Adjust Your Toilet

- You may need to raise the height of your toilet, unless it is already handicapped accessible.

- If your toilet is not handicapped accessible, we recommend that you use a raised toilet seat with or without arms or a three-in-one commode.

- If you have friends or family who already own the above items, please ask to borrow them and install them in your home before surgery. If not, you can order the equipment you need before your surgery. Our staff can assist you with where to order the equipment if you don’t know where to find these items.
What to Expect the Day of Surgery
What to Expect the Day of Surgery

1. At your assigned time, go to the Same Day Program on the 4th floor just above the Emergency Department. It is best to park at the parking garage. You will enter on Level 4. Same Day Surgery is directly ahead, at the end of the hall.

2. Once there, you will be asked to remove
   - all jewelry except for your wedding band which can be taped to your finger. If your left shoulder is being operated on you will need to move your wedding ring to your right hand. It is best to leave all jewelry at home, including body piercing.
   - dentures or partial plates
   - contact lenses and eyeglasses
   - hair pieces
   - cosmetics and nail polish (it is best to remove these the night before)

3. You will be asked to put on a hospital gown and remove all other clothing.

4. A nurse will check your
   - heart rate
   - blood pressure
   - temperature
   - breathing

5. A nurse will place an IV in your arm. This is usually removed 24 hours after surgery.

6. Your surgeon will mark the joint you are having replaced with a green marker.

7. An anesthesiologist will meet with you to talk about the general anesthesia and the interscalene block and catheter you will receive.

8. A nurse may give you medication to help you relax and feel more comfortable.

9. You will then be taken to the operating room on a stretcher.

10. After you have been given anesthesia, a nurse may place a tube (known as a catheter) in your bladder. The catheter is usually removed the morning after your surgery.
What to Expect After Surgery

The recovery room
After your surgery is done, you will be taken to the recovery room also known as the Post-Anesthesia Care Unit (PACU). You may have a small tube, known as a drain, right next to your incision to remove extra blood or fluid. This is usually removed the morning after surgery.

As you are recovering from your anesthesia, your surgeon will talk with your family and friends to let them know that your surgery is over and how things went.

Am I going to have pain?
You will be asked what your pain level is on a scale of 0 to 10 (0 being no pain and 10 being the worst pain you can imagine). It is important that you know that we cannot take away all of your pain. We would like to keep you at or below a 2 or 3 on the pain level scale. Controlling your pain is a very important part of your recovery. Too much pain will keep you from being able to do your exercises and physical therapy. These are important for getting you back on your feet sooner.

Be sure to let your nurse know if your pain medications seem to wear off too quickly or if you start to feel nauseated. The sooner the team can help, the better you will feel. Please feel free to talk with your nurse about any other concerns you have.

What is squeezing my legs?
After you wake up from surgery, you will have plastic sleeves on both of your legs. Every few minutes they will inflate with air, and you will feel a squeeze that starts at the ankle and works its way up. These sleeves (also known as Venodynes) help pump blood back up from your legs to prevent blood clots. The amount of time these stay on will depend on your level of activity. Think of them as your own personal leg massagers!

Incentive Spirometer (handheld breathing exercise device): you will be asked to use this every one to two hours while you’re in the hospital and when you first get home to prevent pneumonia.

Venodynes: help pump blood back up from your legs to prevent blood clots
Using your sling
You will wake up after surgery with your operated arm in a sling. There is a "pillow" that is part of the sling. This pillow is between your arm and body to help hold your arm in the correct position. The straps on the sling can be moved and adjusted for your comfort. Please ask the nursing and physical therapy staff to adjust these straps; do not try to do this on your own. Your elbow should be fully supported by the sling and you should not "shrug" your shoulder or "hold" your shoulder in place; relax the arm to let the sling work. You should wear your sling at all times with the exception of bathing, dressing and doing exercises for the next six weeks (unless otherwise directed by your care team). Be sure to wear your sling even when you sleep.

Physical therapy
The physical therapist will come in on the first day after surgery to

- instruct your family on how to assist with range-of-motion exercises at home.
- evaluate your mobility to see if you are safe to go home.
- begin passive range-of-motion exercises with your new shoulder joint, according to your doctor’s orders.
Q. When can I eat?
A. You may not feel hungry right away, but by the next day you will be ready to try solid food. Nausea may occur, but it is usually temporary. It is important to let your nurse know if you feel nauseated because there are medications that can help you with this.

Q. What happens on the days following surgery?
A. Your bladder catheter will usually be removed on the day after surgery. You may feel a slight burning sensation for one to two seconds when it is removed.

Your care team will change your shoulder bandages on the second day after surgery. Your incision may have staples or stitches. Your sutures or staples will be removed at your first post-operative visit.

Q. When do I start rehabilitation?
A. You may see a rehabilitation therapist the day after surgery. Remember that pain control is very important. Your nurse will give you pain medicine about 30 minutes before your rehabilitation sessions start so that you can do as many exercises with your physical therapist as possible. You should continue these exercises once you return home.

Q. When can I leave?
A. Patients are usually ready to go home in one to two days after surgery.

You will get to go home when
- Your care team feels you are safe to get up and move around.
- You can keep solid food down.
- Your incision has no signs of infection.
- Your vital signs are normal.
- You can control your pain with oral medications.
- Your lab work is acceptable to your providers.

Q. What is a discharge summary?
A. When you are discharged from the hospital, you will receive a copy of your after visit summary. Please read this entire document, it contains important home instructions from your surgeon. If you have questions, you can always call our nursing staff at (603) 650-5133.

Q. How long will I wear the sling?
A. In most cases, you will be wearing your shoulder immobilizer for a total of six weeks. Normally, unless you have had a reverse total shoulder arthroplasty, you will remove your shoulder immobilizer at least twice a day for physical therapy or your home exercises. You will also be able to do your personal hygiene and change your clothes at the same time, although you will need to wait until after your first post-surgical office visit to shower. Your physical therapist will instruct you on how to change a button-front shirt while you are in the hospital after your surgery.
Now that your surgery is done, your focus should be on healing. If you follow the recommendations listed in this section, you will help ensure that your new shoulder will have the best possible outcome.

patients.d-h.org/shoulder
The First Four to Six Weeks

When you first get home

■ You may need to use a cane if you feel unsteady.
■ DO NOT swim, use hot tubs or take tub baths until your surgeon gives you the go-ahead.
■ DO NOT USE ointments, lotions, oils or vitamin preparations on your incision until after your first follow-up appointment.
■ Apply an ice pack or cooling system to your shoulder dressing for a minimum of twenty minutes, at least four times daily to decrease pain and swelling.
■ Be sure to take your pain medication with food to avoid nausea.
■ To help your wound heal faster, continue your healthy eating habits, give up smoking (if you haven’t already), and, if you are diabetic, maintain control of your blood glucose level.
■ Do not allow pets to share the space where you are sleeping and resting; they can infect your incision.
■ To reduce the chance of getting an infection, make sure you and your caregiver wash your hands thoroughly
  □ when they are visibly soiled.
  □ before and after care of your incision.
  □ before eating.
  □ after going to the bathroom.
  □ after handling or caring for pets.

How to use the shower

■ You will be able to shower after your first post-operative visit.
■ If you are unsteady on your feet, it is safest to sit while taking a shower.
■ Pat your incision dry after showering.

Your pain medications

■ Commonly-taken narcotic pain medications include
  □ Oxycodone/Hydrocodone
  □ Dilaudid/Hydromorphone
Do not take any NSAIDS if they are not prescribed for you until you discuss it with your care team. Examples of NSAIDS are Advil®, Motrin®, Aleve®, naproxen and ibuprofen.

PLEASE NOTE:
The medications you are prescribed should not cause narcotic addiction since you are only be using them for a brief time to relieve genuine surgical pain; however, if you are concerned about addiction, please discuss this with your surgeon, your care team or your primary care physician.
Many patients find that taking narcotic medications as directed helps to control their pain. Be sure to always take your pain medication with food to help avoid nausea.

It is important to know that “no pain, no gain” is not our philosophy. Tolerable discomfort is our goal, whether during exercise, daily activities or at rest.

Be aware that pain medications cause constipation. Drink plenty of fluids, eat lots of fruits, vegetables, and foods high in fiber (whole grains, cereals, etc.) to avoid constipation. Also, take your stool softeners as directed in the discharge summary sheet you will receive before leaving the hospital. Call your care team if your constipation continues.

**Refilling your pain medication**

It is very important to call the clinic **three to four days** before you will run out of your medicine.

**Your first follow-up appointment**

Your first check-up will happen two weeks after your surgery. The exact time and date of your appointment will be noted on your discharge summary sheet.

*If you know you are going to physical therapy, take your pain medication. You will have low levels of pain. This is normal.*
When to Call

We urge you to contact us if you

■ experience any unusual or increased shoulder pain, redness or swelling.

■ have a fever (temperature above 100.0) lasting longer than 24 hours.
  Note that mild temperature elevations are normal in the afternoons and evenings.

■ experience increasing redness, swelling, warmth, unpleasant odor or milky liquid coming from the wound.

■ have a sudden shortness of breath or chest pain.

■ have trouble re-establishing normal bowel habits despite the use of stool softeners and increased fluids.

■ have other symptoms you are concerned about.

If you were discharged from the hospital to a rehabilitation or skilled nursing facility, please call our nursing staff at (603) 650-5133 within 24 hours of returning home so he or she can discuss follow-up care with you.

Six Weeks and On

How you will feel after the first six to eight weeks

It is common to feel frustrated even at six to eight weeks after surgery. You might think you are going a bit stir-crazy. You will get better. Healing takes time, so be patient with yourself.

It is normal to experience an emotional slump about three weeks after surgery. It is difficult to be confined to your house when you have been used to being on the go when you like. This slump will pass.

Many patients find that they still become tired very easily or are tired most of the time. Some patients find this is true for even longer than that (up to several months after surgery). These feelings are a normal part of your body’s recovery from surgery and the healing that you have to do. Over time, as you are able to move more and have less pain, you may find that you are more tired instead of less. Allow time for an afternoon nap even when you have never needed one before.
Resuming regular exercise
Discuss regular exercise with your surgeon, or his associate, before doing anything other than walking or your physical therapy. Doing too much activity too soon can cause damage to your new joint that you may not feel right away.

Driving
Narcotics and unreliable muscles may impair your ability to drive safely. You should not drive until your provider tells you that you no longer have to use your sling and you are no longer taking narcotics.

Long-term precautions
- Tell all of your current and future providers about your surgery; they need to know.
- It is normal for some patients to feel a dull ache when the weather changes or if they spend time out in the cold.
- Please remember that it takes many months to fully heal, so try to be patient. You will continue to see improvements even after 12 to 18 months.

Follow-up visits
Our team will schedule regular follow-up visits each time you come to see us. These appointments will be with a member of your shoulder provider team.

You can expect to come back for follow-up visits at these intervals:
- **Post-surgery**
  - two weeks
  - six weeks
  - 12 weeks
- **Ongoing care**
  - year one
  - year two
  - year five
  - every five years

It is important to attend the ongoing care appointments to be sure your joint replacement is performing properly.

By conducting a regular physical exam and a review of x-rays, your care team can identify any problems that may be developing even though you may not have any physical symptoms.
In this section you will find our recommendations for exercises you should do over the next several months. Whether you see our physical therapists or arrange to see someone in your local community, this information will provide helpful guidelines for you and your therapist.

The ultimate goal of your total shoulder replacement is to get you back to work, functional activities and hobbies. Participation in your rehabilitation program is essential as your success is based in large part on you. The actual surgery is only a small portion of how well you will do when you return to your pre-injury activities. Your physical therapist will release you to independent activities nine to 12 weeks after surgery. You will then have a discussion with one of your shoulder team providers mark to talk about returning to sports/activities.

No one should tell you that the rehabilitation portion of your recovery is easy. It will take dedication on your part to achieve the best possible outcome. We are with you every step of the way!

Make sure you do the exercises no matter how much you don’t want to; they will pay off in the end even if the recovery time seems far too lengthy; however, make sure you follow your protocol and don’t start movement or strengthening too soon.
### ACUTE PHASE

**Inpatient Days 1 and 2, and Outpatient week 1**

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### PHASE I: PROTECTION AND GENTLE MOVEMENT

**7 days-3 weeks**

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### PHASE II: ACTIVE MOVEMENT

**6-9 weeks**

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### PHASE III: STRENGTHENING

**9-12 weeks**

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**12 weeks and beyond**

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**6 months**

- Contact sports

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**Questions?**

**Orthopaedics:**
(603) 650-5133

**Rehabilitation Medicine:**
(603) 650-5978
## Total Shoulder Replacement: 
Guide For Your Physical and Occupational Therapist

<table>
<thead>
<tr>
<th>Sling</th>
<th>• Week 1-6 = wear at all times (except during physical therapy)</th>
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</table>
| Passive Range of Motion (PROM) Limits | • Flexion = 130 deg  
  • External Rotation = 0 deg (unless otherwise specified until first post operative visit)  
  ***Guidelines for Physical Therapy*** |
| Guided by patient's pain levels/tolerance (unless otherwise specified) | **TO BE PERFORMED BY PHYSICAL THERAPIST ONLY** |
| Active Range Of Motion (AROM) Permitted | • Cervical AROM  
  • Elbow AROM/stretching or forearm supination and pronation, ball squeeze for 6 weeks |
| Home Exercises | • Do not teach PROM to spouse/friend  
  • Teach pt/spouse/friend:  
    - Ball squeeze  
    - Elbow flexion/extension with forearm neutral  
    - Forearm supination/pronation  
    - Cervical stretching |
| Precautions | • NO shoulder extension (active or passive) for 6 weeks  
  • Non-weight bearing operated extremity |
| Other | • Encourage cryocuff (ice) usage  
  • Patient should be seen by occupational therapy in-house as well  
  • Physical therapy post hospital discharge (either home care or outpatient PT) needs to be set up prior to admission to prevent lapse in treatment  
  • REVERSE TSA - NO PHYSICAL THERAPY |

### Post Operative Day #1
- Evaluation
- PROM operated shoulder by PT only
- Patient and family education
- AROM elbow, forearm, wrist and hand
- Instruction of in-home exercise program (AROM elbow, forearm, wrist and hand only)
- Functional mobility assessment/treatment as indicated
- Should be seen by OT as well

**Courtesy of:**
SHOULDER TEAM
SHOULDER TEAM

Dartmouth-Hitchcock MEDICAL CENTER
Total Shoulder Replacement:

Precautions

- Do not put any weight on or lift any weight with your surgical arm. For example, don’t lean on your arm when pushing up from sitting and don’t carry the groceries or milk jug with your hand.

- Use your sling at all times, except while exercising, until your provider tells you to stop.

- When your forearm/hand is facing straight out in front of your body with your elbow bent, do not allow your forearm/hand to move any further out to the side.

- When upright, do not allow your elbow to move back, past the ribs.

- When lying down, do not allow your elbow to fall any further back than your body. Place a pillow under your arm when lying down to prevent this position.

- Do not use your shoulder under your own power.
Acute Phase: Home Exercise Program

1. **Gripping**
   Ball squeezes

2. **Elbow Motion**
   Lie on your back and place a pillow under your arm. Bend and straighten your elbow with your thumb up.

3. **Rotating Forearm**
   Sitting, keep your elbow at your side. Turn your palm up, and back down.

4. **Pendulum**
   Lean over a table or chair as shown, supported by your nonoperated arm. Relax the arm that you are hanging down. Allow the operated arm to swing freely. Use your trunk to swing your arm in circles. Do not use your arm muscles to move the arm.

5. **Upper Trapezius Stretch**
   Standing (or sitting), place your nonoperated hand on your head. Keep your head facing forward and gently pull your head sideways (away from your operated arm). You are bringing your ear toward your shoulder.

During your first week following surgery, make sure you are wearing the sling at all times. You need to allow the soft tissues and the new shoulder time to heal. Only perform the exercises provided by your physical therapist. The exercises on this page are samples of what you need to be doing. Make sure you are taking your pain medication as indicated by your shoulder team providers and as needed for pain.

Do each exercise 2-3 times a day, 10 repetitions each.

Ice your shoulder for about 20 minutes, several times each day, especially following exercise.

If you have questions, please contact the orthopaedic care team at: (603) 650-5133
1. **Isometric shoulder external rotation (weeks 1-6)**
   Remove your sling. Stand with the operated arm in the sling position with your hand against the wall or door, as shown. Gently push the back of your hand outward toward the wall. Your arm should not be moving; contract your muscles to push into the wall, but do not move the arm. You should push using about 50% of your strength. Hold the muscle contraction for a count of 10 seconds.
   Perform one set of 10 repetitions, three times a day.

2. **Isometric shoulder abduction (weeks 1-6)**
   Remove your sling. Stand with the operated arm in the sling position with your arm against the wall or door, as shown. Gently push your elbow outward toward the wall. Your arm should not be moving; contract your muscles to push into the wall, but do not move the arm. You should push using about 50% of your strength. Hold the muscle contraction for a count of 10 seconds.
   Perform one set of 10 repetitions, three times a day.

3. **Pulleys (weeks 4-6)**
   Attach pulleys to a secure object overhead. Sit with your back to the pulley. Begin with the operated arm at your side, holding the handle with your palm down. Grasp the other handle with your other hand and gently pull, raising the operated arm up in front of you. Make sure your operated arm is not “helping” with the motion. Return to the starting position. Move slowly through the motion.
   Perform for five minutes, three times a day.

4. **Shoulder retraction (weeks 4-6)**
   Stand with your arms at your side. Squeeze both shoulder blades together. Hold for five seconds. Relax and repeat. You can also do this exercise in your sling.
   Perform one set of 10 repetitions, three times a day.

If you have questions, please contact the orthopaedic care team at: (603) 650-5133
1. **Shoulder external rotation with a cane**
   Lie on your back, bend your knees, with arms at your side and elbows bent. Place a pillow under the operated arm (to prevent the arm from moving behind your body). Hold the cane in your hands. Rotate the operated arm away from your body by pushing the cane with your non-operated arm. Return to the starting position. Make sure you keep your elbow at your side. Perform one set of 10 repetitions, three times a day.

2. **Shoulder flexion with a cane**
   Lie on your back, bend your knees, with arms at your side. Place a pillow under the operated arm (to prevent the arm from moving behind your body). Hold the cane in your hands. Lift the operated arm upward by helping with your non-operated arm. Return to the starting position. Perform one set of 10 repetitions, three times a day.

3. **Prone rows**
   Lie face down on your bed or couch. Position your arms with your elbow bent at 90 degrees, as shown. Raise your arms, bringing your shoulder blades together. Hold for a count of 3. Return to the starting position. Perform one set of 10 repetitions, three times a day.

4. **Prone shoulder blade squeeze**
   Lie face down on your bed or couch. Position your arms alongside your body as shown. Pull your shoulder blades downward and together (lifting the front of your shoulder off the table). At the same time, lift your arms slightly upward. Hold this position for a count of 5. Return to the starting position. Perform one set of 10 repetitions, three times a day.

5. **Internal rotation with the pulleys**
   Stand facing the pulleys. With the operated arm at your side, grasp the pulley with your palm facing up. With the non-operated arm, pull the pulley and slide the operated arm upward against your back. Try to relax your operated arm during this stretch. Hold for a count of 5 seconds. Return to the starting position. Perform one set of 10 repetitions, three times a day.

6. **Sitting flexion stretch at the table**
   Sit in a chair facing the table or counter. Place the operated arm on the table with your elbow straight. Slide the arm forward on the table, lean your body backward and stretch your arm. Hold for a count of 10 seconds. Slide the arm back to the starting position. Perform one set of 10 repetitions, three times a day.

7. **Sidelying arm raises**
   Lie on your non-operated side. Place your operated arm alongside your body. Lift the arm upward toward the ceiling. Lift as high as you can or until your arm is straight up (at 90 degrees elevation). Slowly lower your arm. Perform one set of 10 repetitions, three times a day.

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**Phase II: Active Movement Weeks 6-9**

During the second phase of rehabilitation, you can begin to move your shoulder on your own. You should be out of the sling most of the time during this phase. Continue to restrict your lifting; however, pain-free lifting up to five pounds is allowed. You may perform the exercises on this page. Your therapist may change or add exercises depending on how you are recovering.

If you have questions, please contact the orthopaedic care team at: (603) 650-5133

You can purchase a pulley system at a local durable medical equipment store (for example, Keene Medical or Yankee Medical) or Ortho Care at DHMC.
1. **Shoulder adduction with therapy band**
   - Attach the therapy band to a secure object at waist height.
   - Grasp the therapy band with the operated hand. Pull the arm inward, toward your body, keeping your elbow straight.
   - Slowly return to the starting position.
   - Perform one set of 10 repetitions, three times a day.

2. **Shoulder internal rotation with therapy band**
   - Attach the therapy band to a secure object at elbow height.
   - Bend the elbow and grasp the therapy band with the operated hand. Place a small towel between your elbow and body, as shown. Pull the hand inward, toward your stomach. Keep your elbow bent and at your side (don’t drop the towel). Slowly return to the starting position.
   - Perform one set of 10 repetitions, three times a day.

3. **Shoulder external rotation with therapy band**
   - Attach the therapy band to a secure object at elbow height.
   - Bend the elbow and grasp the therapy band with the operated hand. Place a small towel between your elbow and body, as shown. Pull the hand outward away from your body. Keep your elbow bent and at your side (don’t drop the towel). Slowly return to the starting position.
   - Perform one set of 10 repetitions, three times a day.

4. **Wall pushups**
   - Stand facing the wall, about 12-18 inches away. Place your hands on the wall at shoulder height and slightly wider than your shoulders. Slowly bend your elbows, bringing your chest toward the wall. Push back to the starting position.
   - Perform one set of 10 repetitions, three times a day.

5. **Quadruped arm raises**
   - Kneel on your hands and knees (on a mat or on your bed). Position your hands directly under your shoulders. Lift one arm upward, keeping the elbow straight. Return to the starting position. Lift the opposite arm upward, keeping the elbow straight. Return to the starting position.
   - Perform one set of 10 repetitions, three times a day.

6. **Standing shoulder depression**
   - Attach the therapy band to a secure object overhead.
   - Grasp the therapy band with both hands, keeping your arms at your side and your elbows straight. Shrug your shoulders while maintaining straight elbows, and then push your shoulders downward against the band, keeping your elbows straight. Return to the starting position.
   - Perform one set of 10 repetitions, three times a day.

7. **Latissmus dorsi pull downs**
   - Attach the therapy band a secure object overhead. Grasp the therapy band in your hands, as shown. Pull downward and squeeze your shoulder blades together. Return to the starting position.
   - Perform one set of 10 repetitions, three times a day.
Meet the DHMC **SHOULDER SURGEONS**

John-Erik Bell, MD  
John Nutting, MD  
Charles Carr, MD  
James Ames, MD, MS

If you have any questions, please call us at (603) 650-5133.
Washing Instructions

Please read the following directions prior to showering before your surgery.

You will receive Hibiclens® anti-bacterial soap from our clinic at one of the office visits prior to your surgery. Please use this soap to complete the following steps to wash carefully before your surgery.

Step 1: Wet your entire body.

Step 2: Use half of the bottle of Hibiclens soap to scrub your entire body from your neck to your feet, avoiding your genitals. Be sure to scrub extra at the spot on your body where you will be having surgery. Also scrub under your fingernails and toenails.

Step 3: Rinse all of the soap off of your body.

On the morning of your surgery:
Repeat steps 1-3 once more using the remaining half a bottle of Hibiclens soap. Be sure to rinse all of the soap off of your body.

Please note:
- Do not apply the soap to your head, face, eyes, inside the nose or ears or in the genital area.
- For external use only. Do not use on open wounds.
- Stop using if redness or irritation develops.
- Do not drink the soap. If swallowed, call Poison Control right away: 1-800-222-1222.
- After showering, do not put lotion, cream or powder on your body.
- Be sure to wear clean pajamas after your shower on the evening before your surgery. Also, be sure you are sleeping in clean sheets that night.
- Do not shave the day before or day of your surgery.

Dartmouth-Hitchcock MEDICAL CENTER
Travel Tips to Prevent Blood Clots

When you travel, don’t let cramped conditions put you at risk of forming a blood clot. Keep your body moving, even when traveling, and avoid dehydration by drinking plenty of water (at least 8 ounces an hour).

General Tips for Air Travel

- Try to keep your feet elevated by using the leg rest at the highest elevation. Rest your feet on your carry-on luggage if necessary.
- If you have the opportunity to move around the cabin, walk to the restroom and back.
- Walk for 30 minutes before boarding the plane.

Seated Exercises

- **Ankle circles:** Lift your feet off the floor and twirl your feet as if you are drawing circles with your toes. Continue this for 15 seconds, then reverse direction. Repeat.

- **Foot pumps:** Keep your heels on the floor and lift the front of your feet toward you as high as possible, keeping the balls of your feet on the floor. Continue for 30 seconds and repeat as often as you like.

- **Knee lifts:** Keeping your legs bent, lift your knee up to your chest. Bring the knee back to the normal position and repeat with your other leg. Repeat 20-30 times for each leg.

Seated Stretches

- **Knee to chest:** With both hands clasped around your right knee, bend forward slightly and pull your knee to your chest. Hold the stretch for 15 seconds, then slowly let your knee down. Repeat the same stretch with your left knee. Perform 10 stretches.

- **Neck roll:** Relax your neck and shoulders. Drop your right ear to your right shoulder and gently roll your head forward and to the other side, holding each position about five seconds. Repeat five times.
Preventive Antibiotics for Dental Procedures

In August of 2016 the American Academy of Orthopaedic Surgeons (AAOS) approved new criteria to specify when it may be appropriate to consider antibiotic use prior to dental procedures. Recommendations are now based on each individual patient and the following information:

- the type of dental procedure to be performed;
- your current health status and health issues;
- if you have a history of infection; and,
- timing since joint replacement procedure.

From this information we are able to make a recommendation on whether or not it is appropriate for you to use antibiotics prior to a planned dental procedure.

Your implant and infection

If you have an orthopaedic implant (such as a joint replacement) please understand:

- A potential complication of these implants is bacterial infections, which occurs in 1-3% of patients. These infections require more surgery as well as the use of antibiotics for an extended period of time. Most infections occur around within one year of your surgery, but they can also occur much later.

- Infections that happen long after your surgery (beyond one year) are thought to be caused by the spread of bacteria from the bloodstream to the implant. Unfortunately, there is no clear scientific evidence to support this theory. We know that many patients with orthopaedic implants frequently have bacteria in their blood that do not spread to their implants.

Infections and dental procedures

Dental procedures have long been considered a potential cause of implant infections, even after the initial orthopaedic post-operative period. The reason for this is that dental procedures can introduce bacteria from the mouth into the bloodstream. Please keep in mind, however, that eating and performing regular oral hygiene at home may also introduce oral bacteria into the blood. Here are important points to consider:

- Traditionally, antibiotics have been provided prior to dental procedures in patients with orthopaedic implants to minimize the bacteria that gets into the blood.

- **The best evidence we currently have does not show that using antibiotics before dental procedures can reduce the risk of infections of orthopaedic implants.**

- The routine use of antibiotics has potential side effects such as increased bacterial resistance, allergic reactions and diarrhea.

Summary of Guidelines

- No dental work for a minimum of two weeks prior to surgery.

- No elective dental work (including cleanings) for six months after surgery. If urgent dental work is required within six months please contact our office as we will prescribe antibiotics during this time.

- Recommendations for use of antibiotics prior to dental work is patient specific and based on the AAOS Appropriate Use Criteria; please speak with our orthopaedic team for your specific recommendation.

For more information visit: http://tinyurl.com/orthodental
What to Expect
After Your Shoulder Replacement

You will be living life with only one useful arm for a while, and, in some cases, you’ll be without your dominant arm—the one you use for eating, writing, and other daily tasks. In this case, a little pre-planning can really pay off. These are some hints to make life a little easier. In addition, make sure to follow any instructions your surgeon gives you at discharge.

Washing: Please do not shower until after your first post-operative visit.

Dressing: By the time you leave the hospital, you’ll be taking your sling off three times a day to do your exercises. Use those times to wash up and change your clothes. Clothes that open in the front will be the easiest to get on and off. To undress, start by sitting on the edge of a chair or standing up, and remove your sling. Do not use your operated arm; just let it hang by your side. Take your non-operated arm out of the garment, then bring the garment around your back, and slide it off your operated arm. To dress, slide your operated arm into the garment first using your non-operated arm. Do not use your operated arm; just let it hang loose. Once this arm is fully in the sleeve, bring the garment around your back and put the other arm in. Fasten the garment using your non-operated arm; and put your sling back on. Non-tie shoes and elastic-waist pants are also helpful to have.

Daily Activities

Grooming: Before surgery, pay attention to your daily grooming habits. Keep in mind that you will not be able to use your operated arm for chores such as brushing your teeth, flossing or hair styling. A disposable electric toothbrush, pre-strung flossers and a low-maintenance haircut may help out.

Eating: As you prepare food and sit down to a meal, you will have to use utensils with your non-operated hand.

Toileting: You will need to use only your non-operated arm for wiping yourself after using the toilet. If your surgery is on the arm you are used to using, you will need to practice using your other hand before coming in for surgery.

Household chores: Avoid lifting anything with your operated arm and nothing heavy with your non-operated arm. Housework will also need to go on hold until after your first post-op visit. Writing checks may be impossible, so plan to pre-write some checks ahead of time or arrange for alternate methods to pay bills. When climbing/descending the stairs, hold the banister with your non-operated arm. You may need to install a second banister prior to your surgery.
Transportation:
While you are taking narcotic pain medication, you cannot drive. Plan ahead of time for someone to drive you to physical therapy appointments, the store and other important trips. You will not be able to drive yourself until you are completely off of your pain medication and out of your sling—probably about six weeks after your surgery.

Sleeping:
You will need to keep your sling on while you are in bed for six weeks following your surgery. You may find it more comfortable to sleep on your back to start, with a pillow under your operated arm for support. A semi-upright position in a recliner or on the couch may also be a good option. If you are having difficulty falling asleep, following your normal going-to-bed routine as much as possible will help, as can mild sleep aids such as chamomile or Sleepytime® tea. If you are having difficulty staying asleep, try altering your position to sleep in more of an upright position. Of course, keep your pain medication nearby since you may need it during the night.

Pain:
Everyone has some pain after shoulder surgery, and you will be given prescriptions for pain medication to take home. Do not take ibuprofen (Advil®, Motrin®) or naproxen (Aleve®) unless explicitly directed by your doctor.

Take the pain medication as directed. Ice packs can help as well. The cooling system you may be sent home with is quite helpful, especially in the first few days after surgery, although it can get heavy after a few days. Try to leave it on all the time for the first three days after surgery. If you remove it after that, try using it a couple of times a day, particularly in the evenings.

Narcotic medications typically cause constipation and nausea. To prevent these side effects, always take your pills with something to eat, take a stool softener (especially if you’re prone to constipation), eat a high-fiber diet and drink plenty of fluids.

Please call us if you have questions or concerns about side effects you experience. When you need a refill of your pain medication, make sure to give us at least three to four days notice. To request refills, contact our team at the number below.

We’re Here to Help
If you experience any of the following symptoms, call us right away, day or night (nights and weekends, please call (603) 650-5000 and ask for the Orthopaedic Resident):

- Excessive bleeding
- Pain not controlled by ice, elevation and pain medication
- Fever over 100.0° F
- Signs of infection at your incision: redness, hot to touch or drainage

Main line:
(603) 650-5133