



Dr. Tomas Pevny

Knee Replacement Playbook

Valley **Ortho**



VALLEY VIEW

Patient Name:
Date & Time of CT Imaging Appointment:
Date of Surgery:
Date & Location of First Follow-Up Visit at ValleyOrtho:
Date & Location of First Rehabilitation Appointment:
Patient Expectations for Surgery & Recovery 1. Pain Expectation: 2. Activity Expectation:

YOUR KNEE REPLACEMENT PLAYBOOK

Thank you for joining our team at ValleyOrtho.

We feel you are the most valuable person in the surgery and recovery process. This Playbook is your guide to best prepare for and recover from your total knee replacement.

Each member of your care team plays a valuable role and has been trained to assist you every step of the way.

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Meet Your Physician, Dr. Tomas Pevny, MD

Dr. Tomas Pevny is a board-certified, fellowship-trained orthopedic surgeon who specializes in knee and shoulder injuries, sports medicine, trauma, total joint replacement and joint preservation. He has treated thousands of patients in the Roaring Fork Valley and the world, taught seminars around the globe and helped train orthopedic fellows and residents. Dr. Pevny is a fourth-generation physician from a professional heritage that began in Czechoslovakia, where his great-grandfather was the surgeon general of what was then known as Austria Hungary.

After earning a bachelor's in biochemistry from Texas A&M, Dr. Pevny attended medical school at Baylor College of Medicine and completed residency at the University of Oklahoma Health Sciences Center. His passion for sports led him to the Rocky Mountain Sports Medicine Fellowship in Aspen; on completion of the program he joined Aspen Orthopedic Associates where he practiced for two-and-a-half decades.

When he isn't caring for patients Dr Pevny's likely outdoors enjoying his avocations, which include golf, skiing, biking and running. He and wife Lori are parents to three athletic children and the family often travels around Colorado and the U.S. for sporting and athletic events.

Meet Your Physician Assistant, Rachael Wymer, PA-C

Rachael Wymer – PA-C, is a certified physician assistant working with Orthopedic Surgeon Dr. Pevny at ValleyOrtho at Valley View. Rachael's medical training and education have focused on additional, specific orthopedics practice and she maintains membership in the American Academy of Physician Assistants.

Rachael got her master's in physician assistant studies from Shenandoah University in Winchester, Va. and completed an orthopedic-specific residency in Chicago at the Illinois Bone and Joint Institute. She attended Boise State University in Idaho as a scholar-athlete in the gymnastics program, where she earned her bachelor's in biology then a master's in exercise and sports studies.

"Gymnastics gave me exposure to orthopedics and it's where I've always wanted to be," says Rachael. "I love getting to know patients one on one and being a part of the patient care team. My passion is to help the weekend warrior and recreational athlete through their injury to restore function."



Meet Your Medical Assistant

Dylan Meeker, MA

Dylan was born and raised in Singapore and moved to Houston Texas when he was 15 years old. He has always been interested in sports but his orthopedic interests really took off when he worked as a US Navy Hospital Corpsman in Beaufort South Carolina for 4 years. His goal is to finish medical school and continue to work with athletes of all kinds. His favorite part of working with Dr. Pevny's team is educating patients so that they feel at ease during their care at ValleyOrtho.

Dylan enjoys spending his off time exploring the Roaring Fork Valley with his wife Daniella and Golden Retriever Hinata and playing soccer whenever he gets the chance.



ANATOMY & TOTAL KNEE REVIEW

Let's review what is bothering your knee and how we can help get you back to what you love doing.

What is "The Knee" Exactly?

The knee is the largest joint in the body. It is made of 3 bones: The thigh bone (femur), the shin bone (tibia) and the knee cap (patella, not pictured). Ligaments connect and stabilize the femur and tibia together.

A healthy knee has smooth cartilage at the contact points between the three bones. This cartilage allows for smooth, pain free motion of the knee.

What Does it Mean to Have Knee Arthritis?

Knee Arthritis occurs when the cartilage that lines the contact points become worn or torn. In the early stages of the condition, small pits develop in the smooth cartilage. Eventually, small protrusions of bone, or 'bone spurs' develop at the edges of the joint surfaces. Joint fluid may also accumulate under the cartilage, forming cysts, which can put pressure on the bone and may contribute to pain. In the late stages of the condition, the cartilage can wear away completely, allowing bone-to-bone contact.

Reparative, Restorative, and Reconstructive Options:

Dr. Pevny has reviewed your x-rays and knee pain history with you at this point. Depending on the severity of your arthritis you may have tried medications, joint fluid supplements and physical therapy to improve or manage your condition. Unfortunately there is no way to regenerate the cartilage that is damaged in your knee. The options listed above have either been ineffective or deemed inappropriate by Dr. Pevny making you the ideal candidate for a knee replacement utilizing the Mako Total Knee Replacement System.

Healthy Knee

Femur (thigh bone)

Healthy Cartilage

Tibia (shin bone)

Arthritic Knee

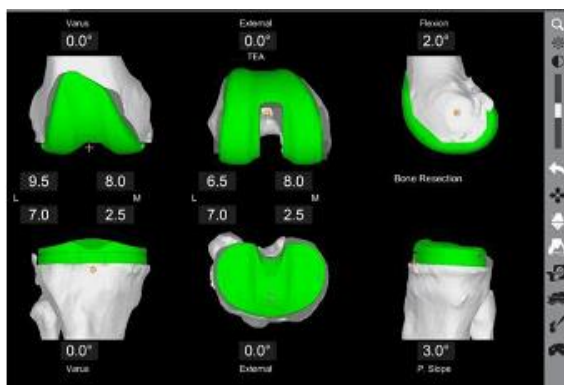
Femur (thigh bone)

Diseased Cartilage

Tibia (shin bone)

What is Different with a Mako Total Knee Replacement?

Before surgery a CT scan will be taken to create a 3D model of your knee. Your specific model will be loaded into the Mako software and used by Dr. Pevny to create a personalized surgical plan. This plan will calculate the best alignment and position possible for your new knee.



The Mako Robotic-Arm doesn't actually perform the surgery. The surgery is performed by Dr. Pevny. He will guide the Mako robotic-arm to remove diseased bone and cartilage using the personalized Mako surgical plan. Dr. Pevny can make adjustments during the surgery to the surgical plan to optimize the implant's placement.



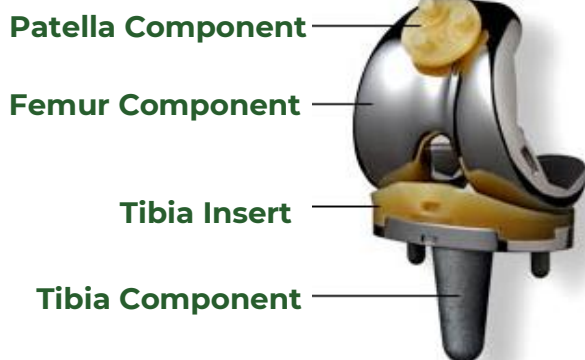
Mako Robotic arm and guiding system



Real time bone removal guide during surgery

What is Being Replaced?

Because your cartilage is worn at the ends of your femur, tibia and behind the knee cap, those surfaces are being replaced. Titanium and cobalt chrome pieces are used for the femur and tibia components. A plastic tibial insert is used to separate the metals and a plastic button is used on the backside of the patella. These changes will ensure full, smooth, and controlled movement of your knee.





KNEE REPLACEMENT TIMELINE

MORE THAN TWO WEEKS PRIOR TO SURGERY

- Get your flu shot and, if you are eligible, pneumonia shot (pneumococcal).
- Schedule your outpatient physical therapy appointments. See page 8 for more.
- Register your One Medical Passport account at OneMedicalPassport.com
- Blood thinners may require modifications before surgery. Ask Dr. Pevny.
- Get any urgent dental care completed. Elective dental procedures are not recommended for 3 months after your total knee replacement.
 - Your orthopedic team and dentist will determine if antibiotics are necessary.
- Dr. Pevny and Rachael will discuss if an outpatient procedure (instead of staying the night in the hospital) is right for you and your family.

ONE WEEK PRIOR TO SURGERY

- The Pre-Anesthesia Clinic will call to schedule a specific date and time for a COVID-19 test and any other medical clearance you need before your surgery. This is also a chance to talk with them about your anesthesia questions/concerns.
- Minimize surgery and medication related constipation. See page 25 for details.
- **DO NOT** shave around the knee beginning 4 days before surgery.
- Prepare your home environment for a safe return. See page 11 for more details.
- Start to pack your hospital bag. Refer to page 12 for more details.
- Stop taking the following medications that increase bleeding:
 - Aspirin, Ibuprofen (Advil®/Motrin®), Naproxen (Aleve®/Naprosyn®) or fish oil.
- Stop taking all supplements that are not prescribed medications.

2 DAYS BEFORE SURGERY

- Shower before bed with provided cleansing kit. Refer to page 13 for details.

THE DAY BEFORE SURGERY

- The Day Surgery Department will call after 2pm the day before surgery about:
 - What time you should plan to arrive at the hospital.
 - When to stop eating and drinking before surgery. See page 14 for more details.
 - Which medications to take the morning of surgery.
 - During this call, complete your “Surgery Instructions Sheet” on page 14.
 - Call 970-384-7166 if you do not hear from the nursing staff by 5pm.

THE NIGHT BEFORE SURGERY

- Remove any nail polish from your toes.
- Shower before bed with provided cleansing kit. Refer to page 14 for details.
- Enjoy dinner then brush your teeth and rinse out your mouth before bedtime.
- **DO NOT** eat or drink anything after midnight unless otherwise instructed.
- **DO NOT** smoke at this time. **DO NOT** resume smoking until the day after surgery.
- Put clean sheets on your bed, wear a clean set of pajamas.
- **DO NOT** allow your animals to be in your bed with you.

THE MORNING OF SURGERY

- Shower and repeat cleansing kit process thoroughly. Refer to page 13 for details.
- If you usually take morning medications for your heart, blood pressure, lungs, seizures, and/or acid reflux, take them with a small sip of water without any food.

THE DAY OF SURGERY

- Arrive and register at the hospital at your assigned time.
- Dr. Pevny will meet with you prior to surgery in the Day Surgery Department.
- After surgery is completed you may be moved to the 4th floor to rest, recover, and meet with your family. A Nurse will assist you in your room. See pages 17-18.
- You will get out of bed and may begin knee exercises with rehabilitation staff.

THE DAY AFTER SURGERY

- If you stayed the night in the hospital you will be trained and educated by Nursing and Rehabilitation staff to return home safely at this time.

3-5 DAYS AFTER SURGERY

- You will begin outpatient or home health physical therapy to regain motion and strength.

10-14 DAYS AFTER SURGERY

- You will return to Dr. Pevny's office to check the progress of your knee replacement, have your stitches removed and your incision checked.

WEEK 1 THROUGH WEEK 3 (See page 26 for more details)

- Your surgical knee will be painful during these early weeks. This is normal and expected. We do not expect you to have normal use of your surgical leg here.
- We expect that you will be able to bend and straighten your knee with moderate difficulty and discomfort. We expect the motion to improve steadily from a completely straight position to 90 degrees of bend within this phase.

WEEK 4 THROUGH WEEK 6 (See page 27 for more details)

- Even though discomfort may still be present, we expect you to be completely transitioned from opioids to over the counter pain medications at this time.
- We expect you to have regained most of the motion of your knee from a completely straight position to 120 degrees of bend in this phase.
- We expect you to be able to manage stairs normally now.

WEEK 7 THROUGH WEEK 12 (See page 27 for more details)

- You may have increased muscle soreness from exercise that does not require pain medication as you work to improve the strength and motion of your surgical leg.
- You will slowly begin to return to recreational activities in this phase with direction from your medical team.

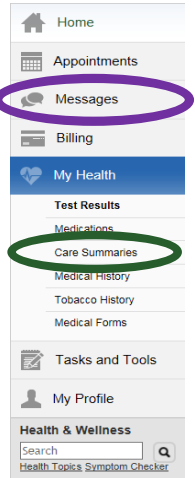


YOUR PRE-OPERATIVE TRAINING

At ValleyOrtho, you are the most important player on our team. Our pre-operative training program is designed to help you participate in your healing like a pro.

1. Set Up Your Valley View Patient Portal

You should have received an email from us with a link to set up your patient portal account. If you cannot find the email we will be happy to send you another one, just let us know.

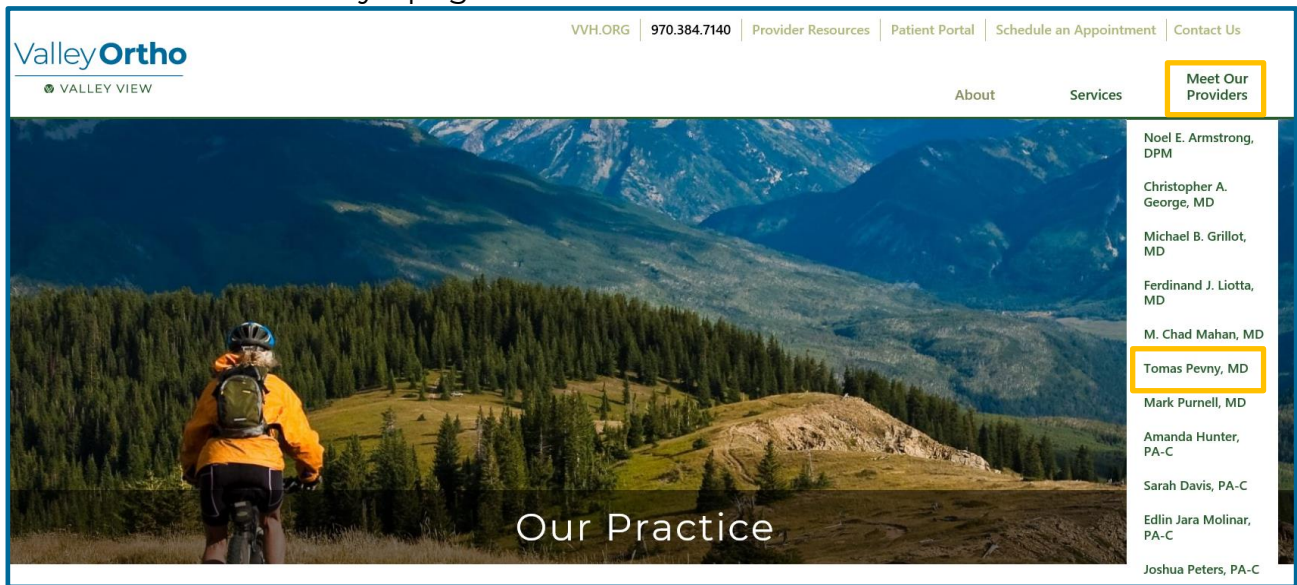


Benefits of the Portal

- Easily contact Dr. Pevny and his team using the **Portal Messaging Center**.
- Have access to your visit reports by clicking **“My Health”** on the left sided toolbar then click **“Care Summaries”**.

2. Access Your Patient Playbook on Our Website

Go to Vworthocare.org and select **Dr. Pevny's link**. The Patient Playbook can be found at the bottom of Dr. Pevny's page.



3. Schedule Your Outpatient Physical Therapy Appointments

Dr. Pevny will talk with you about your initial physical therapy options following surgery. You may choose either to begin outpatient physical therapy or home health physical therapy initially. Schedule two visits a week for 6 weeks when you call.

- If you plan to start with outpatient therapy, schedule your first outpatient therapy appointment 3-5 days after your surgery date.
- If you plan to start with home health therapy or initially stay at a skilled nursing facility, schedule your first outpatient therapy appointment 10-14 days after your surgery date.

4. Understanding Surgical Pain Control

Dr. Pevny uses an injected nerve block or an ON-Q pump for long lasting pain relief after surgery. Both of these decrease the need for opioid use for days after surgery.

If you have the ON-Q, you will leave the hospital with a balloon type pump that delivers numbing medicine at a very slow adjustable flow rate.

- Turn the rate to 8ml/hr at 8pm the first night of surgery, even if you have minimal pain.
- Make sure the white clamp on the tubing is open and not pinching the line. It should move freely along the tubing. Make sure there are no kinks in the tubing.
- The block will not remove all of the pain. The areas above the mid-thigh and the back of the knee cannot be covered by this block.
- Refer to page 21 for more details and after care removal.

If you receive the injected nerve block plan for a gradually decrease in its effects 48-72 hours after surgery.



5. Pain Education

Pain is an expected and necessary part of the healing process after a total knee replacement.

- It is normal to have pain when you awake from surgery.
 - It is also normal to feel an increase in pain 12-24 hours after surgery as the stronger medications used during surgery wear off.
- This early increase in pain does not mean there has been any damage to the replacement.
 - This is your nervous system becoming more efficient at sensing the healing that is taking place in your knee.
 - Your nervous system will become less sensitive over time. Participation in physical therapy with appropriate rest and medication use will help with this process. Your physical therapist will guide you through the pain relieving strategies that will work best for you.
- Rest assured that your new joint is in place and is nearly impossible to damage it in your early recovery.

6. Quick Recovery Tips

These simple healing pointers can take your recovery from good to great.

- Do everything you can to achieve and maintain a straight knee position.
- Elevate your knee in a straight position above your heart when resting.
- Use cold therapy consistently for the first 3 days when you get home.
- Perform prescribed exercises and walk as much as you can tolerate without increasing swelling or the amount of limp you have with walking.



7. Patient Reported Outcome Surveys:

Patient Reported Outcome (PRO) Surveys are a way for us to measure those things that matter most to you; decreasing your pain, restoring your function and productivity, and improving your quality of life. We want to know if we are meeting your needs during your recovery. By participation in the PRO surveys, you can help us understand how we are doing regarding your goals. This will allow us to best direct your care and the care we provide to your community.

What to Expect From Us:

- Prior to surgery, you will receive an e-mail or text link to a short survey to get your pre-operative baseline.
- You will receive this same survey (2-4 in total) by e-mail or text between 30 days and 1 year after your surgery.
- These new scores will be compared to your baseline score in order to evaluate your progress, as evaluated by the person that matters most – YOU!



You're Trained. Now What?

Any surgery can be daunting, but you can rest assured knowing that our team will walk you through every step on your big day.

The rest of this Playbook will explain in detail your pre-surgical, surgical and recovery process from start to finish. Use this as a guide to effectively complete the Total Knee Replacement Timeline on pages 6-7.

When you choose knee replacement surgery with ValleyOrtho and Valley View Hospital, our team is committed to helping you achieve the best surgical outcome possible so you can return to the lifestyle you love.

Contact Us:

At each stage of your journey, before, during and after surgery, we're here to provide information and answer any questions you may have. Feel free to reach us quickly during business hours by messaging "Dr. Pevny" through your Valley View Hospital Patient Portal, or by phone at (970)925-4500. If something is urgent you don't have to worry about when you should call; an on call provider can answer your questions day or night by calling (970)384-7140.

IMPORTANT NOTE:

If you happen to become ill within the weeks or days before your surgery, even with a simple cold, please contact us right away. We may need to reschedule your surgery until you are healthy again. Also, if you get a cut, scrape, rash, or sore around the knee scheduled for operation, please let us know immediately. A skin break could require rescheduling your surgery, due to a small increased risk of infection.

PREPARING FOR YOUR SURGERY

Give yourself a head-start on healing by following these more detailed surgery-prep tips from Dr. Pevny.

Prepare Your Body

- Continue (or develop) the healthy habits needed to support your healing. Eat healthy foods like fruits, vegetables, lean meats and whole grains. Get plenty of rest.
- Reduce tobacco use or quit smoking. Limit or stop drinking alcohol.
- Exercise as much as your body can tolerate to maintain your muscle strength.

Practice Daily Tasks

- You may temporarily need to use a walker or crutches to move about your home. It is important to imagine how you will go about your day without being able to hold anything in your hands as you move from room to room.
- Before surgery, practice how you will get in and out of the shower with a stiff surgical knee that will not want to bend comfortably.
- You may also want to practice getting in and out of the passenger side of the car with a stiff surgical knee, adjusting the seat position now could save you some trouble when it's time to go home.

Prepare Your Home for a Smooth Transition

Make these changes to improve the convenience and safety of your home environment ahead of time.

- Create a clear path to the entrance of your home. Pick up throw rugs, tack down loose carpeting and remove electrical cords or other obstructions from walkways.
- Install a rubber mat, or non-skid adhesive, on the bottom of the tub or shower.
- Install night lights in bathrooms, bedrooms and hallways.
- If you will be returning home alone, establish a rotating support system that involves more than one person to help you with everyday needs.
- Plan for someone to drive you to your outpatient physical therapy appointments, the store, and other important destinations for the first 3-4 weeks.
- It is best to sleep with the knee supported in a straight position elevated on pillows. It may be more comfortable but **DO NOT** support the knee in a bent position (a pillow behind the knee) as this will delay your recovery.





Pre-arrange Your Finances to Reduce Stress

Our Patient Financial Services staff is happy to help all of our patients. If you have questions about billing, insurance, financial assistance or charges for healthcare services, please contact Patient Financial Services at (970)384-6890.

Pack for Your Hospital Stay

To stay comfortable during your hospital visit, we suggest you bring:

- Your Knee Replacement Playbook.
- Slip-on shoes with heel cup and rubberized soles.
- A short, lightweight bathrobe or pajamas.
- Underwear and socks.
- Comfortable elastic waistband pants or shorts.
- A “going home” outfit like a sweat-suit or other loose clothing that is easy to put on and take off over a likely swollen leg.
- Toiletries such as a toothbrush, toothpaste, denture cleanser/cup, electric razor, comb, and deodorant. Please no powders.
 - The hospital provides complimentary toiletries if you happen to forget something.
- Eye-glasses instead of contacts.
- 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.
 - Your own medication will be used **only** when the hospital pharmacy does not stock your specific medication and interruption in the use of that medication would compromise your care. Speak with Dr. Pevny if you feel your medications may fit these criteria, otherwise do not bring any medicines with you.
- Driver’s license or photo ID, Insurance card/Medicare Card.
- Copy of your Advanced Health Care Directives.
- Cash or credit card to pay for discharge medications.
- Important telephone numbers (Include person bringing you home).
- Your Cell phone/charger, books, magazines or other portable hobbies.
- Hearing aid and batteries.
- If you have a CPAP machine, please bring the unit, tubes and settings.
- Any helpful hand-carry equipment you may have such as a reacher, sock aid, and/or long handled shoehorn. Label these items with your name.
- A walker, crutches, or cane if you have them. These should be labeled with your name.
- **DO NOT** wear or bring any jewelry (this includes removing wedding bands and all piercings), or any other valuables.



Prep Your Skin to Discourage Bacteria

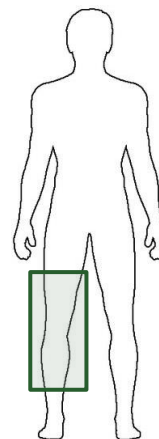
Preparing your skin before surgery can reduce the risk of infection at the surgical site by reducing bacteria on the skin. You will receive scrub brushes with anti-bacterial soap from our clinic at your pre-operative appointment.



Please use the prescribed soap and mitt to wash carefully before your surgery, following the steps below:

If you test positive for any additional skin bacteria you will be notified by ValleyOrtho and you will be instructed in additional skin and/or bacterial preparations to get you ready.

1. Wet your entire body with warm, **NOT** hot, water.
2. Wash hair with normal shampoo/conditioner. Wash your face and body with your normal soap, then rinse.
3. Wet the shower mitt. Turn off the water then apply CHG solution to the mitt.
4. Use the mitt to scrub your surgical knee from mid-thigh to mid-calf. Start with the front of your knee and work your way around to the back of your knee. Make sure to avoid your eyes, ears, mouth and directly on genitals. This process should take 3 minutes.
5. Wait 2 minutes after this application before turning the shower back on and rinsing off.
6. Rinse off all of the soap from your body with **warm** water.
7. Dry with a clean towel and wear clean clothes to bed.



For best results, follow these additional instructions:

- Remove any nail polish so you can see any remaining dirt.
- Don't let the prescribed cleanser get into your eyes, ears, mouth or genitals.
- **DO NOT** use moisturizers, lotions or oils on the skin after beginning the regimen.
- If you have persistent redness or itching, rinse the affected area, discontinue use of the wash, and call our office at (970)925-4500.
- If you swallow the wash, call Poison Control right away: (800)222-1222.

SPECIAL NOTE ABOUT SHAVING:

We ask that you **DO NOT** shave around your knee **for four (4) days** prior to surgery. Dr. Pevny will inspect your knee the morning of your surgery and will carefully shave the area at that time. If there are any breaks in your skin, your surgery may need to be rescheduled due to a risk of infection.



SURGERY INSTRUCTIONS SHEET

The Day Surgery staff will call you the day before your surgery with instructions. Complete this worksheet during that phone call.

Patient calls begin at 2pm one business day before the scheduled surgery date. This means Monday's surgical patients are called on the Friday before. You may contact the day surgery staff at 970-384-7166 if you have not received your instructions before 5pm one business day before your surgery date.

Fill in Your Personal Instructions Below:

Date of Surgery: _____

Check-in Time: _____

If you are late it may affect your surgery time, or result in rescheduling your surgery.

Surgery Time: _____

Eating Allowed Until: _____

Do not eat any food after midnight before your operation unless otherwise instructed.

Approved Clear Liquids Allowed Until: _____

Do not drink anything after midnight before your operation unless otherwise instructed.

Approved Clear Liquids Include: Water, Sports Drinks, Sodas, and Strictly Black Coffee (**DO NOT add milk/cream/sugar/honey**).

Any Additional Eating and Drinking Instructions: _____

Medication Instructions: _____

Medications You are Told to **STOP** Taking Below:

FREQUENTLY ASKED QUESTIONS

Q. Can I work out after my surgery?

We encourage you to exercise as much as you feel able to without increasing the swelling or pain in your new knee. This may be difficult immediately after surgery and your therapist will direct you to the best exercises for each stage of your recovery.

Q. Will my new knee set off airport security alarms?

Your knee is made of titanium and cobalt chrome with a small amount of plastic. It will likely trigger an alarm, be ready to inform the TSA staff at security that you have a total knee replacement and follow their instructions.

Q. How long until I can drive myself?

You are not able to drive while taking your narcotic pain medications. Driving after a total joint replacement is a safety concern. The ability to drive depends on whether surgery was on your right leg or your left leg, and the type of car you have. If the surgery was on your left leg and you have an automatic transmission, you could be driving at two weeks. If your surgery was on your right side, your driving could be restricted as long as six weeks.

Q. What are my options if I am discharged to home alone?

You may qualify for Home Health Services. A nurse and physical/occupational therapist visit you at home several times a week. Discuss this option with your surgeon. We recommend that you have friends or family available to come to your house and assist you at home with meals and household tasks.

Q. Can I take off the steri-strips if they are coming off, or should I wait and let them fall off by themselves?

We encourage you to allow them to fall off. However, if they are “hanging on by a thread,” you can gently pull them off after two weeks.

Q. When can I Shower? Can I submerge the incision area?

We want the incisions to be fully healed and free from scabs, which takes 14 days on average before you submerge. Clear this activity with your therapist or doctor. Shower as soon as you feel able after returning home. The dressings are water resistant so they can get wet, but do not allow the shower to hit the incisions directly. Pat the incisions dry thoroughly after your shower.

Q. How long should I expect my knee replacement to last?

Your knee replacement should last 20-30 years, depending on the health of your bone and soft tissue at the time of surgery and on your current activity level.

Q. When will I be able to get back to work?

We recommend that you take two to four weeks off from work. If your job is labor intensive, plan to take a few more weeks. A physical therapist can make recommendations for joint protection and energy conservation on the job.



Q. Will I be in pain after surgery?

You will likely be in some form of discomfort after surgery. This is normal. It is your body telling you to slow down to heal. Our team will work you through this process, taking your comfort into consideration in everything that we do. It is important to work through some discomfort to regain your knee range of motion. Dr. Pevny and your physical therapist will show you how to do this most effectively.

Q. When will I see my doctor following the surgery?

Your first postoperative office visit will be scheduled for 10-14 days after surgery, then 2 weeks after that first follow up appointment. After that, plan for appointments at one-month intervals. Your physical therapist will communicate with Dr. Pevny and his team regarding your progress.

Q. Do you recommend any restrictions after this surgery?

Be sure to follow all post-operative instructions, and you should enjoy full functional range of motion once you heal. You are encouraged to participate in low-impact activities such as walking, bicycling, dancing, golf, hiking, swimming, fishing, rafting, hunting and gardening. High-impact activities, such as running, jumping and contact sports are not recommended.

Q. How long will my recovery take?

With regular physical therapy, range of motion should be nearly restored within 4 weeks. With continued strengthening exercises, both strength and function of your knee should dramatically improve after three months. At six months to one year, you can expect to achieve a full recovery.

Q. Will I notice anything different about my new knee?

In many cases, patients feel that the new joint moves completely naturally. The most common patient comment is that they can sometimes feel or hear a clicking or clunking sound in the knee. Remember it may take up to a year to feel like yourself again. Discomfort in your foot and ankle is not unusual as they may have to adjust to the alignment of your new knee.

Q. How long do I wait before elective dental procedures?

It is possible, in some situations, for bacteria from the mouth, teeth or gums to travel through the bloodstream and settle in an artificial joint. In an attempt to prevent this occurrence, representatives from the American Dental Association and the American Academy of Orthopedic Surgeons developed these guidelines:

- Refrain from any dental work two weeks prior to surgery.
- Refrain from dental work for three to six months after surgery.
- Ask your dentist about having antibiotics prescribed and the timeframe for pre-medicating prior to any dental work to ensure safety.

YOUR SURGERY & HOSPITAL STAY

The Day of Surgery Game Plan

- The Valley View Valet is a free service. The Calaway-Young Cancer Center valet is open from 7:30AM to 5PM.
- Your first stop will be one of the hospital's registration desks 2 hours before your scheduled surgery time. From there, you'll be directed to the Day Surgery Department.
 - Registration at the Emergency Department entrance is open 24 hours a day.
 - Upper registration on the 2nd floor next to the Pharmacy is open from 7AM-3:30PM Monday-Thursday and from 8AM-2:30PM on Fridays.
- Once checked in to the Day Surgery Department, our nursing staff will begin preparing you for surgery by starting an IV and ensuring that you're comfortable.
- Dr. Pevny will come and answer any additional questions you may have and mark the knee that you are having replaced with a surgical marker.
- An anesthesiologist will meet with you to talk about your anesthesia and the nerve block you will receive for comfort.
- A nurse will take you into the operating room on a portable bed.
- You will return to the post anesthesia care unit (PACU) after surgery, where you will remain for about an hour while your vital signs normalize and your pain is controlled. Your family and friends will not be allowed to visit you in the PACU.
- Dr. Pevny will talk with your family members and then they will be invited to meet you in your Day Surgery room if you are headed home or they will meet you in your hospital room on the fourth floor if you are staying the night with us.

The Day of Surgery on the Fourth Floor

The duration of your hospital stay will be based on your progress, safety, and abilities. Most patients will be discharged in the afternoon the day after surgery.

- You will interact primarily with your nurse and patient care technician (PCT), who will be your advocates and care coordinators. Your nurse will be wearing Caribbean blue, and your tech will be wearing maroon.
- A nurse or therapist will help you out of bed to a chair, to the bathroom (once the catheter is removed) and for a walk. Do not try to get out of bed by yourself. He or she will help guide your movements, monitor pain and dizziness, and keep you safe from possible falls.
- You will be weaned off the IV pain medication and switched to an oral pain medication. Medications and tasks are scheduled and completed in specific blocks of time. If you have more urgent needs or need anything done at a specific time, communicate this with your nursing team.
- An IV will continue to deliver fluids into your system until you are eating and drinking well. Your nurse will help progress your diet after surgery. You will be transitioned back into real food, starting with ice chips and then on to more solid foods.



The Day of Surgery on the Fourth Floor (Continued)

- You may awake with an oxygen tube in your nose. A respiratory therapist will monitor your oxygen level and may teach you deep breathing and coughing exercises that you will use for several days after your surgery.
- You will experience some pain. The goal is to reduce your pain enough for you to rest and take part in therapy.
- A physical and occupational therapist will work with you every day.
- You will have ice packs on your knee for swelling and pain management; these should be changed every hour.
- To improve circulation and help prevent blood clots, you should perform ankle pumps/circles and walk with assistance as much as you can tolerate.
 - You will also be using the drug Lovenox® or Aspirin to prevent blood clots while in the hospital.
- Vital signs will be performed every four hours throughout the day and night. You can also expect other periodic interruptions while your care staff is working to keep you safe and healing well. The staff will work to cluster your care together to minimize these interruptions, but if you feel that you aren't receiving the rest that you need, your nurse can help to advocate for more quiet time.
- Nurses will communicate at shift change using a bedside report. They will come to your room to introduce the oncoming nurse, review the previous shift, and discuss expectations for the next shift. He or she will also answer and address any questions or concerns you may have.
- Visitors are welcome and are best scheduled later in the afternoon or evening.
- Dr. Pevny may have you use a Continuous Passive Motion (CPM) devices during your hospital stay. It is a machine that gently moves your knee from a bent position to a straight position. It can help move swelling out of the knee and decrease the chances of your knee getting stiff.



CPM Machine

The Day after Surgery

- A nurse will still assist you while getting in and out of bed and into the bathroom. He or she will also explain your discharge instructions as you could be going home on this day.
- A physical therapist and/or an occupational therapist will instruct and assist you in understanding the following:
 - Your home exercise program.
 - Proper use of your ice management.
 - Bathing, dressing and other functional activities.
 - Safe ambulation and functional mobility.
 - Preparation for your safe return home.
- Dr. Pevny or Rachael Wymer will come and talk with you about how your surgery went and the next steps forward.
- Dr. Pevny or Rachael Wymer will change your dressing and may have you wear tight compressive stockings on both legs for 2 weeks.
- A nurse will remind you how to use your ON-Q pump and teach you how to remove its catheter. Complete instructions will also be provided by your anesthesiologist if you have this pump.
- Your nurse will go over any remaining instructions and issue your prescriptions just prior to your check out. If you have any specific needs regarding transportation home or timing for leaving, please discuss this with your nurse.



When You Are Ready to Leave the Hospital for Home:

- You cannot drive yourself and you are responsible for arranging a safe ride home.
- You will receive written discharge instructions including home medications, physical therapy, activity, wound/dressing care, etc.
- All medical equipment needed (ice packs, Ace Wrap etc.) will be arranged by the hospital staff.





AT HOME AFTER YOUR SURGERY

Monitor Your Healing

Healing after a total knee replacement can be uncomfortable but you need to know what signs of healing need immediate professional attention. An on call provider is ready to help you at all times, **immediately call 970-925-4500 if you experience any of the following:**



- A fever over 101.5 degrees.
- An increase in bleeding from the surgical site.
- Worsening pain that is not controlled by medication or position changes.
- Worsening nausea or vomiting.
- Increased swelling that is not controlled by cold therapy or position changes.
- Increased redness around your incisions and/or cloudy fluid draining from the incision.
- Or if you get the feeling that something is just not right.
- **Call 911 with** Shortness of breath and/or chest pain symptoms.

If you have questions about upcoming appointments or medications, please message “Dr. Pevny” through your Valley View Hospital Patient Portal for the timeliest response.

Cold Therapy for Pain and Swelling

- When using cold packs: place them on the front and back of the knee with an ace wrap.
- The Nice1 cooling device provides compression and cold water circulation through a wrap that is placed around the knee. It is not essential but is an excellent choice for pain and swelling control. The approximate out of pocket cost for a 2 week rental is \$325. Please talk with the surgical team if you would like this option.
 - Always apply and remove the device from your knee **only** when the knee wrap is empty and the hose is unattached.
 - Set the compression settings on the NICE1 to continuous or intermittent based on your preference. If it is too uncomfortable do not use compression.
- Application Instructions:
 - Apply your chosen cold therapy over a thin layer of clothing with the knee straight in a supported and elevated position. Use cold therapy consistently throughout the day and night for the first three days, then you may decrease to day use only for the next 1 to 2 weeks. Apply cold therapy to your knee for 20 minutes, every hour or as needed.



Cold Packs



The NICE1

Additional ON-Q Tips:

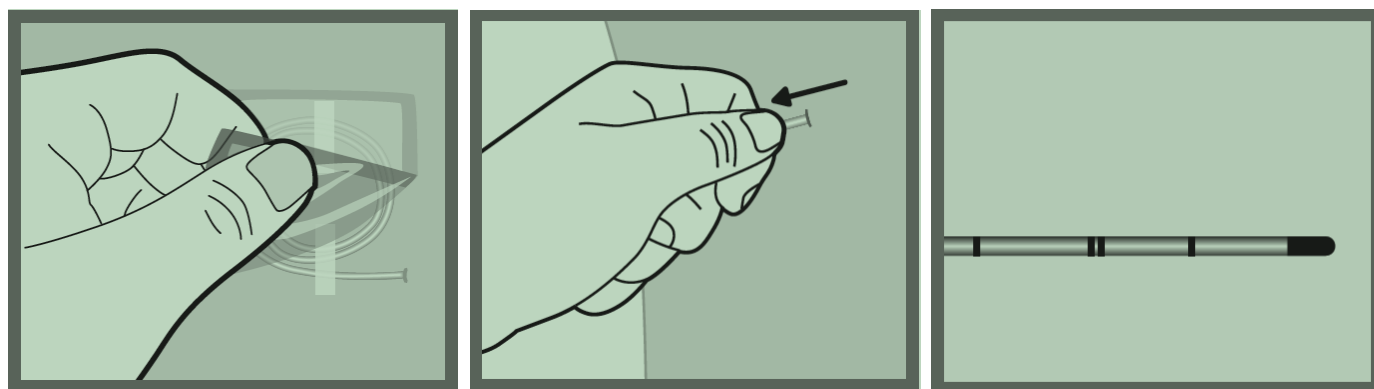
- The pump may be clipped to your clothing, surgical dressing, or it may be placed in a small carrying case.
- Do not tape or cover up the circular filter near the pump.
- It may take longer than 26 hours after your procedure to notice a change in the size and look of the pump.
- You **will not** see fluid in the line or air space in the pump ball. The tubing will look clear and you **will not** see the medicine moving. Do not squeeze the pump.
- As the medicine is delivered, the outside bag on the pump will form wrinkles and the pump ball will gradually become smaller.

How to Remove Your ON-Q Catheter:

You will need to remove your ON-Q catheter by day 5 or sooner if all of the medicine has been delivered (3-5 days).

Follow ON-Q manufacturer instructions and use keeping in mind these key steps:

- Wash your hands thoroughly with soap and warm water and dry them well.
- Remove the dressing covering the catheter site. Remove any skin adhesive strips.
- Do not cut or pull hard to remove the catheter.
- Grasp the catheter close to the skin, and gently pull on the catheter. It should be easy to remove and not painful.
- You can dispose of the entire kit in the regular trash.



IMPORTANT: After you remove the ON-Q catheter, check the catheter tip for the black marking to ensure the entire catheter was removed. Call your anesthesiologist if you don't see the black marking.

On the day of surgery your anesthesiologist will give you their phone number in case you have questions or concerns about the ON-Q pump.

- You can write that number here as well: _____

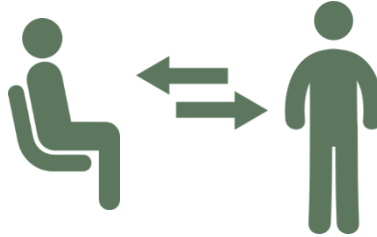


Let Our Pros Help You Tackle New Challenges

Your physical and occupational therapists will help problem solve and address any challenges you may experience at home. Below are some tips to make life a little easier.

Moving Around with Your New Knee:

- **Sitting to Standing:** Slide to the front edge of the chair. Bend each knee as much as possible, bringing your feet underneath you. Push up with both hands on the armrests. If sitting in a chair without armrests, place one hand on the walker while pushing off the side of the chair with the other.
 - If you are using crutches, put both crutches in the hand on the side of your operative leg. Push through the other armrest to stand up. Once you have your balance, move both crutches under your arms.



- **Standing to Sitting:** Back up until you feel the chair behind you. Bend slightly at your hip and reach behind you with one hand and grab the armrest or the side of the chair surface. Do the same with the other hand then lower yourself onto the front of the chair.
 - If you are using crutches, hold both crutches in the hand on the side of your operative leg.

- **Going Up and Down Stairs:** If you are using a walker, have someone take your walker to the top or the bottom of the stairs. Always hold onto the handrail. Have someone support you on the opposite side as needed. Go up starting with the good leg first (“Up with the Good”). Go down starting with the surgical leg first (“Down with the Bad”).
 - If you are using crutches, hold the handrail with one hand. Put both crutches in your other hand. Support your weight evenly between the handrail and your crutches and use “Up with the Good”, “Down with the Bad” sequence as above. Always move your crutches in conjunction with the surgical leg.



Activities with Your New Knee:

- **Dressing:** Initially your surgical leg will be larger as it heals; it will be easier to wear loose fitting pants or shorts early on. You will likely need to sit on the edge of a chair or bed to put on your pants and socks. Slip-on shoes with heel cup and rubberized soles are recommended as bending your knee to tie your shoes may be difficult.
- **Sleeping:** We suggest sleeping with the knee supported in a straight position elevated on pillows. Do not support the knee in a bent position as this will delay your recovery. Keep your pain medication nearby as you may need it during the night.
- **Transportation:** You will not be able to drive yourself until you are completely off of your pain medications. Before getting into the passenger side of the car, push the car seat all the way back and recline it if possible. Back up to the car until you feel it touch the back of your legs. Reach back for the car seat and lower yourself down. Duck your head so that you don't hit it on the door frame. Scoot back onto the seat and lift one leg at a time into the car. Use this sequence in reverse to get out of the car.
- **Getting In and Out of the Tub or Shower:** Have a family member help support you when stepping into and out of the tub.
 - If you do not feel comfortable standing in the shower we recommend placing a chair onto a non-slip surface in the tub so you can sit as you shower.



Additional Tips for Activities of Daily Living

- Don't place your crutches, walker, or cane too far ahead or it could slip out from under you.
- Always keep walking device close to you when you sit down so it is easy to reach when you get up.
- Sit in higher chairs with arms. It makes it easier to get up and down.
- Rise slowly from a sitting or lying position so as not to get light headed.
- Slow down. Plan extra time to get around. Stop and rest frequently.



Keep Your Recovery Moving Forward with These Home Exercises

To get the most out of your exercises be sure to breath during all activity. The pain may make you want to hold your breath; do not hold your breath.

- 1. Ankle Pumps:** While sitting in a chair or lying on your back in bed with your knees straight, slowly push your feet forward (like a gas pedal) then pull them backwards. Do this with **both feet 1,000 times a day.**



For Exercises 2-4 Perform 10 Repetitions 5 Times a Day.

Short Arc Quads: Place a rolled up towel or object under your knee and slowly straighten your knee as your raise up your foot while increasing pressure on towel behind knee. Hold this for 3 seconds, and then relax foot back to surface.



- 2. Straight Leg Raise:** While laying down, squeeze the muscle above knee cap to straighten knee, then lift your leg up as high as pictured keeping your knee as straight as possible. Pause briefly at the top and slowly lower back to the bed.



- 3. Heel Slides:** While lying on your back in bed, bend your knee and slide your heel to your buttock as far as you can with minimal discomfort. Then slowly slide it back out straight.



Perform the Following 2 Stretches 5 Times a Day.

- 4. Propped Knee Straightening Stretch:** While sitting in a chair or lying down, place the foot of your surgical leg on top of another chair seat or towel, then rest in this position with the toes pointing to the ceiling for 15 minutes.



- 5. Knee Bending Stretch:** Option 1: While sitting in a chair use your non-surgical leg to help bend your surgical knee. Option 2: Keep surgical knee planted on floor and scoot body forward in chair. Perform either option until a firm stretch is felt, hold 30 seconds, and repeat it 5 times.



NOTE: The Physical Therapist that will follow you upon discharge will progress your exercise program as you heal. These are just the beginning!

Manage Your Postoperative Pain

Your goal is to be completely transitioned from opioids to your preferred over the counter pain medications 2 - 4 weeks after surgery. Keep in mind that the goal of taking pain medication is not to be pain free after a major orthopedic surgery, but to be comfortable enough to get some sleep and participate in your physical therapy program. **IMPORTANT NOTE:** Please plan ahead as we need 24 hours to properly process any medication refill request and we do not refill medications over the weekend.

- **Anti-inflammatory Medication Use:** Take your prescribed dose of Meloxicam OR Celebrex
- **Tylenol Use:** You may take 650mg every 6 hours **OR** 975mg-1000mg every 8 hours. **DO NOT** take more than 3000mg in a single 24 hour period.
- **How to Wean Off of Narcotics:** Be consistent with the medications above as you complete the following steps.
 - **Step 1:** Increase the amount of time between doses.
 - Example: Take a dose every 5-6 hours for 1-2 days. Then take a dose every 7-8 hours for 1-2 days.
 - **Step 2:** Start to reduce the dose amount.
 - Example: Decrease from 2 pills to 1 pill at each dose for 1-2 days.
- Cold therapy is also very helpful in reducing your pain in the first few weeks after surgery. Refer to page 20 for details.
- **DO NOT** take additional ibuprofen (Advil®, Motrin®) or naproxen (Aleve®) unless explicitly directed by Dr. Pevny.



Address Any Postoperative Constipation

Constipation is one of the most common postoperative complaints, as it's a common side effect from anesthesia and narcotic pain medications. Constipation is defined as infrequent bowel movements, fewer than three a week, and is associated with the following symptoms:

- Difficulty passing stool or incomplete bowel movements
- Bloated or swollen abdomen
- Hard or rock-like stool

Help keep your bowels regular by continuing your pre-surgical laxative protocol when you come home.

- Take MiraLAX twice daily: one dose (17 grams) in the morning and again in the evening, each with an 8 oz. beverage of choice, especially while you are still taking narcotic pain medications.
- Introduce foods rich in fiber (36g/day).
- Increase daily water intake: drink at least 8 cups.
- Include fresh/dried fruits vegetables, whole wheat/oat bran, prune juice and/or oatmeal.



YOUR RECOVERY PROCESS

Steps to Get Back in the Game

The ultimate goal of your total knee 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 therapist will likely release you to independent activities 6 to 12 weeks after surgery. Don't let anyone tell you that the rehabilitation portion of your recovery is easy. It will take hard work and dedication. We're here to encourage and guide you on to the best outcome possible.

During Rehabilitation Follow These Precautions

- **For the First 4 Weeks:**
 - Do not rest the leg in a bent knee position after surgery for greater than 30 minutes at a time.
- **Long Term:**
 - No repetitive impact activity recommended.
 - Running, jumping, or contact sports.



EXPECTED PHASES OF RECOVERY

Phase I: Weeks 1-3 —Motion and Quadriceps Control

- Your surgical knee will be painful during the early weeks of this phase. This is normal and expected as you heal from the surgery.
- Your knee is cemented in place and is very stable at this time. Although it is stable and healing well, you will not have normal use of your surgical leg in this phase.
- We expect that you will be able to bend and straighten your surgical knee with moderate difficulty and discomfort. Your goal is to be able to get your knee complete straight as soon as you can and to 90 degrees of bend by the 3rd week. We expect the motion to improve steadily if you put in the work.
- Prescribed exercises and hands on therapy will increase knee motion and help decrease your pain and inflammation. If the swelling in your knee increases you are working the knee too much or resting, elevating and icing too little.

Phase II: Weeks 4-6 — Functional Movement and Strengthening

- If you walked without a walker or cane before surgery, we expect you to walk without these devices at this time.
- We expect you to be nearing full range of motion (0°-120°) as you return to normal household activities and stair management with mild discomfort.
- Even though discomfort may still be present, we expect you to significantly decrease or stop pain medication use during this phase.
- Additional exercises will be given to strengthen the muscles around the hip and knee.

Phase III: Weeks 7+ — Slow and Progressive Return to Activity

- We expect that you will have muscle soreness that does not require pain medication as you increase work to improve the strength and motion of your surgical leg.
- We expect you to have full motion of your new knee in this phase.
- Prescribed exercises will help maintain full range of motion, increase your balance and increase comfort with stairs and squatting tasks.
- You will slowly begin to return to full pre-injury function, excluding impact and pivot/twisting activities, under the direction of Dr. Pevny or your physical therapist.
- Prescribed exercises in this phase will get you on a path to the strength, power and endurance needed to return to the activities you love.
- You may not have full strength of your surgical leg at this time, but you will have a plan in place for continued training to meet your goals.

Phase IV: Weeks 12+ — Final Home Exercise Program

- We expect that you will have minimal to no discomfort at this time.
- You will not likely be in physical therapy at this point but you should still be working hard to get your strength back to normal.
- You will be able to return to more full-duty work and engage in more recreational activities
 - If you have a specific activity you are worried about returning to, Dr. Pevny will be able to give you the best recommendation.

If you are having concerns about your recovery you can reach out directly to Rachael Wymer PA-C at (208)484-6040.



Set Up and Keep Your Follow-Up Visits with ValleyOrtho

Dr. Pevny, Rachael Wymer and your physical therapist will be in constant communication regarding your progress. It is important to attend your ongoing care appointments to be certain that your knee replacement is performing properly. By conducting regular physical exams and reviewing X-rays, Dr. Pevny can identify any problems that may be developing even before you develop physical symptoms.

Schedule follow-up appointments at these intervals

Post-Surgery

- 10-14 days after your surgery date.
- 5-6 weeks after your surgery date.
- 3 months after your surgery date.
- 6 months after your surgery date.

Ongoing Care

- Any future visits will be scheduled as you and your care team feel you need after your 6 month follow up. We are always here to answer your questions down the road as you get back to your regular activities.

At ValleyOrtho, we appreciate your confidence, and we'll do our best to keep earning it.

We're honored that you've chosen ValleyOrtho to help you regain your freedom of motion. And we'll be the first to wish you happy hiking, biking, skiing, gardening, and grandchild-holding with your new knee. In short, we'd like nothing more than to help you get off the bench and back onto the playing field of your life.

ThankYOU!

