

Safe Life at Home<sup>SM</sup> Orthopedic Program

# Total Knee Replacement Patient Education Booklet



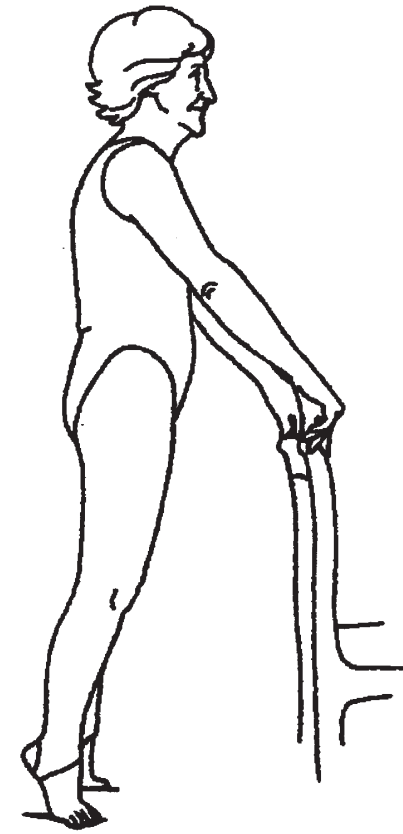
### 19. Heel Raises

**Directions:** Holding on to a stable object, stand on tip toes, raising your heels. Return heels to floor and repeat.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times**

**\_\_\_\_\_ Times a Day**



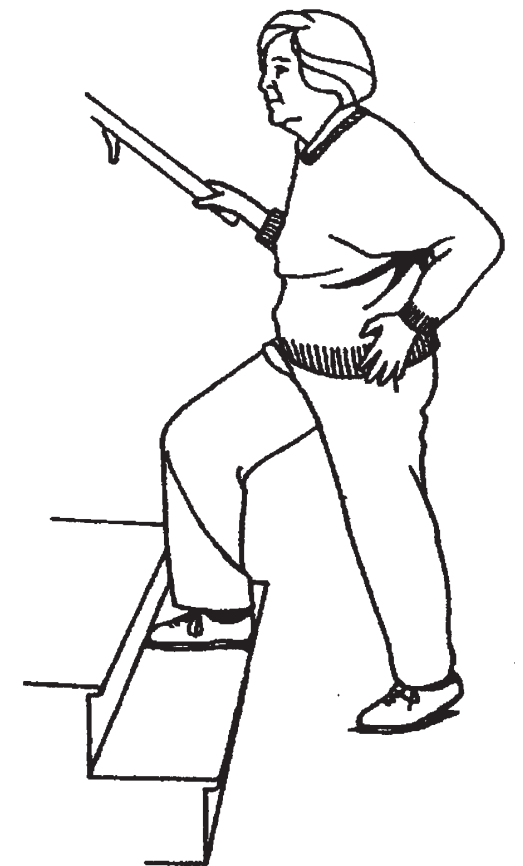
### 20. Step Ups

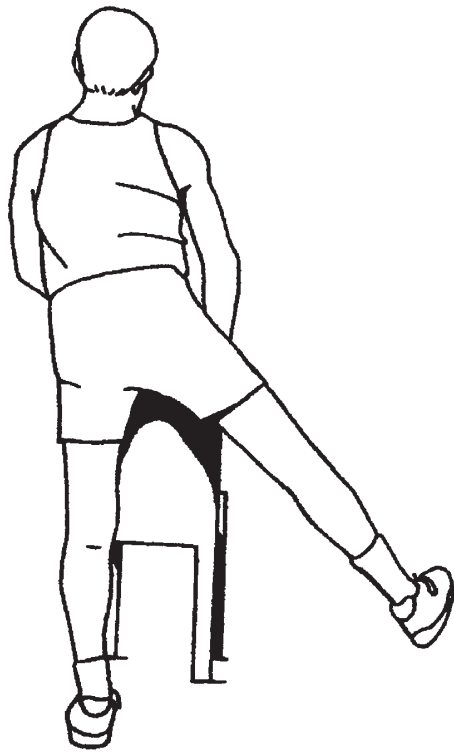
**Directions:** Step up with operated leg. Bring body up to step. Then lower body back down using operated leg.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times**

**\_\_\_\_\_ Times a Day**





## 17. Standing Abduction

**Directions:** Holding onto a stable object, kick leg out to side keeping knee straight and then return to center. Alternate legs.

**Hold for** \_\_\_\_\_ **seconds.**

**Repeat** \_\_\_\_\_ **Times**

\_\_\_\_\_ **Times a Day**

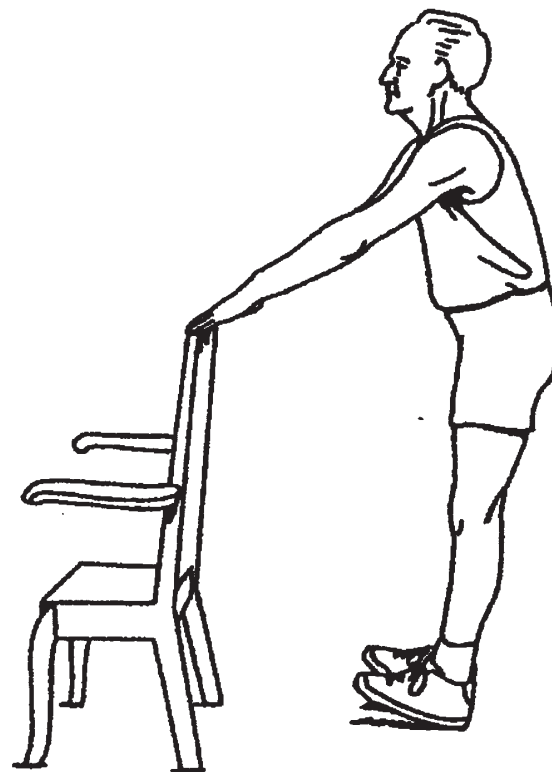
## 18. Toe Raises

**Directions:** Hold on to a stable object. Stand on heels, raising toes up off floor. Return toes to floor and repeat.

**Hold for** \_\_\_\_\_ **seconds.**

**Repeat** \_\_\_\_\_ **Times**

\_\_\_\_\_ **Times a Day**



## Thank You For Choosing Guardian Home Care!

This booklet is designed to assist you through your recovery period with **Guardian Home Care**. It will provide a guideline of what you can expect following your surgical procedure. It will also help you as well as your family and caregivers to better understand what intervention has taken place and what you can expect during your rehabilitation. This booklet will be an important aspect of communication and instruction between you, your family and caregivers, and most importantly your doctor.

## What you can expect from Guardian Home Care Safe Life Orthopedic Program

**Guardian Home Care** has developed an **Orthopedic Program** designed to deliver quality home care-based services following your surgical procedure. Our program adheres to the guidelines established by the American Academy of Orthopaedic Surgeons and the National Institutes of Health.

Our approach is to focus on you and your family and caregivers by utilizing the professional skills of nurses, physical therapists, occupational therapists and home health aides who work in conjunction with your doctor to make sure your recovery is complete.

You can expect friendly, courteous and concerned professionals who are dedicated to achieving the best possible outcomes for a successful rehabilitation. Our goal is to ensure that you have received the best care that will allow you to manage all of your day-to-day activities.

Your doctor will be continually informed of your progress by the use of a **Scorecard**, which will let them know exactly how you are progressing.

It will be important for you as the patient to follow the directions and guidance of your doctor and all of the professionals involved in your care. If you have any questions or concerns regarding your care or the **Safe Life Orthopedic Program**, please contact us. View our list of office locations and phone numbers on page 6.

Thank you again for choosing **Guardian Home Care** and we look forward to working with you during your recovery.

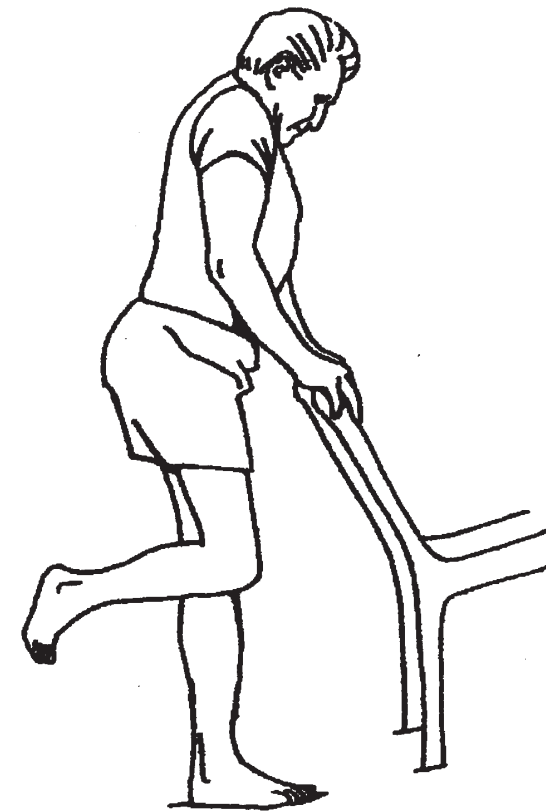
### 15. Standing Hamstring Curl

**Directions:** Holding on to a stable object, slowly bend knee as far as possible.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times**

**\_\_\_\_\_ Times a Day**



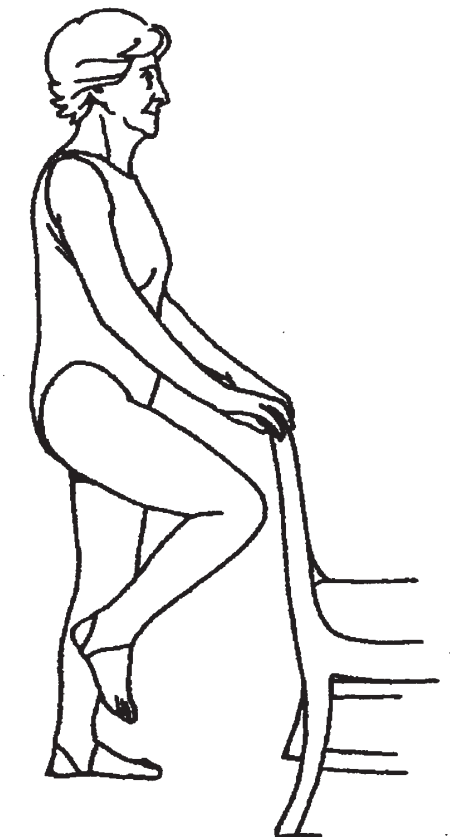
### 16. March in Place

**Directions:** Holding on to a stable object, bring leg up with knee bent. Alternate steps with both legs.

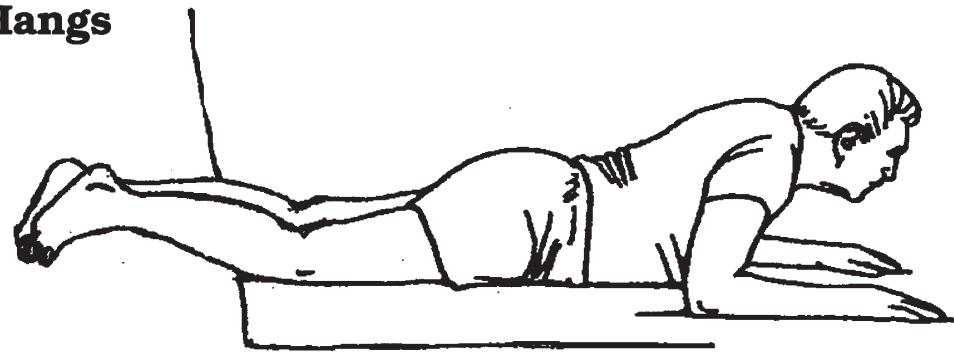
**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times**

**\_\_\_\_\_ Times a Day**



### 13. Prone Hangs

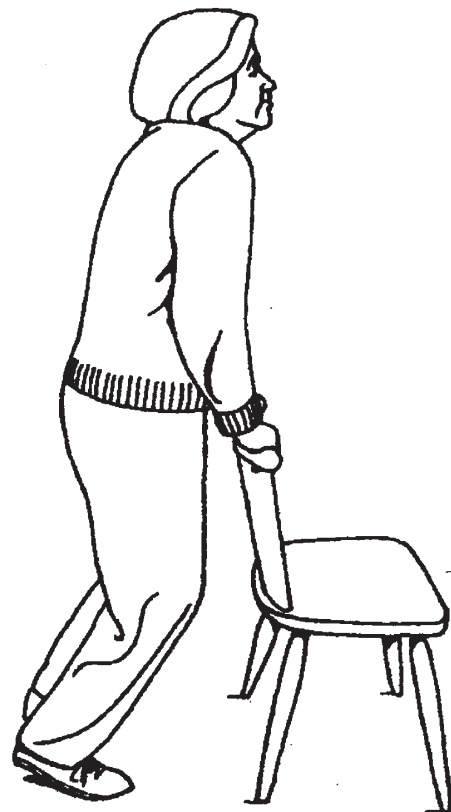


**Directions:** Lie on stomach with operated knee at edge of bed. Allow foot to hang off bed creating a stretch.

**Hold for** \_\_\_\_\_ **seconds.**

**Repeat** \_\_\_\_\_ **Times** \_\_\_\_\_ **Times a Day**

### 14. Mini-Squats



**Directions:** Holding onto a stable object, slightly bend knees and then slowly straighten.

**Hold for** \_\_\_\_\_ **seconds.**

**Repeat** \_\_\_\_\_ **Times**

\_\_\_\_\_ **Times a Day**

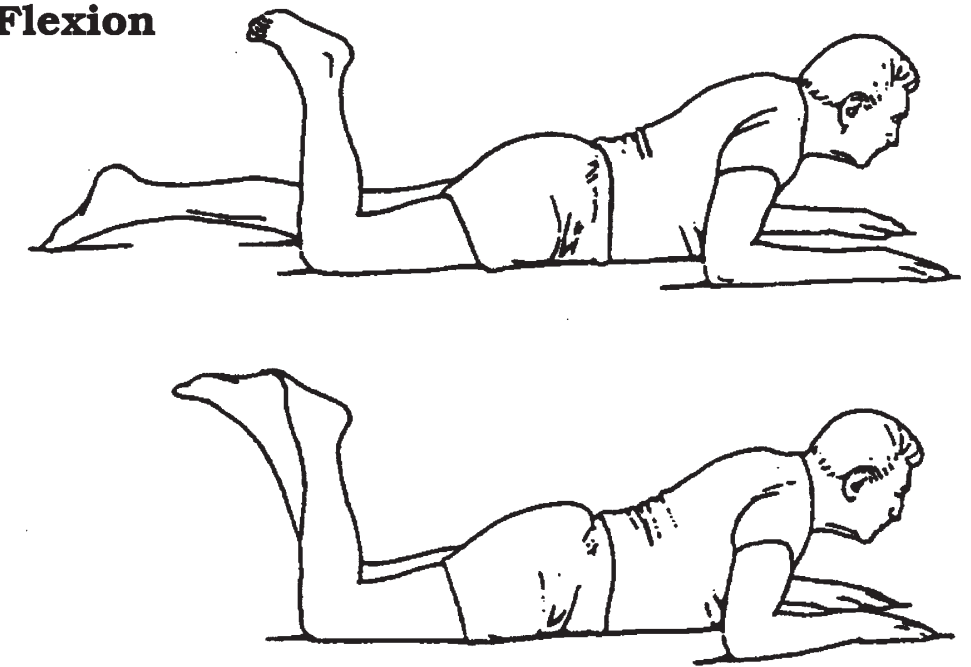
## Notification of Patient's Right to Freedom of Choice

Staff members of Guardian Home Care have told me and I understand that I have the right to choose which agency will provide home health services to me. My signature below means that I have chosen Guardian Home Care to provide home health services to me.

\_\_\_\_\_  
*Signature of Patient*

\_\_\_\_\_  
*Date*

### 11. Prone Flexion



**Directions:** Bend knee, bringing heel toward buttocks. Can use other leg to gently push.

**Hold for** \_\_\_\_\_ **seconds.**

**Repeat** \_\_\_\_\_ **Times**      \_\_\_\_\_ **Times a Day**

### 12. Prone Knee and Hip Extension



**Directions:** Lift operated leg off bed while keeping knee as straight as possible.

**Hold for** \_\_\_\_\_ **seconds.**

**Repeat** \_\_\_\_\_ **Times**      \_\_\_\_\_ **Times a Day**

## 9. Knee Flexion (Sitting)

**Directions:** Keeping feet on floor, slide foot back, bending knee as far as possible.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times**

**\_\_\_\_\_ Times a Day**



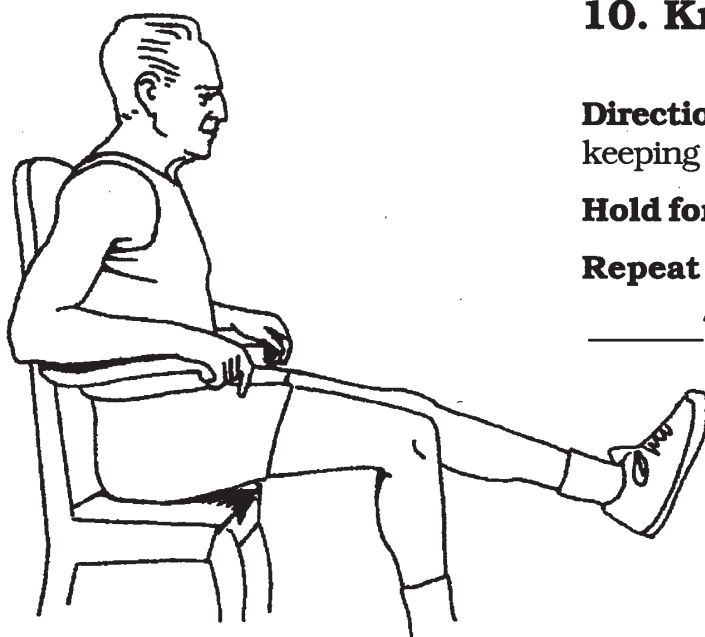
## 10. Knee Extension (Sitting)

**Directions:** Straighten leg out in front, keeping knee as straight as possible.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times**

**\_\_\_\_\_ Times a Day**



## Safe Life Orthopedic Patient Education Overview

Guardian Home Care has developed an **Orthopedic Management Program** dedicated to assisting physicians, patients and caregivers to improve the health status of all clients.

Our **Safe Life Orthopedic Management Program** is designed to deliver quality home care services utilizing experienced therapy staff with extensive orthopedic assessment and pain management skills.

Guardian Home Care offers a unique approach to achieve continuity of care for home care patients. **Guardian Home Care's Safe Life Orthopedic Management Program** is designed specifically for the Orthopedic management of the following surgical procedures with similar orthopedic diagnoses or surgical diagnoses, which include but are not limited to:

- Total Hip Replacement
- Hemi/Uni/or Partial Hip Replacement
- Hip ORIFs (Open Reduction and Internal Fixations after a Fracture)
- Hip Resurfacing Procedures
- Total Knee Replacement
- Partial Knee Replacement

Our program adheres to the guidelines of the American Academy of Orthopaedic Surgeons and the National Institutes of Health. Our **Safe Life Orthopedic Management Program** will provide a comprehensive treatment approach with consideration for a patient's individual needs.

### What can you expect from Guardian Home Care's Safe Life Orthopedic Program?

You can expect quality patient care, outstanding continuity of care and an evaluation of program effectiveness through **outcome scorecard data reporting** as well as patient and physician satisfaction.

Our **Safe Life Orthopedic Management Program** goal is to teach patients and caregivers how to manage their day-to-day lives after experiencing a musculoskeletal or orthopedic condition that results in surgical or medical intervention.

You can be confident that **Guardian Home Care** is dedicated to achieving optimal clinical outcomes for your patients. For more information or if you have any questions about the **Guardian Home Care Safe Life Orthopedic Management Program**, please contact us at:

**Tennessee**

**Athens**  
Toll Free: 888-745-7131

**Cleveland**  
Toll Free: 888-473-8886

**Dickson**  
Toll Free: 800-244-0201

**Dunlap**  
423-949-9222

**Hixson**  
Toll Free: 877-870-9971

**Nashville/Franklin**  
Toll Free: 800-771-2083

**Georgia**

**Athens/Bogart**  
Toll Free: 866-354-6078

**Marietta/Atlanta**  
Toll Free: 888-664-9272

**Riverdale/College Park**  
Toll Free: 866-909-3224

**Gainesville**  
Toll Free: 800-311-3038

**Roswell**  
Toll Free: 888-664-9272

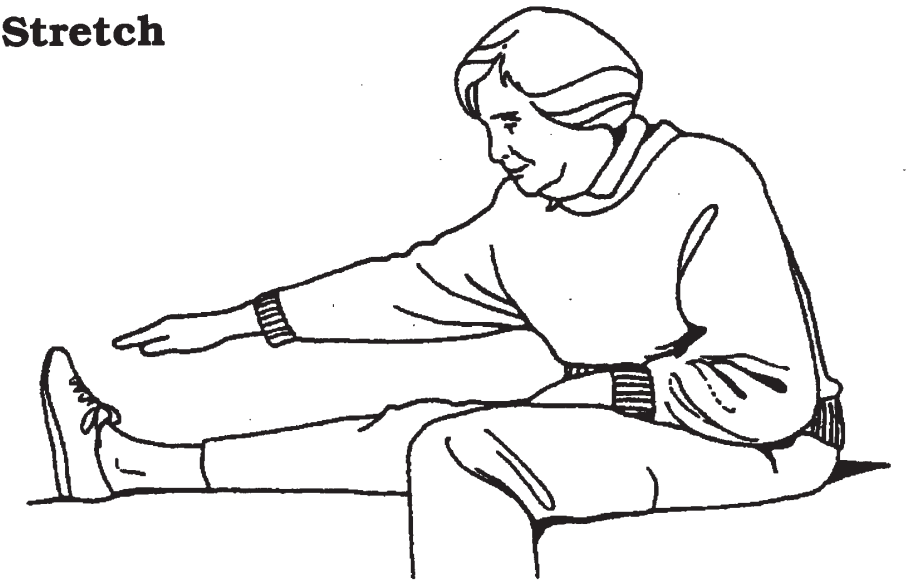
**Snellville**  
Toll Free: 866-982-2231

**Guardian Home Care** is an agency committed to meeting home care needs for patients and their families. We are known for our compassionate care and experienced staff of educated professionals, who are respected and valued by physicians, hospitals, and health care workers.

**Guardian Home Care** offers unique programs that focus on you and your family. Our approach is to evaluate you and your home to make sure nothing will stand in the way of your healing and return to good health.

**Guardian Home Care** employs skilled nurses, physical therapists, occupational therapists, speech therapists, and home health aides who work together to provide outstanding home health care. We follow a specific care plan under the consultation of your physician and in conjunction with the hospital to make sure your transition to home is smooth and comfortable.

**7. Hamstring Stretch**



**Directions:** Sitting with operated leg straight on bed, and foot of other leg on floor, lean forward toward toes. Keep knee as straight as possible.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times \_\_\_\_\_ Times a Day**

**8. Abduction**

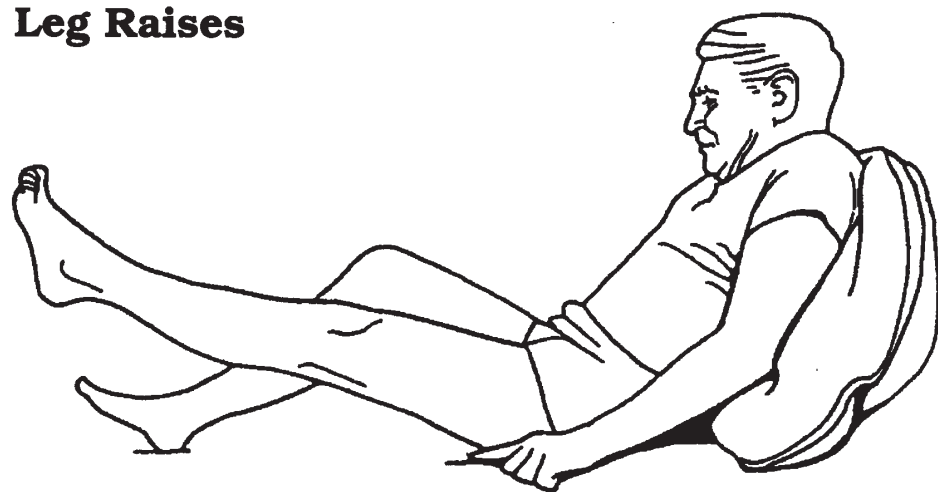


**Directions:** Tighten thigh muscles and slide leg out to side. Return to center.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times \_\_\_\_\_ Times a Day**

## 5. Straight Leg Raises



**Directions:** Bend opposite knee putting foot flat on bed. Keeping knee straight by tightening thigh muscles, lift straight leg off of bed.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times \_\_\_\_\_ Times a Day**

## 6. Heel Slides



**Directions:** Bend knee and pull heel toward buttocks.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times \_\_\_\_\_ Times a Day**

## Total Knee Replacement

### What is a Knee Replacement?

Knee replacement is a surgical procedure in which the diseased parts of the knee joint are removed and replaced with new artificial parts. These parts are called the prosthesis. The goals of knee replacement surgery are to improve mobility by relieving pain and improve the function of the knee.

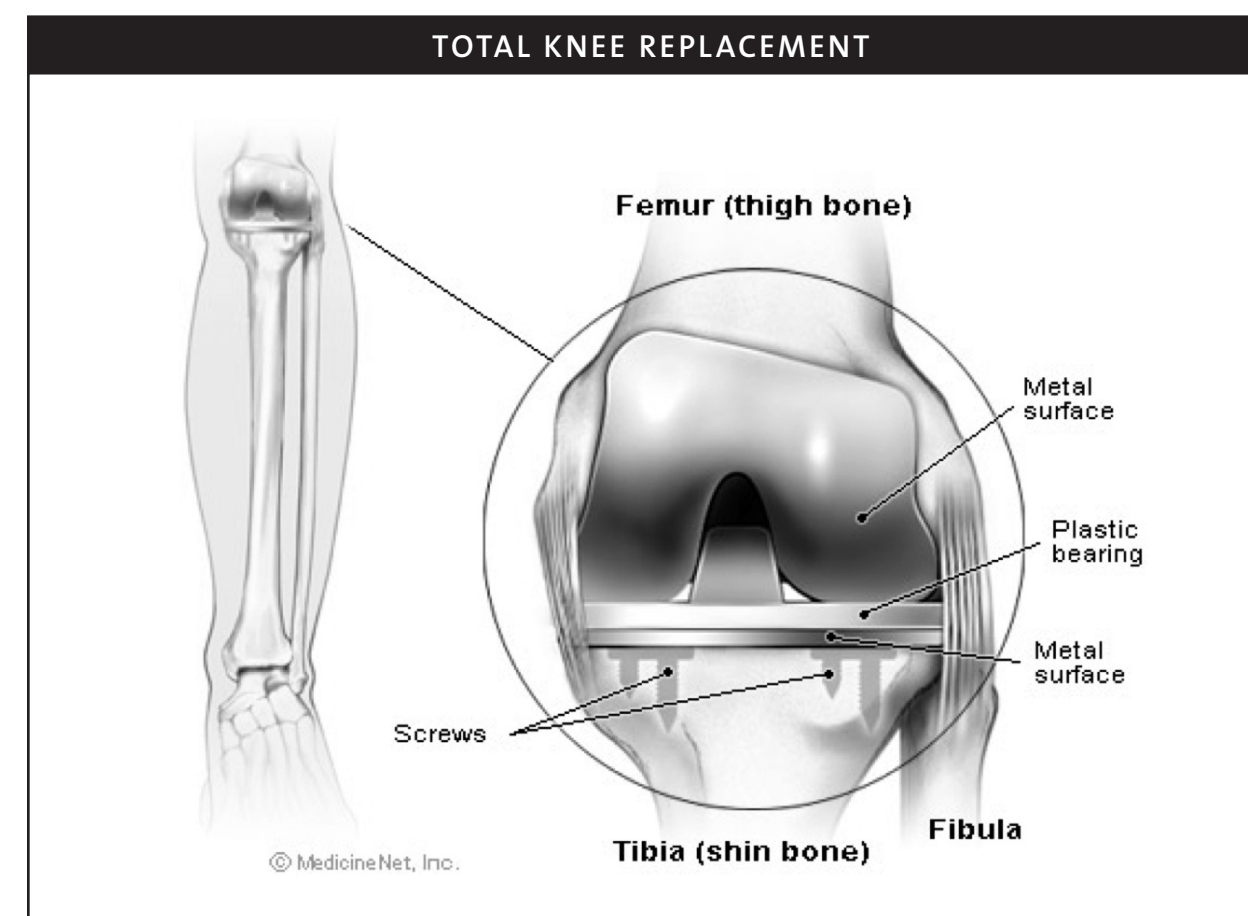


Illustration of knee replacement reprinted with permission from Medicinenet.com, 2009

### Common Causes for Knee Replacement Surgery

The most common causes for knee replacement surgery are the wearing down of the knee joint that results from osteoarthritis. Other conditions, such as rheumatoid arthritis (a chronic inflammatory disease that causes joint pain, stiffness, and swelling), injury, fractures and bone tumors may also lead to breakdown of the knee joint and the need for knee replacement surgery.

### When To Notify Your Home Health Agency

Notify Us Immediately if you have:

- Temperature above 101°F orally (or 100°F rectally)
- Increase in drainage from incision or change in drainage colors
- Warmth at the incision site
- Redness at the incision site
- Unusual pain or tenderness at the incision site
- Pain or Warmth in either calf muscles
- If your wound develops an odor.

### Keep Your Doctor Appointment

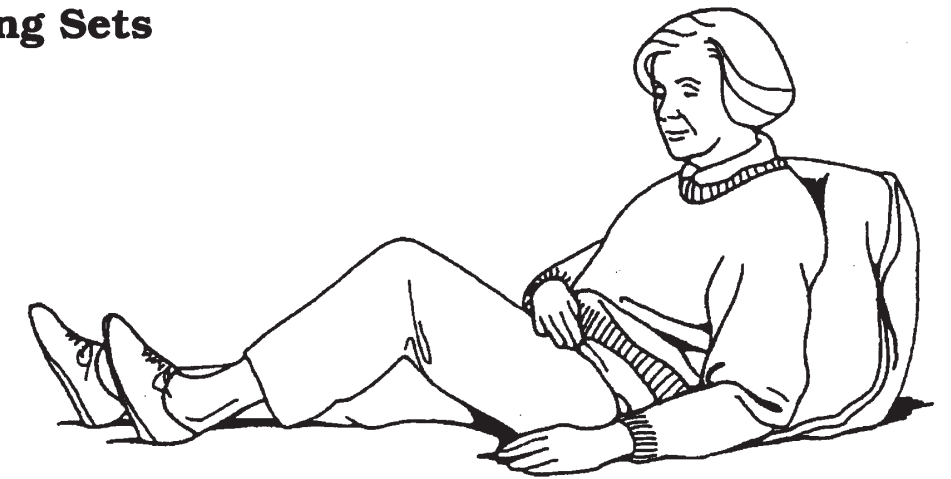
It is very important for you to schedule and keep your doctor appointments. Your doctor has ordered home care to supplement his or her care but not to replace it. Your doctor is the only person who can make changes in your medication and order tests that may be indicated. Discuss any transportation problems you may have with your nurse/therapist in order that they may assist your home care needs.

### Incisional Care

Unless otherwise instructed by your doctor, nurse or therapist, unwrap your elastic bandage or take your dressings off daily to expose your incisions. Look at your incision carefully at least daily to check for the following signs of infection:

- Redness
- Warmth
- Onset of drainage or change in color of drainage
- Presence of fever, pain or tenderness at the surgical incision
- Onset of an odor

### 3. Hamstring Sets

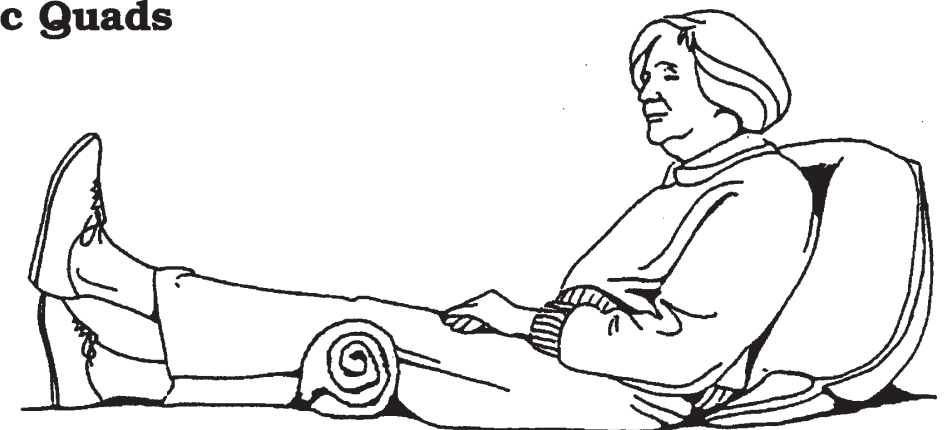


**Directions:** With leg bent slightly, push heel into bed without bending knee further.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times \_\_\_\_\_ Times a Day**

### 4. Short Arc Quads



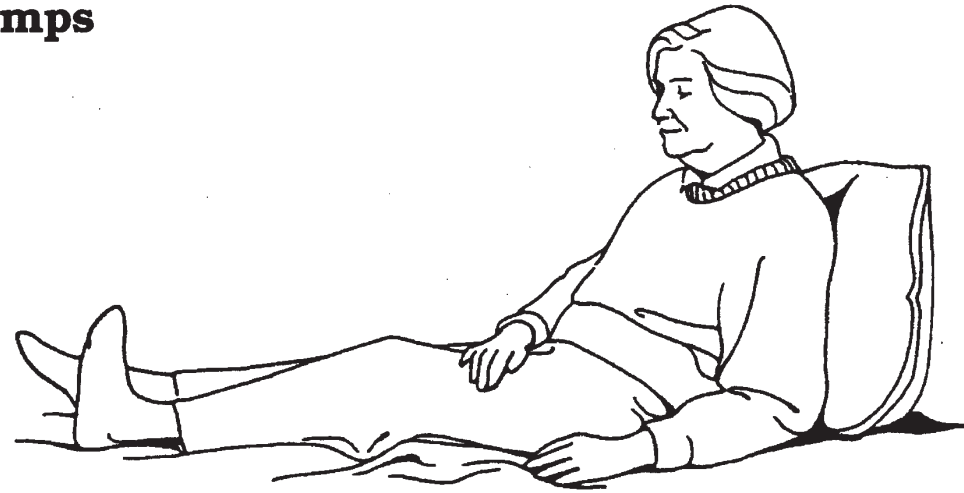
**Directions:** Place a towel roll under knee. Straighten leg lifting foot off bed.

**Hold for \_\_\_\_\_ seconds.**

**Repeat \_\_\_\_\_ Times \_\_\_\_\_ Times a Day**

## Knee Replacement Exercises

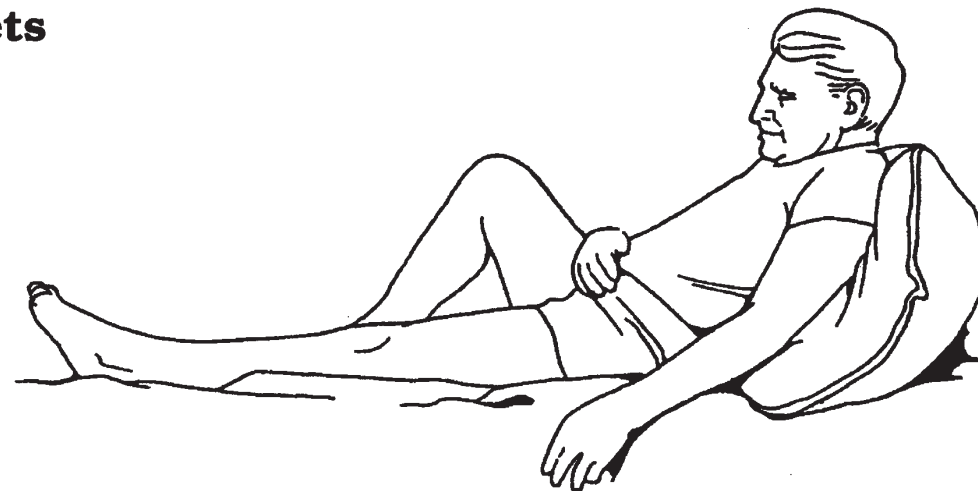
### 1. Ankle Pumps



**Directions:** Bend ankles up and down, alternating feet.

**Repeat** \_\_\_\_\_ **Times** \_\_\_\_\_ **Times a Day**

### 2. Quad Sets



**Directions:** Slowly tighten thigh muscles as if pushing your knees into the bed.

**Hold for** \_\_\_\_\_ **seconds.**

**Repeat** \_\_\_\_\_ **Times** \_\_\_\_\_ **Times a Day**

If your incision does not have any open areas, cleanse the incision with a mild soap and warm water. Use a clean washcloth and towel when you care for your incision and allow it to dry thoroughly before rewrapping the knee with the elastic bandage. If your incision is open, follow the dressing change instructions from your doctor, nurse or therapist.

#### BLOOD THINNERS

After surgery, your doctor may prescribe a blood thinner to help prevent blood clots from forming. There are two types of blood thinners: injectable and oral. Your home health nurse can help you with either type of medicine.

**Injectable** — This type of blood thinner is injected under your skin once or twice a day. The number of days you receive this injection will be determined by your doctor. Your home health nurse can teach you how to inject the medication correctly.

**Oral (Pills)** — In order for your doctor to determine the correct dose of oral blood thinners, it will be necessary for your home health nurse to test your blood once or twice a week. Diet, medications and illness may affect the result. Your home health nurse can teach you how to avoid certain foods and medications to keep your blood clotting at an optimal level.

#### Ice Packs

Ice is important for pain management and to control swelling (edema). To achieve maximum benefit of the ice, it is imperative that you use it as directed. Applying ice to your affected joint will decrease discomfort. Ice can be beneficial before and after you perform your exercise program. Place an ice pack on your knee for 20 to 30 minutes when it becomes swollen, painful or stiff. Elevate your leg to reduce the swelling. You will achieve the best results by positioning yourself so that your surgical leg is higher than your heart.

#### General Precautions

- Never place a pillow under your knee, except during exercise.
- Never sit for prolonged periods of time with your legs crossed.
- Adhere to your weight bearing status until your physician or physical therapist advances you.
- Always use your assistive device until your physician approves advancement.
- Try to ambulate every hour or two throughout the day for circulation.



## Anticoagulation Therapy following Orthopedic Surgery

**Anticoagulation therapy is common after hip and knee replacement surgery.**

Anticoagulation therapy is prescribed to prevent blood clots after surgery and is continued for as long as determined necessary by your doctor.

Anticoagulation therapy helps prevent unwanted blood clots from forming that may cause strokes, heart attacks, or clots in the legs or lungs.

Your physician may wish to continue your anticoagulation therapy with oral medications such as Coumadin (Warfarin) or with injected medications such as Arixtra (Fondaparinux Sodium), Lovenox (Enoxaparin), Fragmin (Dalteparin), or Innohep (Tinzaparin). These medications are often called *blood thinners*. They reduce the ability for the blood to clot, but do not actually make the blood thin or watery.

### Other medications used for anticoagulation

Your doctor may determine that different types of medication may be appropriate to help prevent a blood clot (Deep Venous Thrombosis) following your surgery. Some of these medications are listed below with information about the medication.

Even though these medications have different actions, the information in *“Tips for keeping safe while taking anticoagulant medications”* and *“While on anticoagulation therapy, call your home health nurse or your doctor if you have any of the following,”* on page 12 of this book will be helpful in keeping you safe while on anticoagulants.

**Arixtra (Fondaparinux Sodium)** is a medication that is provided as a pre-filled injection to be given under the skin, generally once a day. This medication blocks a specific factor (called Factor Xa) and reduces the ability of your blood to coagulate (clot). This medication is not for use in people who have kidney problems, so be sure to make your doctor aware of any current or previous history of kidney problems. It is generally not used for prevention of clots after abdominal, knee, and hip surgery for people who weigh less than 110 pound (50 kilograms). You should not use this medication if you have a condition

called *bacterial endocarditis* (an infection of the heart), if you have a condition called *thrombocytopenia* (having too few platelets, a type of cell that helps blood clotting), and if you have an allergy to this medication.

**Aspirin (Acetylsalicylic Acid)** may be prescribed by your doctor to help reduce the chance that you will have a blood clot after surgery. Aspirin reduces the chance that a clot will form by preventing platelets in the blood from sticking together. Aspirin therapy may have some undesirable effects including increased risk of stomach and intestinal ulcers or bleeding and tinnitus (ringing in the ear).

Your doctor may also prescribe Aspirin to be taken after you have completed your dose of the other anticoagulation medications in order to prevent the possibility of a clot to form.

### Tips for keeping safe while taking anticoagulant medications

- Get all of your prescriptions filled at the same pharmacy whenever possible.
- Plan ahead — do not wait until you have one dose left before requesting a refill.
- Tell all of your doctors and health care providers, including dentists and podiatrists, that you are on anticoagulant therapy.
- Please report any changes to any of your medications, including non-prescription, over-the-counter drugs, to the physician managing your Coumadin dosing.
- Consider wearing a Medic Alert bracelet or necklace.
- Keep all your medications out of the reach of children and pets.
- Use an electric razor to shave instead of a razor with a sharp blade.
- Use a soft toothbrush; floss your teeth gently — use waxed rather than unwaxed dental floss; do not use toothpicks.
- Use care when handling sharp knives, garden tools, and broken glass.
- Always wear shoes, both indoors and outdoors; do not trim corns or calluses on your feet yourself.
- Avoid picking at your nose or blowing your nose forcefully.
- Have your Protime/INR tested regularly if on Coumadin or Warfarin therapy.

### While on anticoagulation therapy, call your home health nurse or your doctor if you have any of the following:

- Red or dark brown urine or red or tarry black stools
- Bloody sputum or bloody or coffee-ground appearing vomit
- Unusual bruising for unknown reasons; pinpoint red spots on your skin

## Glossary of Your Health Care Professionals

**Nurse:** Will care for your wound, removal of your sutures or staples and instruct you in dressing changes according to your doctor's order. They will assess your medications, vital signs and any other nursing issues that relate to your care.

**Physical Therapist:** Will be focused on restoring your strength, range of motion, walking and pain issues. They will give you instruction on what you should be doing on a daily basis to ensure that you have the best recovery possible. This will include a home exercise program, instruction on precautions and how to best manage your pain issues and to care for your surgery site.

**Occupational Therapist:** Will assess your home and your ability to function within it. They will look to see if there are any techniques and/or assistive devices that will make your day-to-day activities as easy and as independent as possible. This may include activities such as bathing, dressing toileting, cooking, cleaning etc. It may also include temporarily modifying your home for safety.

**Aide:** If assigned to your home, the home health aide will assist you in your daily routines of dressing, bathing, hygiene, and general care.

## Commonly Asked Questions

### Q Do I have to pay for this?

**A** Generally this is a covered Medicare program. However, there are times when you may have a private insurer which may require a fee associated with your care.

### Q How long will I have this home health?

**A** Typically this is a four (4) week program during which time you will be seen three (3) times a week. However, some patients may require a longer period of home health, yet some patients may require a shorter rehabilitation process depending on your individual rate of recovery. Following the conclusion of your home health rehabilitation, your doctor may refer you to an outpatient program for the final recovery stage.

### Q When can I drive my car?

**A** Ultimately, your doctor will tell you when it is safe for you to drive. Your physician may communicate with your therapist to determine your ability to operate a vehicle. However, your ability to drive will no longer allow you to be eligible for home health care.

### Q How long do I have to take my pain medication?

**A** Your medication is prescribed by your doctor. It is best to take it as prescribed especially during the initial recovery period. Your doctor or nurse will indicate when you can reduce your pain medicine requirement.

### Q How long will I have to use my cane?

**A** You will generally need your cane to walk longer distances until you cannot remember where you left it.

- Severe headache, dizziness, fatigue, or weakness
- A cut that will not stop bleeding within 10 minutes
- Unexpected vaginal bleeding
- A serious fall or you hit your head

## About Coumadin (Warfarin)

Coumadin and Warfarin are the same medication. Coumadin is a brand name. Warfarin is the generic name for the drug. It is a pill that is taken to make your blood clot more slowly. It works in your body by interfering with Vitamin K in the blood clotting process.

The pills are scored so that that it can be broken in half more easily. They are color-coded by dose and the dose is marked on the pill. The full effect of Coumadin/Warfarin usually takes 2–7 days to occur. The anti-coagulant effects of a single dose can last 2–5 days.

The most common side effect from taking Coumadin/Warfarin is bleeding. You may have prolonged bleeding from cuts or nosebleeds, bleeding from the gums when brushing/flossing your teeth, and increased menstrual flow. Hair loss is an infrequent side effect of Coumadin/Warfarin. You may have bruising when you bump into something.

Your lifestyle has a big impact on your INR and Coumadin/Warfarin dosing. Your dose may be changed several times to find out what works best for you.

### When and how should I take my Coumadin/Warfarin?

- Coumadin/Warfarin is taken once a day.
- Use a 7-day pillbox to keep your medication so that you don't miss a dose or take too many doses in one day.
- Try to take your Coumadin/Warfarin at about the same time each day, so that taking it becomes a habit and you don't forget.
- You may be asked to take your Coumadin/Warfarin in the late afternoon or early evening. If you have trouble remembering to take your Coumadin/Warfarin at that time of the day, talk to your home health nurse or doctor.
- You can take Coumadin/Warfarin with or without food.

- If you forget a dose and remember the same day, go ahead and take the dose that you were scheduled to take. If you don't remember until the next day or for several days, call your doctor for specific instructions. ***Never take 2 doses of Coumadin/Warfarin at the same time unless you are directed to do so by your doctor.***
- Never guess at your Coumadin/Warfarin dosing. If you don't remember how much you are supposed to take, call your home health nurse, or the doctor managing your Coumadin/Warfarin dosing.

### How is Coumadin/Warfarin monitored?

A blood test, called the Protime or the INR (International Normalized Ratio), is the blood test that is done to check how effectively your Coumadin/Warfarin is working.

Your doctor will determine what your *target* or *therapeutic* INR range is. The most important aspect of Coumadin/Warfarin therapy is to keep your INR within the prescribed target or therapeutic range.

The dose of Coumadin/Warfarin you need is the one that keeps your INR in the therapeutic range for your medical condition.

To perform the INR, a small amount of blood is taken from your arm and sent to a lab, or a sample may be attained by pricking your finger with immediate results. The results will be called to the doctor managing your anti-coagulation therapy.

You do not need to be *fasting* to have an INR done.

When you first start taking Coumadin/Warfarin, frequent INR testing is needed to determine the best dose. Use a calendar to help you keep track of when to have your INR tested.

If your INR is too high, you are at risk of bleeding problems.

If your INR is too low, you are at risk of forming unwanted clots.

### What can cause your INR to decrease?

- Missing one or more doses of Coumadin/Warfarin
- Eating more food high in Vitamin K than usual
- Some medications

Be certain to take the drug for the entire length of time that your doctor prescribed.

- **If you miss a dose of this medication**, take it as soon as possible. If it is almost time for your next dose, skip the missed dose and go back to your regular dosing schedule. Do not double up doses.
- Most doctors will want you to stop it before any surgery and some procedures and dental work. Talk to all your health care providers, including anesthesiologists, about your anticoagulation therapy.

### Will Arixtra, Heparin, Lovenox, Fragmin, or Innohep require monitoring?

These drugs do not require INR monitoring like Coumadin/Warfarin does. One of the advantages of these drugs is that they don't need frequent lab tests. Your doctor may ask you to have a blood count while you are taking this drug to monitor your platelet count.

### Side effects of Arixtra, Heparin, Lovenox, Fragmin, or Innohep

Bleeding is the most common side effect of these drugs. You may bruise more easily when taking these drugs. You may experience dark purple bruising and slight swelling at the injection site.

### Call your home care nurse or doctor if you have any of the following:

- Excessive bruising or bleeding that is hard to stop.
- Back pain, leg weakness, numbness, paralysis, or problems with bowel or bladder function.
- A fall or a bump to your head

### Medication, Food and Alcohol Interactions with Arixtra, Heparin, Lovenox, Fragmin, or Innohep

Food and other medications do not interact with Arixtra, Heparin, Lovenox, Fragmin, or Innohep like they can with Coumadin/Warfarin. As a safety precaution, limit your alcohol intake to one drink per day (1 drink = 1 beer, 1 glass of wine, or one ounce of alcohol).

## About Heparin and Low Molecular Weight Heparins

Heparin and the low molecular weight heparin drugs (**Arixtra, Lovenox, Fragmin, and Innohep**) are anticoagulants that are injected into the fatty tissue under the skin of the abdomen to slow blood clotting. Like Coumadin/Warfarin, they are sometimes called *blood thinners* although they do not actually make your blood thinner. You have been prescribed this medication by your doctor to decrease the risk of blood clots from forming in your body. Heparin and low molecular weight heparins may be used with Coumadin/Warfarin or with Aspirin sometimes.

Let your doctor know if you have a history of bleeding problems, eye problems caused by diabetes, ulcer disease, or high blood pressure. Also, let your doctor know if you have received Heparin or low molecular weight heparin before and developed a reaction called *thrombocytopenia* or low platelet count.

### When and how do I take my Arixtra, Heparin, Lovenox, Fragmin, or Innohep?

Your doctor will tell you how often to take these drugs. It may be one to three times each day, depending on the specific drug. You should try to take them about the same time(s) of the day and/or evening. Arixtra, Heparin, Lovenox, Fragmin, and Innohep are injectable drugs that are given into the subcutaneous, or fatty portion, of the body. You, or your caregiver, will be taught by your nurse or doctor how to prepare and inject this drug. Be sure to follow these directions carefully.

Inject the medication into the layer of fat under the skin of your stomach. Do not inject it deeply into the muscle. Avoid injecting the medication too close to your belly button or to any scars you might have on your abdomen. Alternate, or move, the injection sites as instructed by your doctor.

Check injection sites for redness, pain, warmth, and oozing, which could indicate infection. If you think you might have an infection, call your home care nurse.

### What can cause your INR to increase?

- Taking too much Coumadin/Warfarin
- Eating fewer green, leafy vegetables;
- Increased alcohol consumption
- Illness — diarrhea, vomiting, fever lasting more than two days
- Some medications
- Worsening heart failure

### Interactions with other Medications

Any medication, both prescription and over-the-counter medications and herbal preparations, can affect how your body responds to Coumadin/Warfarin and can affect your INR level.

These medications include:

- certain antibiotics
- some medications for controlling heart rhythm
- some medications for controlling seizures
- certain anti-depressants
- some medications used for diabetes
- some steroids
- some stomach medications
- certain medications used to lower your cholesterol or triglycerides.

Always talk with your doctor, pharmacist, or whoever is managing your Coumadin/Warfarin before you start taking any new medications.

**Do not take aspirin or aspirin-containing medications** when you are taking Coumadin/Warfarin unless your doctor managing your Coumadin/Warfarin says it is okay to do so.

**Aspirin and aspirin-containing medications can increase the risk of bleeding.** Read the labels on all medications. If you see “aspirin, salicylate, acetylsalicylic acid, or ASA” on the label, do not take the medication. Some examples of these medications are: Alka-Seltzer, Anacin, Ascriptin, Aspergum, Aspirin, Bayer, Buffaprin, Bufferin, Doan’s Pills, Durigesic, Ecotrin, Empirin, Excedrin, Fiorinal, Lortab, Norwich tablets, Pepto-Bismol, Percodan, Soma, Talwin, Vanquish, and Zorprin.

**Do not take non-steroidal anti-inflammatory drugs** when you are taking Coumadin/Warfarin unless your doctor says it is okay to do so. Some examples of these drugs include Advil, Aleve, Ibuprofen, Indocin, and Naproxen.

**Many herbal or alternative medications** interact with Coumadin/Warfarin. If you take any of herbal medications or supplements, be sure to inform your doctor.

**\*\*\*If you have any questions about what is in a medication, ask your nurse, doctor, or pharmacist.**

### Food Interactions

Vitamin K counteracts the anticoagulation effects of Coumadin/Warfarin so foods high in Vitamin K can affect your INR. The following foods are high in Vitamin K and may change your INR results:

- Green leafy vegetables, including asparagus, broccoli, brussels sprouts, cabbage, collard greens, escarole, endive, green onions, leaf lettuce, kale, romaine lettuce, mustard greens, parsley, spinach, turnip greens, watercress
- Mayonnaise, margarine, canola oil
- Avocados, cauliflower, chick peas, black-eyed peas, split peas
- Liver — Beef, pork, and chicken/turkey
- Soy products — soy milk, soybeans, soybean oil
- Green tea and herbal teas (in large amounts) that contain tonka beans, sweet clover, or sweet woodruff
- Foods that are supplemented with fat-soluble vitamins like those that contain olestra (Olean), or diet-supplement drinks such as Ensure, SlimFast, or Carnation Instant Breakfast
- Cranberries, cranberry juice (They are not high in Vitamin K, but do contain other elements that can react with your Coumadin/Warfarin and affect your INR.)

**You can eat the foods listed above, but it's important to eat them consistently and in moderation.** Eat normal-sized servings (3–4 ounces) per day. Avoid marked differences in the amount of green leafy vegetables that you eat from day to day. Don't binge on foods high in Vitamin K.

Foods that are **low** in Vitamin K and **do not affect the INR** or your Coumadin/Warfarin dosing include beef, chicken, pork, shrimp, tuna, turkey, cereal grains, fruits, fruit juices, and the following vegetables: green beans, green peas, iceberg lettuce, carrots, potatoes, celery, corn, cucumber, eggplant, tomato, peppers, and zucchini.

### Alcohol Consumption

Alcohol interacts with your liver and Vitamin K. Like with food, moderation is key. Talk to your doctor about drinking alcohol. You can drink alcohol when taking Coumadin/Warfarin, if your doctor agrees, but keep it to one drink per day. (A drink = 1 beer, 1 glass of wine, or one ounce of alcohol). Drinking too much alcohol can affect your liver function and drinking alcohol can increase your risk of injury, resulting in bleeding. Avoid binge drinking.

### Exercise and Activities

Because you are taking Coumadin/Warfarin, you may be at a higher risk of bruising and bleeding into the body tissues, including the brain, if you are injured during exercise, fall, or hit your head. Exercise and activity are safe for most patients taking Coumadin/Warfarin, but always talk to your doctor before beginning any activity that may result in injury.

### Sick Day Instructions

If you become ill with a fever, the flu, or an infection, or if you have diarrhea and vomiting that lasts more than 2 days, call your home care nurse or the doctor managing your Coumadin/Warfarin dosing for further instructions.

### Smoking

Smoking is known to increase constriction of blood vessels, which can lead to clot formations. If you smoke, it is suggested that you quit smoking while taking anticoagulation medications.