North Valley Surgery Center

Affiliated with HONORHEALTH

Joint Replacement Welcome Email

Hello, my name is Alexandria Denham, and I am the Total Joint Program Coordinator at North Valley Surgery Center. I am an RN and look forward to working with you. Attached you will find an informational packet that you and your care giver need to review prior to surgery. You are required to have a primary caregiver for 5-7 days following surgery. ***THIS IS A REQUIREMENT***. Both you and your caregiver will need to schedule and attend a joint replacement education class. This class is ***MANDATORY***, no exceptions. The class may be electronic, group in person session, or 1:1 session depending on availability. Please call me to schedule. Preparation is important, and I will be your resource should any questions arise. Please expect a call from me to review your medical history. If you need anything before then please call me or email me. You and your caregiver will need to initial the agreement form attached. If you do not have capability to perform electronically, I will provide a hard copy the day of surgery for you both to complete. The "Patient and Caregiver Acknowledgement" form is a ***REQUIREMENT***, not optional.

Please see the attachment guide as follows and note that some surgeons use specific equipment or therapies.

Document	Page #	Purpose
Outpatient Total Joint Program	4-51	Describes our program, facility, and what you need to do to prepare for surgery.
Patient and Caregiver Acknowledgment	3	This document is a read and initial document that is REQUIRED for all our joint patients (total and partial joints)
Hibiclens Instructions	52	This document shows the instructions for use of a soap prior to surgery.
Prevention Guide for Joint Patients	53-54	This document shows how to prevent complications post operatively regarding blood clots, falls, constipation, and infection.
ON-Q Education	55-62	This document is for total knee replacements ONLY and surgeon specific. This shows how the ON-Q Pain Pump works for post operative pain relief.
ON-Q Removal	63-64	This document is for total knee replacements ONLY and surgeon specific. This shows how to remove your ON-Q pain pump at home.
PICO Information Sheet	65-66	This document shows how to manage and take care of your surgical dressing (surgeon specific).
Polar Care	67-68	This document shows how to use and manage the cold therapy system post operatively for partial and total knee replacements ONLY.
Ant THA or TKA Exercises	69	This document is for total hips or knees (both partial and total) demonstrating the post operative exercises to be performed.
Plasma Flow Instructions	70-81	This document shows how to use and manage post op compression devices to help prevent blood clot formation.

******Please go to the following website and complete your medical history prior to our call to ensure efficiency and accuracy. ******

https://www.onemedicalpassport.com/?fid=197

Reminders:

1. Your surgeon's office will call you the day before surgery to confirm check in time and surgical start time. Please do not ask prior to this, the schedule is determined by your surgeon not the surgery center.
2. Please obtain the following prior to surgery: enteric coated Aspirin, stool softeners, icepacks (hip replacements), and Tylenol.
3. You will also need to have Hibiclens antiseptic soap to wash with the night before and morning of your surgery prior to coming to center.
4. Please pick up your prescriptions prior to surgery that your surgeon has called into your pharmacy.
5. The day prior to your surgery please do not eat anything after midnight, clear liquids are allowed up until 3 hours prior to your procedure start time (BLACK COFFEE AND WATER ONLY, please limit intake to one 8oz glass and NO CREAM OR SUGAR OR YOU WILL BE CANCELLED). I will review which medications you will take during our call, in the morning of and please no mints, gum, candy or smoking (e-cigs or chewing). Any noncompliance of these restrictions could possibly result in a cancellation of your procedure.
6. After your surgery, expect a call from one of our nurses or messages from our 1MP after 24 hours, 48 hours, 7 days, 30 days, 60 days, and 90 days after your surgery.

We are available for any questions or concerns you may have. I look forward to speaking with you soon. Congratulations on this exciting experience! Have a great day.

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Patient and Caregiver Acknowledgement

I acknowledge that myself and my caregiver have thoroughly read, reviewed, and understand all available information provided by my surgeon, and the North Valley Total Joint Coordinator. I understand that adequate preparation for this surgery is required and my responsibility. I will practice the required safety standards and protocols that have been provided to me. I understand that my outcome is dependent on my active participation in care and understanding of educational materials. I accept that if I do not fully understand something I will immediately contact my surgeon or the Total Joint Coordinator for more information. I understand what is expected of me and my caregiver prior to surgery, during surgery, and after surgery.

Please initial acknowledging you and your caregiver understand and will practice the following items below.

Patient Initials	*Caregiver Initials*	*Action Item*
		My caregiver and I attended the in person Total Joint Preop Education class. **OR** My caregiver and I reviewed and understand the "Outpatient Total Joint Program" powerpoint presentation.
		My surgeon has explained the risks and benefits of the surgery to me, and I understand them.
		I have obtained the Hibiclens soap and will shower with the night before surgery and morning of surgery. I understand the proper use of the soap.
		I have obtained all the necessary equipment required of me or I have made arrangements with NVSC to provide this equipment the day of surgery.
		I have a responsible adult to stay with me for a full 24 hours after surgery. I have a responsible adult to be a primary caregiver for 5-7 days following my joint replacement. This caregiver is of sound mind, and physically capable of helping with walking, and household chores.
		My caregiver and I have reviewed and understand the preventative measures for complications including: DVT prevention, fall prevention, incision care, and bowel care. We will practice the required safety measures and not deviate from instructions.
		I will always use my walker, even when making short trips. I will not fall. My caregiver will ensure I am always using my walker.
		I understand I am schedule for an outpatient total joint and if I have any concerns of going home the same day I will contact my surgeon or Total Joint Coordinator immediately to be rescheduled for the hospital setting.

Outpatient Joint Replacement Program

North Valley Surgery Center

Presented by: Alexandria Denham RN ONC & Patrick Williams PT

Benefits of Outpatient Joint Replacement

- Recovering in the comfort of your own home
- Restful sleep without interruptions
- Eating your own food
- Support of Physical Therapy/Home Health Services
- Recovering in a familiar environment
- Less exposure to potential infectious processes

Preparing YOURSELF for Surgery

Weight loss

Eating healthy

Staying active, exercising 5 days a week

Controlling blood sugar

Stop smoking

Preparing your HOME for Surgery

Remove rugs and electricals cords	Put food and toiletry items at counter level for easy access	Obtain a proper fitting pair of shoes, no sandals or flip flops	Obtain loose fitting and comfortable clothing
Pets are to be boarded or kept in a designated part of the home	Prepare meals	Medication schedule	Have freshly laundered sheets for your bed after showering the night before surgery

Before you come to NVSC

Preop testing should be completed. Consult your surgeon if you have questions so your surgery is not delayed or canceled.

1. Blood work, EKG, x-rays, urine test, etc.
2. If you see a specialist (cardiologist or pulmonologist) they will need to see you prior to surgery for clearance

Medications should be stopped prior to surgery

1. NO ACE's or ARB's(Certain Blood Pressure Medications) 24 hours prior to surgery
2. Aspirin or blood thinners should be stopped 5-7 days prior to your procedure
3. Vitamins and supplements should be stopped prior to surgery (unless instructed otherwise by your surgeon)

Medications to Hold AM of Surgery

- **Ace Inhibitors – *NONE the morning of surgery (examples below)***

Amiodipine/Benazepril (Lotrel®)	Benazepril (Lotensin®)	Captopril (Capoten®)
Diltiazem/Enalapril	Moexipril (Univasc®)	Perindopril (Aceon®)
Quinapril (Accupril®)	Ramipril (Altace®)	Spirapril (Renormax®)
Trandolopril (Mavik®)	Fosinopril (Monopril®)	Trandolapril;Verapamil (Tarka®)
Enalapril,Enalaprilat (Vasotec®)	Enalapril; Felodipine (Lexxel®)	Lisinopril (Prinivil®, Zestril®)
Benazepril/HCTZ (Lotensin HCT®)	Captopril/HCTZ (Capozide®)	Enalapril/HCTZ (Vaseretic®)
Fosinopril/HCTZ (Monopril HCT)	HCTZ/Moexipril (Uniretic®)	HCTZ/Quinapril(Accuretic®,Quinaretic®)
Fosinopril/HCTZ (Monopril HCT)	HCTZ/Quinapril(Accuretic®, Quinaretic®)	HCTZ?Lisinopril(Prinzide®,Zestoretic®)

Angiotensin II Receptor Blockers – *NONE the morning of surgery (examples below)*

Candesartan (Atacand®)
Eprosartan (Teveten®)
Irbesartan (Avapro®)
Losartan (Cozaar®)
Olmesartan (Benicar®)
Telmisartin (Micardis®)
Valsartan (Diovan®)

Before you come to NVSC

You and your caregiver must have reviewed surgical packet received by surgeon in office

You and your caregiver must have reviewed welcome information provided via email

Fill out your medical information/history online through Medical 1 Passport Platform

Anticipate phone call from one of our nurses for review of information

Caregiver must be present for 5-7 days following total joint

Before you come to NVSC

1. Pick up RX's from pharmacy
2. Obtain Hibiclens soap
3. Obtain ice packs (hip replacements)
4. Obtain stool softeners
5. Obtain Aspirin

The Night Before Surgery

Hydrate	DO NOT take	Shower	NPO
Hydrate with fluids and eat a healthy meal	DO NOT take ACE's or ARB's (Blood Pressure Meds)	Shower with Hibiclens soap the night before and morning of surgery	Clear liquids (water, black coffee) are allowed up until 3 hours prior to your surgery

The Day of Surgery

- Hold all medications unless specifically instructed otherwise
- DO NOT shave operative extremity
- Arrive 2 hours early prior to your surgery time
- No solid food 8 hours prior to your surgery
- Wear comfortable, loose-fitting clothing
- Remove all jewelry, body piercings and leave at home
- DO NOT bring valuables with you or prescriptions
- Bring insurance card, photo ID, credit card, and cell phone

Timeline for Surgery

Waiting room- 15 minutes for check in and registration

Preop- 45 minutes-1 hour of prep, potential for waiting

Intraop

- Partial Knee Replacement- 45 minutes to 1.5 hours
- Total Knee Replacements- 1.5 hours-3 hours
- Total Hip Replacement- 1.5-2 hours

Recovery room- 1-2 hours then discharge home

For your Family

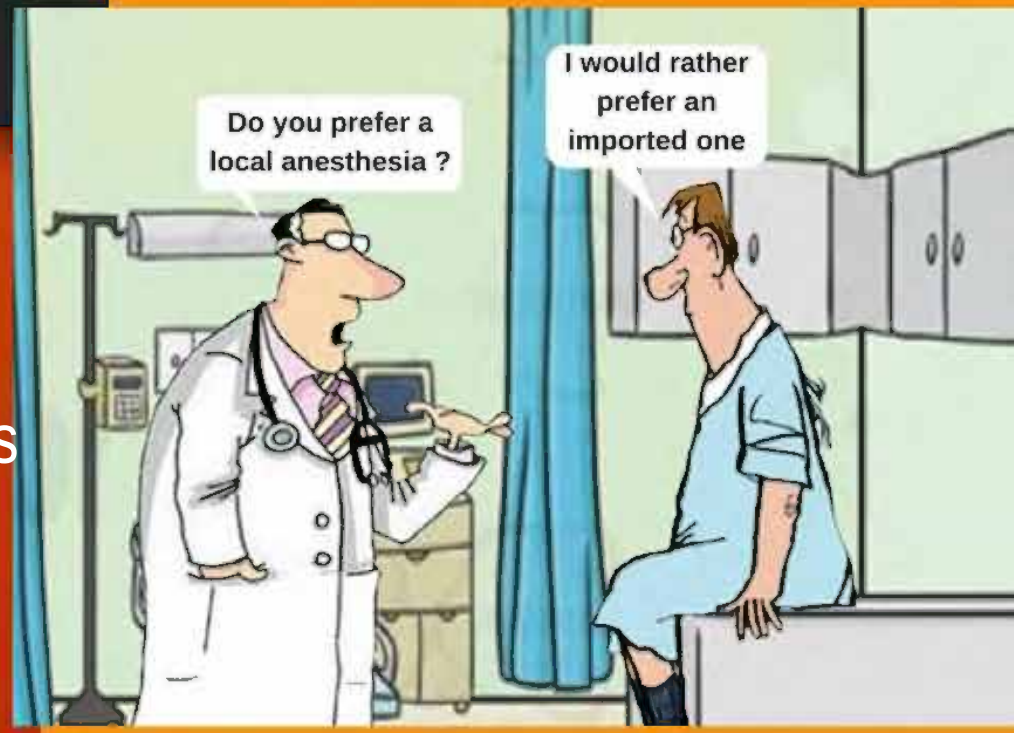
- Your family may wait in the waiting room during your surgery or leave, they will need to give us their cell phone number if they leave
- They will be notified when surgery is over, and come to bedside in PACU when awake for further education
- Bring a jacket and snacks
- YOU MUST HAVE A CAREGIVER TO DRIVE YOU HOME AND STAY WITH YOU FOR 24 HOURS

Preop Phase

- Change into gown
- Wipe down with CHG wipes
- Complete Paperwork/Sign Consents
- Meet Anesthesia/Surgeon
- Clipping
- Apply SCD's/TEDS
- Nozin
- Pills given

Anesthesia

- Anesthesia affects everyone differently!
- You and your anesthesia provider will discuss what is safest and best for you
- Anesthesia may cause nausea and vomiting this is a common side effect. We will give you medications during the procedure to prevent this from happening.
- Anesthesia may cause drowsiness, dizziness, and forgetfulness. It may stay in your system for up to 24 hours. Safety precautions must be followed when at home.
- YOU WILL NOT BE AWAKE DURING THE PROCEDURE

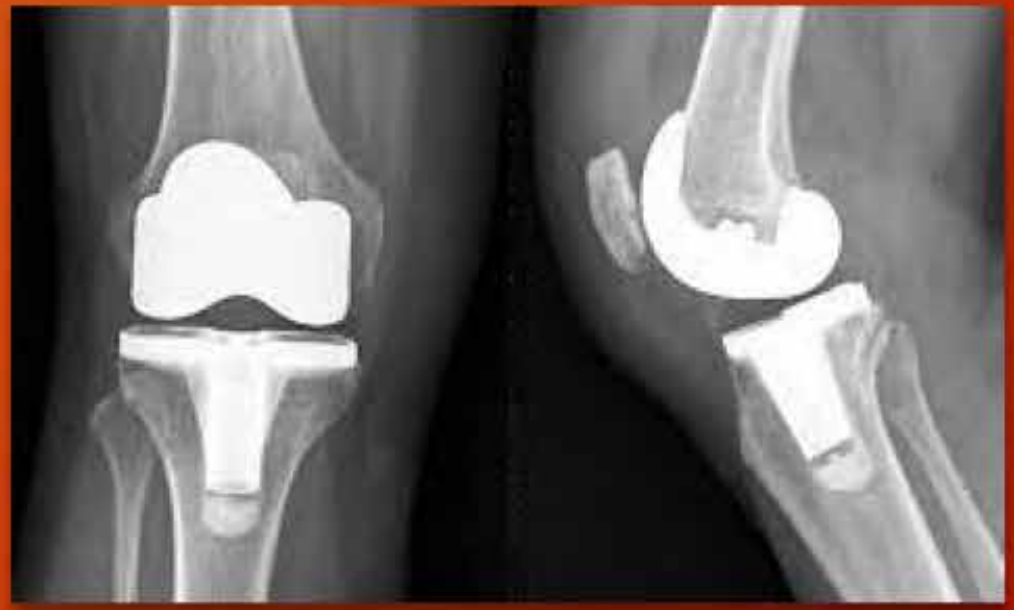


Anesthesia Options

- Spinal: numb from the waist down
  - Prevents blood loss during surgery and good for pain control
  - You will be awake for the insertion of the spinal then drifted off to sleep with general anesthesia for the surgery
  - Temporary, lasts about 75-120 minutes
  - May have numbness in PACU this is NORMAL
  - Your bladder is the last thing to “wake up”, we will assess your need to urinate. Urinary incontinence or retention may occur.
- PNBs (Peripheral Nerve Blocks): local anesthetic around nerves of operative extremity
  - Temporary pain relief, lasts from 8-24 hours
  - ON-Q Pain pump is an extension of block, lasting for 3-4 days
  - DOES NOT TAKE AWAY ALL THE PAIN, but will decrease the amount

Intraop Phase

- Airway: irritated throat after surgery is normal
- Positioning: Hana Table for hips
- Draping
- Antibiotics given
- Warming
- Completed and transport to recovery



Post op Phase

- Monitoring of vitals while anesthesia wears off
- Monitor movement, sensation, and strength
- Provide pain medication (avoidance of IV narcotics)
- Assess need to urinate
- Reinforcement of Education with Family
- Physical Therapy Evaluation, goal is within 1 hour of you being in recovery

Pain Management

- Pain is normal and to be expected after surgery.
- YOU WILL NOT BE PAIN FREE. Take medications as scheduled by your surgeon. Playing “catch up” is hard.
- Pain should be tolerable so you can walk, and perform daily duties
- Activity will usually help pain
- Alternatives to medications:
  1. Cold therapy
  2. Relaxation and quiet time
  3. TV/distractions

Prevention Guide

Please note: if you have signs or symptoms that you are concerned about, please contact your surgeon’s office directly for further management.

Infection Prevention

- Hand hygiene
- Showers only
- Monitoring for abnormal discharge or odor from surgical site
- Monitor temperature(above 101.5 call your surgeon)

Blood Clot Prevention

- Take anticoagulant (blood thinner) as prescribed
- Walking every hour during waking hours
- Use of SCD's or TEDS
- Know signs and symptoms of DVT/PE

Fall Prevention

- Always use walker
- Take precaution when changing positions
- Use night lights
- Wear nonskid socks

Preventing Constipation-Bowel Care

- Push fluids
- Walking every hour
- Stool softener usage if using narcotics
- Stop narcotics when possible
- If BM does not occur, use laxative
- If no BM within 3 days after surgery call your surgeon

Equipment and Therapies

Please note that any equipment provided by North Valley Surgery Center does NOT need to be returned to the facility. Your insurance may be billed for these items. Please read all instructions for use that are provided by the manufacturer of the product.

Walker & Cane Instructions

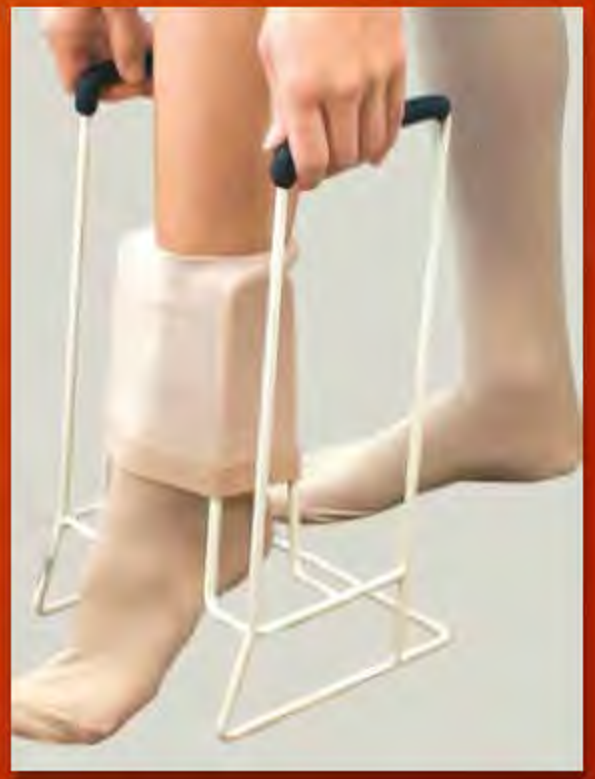
- Purpose: safety and stability
- Hip/Knee replacement
- Most patients use walker for at least 5-7 days
- Always use, even if it is a short distance
- May transition to a cane when you feel stable
- Physical therapy will fit you for a walker the day of surgery to ensure proper height

Cold Therapy Instructions

- Purpose: reduce inflammation and pain
- Don't ever put ice or cold therapies directly on bare skin
- We provide polar care machines for KNEE replacement patients ONLY. With the polar care pad use a barrier such as an ace wrap to protect skin from burn or injury
- Hip replacement patients will be responsible for getting their own ice packs
- Polar Care requires ICE and WATER to work
- Fill container up about halfway with water and add ice
- May freeze 4 standard 16.9 oz water bottles to substitute as ice
- Don't use cold therapies while sleeping, only use during waking hours
- https://youtu.be/8QpD3mGgqqY

Compression Stocking Instructions

- Purpose: help prevent blood clots and help with swelling
- Dr.Gendy, Dr.Mileski, Dr.Russo, Dr.Werner, Dr.Seidel (for Hip/Knee Patients)
- Remove when sleeping or showering
- Please wear nonskid socks over compression stockings to prevent falls
- Hand wash, hang to dry. DO NOT PUT IN WASHER OR DRYER
- Ensure there are no wrinkles
- Difficult to apply, you will need assistance
- May use a plastic bag on the foot for easier application or compression stocking donner



Plasma Flow SCD Instructions

- Purpose: prevention of blood clots
- Hip/Knee Patients (all surgeons use except Dr.Russo)
- Worn on BOTH legs following surgery, placed around the calf
- Must be snug, not tight
- Worn only during the daytime during periods of inactivity (watching TV, reading a book, etc.)
- DO NOT WEAR AT NIGHT or WHEN WALKING
- Worn for 2 weeks following surgery
- Recharge devices at night

https://compressionsolutions.us/wp-content/uploads/2022/03/PlasmaFlow_IFU_IFU.pdf

Elevated Toilet Seat & Shower Chair

- Purpose: safety and stability
- Hip/Knee Replacements can use
- Beneficial if you have a low sitting commode
- Handles on the device make it easier and safer for you to lower yourself down
- If you do not have grab bars in your bathroom, consider these assistive devices
- NOT a requirement. NOT provided by NVSC.

ON-Q Pain Pump

- Purpose: decrease narcotic usage
- Dr.Gendy, Dr.Kaper, Dr.Mileski for TOTAL KNEES ONLY
- Helps with post op pain relief for the front of the knee, does not cover back of the knee pain
- Lasts approximately 3-4 days
- Removed at home by patient, or Home Health RN
- Normal: small amount of bleeding from site
- TUBING OF THE CATHETER IS BROWN. THIS IS NOT BLOOD BACKING UP
- You will NOT notice the change in the size of the ball for 24 hours

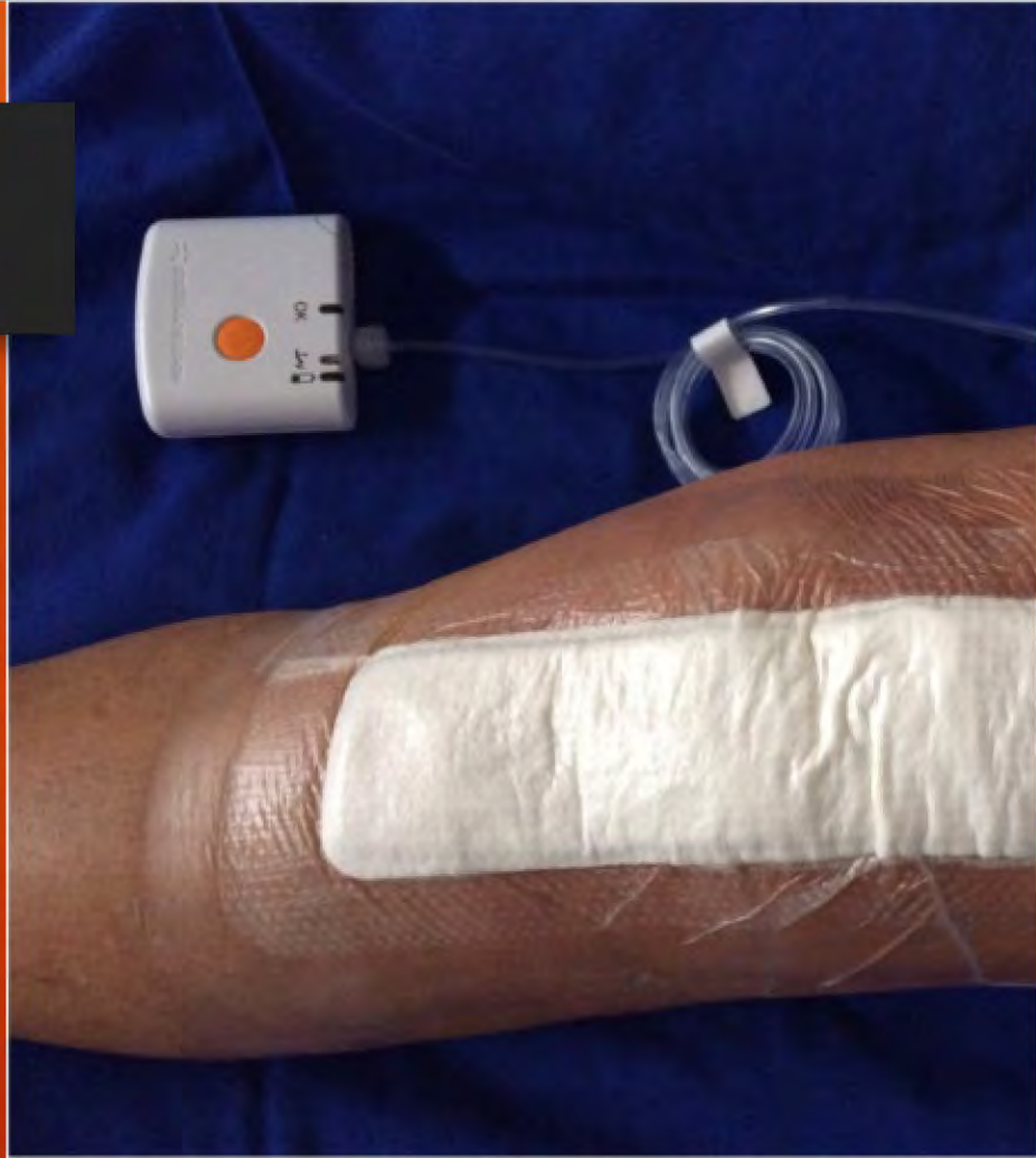
https://youtu.be/TImvnyBVNtw

Surgical Dressings

Please note: Surgical dressings vary depending on the surgeon. If you have questions regarding this, please contact your surgeon's office directly.

PICO Wound Vac Instructions

- Purpose: wicking mechanism to keep skin dry, prevent infection
- Dr.Gendy, Dr.Kaper (Hips/Knee)
- Battery life of the device is 7 days, it will shut off automatically on day 7
- Press orange button to pause and restart therapy
- Disconnect battery pack prior to showering or bathing
- Bleeding is normal, if soaking or saturating call your surgeon



Aquacel Dressing Instructions

- Purpose: silver coated dressing, antimicrobial to prevent infection
- Dr.Russo, Dr.Werner, Dr.Seidel (Hip/Knee)
- May shower with dressing in place, may apply clear plastic wrapping for extra protection from water
- Bleeding is normal, if soaking or saturating call your surgeon
- Leave in place until your follow up appointment with your surgeon unless directed (Dr.Werner will have you remove on day 5 and then replace with telfa dressing)

Zipline Dressing

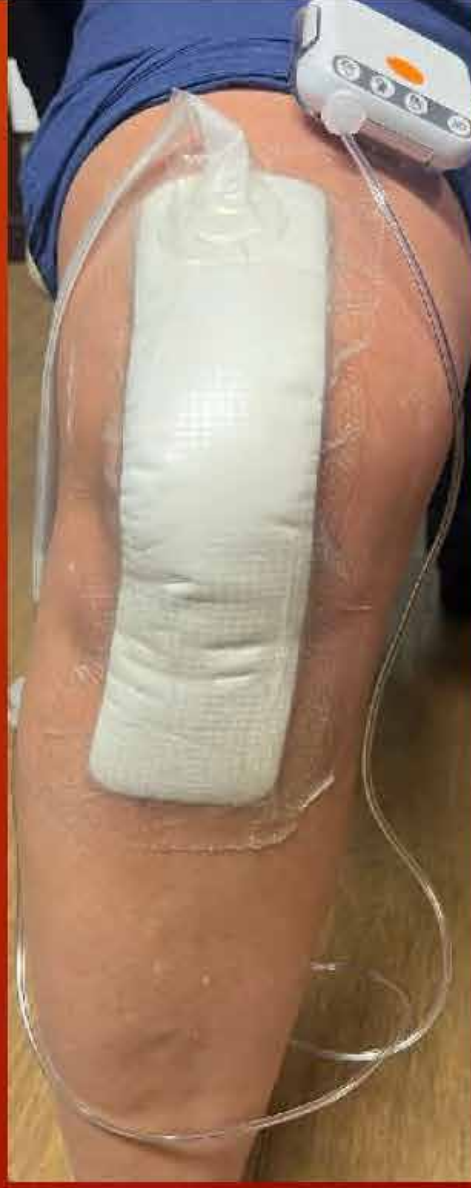
- Purpose: keep incision approximated, reduce strain on incision, minimize scarring
- Dr.Kaper and Dr.Werner (Hip/Knee)
- Will remain in place until your follow up appointments, surgeon will direct you when to remove
- May shower when in place
- Can get caught on clothing, may put gauze or other dressings over top to prevent

Total/Partial Knee Dressings

Dressing	Directions
Ace wrap(tan compression wrap) **OUTER LAYER- see picture on next slide**	Remove after 24-48 hours after surgery **MAY KEEP IN PLACE IF CLEAN**
Cotton padding(white fluffy layer) **UNDERNEATH ACE WRAP- see picture on next slide**	Remove after 24-48 hours after surgery **THROW AWAY**
Surgical Dressing, Sutures (stitches), Staples, Skin Glue **SKIN LAYER- see picture on next slide**	**SURGEON WILL REMOVE IN OFFICE AT FOLLOW UP APPOINTMENT**

Outer Layer: ace wrap (keep ace wrap)

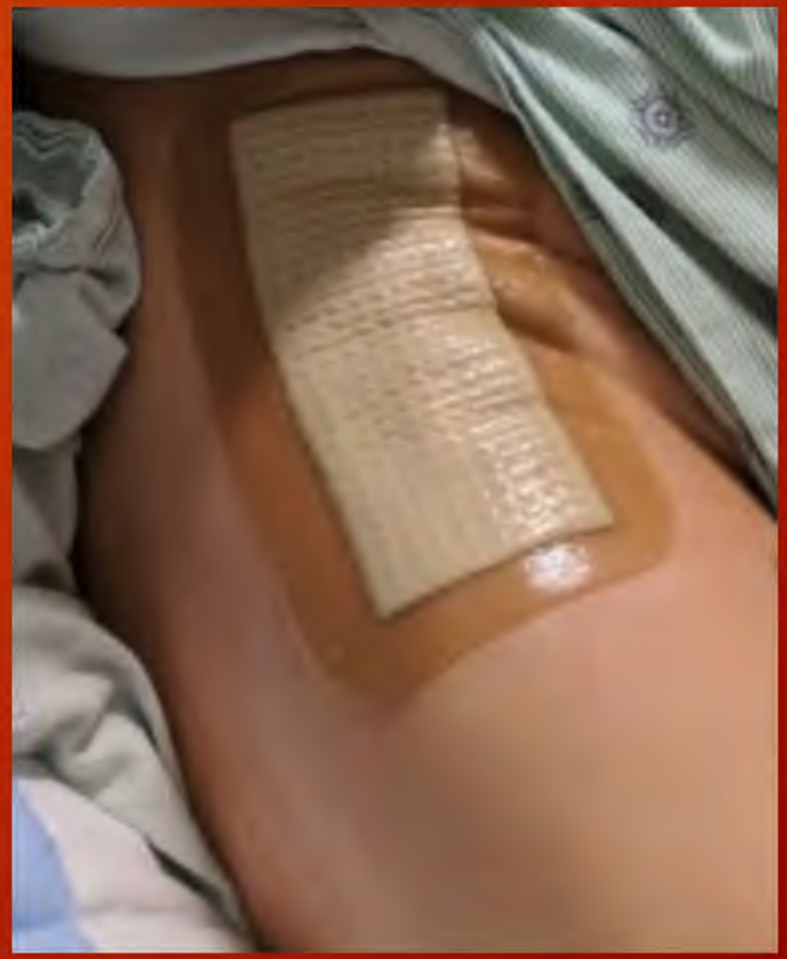
Second Layer: White Cotton Padding (Throw Away)



Third Layer: Surgical Dressing (may vary from picture, leave in place)

Hip Dressings

- Surgical dressing will stay in place as directed by your surgeon.
- If dressing needs to be changed, please contact your surgeon’s office directly.
- Most dressings allow you to shower with it in place.



After Care Instructions

Basic instructions following hip and knee surgery and when you should call your surgeon. Please review your specific discharge paperwork given to you and your family the day of surgery.

After Care Instructions

- Responsible adult required for 24 hours due to anesthesia
- Primary caregiver for 5-7 days due to the procedure/safety
- Diet: regular, no fried or greasy foods, push fluids.
  a) If diabetic check blood sugars more frequently.
  b) Nausea is common after surgery, start slow and bland.
- Activity: Weight bearing as tolerated
  a) Put as much or as little weight on surgical extremity that you are comfortable with
  b) Implant is stable, DO NOT FALL
  c) Take time with changing positions, dangle legs before standing to prevent dizziness

After Care Instructions

- Activity:
  a) Walking every hour while awake
  b) Do not sleep on your stomach
  c) Do not do extreme stretching or yoga positions
  d) Do not drive until discussed with your surgeon
- Follow ups:
  a) Attend ALL follow up appointments with your surgeon
  b) If having a dental procedure, you must notify dentist that you have had a joint replacement

After Care Instructions

- Medications
  a) Discontinue narcotics as soon as tolerated.
  b) Use of stool softener when using narcotics is a MUST
  c) Stay ahead of the pain, playing “catch up” is hard
  d) Take Aspirin or anticoagulant as prescribed to prevent blood clots
  e) PAIN IS NORMAL

Normal	Abnormal
• Pain radiating from thigh to ankle. Sensations: Burning, Aching, Throbbing, Stabbing, Stiffness • Pain can occur for weeks to months after surgery!	• Excessive pain not relieved with prescribed medications, ice, or elevation • Pain that does not allow you to walk or perform daily duties
• Feeling tired, drowsy, dizzy after surgery • Fluids and safety precautions!	• Passing out, fainting
• Swelling and bruising from thigh to toes • Most swelling occurs the first 2 weeks!	• Swelling that does not improve after elevating for extended period
• Bleeding at surgical site	• Saturation or soaking of surgical dressing
• Pink discoloration or redness around surgical incision • Healing of site usually takes 4-6 weeks!	• Redness with fever above 101.5

Normal	Abnormal
• Drainage from surgical incision that is clear, pink, or bloody	• Drainage from surgical incision that is yellow, green, or has foul odor
• Low grade temperature for 1-2 weeks • Should be below 101.5, ensure you are taking Tylenol	• Fever above 101.5 with Tylenol
• Constipation from anesthesia and narcotics • Stool softeners must be taken!	• No bowel movement for 3 days following surgery
• Increased urinary frequency the evening of surgery	• Inability to urinate for 6-8 hours
• Decreased appetite and energy levels	• Inability to keep food or liquids down
• Difficulty sleeping	• Excessive pain keeping you from sleeping AT ALL
• Numbness around surgical site	• Numbness that progresses or worsens.

Physical Therapy/ Home Health Knee Replacements(Partial/Total)

- All surgeons prescribe physical therapy for partial and total knee replacements. This may be done through home health services or outpatient.
- Home health services are insurance and surgeon based.
- If home health services are used it will be for the first 2 weeks following surgery, then you will transition to outpatient PT.
- Outpatient physical therapy should be set up by you or your surgeon's office (usually will last 4-6 weeks following surgery depending on your progression.

Physical Therapy/ Home Health Hip Replacements

- Your surgeon will determine if physical therapy is necessary for you after hip replacement.
- Some surgeons will not prescribe formal outpatient physical therapy until your 6-week post op appointment.
- It is surgeon preference if home health services are used following hip replacement surgery.
- If you have questions, please contact your surgeon's office.

Contacts

If you have a question regarding aftercare, please call Alex directly at 502-533-6879

If you signs or symptoms of the following, go to the ER immediately: inability to urinate for 8 hours, signs of DVT confirmed by surgeon

If you have sudden onset of chest pain or shortness of air, please call 911 immediately

Any other complications or abnormalities should be communicated to your SURGEON immediately, call their office

Survey and Follow Up

PLEASE COMPLETE ALL QUESTIONNAIRES AND SURVEYS YOU RECEIVE

YOUR FEEDBACK HELPS US IMPROVE!

Questions?

- It is your responsibility to prepare for surgery, we give you the tools and information. Your caregiver MUST be included in the process.
- PACU should not be the first time you have heard the information. DO YOUR HOMEWORK.
- See us directly for questions
- Call Alex at 502-533-6879
- Email Alex at Alexandria.Denham@sovereignhealthcare.net

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Hibiclens, trusted by hospitals for over 40 years as a pre-operative skin wash, can help reduce the risk of surgical site infections (SSIs) caused by germs that live on the skin.

Protecting yourself before surgery

A surgical site infection (SSI) is an infection that patients can get during or after surgery. They can happen on any part of the body where the surgery takes place and sometimes only involve superficial layers of the skin. Other SSIs are more serious – they can involve tissues under the skin, organs, or implanted material.

Preparing for surgery

- If you plan to wash your hair, use your regular shampoo; then rinse your hair and body thoroughly to remove any shampoo residue
- Wash your face with your regular soap or water only
- Thoroughly rinse your body with water from the neck down
- Apply Hibiclens directly on your skin or on a wet washcloth and wash gently; move away from the shower stream when applying Hibiclens to avoid rinsing it off too soon
- Rinse thoroughly with warm water and keep out of eyes, ears, and mouth; if Hibiclens comes in contact with these areas, rinse out promptly
- Dry your skin with a towel
- Do not use your regular soap after applying and rinsing with Hibiclens
- Do not apply lotions or deodorants to the cleaned body area

Please shower with Hibiclens soap the night before surgery and the morning of surgery. If you have questions or concerns regarding the usage of this product, please contact North Valley Surgery Center at 480-767-2179.

CDC https://www.cdc.gov/features/safesurgery/index.html

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Post-Operative Total Joint Patient Education/Prevention

Patient safety is our priority. Please sign acknowledging that this information has been reviewed with you, and you will continue to practice safety measures after discharge home.

Infection Prevention:

- Wash hands with soap and water when touching surgical dressing/site.
- Monitor temperature (fever over 101.5 should be reported immediately to your surgeon).
- Monitor for abnormal discharge (yellow, green, white, or foul odor).
- Monitor for redness or warmth around the surgical site.
- Do not soak or submerge surgical site until given permission by surgeon at follow up appointment in office.
- If having any dental work, please consult your surgeon if antibiotics are indicated.

DVT (Blood clot) & PE (pulmonary embolus) Prevention:

- Walking frequently throughout the day during waking hours (generally every hour).
- Perform ankle pumps during periods of rest (while lying in bed or on couch).
- Take Aspirin or blood thinners as prescribed by your surgeon.
- Wear Plasma Flow SCD's during waking hours only, may recharge at night.
- Wear compression stockings as prescribed by your surgeon.
- If the following occur notify your surgeon immediately: unexpected increase in pain in calf and leg, new swelling in the leg that does not go away with elevation, redness, and warmth of leg.
- If the following occur call 911 immediately: chest pain, shortness of breath, fast heartbeat, or fainting.

Fall Prevention:

- Always use assistive devices (walker).
- Take your time when changing positions (lying to sitting, sitting to standing).
- Remove throw rugs from the floor, remove extension cords from your walking path.
- Wear non-skid socks, or good fitting shoes with backing.
- If a fall does occur, please call your surgeon immediately.

Bowel Care:

- Stay well hydrated, drink plenty of fluids (water, sports drinks).
- Take stool softeners daily.
- Narcotics may cause constipation.
- If stool softeners do not produce a bowel movement, laxatives may be needed. If diarrhea occurs, stop taking laxatives immediately and notify your surgeon.

_____ _____

Patient Signature **RN Signature**

PATIENT LABEL

North Valley Surgery Center

Affiliated with HCA Healthcare

Patient Education Sheet for DVT(Deep Vein Thrombosis) & PE(Pulmonary Embolus) Prevention

What is a DVT? Deep Vein Thrombosis(DVT) is a blood clot that forms inside a deep vein. It can also lead to a serious health problem called pulmonary embolus (PE).

What is a PE? A pulmonary embolus occurs when the blood clot travels through the veins and blocks a major blood vessel leading to the lungs. This is a medical emergency and can cause death.

People at Risk for Getting a DVT Some patients are at higher risk for getting a DVT. Patients that have surgery are at an increased risk at developing a blood clot. Some risk factors include:

Recent surgery, surgery lasting longer than 1 hour	Inactivity or immobilization (cast)	Spinal Cord Injury	Hormone therapy, birth control pills
Previous heart attack or heart failure	Overweight and obesity	Genetics (Factor V Leiden)	Injury or trauma
Personal/Family history of DVT or PE	Pregnancy and postpartum	Infection	Active cancer or recent history of cancer (< 6 months)
Older age	Varicose veins	Smoking	IBS, Colitis, Crohn's disease

How to Prevent DVT & PE

Both DVT and PE often are preventable. Your physician may order TED hose, SCD's (Sequential Compression Devices), or medication to help prevent a DVT. Please follow your surgeon's specific instructions and guidelines for use.

Ted Hose	Special stockings that improve blood flow from the lower legs.
SCD's	Use air through special sleeves to squeeze the lower leg muscles to also improve blood flow.
Medications	Aspirin, Coumadin, Eliquis, Xarelto, Lovenox, may be prescribed post operatively by your surgeon or doctor to prevent blood clots.
Ankle Pump Exercise	With your legs straight and relaxed, point toes toward head of bed, then toward the foot of the bed. Repeat frequently.
Foot Circle Exercise	With legs relaxed on bed, move ankles in small circles. Repeat frequently.

Additional Ways to Prevent DVT & PE

- Early and frequent walking once your doctor approves (walking every hour during your waking hours).
- Make sure you're taking in plenty of fluids once your doctor approves.

****If the following occur notify your surgeon immediately: ***unexpected increase in pain of calf and leg, new swelling in the leg that does not go away with elevation, redness, and warmth of leg.***

****If the following occur call 911 immediately: ***chest pain, shortness of breath, fast heartbeat, fainting, or decrease in level of consciousness.***

_____ _____

Patient or Caregiver Signature RN signature

4/4/2022

AVANOS | ON-Q PAIN RELIEF SYSTEM

PAIN RELIEF THAT'S BETTER FOR EVERY BODY.†

ON-Q* PUMP WITH SELECT-A-FLOW*

*Ask your doctor about ON-Q**

FACEBOOK.COM/ONQPAINRELIEF
TWITTER.COM/ONQPAINRELIEF

† *As determined by your doctor*

PAIN RELIEF AFTER SURGERY

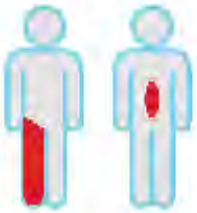
Pain relief after surgery is an important part of the recovery process. When you're not in pain, you will have a more comfortable recovery and return to your normal activities faster.

POST-SURGICAL PAIN RELIEF OPTIONS

The most common way to treat pain after surgery is with narcotics, such as morphine or codeine. These drugs can cause side effects, such as breathing difficulty, constipation, nausea and vomiting. They can also make you sleepy or groggy. Narcotics affect the entire body and may slow the recovery process.

Unlike narcotics, local anesthetics are medications that numb a targeted site. Because they don't affect the entire body, there is less risk of these unpleasant side effects. Local anesthetics have been used for years for different types of surgeries and dental procedures.

Narcotics
The brain and entire body are affected



Local Anesthetics
Only the area near the surgical site is targeted

ON-Q* PAIN RELIEF SYSTEM – PAIN RELIEF RIGHT WHERE YOU NEED IT

The ON-Q* system is a small disposable pump filled with a local anesthetic medication to relieve your pain after surgery. It continuously delivers medication that blocks pain in the area of your procedure. With the ON-Q* system, you may get better pain relief than by taking narcotics alone. You may also need to take less narcotic medication.

HOW THE ON-Q* PAIN RELIEF SYSTEM WORKS

The pump is connected to a small catheter (tube), which is inserted by your surgeon or anesthesiologist. Depending on your procedure, the catheter will be placed near the surgical incision site or under the skin next to a nerve near the surgical area.

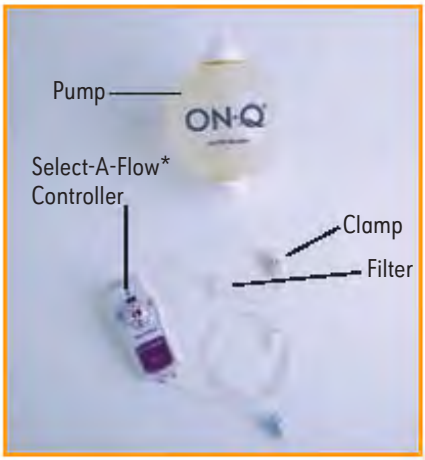
The ON-Q* pump continuously delivers the medication at a very slow flow rate. It is completely portable and may be clipped to your clothing or placed in a small carrying case.

THE ON-Q* PAIN RELIEF SYSTEM MAY PROVIDE:

- More comfortable recovery after surgery
- Better pain relief without the side effects of narcotics
- Quicker return to normal
- Earlier release from the hospital

Your surgeon and anesthesiology pain management team will let you know if the ON-Q* system is right for you.

ON-Q* PUMP WITH SELECT-A-FLOW* VARIABLE RATE CONTROLLER



The ON-Q* pump automatically infuses the medication at a slow flow rate. The Select-A-Flow* controller lets your doctor adjust the amount of medication you receive to best meet your needs. The label on your Select-A-Flow* may be either Blue (1-7 ml/hr) or Purple (2-14 ml/hr).

CHECK TO MAKE SURE:

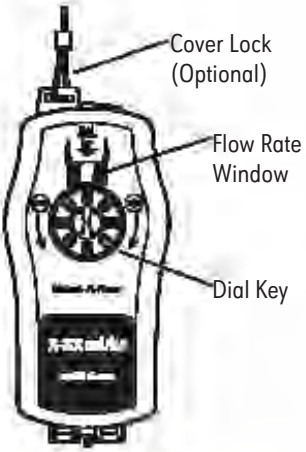
- White tubing clamp is open (moves freely on the tubing).
- Tubing is not kinked.
- Filter is not taped or covered.

⚠ CAUTION:
The Select-A-Flow controller should be worn outside your clothing.*

⚠ CAUTION: Do not squeeze the pump. It has the force necessary to deliver your medication.

⚠ **WARNING:** Do not change the flow rate on the Select-A-Flow* dial unless instructed by your doctor. Changing the flow rate without your doctor's instructions may result in the wrong dose of medication delivered, which could cause serious injury.

- **Do not tape tubing to skin. The Select-A-Flow* device should be worn outside your clothing.**

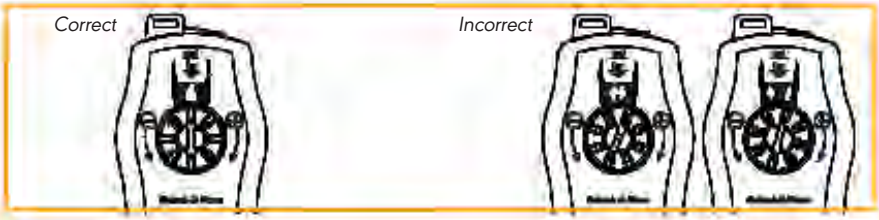


ADJUST YOUR FLOW RATE **ONLY** IF INSTRUCTED BY YOUR DOCTOR

❶ Lift plastic cover

❷ Turning dial towards ⊕ increases flow rate

Turning dial towards ⊖ decreases flow rate



❸ Make sure the entire number is within the window below the ml/hr ▼mark

❹ If the rate is not properly positioned in the window, you will not be able to close the cover

❺ The cover will close completely only when the flow rate is properly selected

IMPORTANT INFORMATION

Things to be aware of when using the ON-Q* Pain Relief System

⚠ **WARNING:** ***The following symptoms may represent a serious medical condition. Immediately close the clamp on the pump tubing and call your doctor or 911 in case of an emergency to prevent serious patient injury.***

- Increase in pain
- Fever, chills, sweats
- Bowel or bladder changes
- Difficulty breathing
- Redness, warmth, discharge or excessive bleeding from the catheter site
- Pain, swelling or a large bruise around the catheter site
- Dizziness, lightheadedness
- Blurred vision
- Ringing, buzzing in your ears
- Metal taste in your mouth
- Numbness and/or tingling around your mouth, fingers or toes
- Drowsiness
- Confusion

NUMBNESS

Be aware that you may experience loss of feeling at and around the surgical area. If numbness occurs, take proper measures to avoid injury. Be careful when placing hot or cold items on a numb area.

⚠ **CAUTIONS**

- Do not reuse.
- Protect the pump and catheter site from water according to your doctor's instructions.

FREQUENTLY ASKED QUESTIONS

WILL THE ON-Q* SYSTEM TREAT ALL OF MY PAIN?

- Patients experience different levels of pain. The ON-Q* system works with other medications or therapies your doctor may prescribe to manage your pain after surgery. With the ON-Q* system, you may need less narcotics and have better pain relief than with narcotics alone.

HOW DO I KNOW THE PUMP IS WORKING?

- The pump delivers your medication very slowly. It may take longer than 24 hours after your procedure to notice a change in the size and look of the pump.
- As the medication is delivered, the pump (ball) will gradually become smaller.
- You should also take any other pain medicine as instructed by your doctor.

HOW LONG WILL MY ON-Q* PUMP LAST?

- Depending on the size of your pump, it may take 2-5 days to give all the medication.
- All the medication has been delivered when the ON-Q* pump is no longer full. The outside bag will be flat, and a hard tube can be felt in the center of the pump.

WHERE CAN I FIND MORE INFORMATION ABOUT MY PUMP?

- You should be provided with a Patient Guideline prior to discharge (it may be in your carry case).
- Patient Guidelines can also be found on www.myON-Q.com.
- There is a 24-hour Product Support Hotline for questions about your pump – 800.444.2728. Please call your doctor for all medical questions, and dial 911 for an emergency.

YOUR DOCTOR'S INFORMATION

Call your doctor for all medical questions:

DOCTOR: _____

PHONE:

AFTER HOURS/WEEKENDS: _____

24-Hour Product Support

Hotline: 1-800-444-2728

myON-Q.com

FACEBOOK.COM/ONQPAINRELIEF

TWITTER.COM/ONQPAINRELIEF

There are inherent risks in all medical devices. Please refer to the product labeling for **Indications**, **Cautions**, **Warnings** and **Contraindications**. Failure to follow the product labeling could directly impact patient safety. Physician is responsible for prescribing and administering medications per instructions provided by the drug manufacturer. Refer to **www.avanospainmanagement.com** for additional product safety Technical Bulletins.

For more information please visit: avanospainmanagement.com
Call 1-800-448-3569 in the United States and Canada.

AVANOS

avanospainmanagement.com

Rx only.

MK-00866 11/2015

AVANOS | ON-Q PAIN RELIEF SYSTEM

ON-Q* CATHETER REMOVAL

DESCRIPTION: The catheter is a small tube near your incision site that is connected to your infusion pump. The color of the catheter may be clear or golden.

REMOVAL OF CATHETER
If your doctor has instructed you to remove the catheter, then follow their instructions keeping in mind these key steps:†

- Wash your hands thoroughly with soap and warm water. Dry thoroughly.
- Remove the dressing covering the catheter site.
- Remove any skin adhesive strips.
- Grasp the catheter close to the skin, and gently pull on the catheter. It should be easy to remove and not painful. Do not tug or quickly pull on the catheter during removal. If it becomes hard to remove or stretches, then STOP. Call your doctor. Continued pulling could break the catheter.
- Do not cut or pull hard to remove the catheter.

⚠ **WARNING:** ***After you remove the catheter, check the catheter tip for the black marking to ensure the entire catheter was removed. Call your doctor if you don't see the black marking.***

- ***Place a dressing over the catheter site as instructed by your doctor.***

† *Repeat these steps for other catheter sites if you have more than one catheter.*



24-Hour Product Support
Hotline: 1-800-444-2728
myON-Q.com

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- Pain, swelling or a large bruise around the catheter site
- Dizziness, lightheadedness
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NUMBNESS

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⚠ CAUTIONS

- Do not reuse.
- Protect the pump and catheter site from water according to your doctor's instructions.

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For more information please visit: avanospainmanagement.com
Call 1-800-448-3569 in the United States and Canada.

AVANOS

avanospainmanagement.com

Rx only.

MK-00456_Rev1 12/2014

PICO information sheet

smith&nephew
PICO®
Single Use
Negative Pressure
Wound Therapy System

Call your nurse or doctor immediately if

You notice a change in the color or amount of the fluid in the dressing, for example:

- If it changes from clear to cloudy or bright red.
- You see the dressing fill rapidly with blood.
- Your wound looks more red than usual or has a foul smell.
- The skin around your wound looks reddened or irritated.
- The dressing feels or appears loose.
- You experience pain.
- The alarm display will not stop flashing.

Dress

Partially remove backing from dressing and position dressing over wound bed. The port should be uppermost from the wound (if possible) and not over the incision or wound.

Remove remaining backing and smooth dressing edges to secure to periwound skin.

Connect dressing port tubing to pump tubing and twist to secure the connection.

Press

Push the orange button to start delivery of NPWT.

Seal dressing with the supplied adhesive retention strips around all edges.

Go

Change dressing as needed within the 7-day period (pump life) using the additional dressing provided.

What does PICO do?

PICO provides suction known as Negative pressure wound therapy (NPWT) which draws out excess fluid from a wound and protects the incision or wound.

How does PICO work?

PICO consists of an NPWT pump connected to an absorbent gentle adhesive dressing.

The dressing is applied to the wound bed and extra adhesive strips are placed over the outside edge to help hold the dressing in place. When the pump is turned on, air is pulled out of the dressing and excess fluid from the wound will start to enter the dressing. The dressing helps to prevent bacteria from entering the wound. It may also improve blood flow to the wound which will help it to heal.

How long will it take to improve your wound?

The length of time that the therapy takes to improve a wound is different for every patient. It will depend on your general health, the size and type of wound that you have and the treatment you have been prescribed. In many cases, an improvement in the wound can be seen when the first dressing is changed, but in some cases, it may take several weeks.

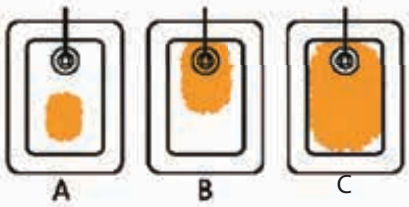
Will it be painful?

The first time the PICO pump is turned on, you may feel a slight pulling or drawing sensation.

If you experience any pain, please speak to your nurse or doctor for advice. They may prescribe pain-relief medication.

How often will the dressings have to be changed?

The dressings may be left in place for up to seven days depending on the type of wound and amount of fluid from the wound. Your nurse or doctor will determine how often your dressings should be changed.



A) Dressing properly positioned and is acceptable to be left in place

B) Dressing requires change

C) Dressing requires change

Will the dressing changes hurt?

Some people may experience slight discomfort during dressing changes, specifically during cleaning of the wound, depending on the type and position of the wound. If you feel any discomfort, please tell the person who is changing your dressing.

Can you move around while on the therapy?

Patients using PICO® can move around but this will depend on recommendations provided by your nurse or doctor.

When you are asleep

Make sure that the PICO pump is placed somewhere safe and cannot be pulled off a table or cabinet onto the floor during sleep.

Disconnection of the pump from the dressing

The pump may be disconnected from the dressing if there is a requirement to disconnect the pump – such as the need to have a shower.

Press the orange button to pause the therapy. Unscrew the two parts of the connector. Place the pump somewhere safe.

Once you are ready to reconnect the pump, screw the two halves back together. Ensure your dressing is smoothed down to make sure there are no creases that could cause air leaks. Press the orange button to restart the therapy. The green light will start flashing to show that the pump is starting to apply therapy. If after one minute the orange "air leak" light starts to flash refer to the section regarding alarms. Please note that if the pump is left paused for longer than one hour it will automatically restart the therapy.

Showering and washing

The PICO pump is splash proof but should not be exposed to jets of water.

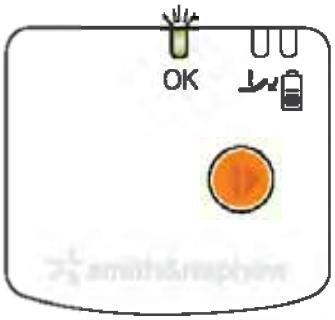
Make sure the tube attached to the dressing is held out of the water and that the end of the tube is pointing downwards so that water cannot enter the tube.

The dressing on top of the wound is water resistant. You can shower or wash with the dressing in place, as long as you take care not to expose it to direct jets of water and not to soak it. Soaking the dressing may cause it to fall off.

How do I know if the PICO system is working?

While the PICO pump is working correctly a green light located at the top of the device will flash continuously.

The dressing should have a slightly wrinkled appearance and feel firm to the touch.



Smith & Nephew, Inc.

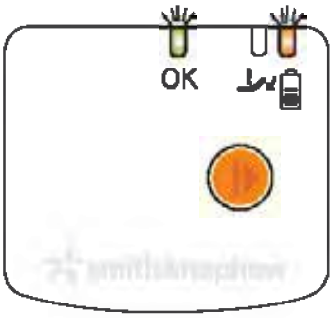
USA
970 Lake Carillon Drive
Suite 110
St. Petersburg, FL 33716

Customer Care Center
1-800-876-1261
T 727-392-1261
F 727-392-6914

www.smith-nephew.com
www.possiblewithpico.com

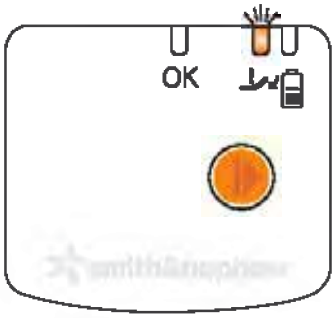
What happens if the PICO visual alarm display starts flashing?

The PICO pump has a visual alarm for "Low Battery" and "Leak Alarm". These issues are easily solved, for example:



"Low Battery" – The pump will begin to alert you with a flashing orange light (above the battery symbol) when there are 24 hours and less of battery life. The batteries should be changed at this point. Press the orange button to pause the therapy. Replace batteries, put the cover back on and press the orange button again to restart your therapy.

The green light and the orange light above the battery will flash together when the batteries need changing.



"Leak Alarm" – Air leak detected possibly due to a creased dressing/border/strip.

Pump has gone into Auto Pause. NPWT is not being applied to the wound.

The pump will Auto Pause for one hour and then will automatically try to re-establish therapy if no remedial action is taken.

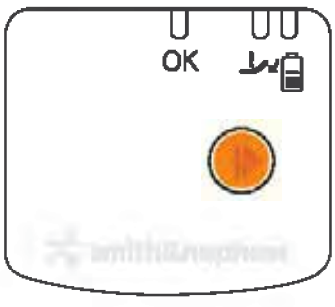
Smooth down the dressing and the strips to remove any creases that are allowing air into the system. Press the orange button to restart the therapy. The green "OK" light will flash as the pump tries to establish therapy. If the air leak remains, the amber leak light will start to flash after approximately 30 seconds. If this happens, repeat smoothing actions and press the orange button. If the leak is resolved the green light will continue to flash.

Contact your nurse or doctor if you have continuous issues with the flashing low vacuum light.

When will I need a new pump?

The pump is designed to stop working after seven days after initially started. After this time, it will stop and will not restart even with new batteries. Negative pressure therapy is not being applied at this point so your nurse or doctor will need to apply a new PICO therapy system if needed.

The pump will look like this when it has come to the end of its life.



If you have any other questions, please speak to your nurse or doctor, or call the Customer Care Center at **1-800-876-1261.**

BREG

POLAR CARE® CUBE™

OPERATING INSTRUCTIONS

⚠ WARNING

The Polar Care Cube can be cold enough to cause serious injury, including full skin necrosis. Follow these Operating Instructions, and carefully read the Product Insert (see pouch on side of unit) and the Cold Therapy Pad Fitting Instructions (provided with each Cold Therapy Pad) prior to use.

Cold Therapy Protocol*

Treatment Period	Awake/ Asleep	Frequency/Duration	Inspect Skin Every:
Day:	Awake		
Through			
Day:	Asleep		
Day:	Awake		
Through			
Day:	Asleep		
Day:	Awake		
Through			
Day:	Asleep		

* To be completed by a licensed Health Care Professional

1 ⚠ Discuss Treatment with your Licensed Health Care Practitioner
Provide a complete medical history including any reactions to cold. Certain medical conditions make cold-induced injury more likely. Ask your practitioner about potential adverse reactions and cold-induced injuries.

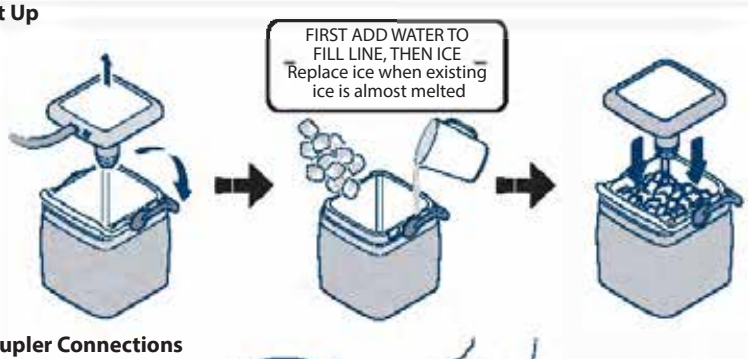
2 ⚠ Use Only as Prescribed
Use only according to your practitioner's instructions regarding the frequency and duration of cold application and length of breaks between uses, how and when to inspect the skin, and total length of treatment. Do not use this device if you did not receive or do not understand the instructions. Unless your practitioner provides different instructions, to take a break between uses simply disconnect the power from the unit or remove the pad from your body for a minimum of 30 minutes. Federal law restricts this device to sale by or on the order of a licensed health care practitioner.

3 ⚠ Apply Insulation Barrier & Cold Therapy Pad
Do not let any part of the pad touch skin. Always use an insulation barrier (such as Breg Polar Dressing, Webril™, Kerlix™, cast padding or elastic bandage) between the Cold Therapy Pad and skin. If a sterile dressing has been applied to the treatment site that does not completely cover the skin under the pad, use an additional insulation barrier. Use only with the Breg Cold Therapy Pads. Other pads may be colder, increasing the risk of serious cold-induced injury, including full thickness necrosis.

4 ⚠ Check for Moisture
Check for moisture on the barrier between your skin and the cold pad. Discontinue use if the barrier is moist. Change to a dry skin barrier before resuming use.

5 ⚠ Inspect Skin Regularly
Inspect the skin under the Cold Therapy Pad (by lifting the edge) as prescribed, typically every 1 to 2 hours. Ask your practitioner to instruct you on how to inspect the skin area which is being treated by the device. Do not use the Polar Care unit if dressing, wrapping, bracing, or casting over the Cold Therapy Pad prevents skin checks. Stop using and contact your practitioner immediately if you experience any adverse reactions, such as: increased pain, burning, increased swelling, itching, blisters, increased redness, discoloration, welts, other changes in skin appearance, or any other reaction identified by your practitioner.

Set Up

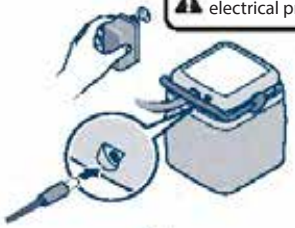


Coupler Connections

Connect

Operation

⚠ See Product Insert for electrical precautions.



Check Skin Frequently

End Session
To stop the pump, disconnect electrical power. Remove pad.

Over ➡

POLAR CARE CUBE

Tips and Trouble Shooting

Usage Tips

1. Use cubed or chunked ice for optimal performance.
2. It is recommended to drain the Cold Therapy Pad between uses. To drain the pad, hold the Cold Therapy Pad upright with the hose pointed toward the ground. Depress the black plunger and allow water to drain out of the pad.
3. You may disconnect the Cold Therapy Pad from the unit without removing the pad from the affected area by depressing the silver tabs on the hose coupling and gently pulling the hoses apart. The Breg Polar Care Cold Therapy Pad and unit will seal itself and will not leak. Note: Some dripping during release is normal.
4. DO NOT RUN PUMP WITHOUT WATER! The pump in this unit is designed to run with water. Running the unit without water will cause permanent damage to the pump.
5. Unplug unit before removing lid.

Troubleshooting Guide

Problem: Pump not running, water not flowing to pad, or pad not cold.

Possible solutions:

- Use larger ice for optimal performance.
- Allow 10 minutes for flow and pressure to stabilize.
- Ensure power outlet is working and plugs are fully engaged.
- Ensure unit has both ice and water.
- Ensure hose is not kinked.
- Disconnect and reconnect the pad and unit.
- Release air by depressing the black plus-shaped part inside the unit connector. Note: water may be released.
- Place unit on a table or other raised surface.
- Decrease tension of bandages or straps around the pad.
- Remove pad and lay it flat. Allow pad to fill; reapply.
- Clean filter: Disconnect pad. Remove unit lid. Pull filter cap from bottom of lid. Remove foam filter. Rinse filter cap and filter to remove clogs. Reassemble (Fig. 1).

(fig. 2)
(Fig. 1)

Problem: Condensation

Possible solutions:

- Wrap material over pad and hose to minimize air exposure.
- Protect the wound site by using a sterile dressing with waterproof barrier.

Problem: Unit is leaking

Possible solutions:

- Disconnect unit connector. Ensure metal tabs are pressed down; reconnect (Fig. 2).
- Apply lubricant to o-rings of connectors.
- If leaking continues, or if a leak is detected in the pad or unit lid, stop using the unit and contact Breg Customer care at 1-800-321-0607 or +1-760-795-5440.

(Fig. 2)
(fig. 1)

Cleaning

After use, empty and dry the unit with a soft cloth. Warm water and mild detergent may be used occasionally to clean the pump and tubes.

Scan QR code for Breg's Cube instructional video.

Breg.com/PCC

Breg, Inc.
2885 Loker Ave E
Carlsbad, CA 92010 USA
Toll Free Tel: 1-800-321-0607
Local: +1-760-795-5440
Fax: +1-760-795-5295
www.Breg.com

North Valley Surgery Center

Affiliated with HONORHEALTH

TOTAL KNEE EXERCISES

Preferred Exercises – First Week:

1. **Ankle Pumps**


While lying on your back, pull your foot towards your head and then point it down, moving your ankle through as much range of motion as possible. Repeat 15 times per set, 5 times per day.

2. **Quad Sets (Thigh Squeezes)**

With your leg straight out in front of you, tighten the muscles on the front of your thigh by pushing the back of your knee down into the bed. Hold contraction for 5-10 seconds, then release. Repeat 15 times per set, for 2 sets. Complete 3 times per day.

3. **Gluteal Sets (Buttock Squeezes)**

Tighten your buttock muscles by squeezing them tightly together. Hold contraction for 5-10 seconds, then release. Repeat 15 times per set, for 2 sets. Complete 3 times per day.

4. **Heel Slides**

While lying on your back, slide your heel up the bed towards your buttocks, trying to bend the knee as much as tolerated. Repeat 15 times per set, for 2 sets. Completed 3 times per day.
*Note: you may use a plastic bag under the heel to decrease friction

5. **Seated Knee Extension**


While sitting on a firm surface, lift your foot off the floor by straightening your knee as much as possible. Hold 5-10 seconds, then lower your leg slowly, allowing your heel to bend to a right angle. Repeat 15 times per set, for 2 sets. Complete this 3 times per day.

6. **Passive Extension Stretch**

Lie on your back with your surgical leg straight out in front of you. Place a small towel roll under your heel and allow your knee to relax and straighten as much as possible. Make sure your leg does not roll out to the side. Lie in this position for 3-5 minutes. Repeat 5 times per day.

USER GUIDE

Scan QR Code to watch Instructions for Use

PlasmaFlow™

Vascular Therapy System

(Compressible Limb Sleeve Device)

PlasmaFlow™

Do not use this product before reading this manual. If you have any questions, please call your physician or ManaMed Customer Service at 888-508-0712.
To learn more about ManaMed, visit www.manamed.com

MANAMED®

PlasmaFlow™

PlasmaFlow Label Symbol Descriptions

The use of accessories, power supplies and cables other than those specified, with the exception of components sold by the manufacturer of the PlasmaFlow™ as replacement parts, may result in increased emissions or decreased immunity of the PlasmaFlow.

Designates Class II medical electrical equipment.

This unit is an electromechanical device that includes printed circuit boards and rechargeable batteries. Do not discard in landfill. Consult local county requirements for proper disposal instructions.

This symbol designates the degree of protection against electrical shock from the wrap as being a type B applied part.

Consult instructions for use.

CAUTION: Federal Law restricts this device to sale by or on the order of a physician.

Caution

Federal Law (U.S.A.) restricts this device to sale, distribution or use by or on the order of a physician or properly licensed practitioner. PlasmaFlow is only intended for the use by the individual for whom it was prescribed. The device is ONLY for single patient use.

THIS DEVICE IS NON-STERILE
PlasmaFlow does not require sterilization before use.

Technical Data

Device Box Components
PlasmaFlow Take-Home DVT Device (2)
PlasmaFlow Charger

Power Supply
Class II Input: 100 – 240 Vac, 50-60 Hz Output: 5 V at 1 Amp
Use only UL/60601-1 approved power supplies
from ManaMed for use in hospital settings
Output Mode of Operation Continuous

Specifications
Dimension: 23" x 10.25" x 1.5" (58cm x 26cm x 4 cm)
Weight: Approximately 1.43 lb (.65 kg)
Modes of Operation: Mode 1 and Mode 2
Source of Power: DC 5 V or Inner Battery
(3.7volt Lithium-Ion Battery)

System Operating Environment:
Temperature: 50oF (10oC) and 104oF (40oC)
Humidity: 30%-75%. Keep dry.

Default Settings
Leg Pressure (not adjustable): 55mmHg
Cycle time: 60 Seconds
Mode One: Slow Inflation
Mode Two: Set Up Technology

Tolerance
Pressure 5%

PlasmaFlow Labeling Information

Indications for Use

PlasmaFlow model PF0001 is intended to be an easy-to-use portable system, prescribed by a physician, for use in the home or in a clinical setting to help prevent the onset of DVT in patients by stimulating blood flow in the extremities (simulating muscle contractions). This device can be used to:

- Aid in the prevention of DVT.
- Enhance blood circulation.
- Diminish post-operative pain and swelling.
- Reduce wound healing time.
- Aid in the treatment and healing of stasis dermatitis, venous stasis ulcers, arterial and diabetic leg ulcers, chronic venous insufficiency and reduction of edema in the lower limbs.
- The unit can also be used as an aid in the prophylaxis for DVT by persons expecting to be stationary for long periods of time.

Contraindications

PlasmaFlow must not be used to treat the following conditions:

- Persons with suspected, active or untreated deep vein thrombosis, ischemic vascular disease, severe arteriosclerosis, pulmonary edema, severe congestive heart failure, thrombophlebitis or an active infection.
- On a leg where the cuffs would interfere with the following conditions: vein ligation, gangrene, dermatitis, open wounds, a recent skin graft, massive edema or extreme deformity of the leg on patients.
- On patients with neuropathy.
- On extremities that are insensitive to pain.
- Where increased venous or lymphatic return is undesirable.

Warnings

Do not attempt to repair the device or open or remove covers. Do not remove the pump unit from the cuff. Do not attempt to modify or change the device. NEVER attempt any service while the device is in use. PlasmaFlow is a Medical Electrical Device. The following are precautions specific to Medical Electronic Devices:

- Do not operate in a wet environment.
- Do not immerse in any liquid for any reason. For cleaning and disinfecting instructions, refer to "Cleaning and Disinfecting" section.
- Do not place the device in autoclave for any reason.
- Not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
- If exposed to temperatures below 50oF (10oC), allow the device to warm up to room temperature.
- Do not subject the device to extreme shocks, such as dropping the pump.
- Portable and mobile Radio Frequency Communication Equipment can b affected by Medical Electrical Devices.

Cautions

The device is to be sold by or on the order of the physician. Operation of the device can be done by the patient. The PlasmaFlow cuffs are designed for single patient use. The device must be ONLY used for its intended use by the patient prescribed. The device must not be transferred to another patient. Stop using the device if swelling, skin irritation or any other unpleasant or painful sensation occurs. Consult your physician. Loosen cuffs immediately if pulsation or throbbing occurs as the cuffs may be wrapped too tightly. Patients with diabetes or vascular disease require frequent skin assessment. Consult your physician. Patients who use warming devices in combination with cuffs require frequent assessment as skin irritation may occur. Consult your physician. Patients positioned in the supine lithotomy position (with or without cuffs) for an extended period of time require special attention to avoid extremity compartment system. Consult your physician.

PlasmaFlow™

PlasmaFlow Overview

Purpose and Description of PlasmaFlow - What is DVT?
Deep vein thrombosis (DVT) occurs when a blood clot (thrombus) forms in one or more of the deep veins in your body, usually in the legs. This can cause pain or swelling.
Causes of DVT:

- Certain blood clotting medical conditions.
- Immobility for extended periods of time.
- Damage to a vein from surgery or trauma.
- Inflammation due to infection or injury.

The purpose of the PlasmaFlow™ is to aid in the prevention of DVT. The device stimulates blood flow within the legs with an electrically- controlled pump that delivers a set amount of air to the leg cuffs. The air compresses the calf or calves to aid blow flow out of the lower extremities.

The pump will inflate each leg cuff to a pre-set pressure of 55mmHG and deflate once that pressure is reached. These cycles are repeated on each unit until the power is turned off. The internal, rechargeable batteries allow the PlasmaFlow to be completely portable, thus preventing interruptions in treatment.

PlasmaFlow System Features and Components

Two portable, tubeless and lightweight cuffs.
Each cuff features a house control unit that contains a Power Button, Charging Port and an LCD Screen to monitor patient usage and device air pressure. The control units are not removeable from PlasmaFlow.

Each house control unit contains a battery and internal electronics to ensure the pump is inflating and delivering air to the leg cuffs.

PlasmaFlow control unit displays the mode, timer, and air pressure of the device while turned on. Refer to "Getting Started" section on page 4.

The house control on each cuff has a charging port to charge the device. PlasmaFlow will not communicate with other electrical devices.

Battery and Charger:

Battery Run Time: 7 to 9 hours.

PlasmaFlow is powered by a rechargeable battery. The charger is included with PlasmaFlow upon receiving the device box.

CAUTION: Only use the charger that was supplied by ManaMed. Do not plug other chargers into PlasmaFlow as it may damage the device or charger.

The port plug end of the cord plugs into the charging port on the housing unit on the PlasmaFlow device and the other end plugs into an electrical wall outlet.

Battery Charge Time: Takes approximately 3 hours to charge (from depleted state).
Read more about the battery and how to charge PlasmaFlow in the "Getting Started" section on page 4.

PlasmaFlow

Getting Started

Charging PlasmaFlow

PlasmaFlow has a rechargeable lithium-ion battery that provides approximately 7-9 hours of treatment before needing to be recharged. It takes approximately 3 hours to charge from depleted state. To ensure PlasmaFlow is functioning properly, the device monitors battery voltage and electrical signal. Important: Charge both device cuffs before first use.

Warning: Use only the charger provided by ManaMed. The use of the wrong charger can cause excessive heat, damage to the circuit and shorten the life of the battery.

When Device is OFF: Plug in the power supply adapter to the wall socket using the plug located on the bottom end of the device. The RED "Charging" LED indicator (located above the Power Button) on the device will illuminate or flash, depending on the state of the charge. When the battery is charging, the LED indicator will be RED. Once the battery is fully charged, the LED indicator will be solid BLUE.

When Device is ON: The AC Adaptor can be connected while the device is in use. Plug the charger into the bottom of the controller on the device. Plug the end of the charger into an electrical wall outlet.

1. Find the charger port on the PlasmaFlow device.

2. Plug the charger into the charging port on the PlasmaFlow device. Plug the power supply end of the charger into an electrical wall outlet.

3. The charging LED indicator will illuminate RED when the battery is charging. When the batter is fully charged, the indicator will be BLUE.

4. If the device is on and charging, the LED indicator on the device will be BLUE.

Quick Start Instructions for Wearing and Operating PlasmaFlow

Step 1

Step 1: Calf Cuff Application
Wrap the cuff around each calf and secure the Velcro to hold it in place. Make sure the wrap is snug, but not too tight.

Step 2

Step 2: Turning the Device On
When the cuffs are secured on your each of your calves, press the Power Button for three seconds until the blue light is illuminated on each unit. The unit will be in the first working mode.

Step 3

Step 3: Starting Treatment
After a couple seconds, pumps inside the unit will cause the cuff sleeves to inflate to a pre-set pressure of 55 mmHG. Once the pressure reaches the proper level, the pumps will turn OFF for a 50 second 'rest' period.

The unit will inflate and deflate to the specified mode as directed by your physician. For instructions on how to switch between modes, refer to the "Switching Modes" section on page 5.

Switching Modes

The PlamsaFlow unit is pre-set to "Mode 1." Only switch to "Mode 2" if instructed by your physician.

In order to operate the PlasmaFLow unit in "Mode 2", tap the Power Button once while the unit is powered on. The screen on the left side of the Power Button will display "O" and the screen on the right side of the Power Button will display "F2". The unit will start operating in "Mode 2" after a 10-second pause. To switch the PlasmaFlow unit back to "Mode 1," simply tap the Power Button once.

Mode 1 "Slow Inflation":
Pressure will inflate to 55 mmHG and deflate.

Mode I

Mode 2 "Step up Technology":
The PlasmaFlow unit's pressure will increase at 10 mmHG with a pause at every increment. Once the unit reaches 55 mmHG, it will deflate in the same descending increments. Wrap the cuff around each calf and secure the Velcro to hold it in place. Make sure the wrap is snug, but not too tight.

Mode 2

PlasmaFlow Use and Care

Contains no serviceable parts. Inspect the unit and all components for any damage that may have occurred during shipping or general handling prior to each use (for example, frayed or cut charging cord, cracked plastic housing unit, torn cuffs, etc). Refer to image of PlasmaFlow for description of the system components. Do not attempt to connect the wall supply if any damage is noticed. Avoid subjecting the unit to shocks such as dropping the pumps. Do not handle leg cuffs with any sharp objects. If a bladder is puncture or you notice a leak, do not attempt to repair the unit or cuffs. Replacement units are available by contacting customer service. Avoid folding or creasing the bladder during use and transportation of the unit. Battery is not replaceable. Replaceable units are available by contacting customer service.

WARNING: This device is not protected against water. Equipment not suitable for use in the presence of flammable anesthetic mixture with air, oxygen, or nitroux oxide. Contact ManaMed Customer Service at 888-508-0712 to receive replacement instructions for any damaged items.

Operating Conditions
Temperature: 50°F (10°C) and 104°F (40°C).
Humidity: 30%-75%. Keep dry.
If PlasmaFlow is stored or transported in temperatures and humidity outside of this range, allow the device time to come to room temperature.

Storage
Store in a dry location between 50°F (10°C) and 104°F (40°C).
Do not expose to heat exceeding 122°F (50°C) for extended periods of time.
Do not store items in direct sunlight.

Cleaning and Disinfecting

Note: Inspect the device and follow the cleaning and disinfecting procedures prior to use.

Warning: Device must be turned off and disconnected from the wall outlet prior to and during cleaning or disinfecting.

DO NOT IMMERSE DEVICE IN ANY LIQUID. DO NOT PLACE DEVICE IN AUTOCLAVE.

Clean the outer surface of the pump unit using a soft cloth, moistened with soapy water or 70% isopropyl alcohol. Air dry only. Clean the exterior of the cuffs using a soft cloth, moistened with soapy water or 70% isopropyl alcohol. Air dry only.

Unit must be completely dry prior to use. To ensure unit is completely dry, leave the device in the OFF position and disconnected from the wall outlet for at least 30 minutes (and as long as necessary for the unit to dry completely) after cleaning or disinfecting.

- Do not remove the pump unit from the cuff.
- Do not place cuffs in the dryer or microwave.
- Do not use a hair dryer to accelerate drying.
- Do not place the device on top of or in front of portable or stationary radiators to accelerate drying.
- Do not use abrasive cleans.

Battery and Charging Safety

Battery

Do not attempt to replace the lithium-ion battery.

Do not attempt to replace the battery with non-approved batteries. Incorrect replacement of batteries could result in damage to the device. The battery should only be replaced by ManaMed.
Be sure to only use the USB battery charger (Part Number PFCHG) provided with the system. Other chargers may cause the battery to overheat and damage the battery, PlasmaFlow or the user.
Do not use an extension cord with the battery charger as it may cause overheating.
Do not use the battery charger with other devices as it may cause damage to the device or battery charger.
If the battery area on the PlasmaFlow system becomes overheated, discontinue using and contact ManaMed Customer Service at 888-508-0712.

Charging

Important: Charge both devices before first use.
The battery will charge whether PlasmaFlow is turned on or off.
If the battery power decreases quickly even after recharging for four or more hours, contact Customer Service.

Do not recharge the battery in any of the following locations:

- Where the temperature is below 50°F (10°C) or above 104°F (40°C).
- Anywhere near water.
- Outdoors.
- Within reach of small children.
- Any areas where people could walk on the charger cable or trip over the charger cable.

Disposal

PlasmaFlow is an electromechanical device that includes printed circuit boards and rechargeable batteries. Do not discard in landfill. For details on how to dispose of PlasmaFlow correctly, consult local requirements for proper disposal instructions. Pump control units contain rechargeable batteries. Do not discard the pump in regular waste. Bring the unit to your local recycle center or contact ManaMed Customer Service at 888-508-0712.
Warning: Do not throw any part of PlasmaFlow into fire.

Alerts and Alarms

E1-Low Battery: When the device is in use and error code "EI" appears, it means the battery is low. Charge the device for a full 4 hours before resuming use.

"Low Pressure or Leak": EI may also appear if the pressure limit is not reached within 80 seconds. The cycling will stop and the alarm will sound for 10 seconds (unless unit is powered off). Turn the device OFF and then back ON. If the device continues to alarm after this step, plug both devices into the wall for a full four hours and resume use after charge.

E2-"Battery Critical" Alarm: When the code "E2" appears on the device, the device must be plugged in and charged. You can continue to use the device if it is plugged in and charging. If the device continues to alarm, call ManaMed Customer Service at 888-508-0712. DO NOT ATTEMPT TO FIX THE DEVICE.

Limited Warranty

ManaMed, Inc warrants to the original purchaser of its PlasmaFlow Vascular Therapy System purchased by the purchaser directly from ManaMed, Inc that the PlasmaFlow System conforms to ManaMed, Inc's manufacturing specifications. This warranty will be in effect for a period of 120 days from the date of purchase.

In the event of a material breach of this warranty, upon timely written notice, ManaMed, Inc will either repair or replace the PlasmaFlow Vascular Therapy System or refund the original purchase price. This will constitute the Purchaser's sole remedy. This limited warranty does not extend to any resale or other transfer of the PlasmaFlow System by Purchaser to any other person or entity.

MANAMED, INC EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, RELATING TO THE SYSTEM OR ITS PERFORMANCE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Customer Service
Manamed is available to answer any questions regarding the use of the PlasmaFlow System.
To contact Customer Service:
Call: 888-508-0712 (toll free) or
E-mail: CustomerService@ManaMed.Net

For General Information: Visit www.ManaMed.Net

Mail: ManaMed PlasmaFlow Customer Service
5240 W Charleston Blvd., Las Vegas, NV 89146

PlasmaFlow

Compliance Statements & Declarations Electromagnetic Compatibility (EMC) Tables

GUIDANCE AND MANUFACTURER'S DECLARATION - ELECTROMAGNETIC EMISSIONS		
The PlasmaFlow is intended for use in the electromagnetic environment specified below. The customer or the user of the PlasmaFlow should assure that it is used in such an environment.		
Emissions Tests	**Compliance**	**Electromagnetic Environment Guidance**
RF Emissions CISPR11	Group 1	The PlasmaFlow uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR11	Class B	The PlasmaFlow is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations IEC 61000-3-3	Complies	

GUIDANCE AND MANUFACTURER'S DECLARATION - ELECTROMAGNETIC IMMUNITY			
The PlasmaFlow is intended for use in the electromagnetic environment specified below. The customer or the user of the PlasmaFlow should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment Guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	±8KV contact ±15kV air	±8KV contact ±15kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical Fast Transient/Burst IEC61000-4-4	±2kV for power supply lines ±1kV for input/ output lines	±2kV for power supply lines ±1kV for input/ output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC61000-4-5	±1kV differential mode ±2kV common mode	±1kV differential mode ±2kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC61000-4-11	<5%UT (>95% dip in UT) for 0.5 cycle 40%UT (60% dip in UT) for 5 cycles 70%UT (30% dip in UT) for 25 cycles <5%UT (>95% dip in UT) for 5 seconds	<5%UT (>95% dip in UT) for 0.5 cycle 40%UT (60% dip in UT) for 5 cycles 70%UT (30% dip in UT) for 25 cycles <5%UT (>95% dip in UT) for 5 seconds	Mains power quality should be that of a typical commercial or hospital environment. If the user of the PlasmaFlow requires continued operation during power mains interruptions, it is recommended that the PlasmaFlow be powered from an uninterrupted power supply or a battery.
Power Frequency (50/60Hz) Magnetic Fields IEC61000-4-8	30 A/m at 50 or 60 Hz	30 A/m at 50 or 60 Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE: UT is the a.c mains voltage prior to application of the test level.			

PlasmaFlow

Compliance Statements & Declarations Electromagnetic Compatibility (EMC) Tables

GUIDANCE AND MANUFACTURER'S DECLARATION - ELECTROMAGNETIC IMMUNITY			
The PlasmaFlow is intended for use in the electromagnetic environment specified below. The customer or the user of the PlasmaFlow should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment Guidance**
Conducted RF IEC61000-4-6	3Vrms 150 kHz to 80 MHz	3Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the PlasmaFlow, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1.2\sqrt{P}$ 150 KHz to 80 MHz $d = .35\sqrt{P}$ 80 MHz to 800 MHz $d = .70\sqrt{P}$ 800 MHz to 2.5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey[a], should be less than the compliance level in each frequency range[b]. Interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF IEC61000-4-3	3 V/m 80 MHz to 2.5 GHz	10 V/m	
NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
[a] Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to the fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the PlasmaFlow is used exceeds the applicable RF compliance level above, the PlasmaFlow should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the PlasmaFlow. [b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than [V1] V/m.			

RECOMMENDED SEPARATION DISTANCE BETWEEN PORTABLE AND MOBILE RF COMMUNICATIONS EQUIPMENT AND THE PLASMAFLOW			
The PlasmaFlow is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the PlasmaFlow can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the PlasmaFlow as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150 KHz to 80 MHz $d = 1.2\sqrt{P}$	80 MHz to 800 MHz $d = .35\sqrt{P}$	800 MHz to 2.5 GHz $d = .70\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23
For transmitters rated at a maximum output power not listed above, the recommended separation distance in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

Scan QR Code to watch
Instructions for Use

Manufactured By:

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5240 W Charleston Blvd.,
Las Vegas, NV 89146

888-508-0712 (toll free)
CustomerService@manamed.net
www.manamed.com