BlueCross BlueShield of Arizona
An Independent Licensee of the Blue Cross and Blue Shield Association

MEDICAL COVERAGE GUIDELINES	**ORIGINAL EFFECTIVE DATE: 03/05/13**
SECTION: Durable Medical Equipment (DME)	**LAST REVIEW DATE: 01/21/14**
	LAST CRITERIA REVISION DATE: 01/21/14
	ARCHIVE DATE:

OUTPATIENT USE OF LIMB COMPRESSION DEVICES FOR VENOUS THROMBOEMBOLISM PROPHYLAXIS

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Medical Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.

The section identified as "Description" defines or describes a service, procedure, medical device or drug and is in no way intended as a statement of medical necessity and/or coverage.

The section identified as "Criteria" defines criteria to determine whether a service, procedure, medical device or drug is considered medically necessary or experimental or investigational.

State or federal mandates, e.g., FEP program, may dictate that any drug, device or biological product approved by the U.S. Food and Drug Administration (FDA) may not be considered experimental or investigational and thus the drug, device or biological product may be assessed only on the basis of medical necessity.

Medical Coverage Guidelines are subject to change as new information becomes available.

For purposes of this Medical Coverage Guideline, the terms "experimental" and "investigational" are considered to be interchangeable.

Description:

Limb pneumatic compression devices consist of an inflatable garment for the arm or leg and an electrical pneumatic pump that fills the garment with compressed air. The garment is intermittently inflated and deflated with specific pressures and cycle times. Limb pneumatic compression devices are commonly used in the hospital setting to prevent deep vein thrombosis (DVT) and pulmonary embolism (PE), together known as venous thromboembolism (VTE), in individuals undergoing major orthopedic and other surgeries. Pneumatic compression devices may also be used in the outpatient setting, to include but not limited to, an outpatient hospital, ambulatory surgery center or the home setting. Portable battery-operated devices that have been cleared by the FDA include: Venowave VW5, FlowMedic FM220, ActiveCare®+SFT System and Restep® DVT System.

OUTPATIENT USE OF LIMB COMPRESSION DEVICES FOR VENOUS THROMBOEMBOLISM PROPHYLAXIS (cont.)

Criteria:

For cryopneumatic and cryopneumatic/heat devices, see BCBSAZ Medical Coverage Guideline, *"Durable Medical Equipment".*

Major Orthopedic Surgery:

- Outpatient limb compression devices for venous thromboembolism (VTE) prophylaxis is considered ***medically necessary*** for individuals with a contraindication to pharmacologic agents (i.e., at high risk of bleeding) with documentation of **ALL** of the following:

  1. **ANY** of the following major orthopedic surgeries:

     - Total hip arthroplasty (THA)
     - Total knee arthroplasty (TKA)
     - Hip fracture surgery (HFS)

  2. **ANY** of the following risk factors for bleeding:

     - Previous major bleeding; previous bleeding risk similar to current risk
     - Severe renal failure
     - Concomitant antiplatelet agent
     - Surgical factors, including history of difficult-to-control surgical bleeding or difficult-to-control surgical bleeding during the current operative procedure, extensive surgical dissection and revision surgery.

OUTPATIENT USE OF LIMB COMPRESSION DEVICES FOR VENOUS THROMBOEMBOLISM PROPHYLAXIS (cont.)

Criteria: (cont.)

Major Non-Orthopedic Surgery or Non-Major Orthopedic Surgery:

- Outpatient limb compression devices for venous thromboembolism (VTE) prophylaxis after major non-orthopedic surgery or non-major orthopedic surgery is considered ***medically necessary*** for individuals at moderate or high risk of venous thromboembolism with a contraindication to pharmacologic agents (i.e., at high risk of bleeding) with documentation of **ALL** of the following:

  1. **ANY** of the following risk factors for bleeding:

     - Previous major bleeding; previous bleeding risk similar to current risk
     - Severe renal failure
     - Concomitant antiplatelet agent
     - Surgical factors including history of difficult-to-control surgical bleeding or difficult-to-control surgical bleeding during the current operative procedure, extensive surgical dissection and revision surgery.

  2. **ANY** of the following risk factors for venous thromboembolism:

     - Prior deep vein thrombosis (DVT), pulmonary embolism (PE) or venous thromboembolism (VTE).
     - Hypercoaguable state
     - Open abdominal or open pelvic surgery
     - Abdominal or pelvic surgery for cancer
     - Sepsis or severe infection
     - Age $\geq$ 60
     - Active cancer or cancer treatment
     - Anesthesia $\geq$ 2 hours
     - Bed rest $\geq$ 4 days
     - Surgical complications including urinary tract infection, acute renal insufficiency, postoperative transfusion, perioperative myocardial infarction and pneumonia.

- Outpatient limb pneumatic compression devices for venous thromboembolism prophylaxis for periods longer than 30-days post surgery is considered ***not medically necessary***.

OUTPATIENT USE OF LIMB COMPRESSION DEVICES FOR VENOUS THROMBOEMBOLISM PROPHYLAXIS (cont.)

Criteria: (cont.)

- Outpatient use of limb compression devices for venous thromboembolism prophylaxis for all other indications not previously listed or if above criteria are not met is considered ***experimental or investigational*** based upon:

  1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
  2. Insufficient evidence to support improvement of the net health outcome, and
  3. Insufficient evidence to support improvement of the net health outcome as much as, or more than, established alternatives, and
  4. Insufficient evidence to support improvement outside the investigational setting.

Resources:

1. 1.01.28 BCBS Medical Policy Reference Manual. Postsurgical Outpatient Use of Limb Compression Devices for Venous Thromboembolism Prophylaxis, Re-issue date 12/12/2013, issue date 12/13/2012.