

<b>Case Number:</b>	CM15-0070401		
<b>Date Assigned:</b>	04/17/2015	<b>Date of Injury:</b>	07/24/2010
<b>Decision Date:</b>	05/18/2015	<b>UR Denial Date:</b>	04/08/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	04/13/2015

### HOW THE IMR FINAL DETERMINATION WAS MADE

MAXIMUS Federal Services sent the complete case file to an expert reviewer. He/she has no affiliation with the employer, employee, providers or the claims administrator. He/she has been in active clinical practice for more than five years and is currently working at least 24 hours a week in active practice. The expert reviewer was selected based on his/her clinical experience, education, background, and expertise in the same or similar specialties that evaluate and/or treat the medical condition and disputed items/Service. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

The Expert Reviewer has the following credentials:  
State(s) of Licensure: Ohio, North Carolina, Virginia  
Certification(s)/Specialty: Family Practice

### CLINICAL CASE SUMMARY

The expert reviewer developed the following clinical case summary based on a review of the case file, including all medical records:

The injured worker is a 57 year old female who sustained an industrial injury on 7/24/10 from a fall injuring her left knee. She was diagnosed with internal derangement of her left knee and had arthroscopic surgery in 7/2011. She had post-operative physical therapy but her pain was not any better. She then had a partial knee replacement surgery of the left knee. She injured her low back and right ankle and had arthroscopic right ankle surgery on 12/6/13. She continues to experience ongoing pain in her left knee and right ankle (right posterior Achilles pain). Her pain level is 8/10. She ambulates slowly with a mild limp. Pain medications control her pain. She also has constant lower back pain with pain level of 5-7/10. She has sleep difficulties. She is independent in her basic activities of daily living but has difficulty with prolonged sitting, standing, bending, climbing, kneeling, and twisting. Medications are Motrin, Prilosec and Gralise. Diagnoses include left knee pain, internal derangement, partial knee replacement (7/8/11), arthroscopic surgery (2/10); right ankle pain, right ankle Achilles tendinitis, status post surgical repair of the right foot and ankle (12/6/13); low back pain and bilateral hip pain due to abnormal gait; right foot and leg neuropathic pain; sleep difficulties; sexual difficulties and psychological difficulties. Treatments to date include corticosteroid injections, anti-inflammatories. Diagnostics include computed tomography of the left knee (11/12/12) abnormal findings; bone scan (2/4/13) abnormal; MRI right ankle (10/8/12) is negative; MRI right ankle (3/2/15); abnormal MRI of the right foot (2/11/14); MRI left knee (2/12/15) abnormal findings; abnormal bone scan left knee (2/4/13). In the progress note dated. On 4/2/15, the treating provider requested vacutherm deep vein thrombosis prophylaxis unit hot/ cold compression for 30 days following left knee surgery.

## IMR ISSUES, DECISIONS AND RATIONALES

The Final Determination was based on decisions for the disputed items/services set forth below:

**DME: Post-Operative purchase Vascutherm DVT Prophylaxis Hot/ Cold Compression Unit 30 day on 30 day of left knee: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Cryotherapy.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines. Knee and lower leg Venous thrombosis and continuous flow cryotherapy sections.

**Decision rationale:** Per the Official Disability Guidelines, a direct comparison of recommendations from AAOS and ACCP for prevention of VTE following total knee or hip replacement surgery found several differences. Neither AAOS nor ACCP recommend routine screening for DVT or PE in asymptomatic patients postoperatively. Warfarin is an acceptable therapy in all patient groups, but recommendations regarding other medications differ. ACCP recommends a LMWH or fondaparinux. AAOS, in contrast to ACCP, stratifies patients into four categories based on VTE risk and risk of major bleeding. Recommendations regarding mechanical prophylaxis differ slightly. According to AAOS, unless contraindicated, mechanical compression should be utilized for both total hip and knee arthroplasty for all patients in the recovery room and during the hospital stay. For patients undergoing THR or TKR, ACCP recommends the optimal use of mechanical thromboprophylaxis with the VFP (venous foot pump) or IPC (intermittent pneumatic compression) for patients with a high risk of bleeding. When the high bleeding risk decreases, ACCP recommends that pharmacologic thromboprophylaxis be substituted for or added to the mechanical thromboprophylaxis. The latest AHRQ Comparative Effectiveness Review of venous thromboembolism in orthopedic surgery concluded that there are inadequate data to make very many recommendations. They did suggest, for patients who have undergone major orthopedic surgery such as hip or knee replacement, extending post-surgery use of medications, from the standard 7-10 days to 28 days or longer, to prevent blood clots may be beneficial. While there is not enough evidence to determine which type of anti-clotting medication is best, within the heparin class of medications, low molecular-weight heparin was found to be superior to unfractionated heparin. Continuous flow cryotherapy is recommended as an option after surgery, but not for nonsurgical treatment. Postoperative use generally may be up to 7 days, including home use. In the postoperative setting, continuous-flow cryotherapy units have been proven to decrease pain, inflammation, swelling, and narcotic usage; however, the effect on more frequently treated acute injuries (eg, muscle strains and contusions) has not been fully evaluated. Continuous-flow cryotherapy units provide regulated temperatures through use of power to circulate ice water in the cooling packs. The injured worker has been scheduled to have a total knee replacement as a consequence of ongoing pain from loose hardware, The requested device is a dual function unit which purports to help prevent deep venous thrombosis and provides heat/cold modalities to assist with post-operative swelling. The referenced guidelines suggest that continuous flow cryotherapy units are recommended for up to

7 days post-operatively. The requested use for the referenced unit is for 30 days. In terms of post-operative thrombosis prophylaxis, the guidelines are supportive of using anti-coagulants for up to 28 days, and possibly using mechanical devices for this purpose if the patient is at high risk for bleeding. The submitted medical record does not indicate that the injured worker is known to be at high risk for bleeding. Therefore, post-operative purchase of a Vascultherm DVT Prophylaxis Hot/ Cold Compression Unit 30 day on 30 day of left knee is not medically necessary.