

Case Number:	CM15-0077165		
Date Assigned:	04/28/2015	Date of Injury:	06/15/2011
Decision Date:	06/26/2015	UR Denial Date:	04/14/2015
Priority:	Standard	Application Received:	04/22/2015

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: Iowa, Illinois, Hawaii

Certification(s)/Specialty: Preventive Medicine, Occupational Medicine, Public Health & General Preventive Medicine

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 58-year-old male, who sustained an industrial injury on 6/15/2011. He reported injury from a slip and fall. The injured worker was diagnosed as having bilateral knee tricompartmental degenerative joint disease, lumbosacral strain with radiculopathy and carpal tunnel syndrome. There is no record of a recent diagnostic study. Treatment to date has included surgery, steroid injections, viscosupplementation injections, therapy, and weight loss and medication management. In a progress note dated 4/6/2015, the injured worker complains of continued right knee pain with pending right knee surgery. The treating physician is requesting continuous passive motion machine, cold therapy unit-14 day rental, limb compression unit 14-21 day rental and leg compression wrap#2 purchase.

IMR ISSUES, DECISIONS AND RATIONALES

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

CPM: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation ODG (Knee Chapter).

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Knee, Continuous passive motion (CPM).

Decision rationale: MTUS is silent with regards to a Continuous Passive Motion (CPM) unit. ODG states, "Recommended as indicated below, for in-hospital use, or for home use in patients at risk of a stiff knee, based on demonstrated compliance and measured improvements, but the beneficial effects over regular PT may be small. Routine home use of CPM has minimal benefit." ODG further quantifies, Criteria for the use of continuous passive motion devices: In the acute hospital setting, postoperative use may be considered medically necessary, for 4-10 consecutive days (no more than 21), for the following surgical procedures: (1) Total knee arthroplasty (revision and primary). (2) Anterior cruciate ligament reconstruction (if inpatient care)(3) Open reduction and internal fixation of tibial plateau or distal femur fractures involving the knee joint (BlueCross BlueShield, 2005) For home use, up to 17 days after surgery while patients at risk of a stiff knee are immobile or unable to bear weight: (1) Under conditions of low postoperative mobility or inability to comply with rehabilitation exercises following a total knee arthroplasty or revision; this may include patients with: (a) complex regional pain syndrome; (b) extensive arthrofibrosis or tendon fibrosis; or (c) physical, mental, or behavioral inability to participate in active physical therapy. (2) Revision total knee arthroplasty (TKA) would be a better indication than primary TKA, but either OK if #1 applies. Medical records indicate pending knee surgery. The request does not indicate the duration of treatment. Guidelines recommend 4-10 (up to 21) sessions post-surgically. The previous reviewer recommends post-operative CPM x 21 days. As such, the request for CPM is not medically necessary at this time.

Cold Therapy Unit (14-day rental): Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation ODG Knee Chapter.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Knee and Leg, Cryotherapy.

Decision rationale: MTUS does not specifically address cold therapy packs, therefore the Official Disability Guidelines (ODG) were referenced. ODG states, "Postoperative use of continuous-flow cryotherapy units generally may be up to 7 days, including home use." There is no evidence in the guidelines for use after the initial 7 days nor do the guidelines recommend an unspecified duration. The request for a 14-day rental is in excess of the guideline recommendation. The previous reviewer modified request to Cold Therapy Unit (7-day rental). As such, the request for Cold Therapy Unit (14-day rental) is not medically necessary.

Limb Compression Unit (14-21 day rental): Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation ODG Knee and Leg Chapter.

Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Knee and Leg, Venous Thrombosis and Compression Therapy and Other Medical Treatment Guidelines http://www.thermotekusa.com/md_vascutherm.php.

Decision rationale: MTUS is silent concerning compression therapy. ODG States "Recommended. Good evidence for the use of compression is available, but little is known about dosimetry in compression, for how long and at what level compression should be applied. Low levels of compression 10-30 mmHg applied by stockings are effective in the management of telangiectases after sclerotherapy, varicose veins in pregnancy, the prevention of edema and deep vein thrombosis (DVT). High levels of compression produced by bandaging and strong compression stockings (30-40 mmHg) are effective at healing leg ulcers and preventing progression of post-thrombotic syndrome as well as in the management of lymphedema. (Parsch, 2008) (Nelson-Cochrane, 2008) See also Lymphedema pumps; Venous thrombosis." MTUS is silent concerning DVT prophylaxis. ODG states "Recommend identifying subjects who are at a high risk of developing venous thrombosis and providing prophylactic measures such as consideration for anticoagulation therapy. Minor injuries in the leg are associated with greater risk of venous thrombosis. The relative risk for venous thrombosis is 3-fold greater following minor injury, especially if injury occurs in the 4 weeks prior to thrombosis, is located in the leg, and involves multiple injuries or rupture of muscle or ligament. Risk for venous thrombosis is higher in those with leg injury combined with family history of venous thrombosis (12-fold risk), Factor V Leiden mutation (50-fold risk), or Factor II 20210A mutation (9-fold risk). (Van Stralen, 2008) A venous thrombosis is a blood clot that forms within a vein. Deep venous thromboses (DVTs) form in the deep veins of the legs, and if a piece of a blood clot formed in a vein breaks off it can be transported to the right side of the heart, and from there into the lungs, and is called an embolism, and this process called a venothromboembolism (VTE). Risk factors for venous thrombosis include immobility, surgery, and prothrombotic genetic variant. 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. (AAOS/ACCP, 2010) 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. (Sobieraj, 2012) Extended anticoagulation with apixaban or dabigatran reduces recurrent VTE and mortality without increasing major bleeding. "While DVT prophylaxis is appropriate for surgical patients, the treating physician has not provided documentation as to why compression therapy is needed in addition to anticoagulation therapy. The patient will receive Lovenox and Physical Therapy. As such, the request Limb Compression Unit (14-21 day rental) is not medically necessary.

Leg Compression Wrap #2 purchase: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation ODG Knee & Leg Chapter.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Knee and Leg, Venous Thrombosis and Compression Therapy and Other Medical Treatment Guidelines http://www.thermotekusa.com/md_vascutherm.php.

Decision rationale: MTUS is silent concerning compression therapy. ODG States "Recommended. Good evidence for the use of compression is available, but little is known about dosimetry in compression, for how long and at what level compression should be applied. Low levels of compression 10-30 mmHg applied by stockings are effective in the management of telangiectases after sclerotherapy, varicose veins in pregnancy, the prevention of edema and deep vein thrombosis (DVT). High levels of compression produced by bandaging and strong compression stockings (30-40 mmHg) are effective at healing leg ulcers and preventing progression of post-thrombotic syndrome as well as in the management of lymphedema. (Parsch, 2008) (Nelson-Cochrane, 2008) See also Lymphedema pumps; Venous thrombosis." MTUS is silent concerning DVT prophylaxis. ODG states "Recommend identifying subjects who are at a high risk of developing venous thrombosis and providing prophylactic measures such as consideration for anticoagulation therapy. Minor injuries in the leg are associated with greater risk of venous thrombosis. The relative risk for venous thrombosis is 3-fold greater following minor injury, especially if injury occurs in the 4 weeks prior to thrombosis, is located in the leg, and involves multiple injuries or rupture of muscle or ligament. Risk for venous thrombosis is higher in those with leg injury combined with family history of venous thrombosis (12-fold risk), Factor V Leiden mutation (50-fold risk), or Factor II 20210A mutation (9-fold risk). (Van Stralen, 2008) A venous thrombosis is a blood clot that forms within a vein. Deep venous thromboses (DVTs) form in the deep veins of the legs, and if a piece of a blood clot formed in a vein breaks off it can be transported to the right side of the heart, and from there into the lungs, and is called an embolism, and this process called a venothromboembolism (VTE). Risk factors for venous thrombosis include immobility, surgery, and prothrombotic genetic variant. 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. (AAOS/ACCP, 2010) 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. (Sobieraj,

2012) Extended anticoagulation with apixaban or dabigatran reduces recurrent VTE and mortality without increasing major bleeding."While DVT prophylaxis is appropriate for surgical patients, the treating physician has not provided documentation as to why compression therapy is needed in addition to anticoagulation therapy. The patient will receive Lovenox and Physical Therapy. With the non-certification of the limb compression unit, the request for Leg Compression Wrap #2 purchase is not medically necessary.