Case Number:	CM14-0111551		
Date Assigned:	08/13/2014	**Date of Injury:**	12/27/2012
Decision Date:	09/23/2014	**UR Denial Date:**	07/07/2014
Priority:	Standard	**Application Received:**	07/17/2014

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. The expert reviewer is Board Certified in Orthopedic Surgery, and is licensed to practice in California. 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/services. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

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 claimant is a 54-year-old gentleman who was injured on 12/27/12, injuring his knee due to repetitive kneeling and use. There is a current working diagnosis to the left knee of mild osteoarthritis with recurrent meniscal pathology. Surgical intervention in the form of a knee arthroscopy with partial medial meniscectomy and debridement is being recommended. There is perioperative request for use of a compressive therapy pad and Vascutherm compressive device for fourteen days' use in the postoperative setting.

IMR ISSUES, DECISIONS AND RATIONALES

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

Vascutherm Compression Therapy X 14 Day Rental for Left Knee: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 13 Knee Complaints Page(s): 338.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 13 Knee Complaints Page(s): 337-339. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG)-- Official Disability Guidelines Treatment in Worker's Comp , 18th Edition, 2013 Updates: knee procedure - Continuous-flow cryotherapyRecommended 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 (e.g., 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. (Hubbard, 2004) (Morsi, 2002) (Barber, 2000) The available scientific literature is insufficient to document that the use of continuous-flow cooling systems (versus ice packs) is associated with a benefit beyond convenience and patient compliance (but these may be worthwhile benefits) in the outpatient setting. (BlueCross BlueShield, 2005) This meta-analysis showed that cryotherapy has a statistically significant benefit in postoperative pain control, while no improvement in postoperative range of motion or drainage was found. As the cryotherapy apparatus is fairly inexpensive, easy to use, has a high level of patient satisfaction, and is rarely associated with adverse events, we believe that cryotherapy is justified in the postoperative management of knee surgery. (Raynor, 2005) There is limited information to support active vs passive cryo units. Aetna considers passive hot and cold therapy medically necessary. Mechanical circulating units with pumps have not been proven to be more effective than passive hot and cold therapy. (Aetna, 2006) This study concluded that continuous cold therapy devices, compared to simple icing, resulted in much better nighttime pain control and improved quality of life in the early period following routine knee arthroscopy. (Woolf, 2008) Two additional RCTs provide support for use after total knee arthroplasty (TKA). Cold compression reduced blood loss by 32% and pain medication intake by 24%. (Levy, 1993) It improved ROM and reduced hospital stay by 21%. (Kullenberg, 2006) See also Cold/heat packs.Recent research: This systematic review concluded that solely an analgesic effect was demonstrated by the use of continuous cooling. (Cina-Tschumi, 2007) Another systematic review concluded that, despite some early gains, cryotherapy after TKA yields no apparent lasting benefits, and the current evidence does not support the routine use of cryotherapy after TKA. (Adie, 2010) Although the use of cryotherapy may not be a statistically effective modality, according to this systematic review, it may provide patient benefits. (Markert, 2011).

Decision rationale: Based on California ACEOM Guidelines and supportive Official Disability Guidelines criteria, the role of the Vascutherm compressive device would not be indicated. In regards to cold therapy, California Guidelines indicate it is appropriate for acute complaints where after heat may be appropriate. Based on Official Disability Guidelines, the use of the above device is typically recommended for no more than seven days including home use. The specific request for a fourteen day rental of the above compressive therapy device would thus not be indicated. Therefore, this request is not medically necessary.

Compression Therapy Pad (purchase) for Left Knee: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 13 Knee Complaints Page(s): 338.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 13 Knee Complaints Page(s): 337-339. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG)-- Official Disability Guidelines Treatment in Worker's Comp , 18th Edition, 2013 Updates: knee procedure - Continuous-flow cryotherapyRecommended 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 (e.g., 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. (Hubbard, 2004) (Morsi, 2002) (Barber, 2000) The available scientific literature is insufficient to document that the use of continuous-flow cooling systems (versus ice packs) is associated with a benefit beyond convenience and patient compliance (but these may be worthwhile benefits) in the outpatient setting. (BlueCross BlueShield, 2005) This meta-analysis showed that cryotherapy has a statistically significant benefit in postoperative pain control, while no improvement in postoperative range of motion or drainage was found. As the cryotherapy apparatus is fairly inexpensive, easy to use, has a high level of patient satisfaction, and is rarely associated with adverse events, we believe that cryotherapy is justified in the postoperative management of knee surgery. (Raynor, 2005) There is limited information to support active vs passive cryo units. Aetna considers passive hot and cold therapy medically necessary. Mechanical circulating units with pumps have not been proven to be more effective than passive hot and cold therapy. (Aetna, 2006) This study concluded that continuous cold therapy devices, compared to simple icing, resulted in much better nighttime pain control and improved quality of life in the early period following routine knee arthroscopy. (Woolf, 2008) Two additional RCTs provide support for use after total knee arthroplasty (TKA). Cold compression reduced blood loss by 32% and pain medication intake by 24%. (Levy, 1993) It improved ROM and reduced hospital stay by 21%. (Kullenberg, 2006) See also Cold/heat packs.Recent research: This systematic review concluded that solely an analgesic effect was demonstrated by the use of continuous cooling. (Cina-Tschumi, 2007) Another systematic review concluded that, despite some early gains, cryotherapy after TKA yields no apparent lasting benefits, and the current evidence does not support the routine use of cryotherapy after TKA. (Adie, 2010) Although the use of cryotherapy may not be a statistically effective modality, according to this systematic review, it may provide patient benefits. (Markert, 2011).

Decision rationale: Based on California ACEOM Guidelines and Official Disability Guidelines criteria, the postoperative use of a garment pad for use in relationship with a Vascutherm compressive device would not be indicated as the device as a whole has not been supported. Therefore, this request is not medically necessary.