MAXIMUS Federal Services

Case Number:	CM14-0132912		
Date Assigned:	08/22/2014	Date of Injury:	04/05/2013
Decision Date:	09/24/2014	UR Denial Date:	08/12/2014
Priority:	Standard	Application Received:	08/18/2014

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 Pennsylvania. 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:

This is a 50-year-old female who sustained a vocational injury on 04/05/13. The medical records provided for review document that the claimant has been authorized to undergo a left total knee arthroplasty. This review is for use of equipment in the postoperative period.

IMR ISSUES, DECISIONS AND RATIONALES

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

Knee CPM for 45 days: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 13 Knee Complaints. Decision based on Non-MTUS Citation BlueCross BlueShield, (2005).

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG); Knee & Leg chapter: Continuous passive motion (CPM)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. Although research suggests that CPM should be implemented in the first rehabilitation phase after surgery, there is substantial debate about the duration of each session and the total period of CPM application. A Cochrane review on this topic concluded that short-term use of CPM leads to greater short-term range of motion. But in a recent RCT results indicated that routine use of prolonged CPM should be reconsidered, since neither long-

term effect nor better functional performance was detected. The experimental group received CPM + PT in the home situation for 17 consecutive days after surgery, whereas the usual care group received the same treatment during the in-hospital phase (i.e. about four days), followed by PT alone (usual care) in the first two weeks after hospital discharge. (Lenssen, 2008) Continuous passive motion (CPM) combined with PT, may offer beneficial results compared to PT alone in the short-term rehabilitation following total knee arthroplasty. Results favoring CPM were found for the main comparison of CPM combined with physical therapy (PT) versus PT alone at end of treatment. For the primary outcomes of interest, CPM combined with PT was found to statistically significantly increase active knee flexion and decrease length of stay. CPM was also found to decrease the need for post-operative manipulation. CPM did not significantly improve passive knee flexion and passive or active knee extension. (Milne-Cochrane, 2003) (Kirschner, 2004) (Brosseau, 2004) (Bennett, 2005) (Lenssen, 2006) Continuous passive motion can stimulate chondrocyte production of proteoglycan 4 (PRG4), a molecule found in synovial fluid with putative lubricating and chondroprotective properties. (Nugent-Derfus, 2006) A recent Cochrane review concluded that there is high-quality evidence that continuous passive motion increases passive knee flexion range of motion (mean difference 2 degrees) and active knee flexion range of motion (mean difference 3 degrees), but that these effects are too small to be clinically worthwhile, and there is low-quality evidence that continuous passive motion has no effect on length of hospital stay but reduces the need for manipulation under anaesthesia. (Harvey, 2010) The adjunctive home use of CPM may be an effective treatment option for patients at risk of knee flexion contractures, regardless of whether the patient is being treated as part of a worker's compensation claim or not. Recent literature suggests that routine home use of CPM has minimal benefit when combined with standard physical therapy, but studies conducted in a controlled hos.

Decision rationale: California MTUS and ACOEM Guidelines do not provide criteria relevant to this request. The Official Disability Guidelines recommend the use of continuous passive motion machines following total knee replacement for up to 21 days. The current request for 45 days use of a CPM for the knee following total knee replacement exceeds the ODG Guidelines for the length of use and subsequently cannot be considered medically necessary.

Knee immobilizer: Upheld

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 13 Knee Complaints Page(s): 340.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 13 Knee Complaints Page(s): 339-340. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG); Knee & Leg chapter: Immobilization. Not recommended as a primary treatment. Immobilization and rest appear to be overused as treatment. Early mobilization benefits include earlier return to work; decreased pain, swelling, and stiffness; and a greater preserved range of joint motion, with no increased complications. (Nash, 2004).

Decision rationale: The California ACOEM Guidelines state that knee braces may be considered medically reasonable in the setting of patellar instability, anterior cruciate ligament tear and medial collateral ligament instability, although its benefit may be more emotional than

medical. The claimant has been authorized to undergo a left total knee arthroplasty. In addition, the Official Disability Guidelines note that immobilization is not recommended as a primary treatment for the knee; generally rest and immobilization appear to be overused as an early treatment intervention. Therefore, based on the documentation presented for review and in accordance with California ACOEM Guidelines and Official Disability Guidelines, the request for the knee immobilizer cannot be considered medically necessary.

Cold therapy unit for 45 days: Upheld

Claims Administrator guideline: The Claims Administrator did not cite any medical evidence for its decision.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 13 Knee Complaints.

Decision rationale: Official Disability Guidelines (ODG); Knee & Leg chapter: Continuous-flow cryotherapy. 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. (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).

Percocet: Upheld

Claims Administrator guideline: Decision based on MTUS Chronic Pain Treatment Guidelines Opioids Page(s): 79-80, 91.

MAXIMUS guideline: Decision based on MTUS Chronic Pain Treatment Guidelines Opioid Classifications: Short-acting/Long-acting opioids Page(s): 75, 92.

Decision rationale: The Chronic Pain Medical Treatment Guidelines note that Percocet is classified as a short-acting opioid and often used for intermittent or breakthrough pain including treatment of pain in the postoperative setting. Although the use of Percocet would be considered medically reasonable in the postoperative setting, this request does not identify the amount of Percocet to be prescribed or the frequency of time that the medication will be used . Therefore, the request for Percocet without further information about the prescription cannot be considered medically necessary.

Home health care three times a week for four weeks: Upheld

Claims Administrator guideline: The Claims Administrator did not cite any medical evidence for its decision.

MAXIMUS guideline: Decision based on MTUS Chronic Pain Treatment Guidelines Home health services Page(s): 51.

Decision rationale: According to the California Chronic Pain Medical Treatment Guidelines, home health services are recommended only for recommended medical treatment for patients who are home bound on a part time or intermittent basis generally up to no more than 34 hours per week. The medical records do not contain any indication that the claimant is home bound or is unsafe to be taken out of the home including in the setting of postoperative total knee replacement. The request for home health services also does not identify the services needed. Therefore, the absence of documentation regarding the claimant's home bound status and services needed, the request for home health services cannot be recommended as medically necessary.

Home physical therapy three times a week for four weeks: Upheld

Claims Administrator guideline: Decision based on MTUS Postsurgical Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS Chronic Pain Treatment Guidelines Home health services Page(s): 51,Postsurgical Treatment Guidelines.

Decision rationale: The California Chronic Pain Medical Treatment Guidelines recommend home health services for medical treatment of patients who are home bound on a part time or intermittent basis generally up to no more than 34 hours per week. Currently, there is no documentation suggesting that the claimant is homebound despite having recent total knee arthroplasty and not capable of attending outpatient physical therapy. Therefore, without further

clarification and documentation supporting the medical necessity and request for home physical therapy, the request cannot be considered medically necessary.