MAXIMUS Federal Services

Case Number:	CM14-0129756		
Date Assigned:	09/15/2014	Date of Injury:	09/13/2009
Decision Date:	10/15/2014	UR Denial Date:	08/04/2014
Priority:	Standard	Application Received:	08/14/2014

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:

This is a 61-year-old gentleman with documented date of injury on 09/13/09. The medical records provided for review document current complaints of right knee pain. According to the records the claimant has a longstanding history of complaints of the right knee dating back to the time of injury and subsequent ACL reconstruction. The progress report dated 07/22/14 noted ongoing complaints of pain and difficulty ambulating without a cane. [redacted] has included medication management, a corticosteroid injection, bracing, physical therapy and activity restrictions. Physical examination showed lateral tenderness to palpation, effusion, and patellofemoral crepitation. Motion was documented as too painful to proceed beyond 70 degrees of flexion. Plain film radiographs revealed 2 millimeters of remaining articular surface laterally with patellofemoral change noted. The recommendation was made for total knee arthroplasty with a four day inpatient length of stay. The claimant is noted to be with a height of 5' 10" and a weight of 180 pounds giving him a body mass index of 26. The prior utilization dated 08/04/14 supported the surgical procedure and modified the length of stay to three days.

IMR ISSUES, DECISIONS AND RATIONALES

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

Right total knee replacement with 4 day stay at the hospital: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation ODG (Official Disability Guidelines); Knee and Leg, Knee joint replacement.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Treatment in Worker's Comp, 18th Edition, 2013 Updates: knee procedure - Knee joint replacement.

Recommended as indicated below. Total hip and total knee arthroplasties are well accepted as reliable and suitable surgical procedures to return patients to function. The most common diagnosis is osteoarthritis. Overall, total knee arthroplasties were found to be quite effective in terms of improvement in health-related quality-of-life dimensions, with the occasional exception of the social dimension. Age was not found to be an obstacle to effective surgery, and men seemed to benefit more from the intervention than did women. (Ethgen, 2004) Total knee arthroplasty was found to be associated with substantial functional improvement. (Kane, 2005) Navigated knee replacement provides few advantages over conventional surgery on the basis of radiographic end points. (Bathis, 2006) (Bauwens, 2007) The majority of patients who undergo total joint replacement are able to maintain a moderate level of physical activity, and some maintain very high activity levels. (Bauman, 2007) Functional exercises after hospital discharge for total knee arthroplasty result in a small to moderate short-term, but not long-term, benefit. In the short term physical therapy interventions with exercises based on functional activities may be more effective after total knee arthroplasty than traditional exercise programs, which concentrate on isometric muscle exercises and exercises to increase range of motion in the joint. (Lowe, 2007) Accelerated perioperative care and rehabilitation intervention after hip and knee arthroplasty (including intense physical therapy and exercise) reduced mean hospital length of stay (LOS) from 8.8 days before implementation to 4.3 days after implementation. (Larsen, 2008) In this RCT, perioperative celecoxib (Celebrex) significantly improved postoperative resting pain scores at 48 and 72 hrs, opioid consumption, and active ROM in the first three days after total knee arthroplasty, without increasing the risks of bleeding. The study group received a single 400 mg dose of celecoxib, one hour before surgery, and 200 mg of celecoxib every 12 hours for five days. (Huang, 2008) Total knee arthroplasty (TKA) not only improves knee mobility in older patients with severe osteoarthritis of the knee, it actually improves the overall level of physical functioning. Levels of physical impairment were assessed with three tools: the Nagi Disability Scale, the Instrumental Activities of Daily Living Scale (IADL) and the Activities of Daily Living (ADL) Scale. Tasks on the Nagi Disability Scale involve the highest level of physical functioning, the IADL an intermediate level, and the ADL Scale involves the most basic levels. Statistically significant average treatment effects for TKA were observed for one or more tasks for each measure of physical functioning. The improvements after TKA were "sizeable" on all three scales, while the no-treatment group showed declining levels of physical functioning. (George, 2008) This study showed that total knee replacement is second the most successful orthopaedic procedure for relieving chronic pain, after total hip. The study compared the gains in quality of life achieved by total hip replacement, total knee replacement, surgery for spinal stenosis, disc excision for lumbar disc herniation, and arthrodesis for chronic low back pain. Hip replacement reduced pain to levels normal for age, reduced physical functioning to within 75% normal levels, and restored quality of life to virtually normal levels. Total knee replacement was the next most successful procedure, and it all but eliminated pain, improved physical functioning to 60% normal, and restored quality of life to within 65% of normal. (Hansson, 2008) A 6-week program of progressive strength training targeting the quadriceps femoris muscle group substantially improves strength and function following total knee.

Decision rationale: California MTUS and ACOEM Guidelines do not provide criteria relevant to this request. Based on the Official Disability Guidelines, right total knee replacement with a four day inpatient stay is not recommended as medically necessary. The proposed right total knee arthroplasty has already been authorized by Utilization Review on 08/04/14. The Official Disability Guidelines only recommend a three day length of inpatient stay. This request is for

four days and cannot be supported by the ODG Guidelines. Therefore, the request for right total knee arthroplasty with a four day inpatient stay cannot be recommended as medically necessary.

Pre-Op Clearance with [redacted] (ECG, CBC, CMP, PT, PTT, and UA): Overturned

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

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation American College of Occupational and Environmental Medicine (ACOEM), 2nd Edition, (2004) Chapter 7 Independent Medical Examinations and Consultations, page 127.

The occupational health practitioner may refer to other specialists if a diagnosis is uncertain or extremely complex, when psychosocial factors are present, or when the plan or course of care may benefit from additional expertise. An independent medical assessment also may be useful in avoiding potential conflict(s) of interest when analyzing causation or when prognosis, degree of impairment, or work capacity requires clarification. When a physician is responsible for performing an isolated assessment of an examinee's health or disability for an employer, business, or insurer, a limited examinee-physician relationship should be considered to exist. A referral may be for: -Consultation: To aid in the diagnosis, prognosis, therapeutic management, determination of medical stability, and permanent residual loss and/or the examinee's fitness for return to work. A consultant is usually asked to act in an advisory capacity, but may sometimes take full responsibility for investigation and/or treatment of an examinee or patient. -Independent Medical Examination (IME): To provide medicolegal documentation of fact, analysis, and well-reasoned opinion, sometimes including analysis of causality. An IME differs from consultation in that there is no doctor-patient relationship established and medical care is not provided. It may be a means of medical clarification or adjudication in which the physician draws conclusions regarding diagnosis, clinical status, causation, work-relatedness, testing and treatment efficacy and requirements, physical capacities, impairment, and prognosis based on available information. The evaluations must be independent, impartial, and without bias. The client often may be the employer, insurer, state authority, or attorney. Citation(s): Harris J, Occupational Medicine Practice Guidelines, 2nd Edition (2004) - pp. 127 Hegmann K, Occupational Medicine Practice Guidelines, 2nd Ed (2008 Revision), page. 503.

Decision rationale: California ACOEM Guidelines would support preoperative testing to include a urinalysis, preoperative assessment with [redacted], to include EKG, blood work and a urinalysis. The surgery will involve inpatient stay, anesthesia, and possible loss of blood. It is typically standard of care to undergo a preoperative clinical assessment as well as laboratory and clinical testing requested prior to aggressive surgical process due to potential for blood loss, hospitalization and anesthesia. The request in this case would be medically necessary.

Vascu Therma 4 System to Prevent DVT after Surgery: Upheld

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

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Treatment in Worker's Comp, 18th Edition, 2013 Updates: knee procedure - Game Ready accelerated recovery

system. Recommended as an option after surgery, but not for nonsurgical treatment. See Continuous-flow cryotherapy. The Game Ready system combines Continuous-flow cryotherapy with the use of vaso-compression. While there are studies on Continuous-flow cryotherapy, there are no published high quality studies on the Game Ready device or any other combined system. However, in a recent yet-to-be-published RCT, patients treated with compressive cryotherapy after ACL reconstruction had better pain relief and less dependence on narcotic use than patients treated with cryotherapy alone. (Waterman, 2011) 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).

Decision rationale: California MTUS and ACOEM Guidelines do not provide criteria relevant to this request. According to the Official Disability Guidelines, VascuTherm devices or combination therapy devices are typically recommended for no more than seven days in the postsurgical setting. While this individual would benefit from the use of a postoperative cryotherapy compressive device for DVT prevention, its use beyond seven days in the initial clinical setting would not be supported by guideline criteria. The request is not medically necessary.

Home physical therapy 1 time a week for 4 weeks for the right knee: Overturned

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,Postsurgical Treatment Guidelines.

Decision rationale: California MTUS Chronic Pain Guidelines would support the request for home care therapy for four sessions. This individual is to undergo total joint arthroplasty for which home care therapy would be beneficial given initial homebound status. The four sessions of physical therapy would also fall within the Postsurgical Guideline criteria for up to 24 sessions of therapy following joint arthroplasty procedure. The request is medically necessary.

Post op Therapy at outside facility 2 times a week for 10 weeks for the right knee: Overturned

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

MAXIMUS guideline: Decision based on MTUS Postsurgical Treatment Guidelines.

Decision rationale: MTUS Postsurgical Rehabilitative Guidelines would also support 20 sessions of right knee physical therapy. Previously supported from the prior question was four sessions of home therapy. The additional 20 sessions of therapy, which would equal a total of 24 sessions of therapy, would satisfy the Postsurgical Guideline criteria that would support no more than 24 sessions in the postoperative setting. The request is medically necessary.