

## HEALTH EVIDENCE REVIEW COMMISSION (HERC)

### **DRAFT** COVERAGE GUIDANCE: KNEE ARTHROSCOPY FOR OSTEOARTHRITIS

DATE: XX/XX/XXXX

#### HERC COVERAGE GUIDANCE

Arthroscopic treatment of knee osteoarthritis (or osteoarthrosis) should not be covered.

#### RATIONALE FOR GUIDANCE DEVELOPMENT

The HERC selects topics for guideline development or technology assessment based on the following principles:

- Represents a significant burden of disease
- Represents important uncertainty with regard to efficacy or harms
- Represents important variation or controversy in clinical care
- Represents high costs, significant economic impact
- Topic is of high public interest

Coverage guidance development follows to translate the evidence review to a policy decision. In addition to an evidence-based guideline developed by the Evidence-based Guideline Subcommittee and a health technology assessment developed by the Health Technology Assessment Subcommittee, coverage guidance may utilize an existing evidence report produced in the last 5 years by the Agency for Healthcare Research and Quality, the Medicaid Evidence-based Decisions Project or the Washington Health Technology Assessment Program.

#### EVIDENCE SOURCE

Washington State Health Care Authority Health Technology Assessment Program. (2008). HTA evidence report: Arthroscopic surgery of the knee for osteoarthritis. Retrieved from [http://www.hta.hca.wa.gov/documents/ka\\_final.pdf](http://www.hta.hca.wa.gov/documents/ka_final.pdf)

National Institute for Health and Clinical Excellence. (2007). Arthroscopic knee washout, with or without debridement, for the treatment of osteoarthritis: Guidance. London: NICE. Retrieved from <http://guidance.nice.org.uk/IPG230/Guidance/pdf/English>

The summary of evidence in this document is derived directly from this evidence source, and portions are extracted verbatim.

## SUMMARY OF EVIDENCE

### **Clinical Background**

Osteoarthritis (OA) is a common orthopedic condition characterized by articular degeneration within a joint that is estimated to affect approximately 27 million people in the United States. The diagnosis of osteoarthritis of the knee is commonly based on a combination of symptoms and physical findings such as knee pain or stiffness and radiographic findings. Patients with knee osteoarthritis and symptoms that are refractory to medical management may receive arthroscopic interventions for diagnosis or treatment. Interventions such as debridement and lavage of the knee are carried out with the goal of delaying knee replacement arthroplasty. Although orthopedic guidelines list joint lavage and arthroscopic debridement as treatment options, their roles in managing OA of the knee remain controversial. In 1998, it was estimated that 650,000 knee arthroscopies were performed yearly (Moseley 2002). Arthroscopies are considered by many to be minimally invasive procedures, but clinically significant adverse events have been reported.

### **Evidence Review**

The Washington HTA report utilized the 2007 systematic review conducted by AHRQ (Samson 2007) as the primary evidence base. That report stated that the evidence is insufficient to conclude that arthroscopy and lavage or debridement results in pain reduction or improved function for patients with osteoarthritis of the knee. Neither arthroscopic lavage nor debridement has been found to be superior to sham arthroscopy in well-designed and conducted randomized controlled trials (RCTs). A search of the literature identified no new studies since the AHRQ Publication that met inclusion criteria. Only one study (Moseley 2002), was included in the review, which evaluated the Knee-Specific-Pain Score (KSPS) at two years along with other measures of pain and function and determined that they did not include a clinically meaningful difference between either the debridement group and placebo or the lavage group and placebo group.

The WA HTA reported limited information on adverse effects from RCTs that evaluated arthroscopy with lavage and debridement for knee OA, primarily because the trials focused on efficacy and did not formally measure safety events. Observational data, however, provided useful indicators about safety concerns, including the following:

- Mortality has been reported to be from 0.1% to 0.5% ;
- A 0.3% rate of stroke or myocardial infarction has been reported;
- A hemarthrosis rate of nearly 25% was reported in one case series;
- Reports of infection have ranged from 0.5% to 2%;
- DVT has been reported to be from 0.6% to 17.9% in patients undergoing arthroscopy for any reason (not specifically for OA of the knee).

An economic model was provided by The Medical Advisory Secretariat Ministry of Health and Long-term Care, Toronto. The authors were unable to conduct a full economic analysis because effectiveness was not demonstrated in the literature.

[\[Evidence Source\]](#)

### Overall Summary

There is no evidence that neither arthroscopic lavage nor debridement improves pain or functional outcomes in patients with osteoarthritis of the knee.

### LIMITATIONS OF COVERAGE

Not applicable

### PROCEDURE

Arthroscopy of the Knee

### DIAGNOSES

Osteoarthritis of the knee

### APPLICABLE CODES

<b>CODES</b>	<b>DESCRIPTION</b>
<b>ICD-9 Diagnosis Codes</b>	
715.06	Osteoarthrosis, generalized, of lower leg
715.16	Osteoarthrosis, localized, primary of lower leg
715.26	Osteoarthrosis, localized, secondary, of lower leg
715.36	Osteoarthrosis, localized, not specified as primary or secondary, of lower leg
715.86	Osteoarthrosis, involving more than one site but not specified as generalized, of lower leg
715.96	Osteoarthrosis, unspecified as localized or generalized, of lower leg
716.66	Unspecified monoarthritis, lower leg
<b>CPT codes</b>	
29877	Arthroscopy, knee, surgical; debridement/shaving of articular cartilage

Coverage guidance is prepared by the Health Evidence Review Commission (HERC), HERC staff, and subcommittee members. The evidence summary is prepared by the Center for Evidence-based Policy at Oregon Health & Science University (the Center). This document is intended to guide public and private purchasers in Oregon in making informed decisions about health care services.

The Center is not engaged in rendering any clinical, legal, business or other professional advice. The statements in this document do not represent official policy positions of the Center. Researchers involved in preparing this document have no affiliations or financial involvement that conflict with material presented in this document.

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