Health Technology Clinical Committee
Findings and Coverage Decision
Topic: Knee Arthroscopy for Osteoarthritis of the Knee
Meeting Date: August 15, 2008
Final Adoption: October 17, 2008

Number and Coverage Topic
20080815B – Knee Arthroscopy for Osteoarthritis of the Knee.

HTCC Coverage Determination
Knee Arthroscopy for osteoarthritis of the knee is not a covered benefit. This decision does not apply to the use of knee arthroscopy for other diagnostic and therapeutic purposes.

HTCC Reimbursement Determination

❖ Limitations of Coverage
Not Applicable

❖ Non-Covered Indicators
Osteoarthritis of the Knee

❖ Agency Contact Information

<table>
<thead>
<tr>
<th>Agency</th>
<th>Contact Phone Number</th>
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<tbody>
<tr>
<td>Labor and Industries</td>
<td>1-800-547-8367</td>
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<tr>
<td>Uniform Medical Plan</td>
<td>1-800-762-6004</td>
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<tr>
<td>Health and Recovery Services Administration</td>
<td>1-800-562-3022</td>
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Health Technology Background
The knee arthroscopy for osteoarthritis topic was selected and published in August 2007 to undergo an evidence review process. This surgical procedure is generally performed to directly visualize the knee joint, remove excess fluids and worn or loose bodies and repair tears. It is regarded as minimally invasive and a generally safe surgery that has effectiveness in treating certain knee injuries. Benefits are thought to include the reduction of pain but there are important clinical questions about the effectiveness of knee arthroscopy and there is wide variation in its use. Knee arthroscopy is in the top ten procedures, by cost, that are paid for by the Washington agencies.
In June 2008, the HTA posted a draft and then final report from a contracted research organization that reviewed publicly submitted information, updates a recent systematic Evidence Review, searched and searched, summarized, and evaluated trials, articles, and other evidence about the topic. The comprehensive, public and peer reviewed, knee arthroscopy report is 100 pages, summarizes a 2007 systematic review, and identified 41 additional potentially relevant articles, Medicare coverage and 1 expert treatment guidelines, and included a detailed analysis of 3 studies that met inclusion criteria. These studies represent the best available information, including a randomized controlled trial on which moderate quality evidence based conclusions were drawn.

An independent group of eleven clinicians who practice medicine locally meet in public to decide whether state agencies should pay for the health technology based on whether the evidence report and other presented information shows it is safe, effective and has value. The committee met August 15th, reviewed the report, including peer and public feedback, and heard public and agency comment. Meeting minutes with detailing the discussion are available through the HTA program or online at http://www.hta.hca.wa.gov in the committee section.

**Summary of Committee Findings**
The committee found that it had the most complete information: a current evidence report that updated a prior systematic review, significant public and industry comments, and agency utilization information. The committee concluded that the current evidence on knee arthroscopy demonstrates that there is not a net health benefit because there were serious harms and the surgical intervention produced no better outcomes than placebo. In many technologies reviewed, there has been a lack of evidence due to trial design to indicate whether a treatment may work. In this case a trial was designed and provided good evidence directly comparing the surgical treatment to a sham treatment, which resulted in equivalent outcomes and demonstrated no benefit. Information from this randomized controlled trial demonstrated that knee arthroscopy (lavage and debridement) for osteoarthritis of the knee had no more benefit than placebo (the sham surgery), and agencies do provide alternative methods of treatment (e.g., physical and occupational therapy).

Based on these evidentiary findings, the committee voted 10 to 0 for non-coverage.

- **Is it effective?**
  Majority voted that the comprehensive evidence reviewed shows that the technology is equal to placebo
  - Effectiveness was the key focus of the discussion
  - Regarding effectiveness – the key randomized control, placebo-control trial found no difference in outcomes of patients treated with knee arthroscopy for osteoarthritis and placebo surgery.
  - other studies showing some benefit were not RCTs, were generally uncontrolled case series, and were missing key factors such as: there was no outlined distinction between patients with primary or secondary osteoarthritis, the placebo effect was not investigated, and no details of patient sampling were included
  - Regarding pain reduction – no statistically significant difference in knee pain between the placebo group and those who had surgery.
✓ Improved function – no evidence of improved function.

- **Is it safe?**
  Majority voted that the comprehensive evidence reviewed shows that the technology is less safe
  ✓ This is a surgical intervention that carries surgical risks. These risks are especially important where efficacy is not demonstrated.
  ✓ Deep Vein Thrombosis occurrence of between .6% to 17% is also significant

- **Does it provide value (improve health outcome)?**
  Majority voted that the comprehensive evidence reviewed shows that the technology is less cost effective, though this was not a major coverage decision factor
  ✓ Because of the failure to show effectiveness, it is not cost-effective
  ✓ Surgical intervention are costly

**Consistency with Medicare Decision and Expert Treatment Guidelines**
The independent evidence vendor identified two relevant policies. A national Medicare coverage decision that does not cover knee arthroscopy for certain osteoarthritis conditions an OARSI treatment guideline that concludes arthroscopy for OA is controversial because some studies show term benefit while others show relief is due to placebo effect.
  ✓ The committee decision is consistent with these policies.

**Committee Authority**
Washington State believes it is important to use a scientific based, clinician centered approach for difficult and important health care benefit decisions. The HTA gathers and assesses the quality of the latest medical evidence using a scientific research company, takes public input at all stages, and asks a committee of eleven independent health care professionals to review all the information and render a decision at an open meeting. The Washington State Health Technology Clinical Committee (HTCC), an independent committee of 11 health practitioners, determines how selected health technologies are covered by several state agencies. RCW 70.14.080-140. These technologies may include medical or surgical devices and procedures, medical equipment, and diagnostic tests. HTCC bases their decisions on evidence of the technology’s safety, efficacy, and cost effectiveness. Participating state agencies are required to comply with the decisions of the HTCC. HTCC decisions may be re-reviewed at the determination of the HCA Administrator.