

BSC7.16	Knee Arthroscopy in Knee Osteoarthritis		
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Section:	7.0 Surgery	Page:	Page 1 of 15

Policy Statement

- I. Knee arthroscopy with arthroscopic partial meniscectomy/chondroplasty for degenerative tears may be considered **medically necessary** when **all** of the following conditions are met:
 - A. The patient and physician have reviewed, completed, and signed the Knee Arthroscopy Surgery [Decision Aid](#) ensuring [shared decision making](#) has occurred
 - B. The patient has reviewed, completed, and signed the "[CollaboRATE](#)" survey
 - C. Underlying knee osteoarthritis, including degenerative tears of the meniscus in the setting of osteoarthritis
 - D. Documentation of knee symptomatology, including history, physical exam (e.g., knee swelling/effusion and painful range of motion)
 - E. Magnetic resonance imaging (MRI) radiological report with results and interpretation indicating meniscal tear
 - F. No evidence of severe osteoarthritis by radiographic imaging (weight-bearing plain films, MRI, and/or CT scan) of the knee ([Kellgren & Lawrence](#) or [Outerbridge](#) Grade 3 greater than 1.5cm or Grade 4)
 - G. Documentation of unsuccessful [conservative therapy](#) for at least six weeks ([non-surgical medical management](#), see Policy Guidelines*)
 - H. The procedure is NOT for arthroscopic lavage and debridement for persons presenting with knee pain only

- II. Knee arthroscopy is considered **not medically necessary** for persons with advanced or severe osteoarthritis classified Grade 3 or 4 by either the Kellgren & Lawrence or Outerbridge scale.

NOTE: Refer to [Appendix A](#) to see the policy statement changes (if any) from the previous version.

Policy Guidelines

This policy is designed primarily to address elective knee arthroscopy in patients with underlying knee osteoarthritis (OA). This includes degenerative tears of the meniscus in the setting of osteoarthritis.

Knee arthroscopy may be employed for diagnostic purposes alone on rare occasions, and has important roles including debridement without chondroplasty/meniscectomy, ligament reconstruction and repair, articular cartilage restoration, synovectomy, loose body removal, lateral release or patellar realignment, manipulation under anesthesia, acute trauma, and/or lysis of adhesions for arthrofibrosis; however, this policy does not address these indications.

Kellgren & Lawrence (K&L) Scale on standing (weight-bearing) anteroposterior and tunnel x-rays:

The characterization of radiographs is as follows:

- **Grade 0** - no radiographic features of osteoarthritis are present
- **Grade 1** - doubtful joint space narrowing (JSN) and possible osteophytic lipping
- **Grade 2** - definite osteophytes and possible JSN on anteroposterior weight-bearing radiograph
- **Grade 3** - multiple osteophytes, definite JSN, sclerosis, possible bony deformity
- **Grade 4** - large osteophytes, marked JSN, severe sclerosis and definite bony deformity

Modified Outerbridge Classification System**

The characterization of joint cartilage damage is as follows:

- **Grade 0** – normal cartilage
- **Grade 1** – cartilage with softening and swelling. (MRI-focal areas of hyperintensity with normal contour)
- **Grade 2** – Fibrillation/fissuring/fragmentation within soft areas of articular cartilage that does not reach bone (1-2 mm or <50% of cartilage depth) (MRI-blister-like swelling/fraying of articular cartilage extending to surface; <1.5cm)
- **Grade 3** – Fibrillation/fissuring with partial thickness cartilage loss or focal ulceration (>2mm or >50% cartilage depth without exposed bone). (MRI-partial thickness cartilage loss of >2mm with fibrillation or crab-meat appearance; >1.5cm)
- **Grade 4** – Erosion, destruction, or ulceration of cartilage with exposed subchondral bone (does not penetrate subchondral bone). (MRI-full thickness cartilage loss or ulceration with underlying bone reactive changes; any size)

Conservative Treatment

As medically indicated, members with knee pain should have non-surgical treatment documented in the medical record, including **all** of the following, unless contraindicated:

- Anti-inflammatory medications or analgesics
- Activity modification
- Supervised physical therapy which could include an instructed home exercise program, including flexibility and muscle-strengthening exercises. Post-op physical therapy visits will be allowed in addition to the pre-op physical therapy visits.
- Weight reduction counseling as appropriate
- Assistive device use (required for persons with certain relative contraindications*** to knee arthroscopy, optional for others)
- Therapeutic injections into the knee as appropriate, or documentation of contraindication to injection

*Note that knee arthroscopy is indicated *without* 6 weeks of conservative therapy in injuries caused by acute events, in the absence of osteoarthritis. These include non-degenerative meniscal tears leading to a locked knee, recurrent giving way, and/or amenable to repair rather than debridement (flap tears, bucket handle, vertical longitudinal or root tears) or infections.

**The Outerbridge classification is usually based on arthroscopic findings but the Modified Outerbridge is sometimes used in radiologic interpretations as well. Common MRI descriptions are in parentheses following the arthroscopic findings. FS PD is Fat Saturated Proton Density.

***Relative contraindications to knee arthroscopy for degenerative meniscal tears include the following: morbid obesity (body mass index [BMI] greater than 40), or age less than 50 years unless there are no other treatment options for the patient. Patients with relative contraindications should exhaust all appropriate nonsurgical treatment options prior to surgical consideration.

Knee Arthroscopy Decision Aid

Use of decision aids can promote shared decision making and may improve patients understanding and enable them to make decisions that are fully informed and consistent with their preferences, values, and goals. A decision aid is a tool used to inform patients about available treatments, along with potential benefits, risks and costs, during clinical encounters. The decision aid is intended for use following the patient pre-operative education course. The resulting decision aid is intended to be nondirective, encouraging clinicians to create a conversation with patients using their own communication styles, while simultaneously ensuring that key information is conveyed and that patient preferences are elicited. Blue Shield of California considers the use of decision aids as a higher level of informed consent and requires patients to acknowledge receipt, review, and sign the Enhanced Clinical Programs (ECP) Knee Arthroscopy decision aid as a pre-authorization requirement.

Shared Decision Making

Shared Decision Making (SDM) is a process in which patients openly explore with their physicians' assistance both the available evidence supporting each therapeutic intervention, and also determine what matters most to the patient. This allows both the physician and the patient to reach agreed-upon treatment decisions reflecting mutual goals and expected outcomes.

CollaboRATE

Patient-centered health care is a central component of current health policy agendas. CollaboRATE is a 3-Item questionnaire that measures the level of shared decision making in the clinical encounter from the patient's perspective. In the questionnaire, the patient rates, on a scale of 1 to 9, the provider's efforts to understand the surgical plan of care from the patient's perspective. The CollaboRATE SDM tool has demonstrated discriminative validity, concurrent validity, intra-rater reliability, and sensitivity to change.

To access further information, please visit the following website: <http://www.jmir.org/2014/1/e2/>.

Description

This medical policy is designed to enhance the long-term outcome of the arthroscopic treatment of partial meniscectomy of the knee by ensuring that conservative therapies are initiated before the surgical procedure, and that every patient who undergoes this treatment knows exactly what to expect from the procedure chosen. A decision aid and shared decision making tool have been incorporated to improve patient knowledge, adjust unrealistic expectations, and elicit values about the benefit desired and the degree of acceptable risks for the patient contemplating this procedure.

Determining how to help physicians better incorporate clinical guidelines and evidence-based medicine into this decision-making has important implications for patient outcomes after an arthroscopic partial meniscectomy of the knee. Therefore, reducing the incidence of "inappropriate" knee arthroscopy procedures and eliminating overuse helps to ensure that the most appropriate care to Blue Shield members is being delivered.

Related Policies

- Partial Thickness Rotator Cuff Tears and Acromioplasty/Subacromial Decompression

Benefit Application

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Some state or federal mandates (e.g., Federal Employee Program [FEP]) prohibits plans from denying Food and Drug Administration (FDA)-approved technologies as investigational. In these instances, plans may have to consider the coverage eligibility of FDA-approved technologies on the basis of medical necessity alone.

Regulatory Status

Arthroscopy of the knee is a surgical procedure and therefore is not regulated by the U.S. Food and Drug Administration (FDA).

Rationale

Background

Arthroscopic Meniscectomy

Arthroscopy is a surgical procedure in which the inside of the knee can be visualized and treated through the use of an arthroscope (a fiber-optic instrument with a camera attached to the end) that is inserted through a small incision in the knee. Looking at the interior of the joint on a monitor, the surgeon can then determine the amount or type of injury and, if necessary, take a biopsy specimen or repair or correct the problem. These images allow the surgeon to view in detail the inside of the knee and its structures. Arthroscopy can be used to diagnose and treat specific knee problems such as repairing cartilage or removing damaged tissue.

Arthroscopic meniscectomy is a procedure involving the removal of all or part of a torn meniscus from the knee. The meniscus is a half-moon-shaped piece of shock-absorbing cartilage between the femur and the tibia in the knee. This procedure is performed when a meniscal tear is too large to be corrected by surgical repair of the meniscus.

According to the American Medical Society for Sports Medicine (AMSSM), arthroscopic partial meniscectomy of the knee is the most commonly performed orthopedic surgery in the United States, with about 700,000 procedures performed annually¹

Osteoarthritis

Osteoarthritis (OA) affects about 21 million people in the United States. By age 65, the majority of the population has radiographic evidence of OA and 11 percent have symptomatic OA of the knee.² OA (of any joint) was the primary diagnosis that led to 11.3 million ambulatory care visits in 2009. It was estimated that 9.9 million adults had symptomatic OA of the knee in 2010.³

OA is defined as a slowly progressive joint disease that affects middle aged to elderly people. In osteoarthritis, the cartilage between the bones in the joint breaks down, which can cause the affected bones to slowly get bigger. The joint cartilage often breaks down because of mechanical stress or biochemical changes within the body, causing the bone underneath to fail. Symptoms of OA include, but are not limited to joint pain and stiffness, knobby swelling at the joint, cracking or grinding noise and movement, and decreased function of the joint.⁴ Genetics, large body mass, certain occupations, repetitive knee bending or heavy lifting, and hereditary vulnerability are other factors that increase a patient's risk of developing OA.³

The American College of Rheumatology (ACR) proposed an algorithm of diagnosis criteria for OA of the knee.⁵ The diagnosis of OA is established using a combination of clinical information from patient history, physical examination, radiologic imaging, and laboratory evaluation. The diagnosis of OA is defined as presenting with pain and meeting at least five of the following criteria:

- Age > 50 years
- Less than 30 minutes of morning stiffness
- Crepitus (noisy, grating sounds) on active motion
- Bony tenderness
- Bony enlargement
- Lack of palpable synovial warmth
- Erythrocyte sedimentation rate (ESR) <40mm/hour
- Rheumatoid factor <1:40
- Synovial fluid signs of OA (clear, viscous, and/or white blood cell count <2,000 cells/mm³)

Arthroscopic Debridement

Arthroscopic debridement is a procedure which involves the removal of cartilage or meniscal fragments, with the intention to improve symptoms and joint function in patients with mechanical symptoms such as locking or catching of the knee. Its effectiveness declines in

arthritic joints, and it may be completely ineffective as a treatment option in knees with considerable osteoarthritis.

Conservative Care

For the duration of conservative care, four prospective level 1 evidence studies addressed this issue with specific times included in their studies.⁶⁻⁹

Literature Review

Arthroscopic Meniscectomy

In 2013, Herrlin et al reported on a prospective randomized intervention study (N=96) which evaluated the outcome at a 2 and 5 year follow-up (from their 2007 study⁸) on whether combined arthroscopic surgery followed by exercise therapy was superior to the same exercise therapy alone when treating non-traumatic, degenerative medial meniscal tears.¹⁰ Radiographic examination was done at the start of the study and after 5 years, while questionnaires (Knee Injury and Osteoarthritis Outcome Score [KOOS], Lysholm Knee Scoring Scale, and Tegner Activity Scale) and pain ratings (Visual Analogue Scale, VAS) were conducted at the start of the study and then at 2 and 5 year follow-up. Both groups showed highly significant clinical improvements from baseline to the follow-ups at 2 and 5 years on the subscales of KOOS, Lysholm Knee Scoring Scale, and VAS ($p < 0.0001$). The authors reported that the findings indicate that arthroscopic surgery followed by exercise therapy was not superior to the same exercise therapy alone for this type of patients. Consequently, exercise therapy can be recommended as initial treatment. However, one third of the patients from the exercise group still had disabling knee symptoms after exercise therapy but improved to the same level as the rest of the patients after arthroscopic surgery with partial meniscectomy.

In 2013, Yim et al reported on a randomized controlled trial (N=102) on whether the clinical outcomes of arthroscopic meniscectomy would be better than those of nonoperative treatment for a degenerative horizontal tear of the medial meniscus.⁷ Fifty patients underwent arthroscopic meniscectomy, and 52 patients underwent nonoperative treatment with strengthening exercises. Functional outcomes were compared using a visual analog scale (VAS) for pain, Lysholm knee score, Tegner activity scale, and patient subjective knee pain and satisfaction. Radiological evaluations were performed using the Kellgren-Lawrence classification to evaluate osteoarthritic changes. In terms of clinical outcomes, meniscectomy did not provide better functional improvement than nonoperative treatment. The authors reported there were no significant differences between arthroscopic meniscectomy and nonoperative management with strengthening exercises in terms of relief in knee pain, improved knee function, or increased satisfaction in patients after 2 years of follow-up.

Katz et al (2013) reported on a multicenter, randomized, controlled trial (N=351) done to determine whether arthroscopic partial meniscectomy for symptomatic patients with a meniscal tear and knee osteoarthritis resulted in better functional outcomes than nonoperative therapy.⁹ The patients were randomly assigned to surgery and postoperative physical therapy or to a standardized physical-therapy regimen (with the option to cross over to surgery at the discretion of the patient and surgeon). The patients were evaluated at 6 and 12 months. The primary outcome was the difference between the groups with respect to the change in the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) physical-function score (ranging from 0 to 100, with higher scores indicating more severe symptoms) 6 months after randomization. In the intention-to-treat analysis, the mean improvement in the WOMAC score after 6 months was 20.9 points (95% confidence interval [CI], 17.9 to 23.9) in the surgical group and 18.5 (95% CI, 15.6 to 21.5) in the physical-therapy group (mean difference, 2.4 points; 95% CI, -1.8 to 6.5). The results at 12 months were similar to those at 6 months. In the intention-to-treat analysis, the authors did not find significant differences between the study groups in functional improvement 6 months after randomization; however, 30% of the patients who were assigned to physical therapy alone underwent surgery within 6 months.

In a systematic review by Azam and Shenoy in 2016, the authors reviewed the role of arthroscopic meniscectomy in patients with degenerative meniscus tears and suggested recommendations for clinical practice.¹¹ The majority of randomized control trials suggested that arthroscopic partial meniscectomy is not superior to conservative measures such as exercise programs. Furthermore, one randomized control trial found that arthroscopic partial meniscectomy was not even superior to sham surgery. The authors found that there is significant overtreatment of knee pain with arthroscopic partial meniscectomy when alternative, less invasive and less expensive treatment options are equally effective. First-line treatment of degenerative meniscus tears should be non-operative therapy focused on analgesia and physical therapy to provide pain relief as well as improve mechanical function of the knee joint. Arthroscopic partial meniscectomy should be considered as a last resort when extensive exercise programs and physiotherapy have been tried and failed.

After a systematic review of the literature, Siemieniuk et al (2017) put forth a guideline whereby the panel made a strong recommendation against the use of arthroscopy in nearly all patients with degenerative meniscal tears.¹² It was found that among patients with a degenerative medial meniscus tear, knee arthroscopy was no better than exercise therapy.

Thorlund et al conducted a systematic review and meta-analysis of nine trials (N=1,270) in 2015.¹³ The objective was to determine benefits and harms of arthroscopic knee surgery involving partial meniscectomy, debridement, or both for middle aged or older patients with knee pain and degenerative knee disease. After analysis, the authors found that the small inconsequential benefit seen from interventions that include arthroscopy for the degenerative knee is limited in time and absent at one to two years after surgery. Knee arthroscopy is associated with harms such as deep venous thrombosis, pulmonary embolism, and infection. Taken together, these findings do not support the practice of arthroscopic surgery for middle aged or older patients with knee pain with or without signs of osteoarthritis.

In 2014, Hwang and Kwoh conducted a multi-center randomized controlled trial (the Meniscal Repair in Osteoarthritis Research [METEOR] trial; N=351) that aimed to compare the short-term (6-month) and long-term (12-month) efficacy of arthroscopic partial meniscectomy and physical therapy in patients with symptomatic meniscal tear and osteoarthritis of the knee.¹⁴ The METEOR trial concluded that physical therapy is acceptable at first, and that surgery is not routinely needed. In patients assigned to physical therapy who eventually needed surgery, the delay resulting from a trial of conservative management did not impair outcomes at 12 months from the initial presentation.

Similar findings were found in two other studies suggesting that knee arthroscopy with partial meniscectomy as first line treatment for knee pain with or without OA is no more beneficial than the use of conservative measures on future health outcomes.^{15,16}

In a 2014 systematic review by Mezhov et al, the authors concluded there is no convincing evidence that operative approaches are superior to conservative measures as the first-line treatment of older people with knee pain and meniscal tears.¹⁷ From the available data, a first-line trial of conservative therapy, which includes weight loss, is recommended for the treatment of degenerative meniscal tears in older adults. The exception to this may be when mechanical symptoms, such as knee locking, predominate.

As part of the Choosing Wisely® campaign, an initiative of the American Board of Internal Medicine (ABIM) Foundation in partnership with Consumer Reports that seeks to advance a national dialogue on avoiding wasteful or unnecessary medical tests, treatments and procedures, the AMSSM stated to "Avoid recommending knee arthroscopy as initial management for patients with degenerative meniscal tears and no mechanical symptoms."¹

Arthroscopic Debridement and Lavage

In 2014, Khan et al conducted a systematic review of 7 randomized controlled trials (N=805) to evaluate the efficacy of arthroscopic meniscal debridement in patients with knee pain in the setting of mild or no concurrent osteoarthritis of the knee in comparison with nonoperative or sham treatments.¹⁹ The pooled treatment effect of arthroscopic surgery did not show a significant or minimally important difference (MID) between treatment arms for long-term functional outcomes (standardized mean difference [SMD] 0.07, 95% confidence interval [CI]: -0.10 to 0.23). Short-term functional outcomes between groups were significant but did not exceed the threshold for MID (SMD 0.25, 95% CI: 0.02 to 0.48). Arthroscopic surgery did not result in a significant improvement in pain scores in the short term (mean difference [MD]: 0.20, 95% CI: -0.67 to 0.26) or in the long term (MD: -0.06, 95% CI: -0.28 to 0.15). The authors concluded there is moderate evidence to suggest that there is no benefit to arthroscopic meniscal debridement for degenerative meniscal tears in comparison with nonoperative or sham treatments in middle-aged patients with mild or no concomitant osteoarthritis. A trial of nonoperative management should be the first-line treatment for such patients.

In 2010, Reichenbach et al conducted a systematic review of 7 trials (N=567) to compare joint lavage with sham intervention, placebo, or non-intervention control in terms of effects on pain, function and safety outcomes in patients with knee osteoarthritis.¹⁸ The authors concluded that joint lavage did not result in a relevant benefit for patients with knee osteoarthritis in terms of pain relief or improvement of function.

Kirkley et al conducted a single-center randomized controlled trial (N=92) of arthroscopic surgery in patients with moderate-to-severe osteoarthritis of the knee.²⁰ Patients were randomly assigned to surgical lavage and arthroscopic debridement together with optimized physical and medical therapy or to treatment with physical and medical therapy alone. Of the 92 patients assigned to surgery, 6 did not undergo surgery. Of the 86 patients assigned to control treatment, all received only physical and medical therapy. After 2 years, the mean (\pm SD) Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score for the surgery group was 874 ± 624 , as compared with 897 ± 583 for the control group (absolute difference [surgery-group score minus control-group score], -23 ± 605 ; 95% CI: -208 to 161; $P=0.22$ after adjustment for baseline score and grade of severity). The Short Form-36 (SF-36) Physical Component Summary scores were 37.0 ± 11.4 and 37.2 ± 10.6 , respectively (absolute difference, -0.2 ± 11.1 ; 95% CI: -3.6 to 3.2; $P=0.93$). Analyses of WOMAC scores at interim visits and other secondary outcomes also failed to show superiority of surgery. The authors concluded that arthroscopic surgery for osteoarthritis of the knee provides no additional benefit to optimized physical and medical therapy.

Shared Decision Making (SDM)

Shared decision making (SDM) is promoted as an ideal model to incorporate in the treatment plan between patient and physician. This is based on the premise that the best medical decision for an individual patient incorporates the patient's preferences and values through the process of information sharing and planning. This idea involves at least two participants; the clinician and the patient.²¹⁻²⁶ It represents the optimal physician-patient communication. Patients most likely to perceive their physicians as providing excellent care are those experiencing their preferred decision-making style with their primary physicians.²⁷⁻²⁸ Studies show that patient satisfaction, medication compliance, and health outcomes are improved by shared decision making.²⁹⁻³¹

On July 19, 2015, the first joint International Shared Decision-Making/International Society for Evidence-Based Health Care (ISDM/ISEHC) Conference met in Sydney, Australia with over 300 people from around the globe to share knowledge and inspire action to improve the entire health care experience. Highlights of this meeting included:

- Informed consents is gaining importance connected with the use of the SDM, which includes a collaborative conversation around the patient's informed preferences and the best available scientific evidence.
- Aligned incentives are necessary to maximize SDM, but not necessarily monetary.

- Increasing in interest and gaining support is the inclusion of family engagement in the decision-making process with the patient/family/care team (called a triad) rather than the patient/care team (called a dyad). The discussion was how to make this a reality, as it has long been felt the family needed to be part of the SDM, but not easily implemented.
- Development of learning programs/greater communication skills for medical students was repeatedly discussed, looking for ways to include training for these as learned skills to build conversations around patient preferences and evidence-based scientific medicine/practice.³²

According to author David Arterburn, a general Internist, associate investigator at Group Health Research Institute, and affiliate associate professor at the University of Washington:

“Decision aids are evidence-based sources of health information that can help patients make informed treatment decisions. However, little is known about how decision aids affect health care use when they are conducted an observational study to examine the associations between introducing decision aids for hip and knee osteoarthritis and rates of joint replacement surgery and costs in a large health system in Washington State. Consistent with prior randomized trials, our introduction of decision aids was associated with 26 percent fewer hip replacement surgeries, 38 percent fewer knee replacements, and 12–21 percent lower costs over six months. These findings support the concept that patient decision aids for some health conditions, for which treatment decisions are highly sensitive to both patients’ and physicians’ preferences, may reduce rates of elective surgery and lower costs.”³³

He includes a recent review of 86 RCTs of decision aides which found that:

“These aids consistently increase patients’ knowledge; improve treatment expectations; increase active participation in decision making; reduce decisional conflict or uncertainty about the appropriate course of action; decrease the proportion of people remaining undecided about treatment; and help patients reach decisions that are more aligned with their stated values.”³³

CollaboRATE

Patient-centered health care is a central component of current health policy agendas. Shared decision making (SDM) is considered to be the pinnacle of patient engagement and methods to promote this are becoming commonplace. However, the measurement of SDM continues to prove challenging. Reviews have highlighted the need for a patient-reported measure of SDM that is practical, valid, and reliable to assist implementation efforts. In consultation with patients, CollaboRATE was developed, a 3-item measure of the SDM process.³⁴ Barr et al (2014) completed a study identifying the need for scalable patient-reported measure of the SDM process. In the current project, the study assessed the psychometric properties of CollaboRATE. A representative sample of the US population was recruited online and was randomly allocated to view 1 of 6 simulated doctor-patient encounters in January 2013. Three dimensions of SDM were manipulated in the encounters: (1) explanation of the health issue, (2) elicitation of patient preferences, and (3) integration of patient preferences. Participants then completed CollaboRATE (possible scores 0-100) in addition to 2 other patient-reported measures of SDM: the 9-item Shared Decision Making Questionnaire (SDM-Q-9) and the Doctor Facilitation subscale of the Patient’s Perceived Involvement in Care Scale (PICS). A subsample of participants was resurveyed between 7 and 14 days after the initial survey. This study assessed CollaboRATE’s discriminative, concurrent, and divergent validity, intrarater reliability, and sensitivity to change. The final sample consisted of 1341 participants. CollaboRATE demonstrated discriminative validity, with a significant increase in CollaboRATE score as the number of core dimensions of SDM increased from zero (mean score: 46.0, 95% CI: 42.4-49.6) to 3 (mean score 85.8, 95% CI: 83.2-88.4). CollaboRATE also demonstrated concurrent validity with other measures of SDM, excellent intrarater reliability, and sensitivity to change; however, divergent validity was not demonstrated. The fast and frugal nature of CollaboRATE lends itself to routine clinical use. Further assessment of CollaboRATE in real-world settings is required.³⁵

Elwyn et al (2013) completed a study with an objective of measuring the process of shared decision making is a challenge, which constitutes a barrier to research and implementation. The aim of the study was to report the development of CollaboRATE, brief patient-reported measure of shared decision making. The following stages were utilized: (1) item formulation; (2) cognitive interviews; (3) item refinement; and (4) pilot testing of final items. Participants were over 18 years old and recruited from the public areas of the Dartmouth-Hitchcock Medical Center. The key finding of this study is that developing a brief patient-reported measure of shared decision making requires a move away from terms such as 'decisions', 'options' and 'preferences'. Although technically correct, these terms act as barriers. They are often unfamiliar, and they also implicitly assume that patients are willing to take active roles in decision making; whereas patients are often unaware that decisions are required, or have taken place, never mind feel that they could or should have participated in them. The outcome of this study concluded that these methods have allowed the development of a brief, patient-reported measure of shared decision making that is highly accessible to intended users.³⁶

The principles of shared decision making are well documented but there is a lack of guidance about how to accomplish the approach in routine clinical practice. The aim is to translate existing conceptual descriptions into a three-step model that is practical, easy to remember, and can act as a guide to skill development. Achieving shared decision making depends on building a good relationship in the clinical encounter so that information is shared and patients are supported to deliberate and express their preferences and views during the decision making process. To accomplish these tasks, a model was proposed of how to do shared decision making that is based on choice, option and decision talk. The model has three steps: a) introducing choice, b) describing options, often by integrating the use of patient decision support, and c) helping patients explore preferences and make decisions. This model rests on supporting a process of deliberation, and on understanding that decisions should be influenced by exploring and respecting "what matters most" to patients as individuals, and that this exploration in turn depends on them developing informed preferences.³⁴

Summary of Evidence

Knee arthroscopy with arthroscopic partial meniscectomy/chondroplasty is supported with sufficient clinical evidence in the published scientific literature as safe and effective for certain chronic (*non-acute*) knee conditions when the medical necessity criteria is met. There is insufficient evidence to support the safety, efficacy, and improved long-term outcomes for all other indications outside of the medical necessity indications.

Supplemental Information Practice Guidelines and Position Statements

American Academy of Orthopaedic Surgeons (AAOS)

According to the AAOS 2013 evidence based guideline for the treatment of osteoarthritis of the knee, the following surgical treatment recommendations address arthroscopy with lavage and/or debridement and arthroscopic partial meniscectomy³:

- *Recommendation 12*: "We cannot recommend performing arthroscopy with lavage and/or debridement in patients with a primary diagnosis of symptomatic osteoarthritis of the knee. (Strength of Recommendation: Strong)"
- *Recommendation 13*: "We are unable to recommend for or against arthroscopic partial meniscectomy in patients with osteoarthritis of the knee with a torn meniscus. (Strength of Recommendation: Inconclusive)"

Medicare National Coverage

According to the national coverage determination (NCD) for Arthroscopic Lavage and Arthroscopic Debridement for the Osteoarthritic Knee (150.9) effective 6/11/2004³⁷, Medicare states the following:

“The clinical effectiveness of arthroscopic lavage and arthroscopic debridement for the severe osteoarthritic knee has not been verified by scientifically controlled studies. After thorough discussions with clinical investigators, the orthopedic community, and other interested parties, CMS determines that the following procedures are not considered reasonable or necessary in treatment of the osteoarthritic knee and are not covered by the Medicare program:

- Arthroscopic lavage used alone for the osteoarthritic knee;
- Arthroscopic debridement for osteoarthritic patients presenting with knee pain only; or,
- Arthroscopic debridement and lavage with or without debridement for patients presenting with severe osteoarthritis ((Severe osteoarthritis is defined in the Outerbridge classification scale, grades III and IV. Outerbridge is the most commonly used clinical scale that classifies the severity of joint degeneration of the knee by compartments and grades. Grade I is defined as softening or blistering of joint cartilage. Grade II is defined as fragmentation or fissuring in an area <1 cm. Grade III presents clinically with cartilage fragmentation or fissuring in an area >1 cm. Grade IV refers to cartilage erosion down to the bone. Grades III and IV are characteristic of severe osteoarthritis.)”

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Documentation for Clinical Review

Please provide the following documentation:

- History and physical and/or consultation notes including:
 - Type of procedure
 - Reason for procedure
 - Clinical records indicating pain and functional disability that interferes with ADLs
 - Treatment plan
- Radiology reports (e.g., weight-bearing plain films, CT, MRI) used to make surgical decision
- Modified Outerbridge scale Grade/K&L Scale Grade, as applicable
- Prior conservative treatments, duration, and response or reason conservative treatment is inappropriate
- Past and present diagnostic testing and results
- Pertinent past procedural and surgical history
- Completed and signed Knee Arthroscopy Surgery Decision Aid by the patient
- Completed and signed CollaboRATE survey by the patient

Post Service (in addition to the above, please include the following):

- Procedure report(s)

Coding

This Policy relates only to the services or supplies described herein. Benefits may vary according to product design; therefore, contract language should be reviewed before applying the terms of the Policy.

The following codes are included below for informational purposes. Inclusion or exclusion of a code(s) does not constitute or imply member coverage or provider reimbursement policy. Policy Statements are intended to provide member coverage information and may include the use of some codes for clarity. The Policy Guidelines section may also provide additional information for how to interpret the Policy Statements and to provide coding guidance in some cases.

Type	Code	Description
CPT®	29880	Arthroscopy, knee, surgical; with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed

Type	Code	Description
	29881	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
HCPCS	None	

Policy History

This section provides a chronological history of the activities, updates and changes that have occurred with this Medical Policy.

Effective Date	Action
06/01/2018	Custom Policy
12/01/2018	Policy revision without position change
10/01/2019	Administrative update
12/01/2019	Policy revision without position change
04/01/2020	Administrative update. Policy statement and guidelines updated.
08/01/2020	Annual review. No change to policy statement.
11/01/2020	Administrative update. Policy statement updated.
08/01/2021	Annual review. No change to policy statement.
08/01/2022	Annual review. No change to policy statement.

Definitions of Decision Determinations

Medically Necessary: Services that are Medically Necessary include only those which have been established as safe and effective, are furnished under generally accepted professional standards to treat illness, injury or medical condition, and which, as determined by Blue Shield, are: (a) consistent with Blue Shield medical policy; (b) consistent with the symptoms or diagnosis; (c) not furnished primarily for the convenience of the patient, the attending Physician or other provider; (d) furnished at the most appropriate level which can be provided safely and effectively to the patient; and (e) not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of the Member's illness, injury, or disease.

Investigational/Experimental: A treatment, procedure, or drug is investigational when it has not been recognized as safe and effective for use in treating the particular condition in accordance with generally accepted professional medical standards. This includes services where approval by the federal or state governmental is required prior to use, but has not yet been granted.

Split Evaluation: Blue Shield of California/Blue Shield of California Life & Health Insurance Company (Blue Shield) policy review can result in a split evaluation, where a treatment, procedure, or drug will be considered to be investigational for certain indications or conditions, but will be deemed safe and effective for other indications or conditions, and therefore potentially medically necessary in those instances.

Prior Authorization Requirements (as applicable to your plan)

Within five days before the actual date of service, the provider must confirm with Blue Shield that the member's health plan coverage is still in effect. Blue Shield reserves the right to revoke an authorization prior to services being rendered based on cancellation of the member's eligibility. Final determination of benefits will be made after review of the claim for limitations or exclusions.

Questions regarding the applicability of this policy should be directed to the Prior Authorization Department at (800) 541-6652, or the Transplant Case Management Department at (800) 637-2066 ext. 3507708 or visit the provider portal at www.blueshieldca.com/provider.

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. Blue Shield of California may consider published peer-reviewed scientific literature, national guidelines, and local standards of practice in developing its medical policy. Federal and state law, as well as contract language, including definitions and specific contract provisions/exclusions, take precedence over medical policy and must be considered first in determining covered services. Member contracts may differ in their benefits. Blue Shield reserves the right to review and update policies as appropriate.

Appendix A

POLICY STATEMENT (No changes)	
BEFORE	AFTER
<p>Knee Arthroscopy in Knee Osteoarthritis BSC7.16</p> <p>Policy Statement: Knee arthroscopy with arthroscopic partial meniscectomy/chondroplasty for degenerative tears may be considered medically necessary when all of the following conditions are met:</p> <ol style="list-style-type: none"> I. The patient and physician have reviewed, completed, and signed the Knee Arthroscopy Surgery Decision Aid ensuring shared decision making has occurred II. The patient has reviewed, completed, and signed the "CollaboRATE" survey III. Underlying knee osteoarthritis, including degenerative tears of the meniscus in the setting of osteoarthritis IV. Documentation of knee symptomatology, including history, physical exam (e.g., knee swelling/effusion and painful range of motion) V. Magnetic resonance imaging (MRI) radiological report with results and interpretation indicating meniscal tear VI. No evidence of severe osteoarthritis by radiographic imaging (weight-bearing plain films, MRI, and/or CT scan) of the knee (Kellgren & Lawrence or Outerbridge Grade 3 greater than 1.5cm or Grade 4) VII. Documentation of unsuccessful conservative therapy for at least six weeks (non-surgical medical management, see Policy Guidelines*) VIII. The procedure is NOT for arthroscopic lavage and debridement for persons presenting with knee pain only <p>Knee arthroscopy is considered not medically necessary for persons with advanced or severe osteoarthritis classified Grade 3 or 4 by either the Kellgren & Lawrence or Outerbridge scale.</p>	<p>Knee Arthroscopy in Knee Osteoarthritis BSC7.16</p> <p>Policy Statement:</p> <ol style="list-style-type: none"> I. Knee arthroscopy with arthroscopic partial meniscectomy/chondroplasty for degenerative tears may be considered medically necessary when all of the following conditions are met: <ol style="list-style-type: none"> A. The patient and physician have reviewed, completed, and signed the Knee Arthroscopy Surgery Decision Aid ensuring shared decision making has occurred B. The patient has reviewed, completed, and signed the "CollaboRATE" survey C. Underlying knee osteoarthritis, including degenerative tears of the meniscus in the setting of osteoarthritis D. Documentation of knee symptomatology, including history, physical exam (e.g., knee swelling/effusion and painful range of motion) E. Magnetic resonance imaging (MRI) radiological report with results and interpretation indicating meniscal tear F. No evidence of severe osteoarthritis by radiographic imaging (weight-bearing plain films, MRI, and/or CT scan) of the knee (Kellgren & Lawrence or Outerbridge Grade 3 greater than 1.5cm or Grade 4) G. Documentation of unsuccessful conservative therapy for at least six weeks (non-surgical medical management, see Policy Guidelines*) H. The procedure is NOT for arthroscopic lavage and debridement for persons presenting with knee pain only II. Knee arthroscopy is considered not medically necessary for persons with advanced or severe osteoarthritis classified Grade 3 or 4 by either the Kellgren & Lawrence or Outerbridge scale.