Total knee replacement resurfaces worn-out surfaces of the knee, substituting lost cartilage and diseased bone with metal and plastic implants. Patients may need a total knee replacement because of arthritis, injury, or simple wear and tear, according to the American Academy of Orthopaedic Surgeons (AAOS). Knee arthritis can be painful during activity and at rest, and patients may find it difficult to climb stairs, walk, or stand up.

Before turning to surgery, physicians may recommend activity modification, regular exercise, and weight loss. Knee braces and shoe modifications, along with pain relievers and anti-inflammatory medications, can also help. Steroid injections can decrease inflammation, or a lubricant may be used to improve function.

If these interventions don’t work, patients may turn to total knee replacements. Minimally invasive knee replacement makes a 4- to 6-inch incision, rather than an 8- to 10-inch incision made during traditional knee replacement. The damaged parts of the knee, including compartments, femur, and the top of the tibia, are removed and replaced with implants that allow the joint to function and glide like a natural knee.

Early studies show that minimally invasive knee replacement surgery has benefits such as less blood loss, shorter hospital stays, and better motion, while others have shown a higher rate of complications, including poorer position of the knee implant. New techniques use a surgical approach that causes less trauma to the quadriceps, which translates to a much quicker recovery and less pain after surgery. Traditional knee replacement surgery often requires months of rehabilitation.

However, one study presented at the 76th annual meeting of the AAOS in 2009 showed that minimally invasive total knee arthroplasty was found to have a significantly higher rate of early failure. The average time to revisions for minimally invasive surgical patients was 14.8 months, whereas the traditional approach was 80 months. Additionally, minimally invasive surgical knees were more likely to fail in less than 12 months, and eight out of ten patients had revisions in less than 24 months.

For more information, see Clinical Privilege White Paper, Orthopedic surgery—Practice area 149.

**Involved specialties**

Orthopedic surgeons
Positions of specialty boards

**ABOS**

The American Board of Orthopaedic Surgeons (ABOS) requires candidates to complete five years of accredited post-doctoral residency. Beyond postgraduate year one, residents must have a minimum of 12 months of adult orthopedics covering all aspects of care affecting the bones, joints, and soft tissues of the upper and lower extremities. Residency education should also include diagnosis and operative care or orthopedic problems including reconstructive surgery. Beyond these general requirements, however, ABOS does not publish requirements specific to minimally invasive knee replacement.

**AOBOS**

The American Osteopathic Board of Orthopedic Surgery (AOBOS) requires candidates to complete a five-year American Osteopathic Association (AOA)–approved orthopedic residency. The applicant must provide evidence of a minimum of 200 major orthopedic procedures over a period of 12 months. Certifying exams evaluate the candidates’ familiarity with current advances in orthopedics; however, AOBOS does not publish requirements specific to minimally invasive knee replacement.

Positions of societies, academies, colleges, and associations

**AAHKS**

The American Association of Hip and Knee Surgeons (AAHKS) publishes *Minimally Invasive and Small Incision Joint Replacement Surgery: What Surgeons Should Consider*. This position statement provides surgeons with information about minimally invasive surgery, and discusses the increased interest of both patients and surgeons in minimally invasive techniques.

According to the position statement, minimally invasive techniques are difficult to evaluate for a number of reasons:

- Incision length is not well documented in orthopedic literature and has not been of concern in the past
- A surgeon’s training and proficiency affects the invasiveness of his or her approach
- There is no codified way to measure incision length or soft tissue damage, since there is some tissue trauma in all surgeries
- Without common definitions, it is difficult to establish a sharp distinction between traditional approaches and less invasive ones
- New anesthesia, pain management, and physical therapy protocols have been introduced at the same time as less invasive surgical techniques
For knee replacement, studies have shown that less invasive surgery involves incisions that are approximately one-half the length of traditional surgery incisions. Less invasive methods should also involve smaller capsular incisions and either a medial or lateral approach. Some experts say that a minimally invasive approach should not violate the extensor mechanism or the suprapatellar pouch.

Some surgeons define the ideal patient as young, thin, healthy, and motivated, while others have offered minimally invasive hip surgery to most or all patient populations. However, risk factors appear to be greater among patients who are overweight, have bone or joint deformity, or need larger-sized implants. Additionally, less invasive surgical implants such as unicompartmental knee arthroplasty should be evaluated as a separate type of less invasive surgery.

AAHKS also lists possible advantages, disadvantages, and unknown factors of minimally invasive hip surgery. Possible advantages include:

➤ Decreased postoperative pain
➤ Shortened hospital length of stay and rehab
➤ Faster return to work
➤ Decreased blood loss and fewer transfusions
➤ Improved cosmesis
➤ Preservation of normal tissue intervals and decreased scarring and muscle damage
➤ High patient satisfaction
➤ Lower complication rate and earlier weight bearing

Possible disadvantages include:

➤ Restricted visual field
➤ New exposure technique
➤ Poor visualization of landmarks and vital structures, which can lead to fracture, malposition, and neurovascular injury
➤ Increased length of surgery, which can lead to higher rate of thromboembolism or infection
➤ Increased cost because of specialized equipment
➤ Only specific prostheses are suggested for minimally invasive surgery
➤ Damage to prosthetic bearing surfaces where joint is not well visualized

Unknown surgical technique–related factors include:

➤ Long-term durability of the joint reconstruction
➤ Long-term pain relief, motion, and function
➤ Implant positioning
➤ Infection rate
➤ Incidence of thromboembolism
➤ Incidence of neurovascular injury
➤ Joint stability and dislocation rate
Complications are more likely as the surgeon is learning how to perform the minimally invasive surgery, and surgeons may have an increased complication rate if they have only performed a few surgeries. Those with the most knee arthroplasty experience may have the shortest learning curve. Additionally, operative time may be longer when performed by less experienced surgeons, and operations may continue to be longer even when the surgeon becomes proficient.

“Surgeons who are engaged in new techniques are responsible to be competent, proficient and qualified to perform these new approaches. The surgeon should discuss any additional risks associated with these approaches as well as their own experience and qualifications in performing any surgical procedure in the informed consent process,” the position statement reads.

AAHKS defines “less invasive surgery” as a surgery that involves smaller incisions and techniques that are less invasive to soft tissues and/or bone. For knee surgery, minimally invasive surgery involves incisions that are half that of traditional surgery.

AAHKS says it does not certify the competence of an individual or provide credentials. Rather, through educational endeavors, it attempts to educate practitioners and the public about new procedures. Overall, the efficacy of less invasive knee surgery will become clearer as larger studies begin to validate the results of this procedure.

**AAOS**

AAOS publishes a position statement entitled *The Delineation of Privileges in Orthopaedic Surgery*. Orthopedic surgery includes preservation, investigation, and restoration of the form and function of extremities, according to the paper. Surgeons who have completed an accredited residency program will have met educational requirements for diagnosis and care for a wide variety of disorders.

“Decisions regarding the granting of clinical privileges should be based upon a thorough consideration of each individual’s qualifications rather than his or her identification with a specific profession,” the paper reads. “Each hospital medical staff should develop criteria for the delineation of clinical privileges which apply to all individuals who are permitted by law to provide patient care services independently. These criteria should serve as an objective framework from which to evaluate a practitioner’s competence and should be clearly specified in the hospital’s medical staff bylaws. At a minimum, these criteria should address licensure, training, experience, current competence, and health status.”

AAOS also publishes *Surgical Care for the Lower Extremities*. In this position statement, AAOS recognizes that some healthcare providers are expanding their scope of practice beyond their limits of training and experience. In some parts of
the country, orthopedic surgeons are performing reconstructive surgery without the appropriate competency. AAOS defines reconstructive surgery on the lower extremities to include joint replacement.

Critical issues for credentialing surgeons include:
➤ Defining minimum qualifications for performing reconstructive surgery
➤ Requiring a level of education and training that is commensurate with the complexity of the surgery
➤ Recognizing the role and importance of accredited, post-doctoral surgical residency and a uniform board certification process

AAOS sets forth minimum qualifications for credentialing for reconstructive surgery on the foot, ankle, and lower extremities, to include:
➤ Completion of a nationally accredited post-doctoral surgical residency program
➤ Board certification from a surgical board recognized by the American Board of Medical Specialties
➤ State licensure

AAOS believes that orthopedic surgeons have the appropriate training, education, and experience for reconstructive surgery of foot and ankle care, bones, joints, muscles, and tendons of the lower extremities. Orthopedic surgeons can recognize and respond effectively to serious medical complications that may arise and complicate the treatment of any disorders.

**ACGME**

The Accreditation Council for Graduate Medical Education (ACGME) publishes *Program Requirements for Graduate Medical Education in Orthopaedic Surgery*, which will take effect July 1. The five-year residency focuses on the study of musculoskeletal diseases, disorders, and injuries and surgical treatment options.

Residents should demonstrate competency in preadmission care, hospital care, operative care, and follow-up care, and be able to diagnose and manage adult and pediatric disorders. Residents should also demonstrate expertise in their knowledge of areas appropriate to an orthopedic surgeon.

According to ACGME, the curriculum should include the following:

PGY-1 must include:
➤ Six months of structured education in general surgery, multisystem trauma, plastic surgery/burn care, surgical intensive care, and vascular surgery
➤ Three months of structured education with at least one month in three or more of the following:
  – Anesthesiology
  – Emergency medicine
  – Internal medicine
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- Medical/cardiac intensive care
- Musculoskeletal imaging
- Neurological surgery
- Neurology
- Pediatrics
- Rehabilitation
- Rheumatology
- Pediatric surgery

➤ A maximum of three months of orthopedic surgery

PGY-1 should also include resident participation in the following:

➤ Assess, plan, and initiate treatment of adult and pediatric patients with surgical and medical problems

➤ Care for patients with surgical and medical emergencies, multiple organ system trauma, soft tissue wounds, nervous system injuries, peripheral vascular injuries, and rheumatologic diseases

➤ Care for critically ill patients

➤ Participate in pre-, intra-, and postoperative care

➤ Understand surgical anesthesia

PGY 2–5 must include at least 36 months of rotations on orthopedic services, and rotations on related services such as plastic surgery, physical medicine and rehabilitation, rheumatology, or neurological surgery. The final 24 months must be obtained in a single program.

During PGY 2–5, residents must log between 1,000 and 3,000 procedures.

Resident experiences must include management of orthopedic disorders, including joint reconstruction and orthopedic rehabilitation, with increased responsibility for patient care as the resident progresses through the program.

ACGME also publishes Program Requirements for Graduate Medical Education in Adult Reconstructive Orthopaedic Surgery. The fellowship is 12 months long and includes in-depth study of reconstructive treatment for musculoskeletal diseases, disorders, and injuries, including care and surgical options for arthritis and related disorders in the hip, knee, shoulder, elbow, ankle, and foot. Eligible fellows must have completed a residency in orthopedic surgery prior to beginning an adult reconstructive fellowship.

Clinical components should ensure the fellow can skillfully perform procedures within the subspecialty. Fellows should have the opportunity to manage patients with a variety of problems, including disorders of the bones, joints, and soft tissues. Part of the clinical education should involve development of operative skills in orthopedics, including excisional arthroplasty and prosthetic arthroplasty.
AOA

The AOA publishes *Basic Standards for Residency Training in Orthopedic Surgery*, which takes effect in July.

AOA requires a residency program in orthopedic surgery to be five years long and provide a minimum of 250 major orthopedic surgical cases during years two through five. Didactic training includes training in basic sciences, anatomy, biomechanics, interpretation of imaging techniques, rehabilitation of neurologic injury, orthotics and prosthetics, and basic motor skills.

The first year of residency should include 12 one-month rotations or 13 four-week rotations, and must include:
- Two months or rotations of internal medicine
- One month or rotation of emergency medicine
- Three months or rotations of general orthopedic surgery
- One month or rotation of family practice
- Two months or rotations of non-orthopedic surgery, such as vascular, general trauma, basic wound/burn/plastics, or urology
- Three months or rotations of electives for a number of specialty areas, including hip or knee surgery

During residency years two through five, residents should log at least:
- 400 arthroscopic cases
- A three-month rotation in hand surgery or 100 hand cases
- A three-month rotation in foot and ankle surgery or 100 cases
- A three-month rotation in pediatric orthopedic surgery or 100 cases
- A three-month rotation in orthopedic trauma or 100 trauma cases
- A three-month rotation in orthopedic spine or 50 spine cases

Residents should also complete an orthopedic pathology course of at least 20 academic hours, a basic fracture course prior to their fourth year, an advanced trauma life support courses prior to the fourth year, and must attend one annual meeting or one postgraduate seminar of the AOA prior to their fifth year.

**Positions of subject matter experts**

*John Velyvis, MD*

*San Francisco*

Privileging physicians for minimally invasive procedures is difficult because there are very few published definitions about what qualifies as minimally invasive, says John Velyvis, MD, an orthopedic surgeon who owns private practices in San Francisco and Oakland, Calif.
“A lot of surgeons just say they do minimally invasive surgery and they don’t do anything different than they already did, or they just make their incision 1 centimeter smaller than they did 10 years ago,” he says.

Most surgeons are privileged as general orthopedic surgeons or as hip and knee specialists if they focus on joint replacement specifically. It’s difficult to provide oversight for minimally invasive techniques because surgery, by its nature, relies on physicians who are constantly improving surgical procedures.

“How do you tell a surgeon he can’t make the cut smaller or can’t use that retractor?” Velyvis says. “Surgeons are always fluxing and trying to improve what they are doing.”

However, minimally invasive knee arthroplasty can be incredibly technically demanding, especially considering the specialized instruments involved. The hospital should have some way to ensure surgeons have some training and experience with minimally invasive procedures, either in the form of a fellowship, years of dedicated experience, or proctored cases.

Minimally invasive techniques are not always covered during an orthopedic residency, Velyvis says, so fellowship training in adult reconstructive orthopedic surgery is often the best way to get exposure to less invasive joint replacement techniques.

“Typically it’s one year of training and you’re only going to be following around a surgeon in that one particular area,” Velyvis says. “It might be sports medicine, it might be spine, or it might be elbow. For me it was hip and knee replacement. So you get a whole year just on those surgeries.”

Typically general orthopedic surgeons who are new to a hospital will have their first 20 cases proctored, which may include a knee or hip replacement. However, if you decide you want to perform a new procedure, the hospital will make you perform 10 proctored cases specifically in that procedure.

“The hospital needs to decide whether they want to see that kind of documented proctoring with something like minimally invasive hip or knee surgery,” Velyvis says.

Most orthopedic surgeons or joint replacement specialists will focus on hip replacement as well as knee replacement, rather than limiting themselves to one or the other. Although they are different joints, many of the same competencies translate between the two procedures.

But even in terms of reprivileging, physicians may decide to focus more on an area such as sports medicine, but that doesn’t prevent them from doing knee replacements since they are still privileged as an orthopedic surgeon.
“I’ve never seen any hospital say, ‘You didn’t do enough knee replacements, we’re not going to privilege you because you haven’t maintained your competency,” Velyvis says.

Michael Bolognesi, MD
Durham, N.C.

There is still not an overwhelming amount of long-term data to support minimally invasive techniques over traditional knee and hip replacement, but many surgeons are opting for less invasive procedures to help shorten recovery.

Since the effectiveness of these minimally invasive surgeries is still unclear, hospitals need to be even more diligent in appropriately privileging physicians to perform minimally invasive knee replacements, says Michael Bolognesi, MD, chief of adult reconstruction and director of the total joint fellowship for the Department of Orthopaedic Surgery at Duke University Medical Center in Durham.

Surgeons should be proficient in traditional knee replacement methods before beginning minimally invasive procedures. The technical difficulty and risk for complications requires more emphasis on training and experience.

“I think the education for a minimally invasive approach needs to be fellowship training in adult reconstruction or total joint,” Bolognesi says “I wouldn’t want anyone doing a minimally invasive approach if they weren’t fellowship trained or didn’t have an established practice that is predominantly joint replacement for many years.”

Additionally, surgeons may need to take manufacturer courses since minimally invasive knee arthroplasty uses scopes to view the joint. This may include performing operations on cadavers or observing an expert surgeon before beginning to perform the procedure independently.

Bolognesi recommends that fellows, or a surgeon applying for initial orthopedic privileges, should have performed 30–50 minimally invasive cases in hip and knee replacement, although the learning curve for each individual may require more or less.

For reprivileging, physicians need to show they have performed minimally invasive procedures on a fairly routine basis. Bolognesi recommends at least 50 minimally invasive procedures each year to maintain competency. Knee replacements go hand-in-hand with hip replacements, although physicians need to ensure they are doing a large volume of both.
Bolognesi also recommends hospitals initiate some kind of quality care measures to monitor outcomes for physicians who are performing minimally invasive joint replacement.

“You need to make sure you’re not having increased complication rates associated with the minimally invasive techniques,” Bolognesi says. “And a measure of success is that it is at least as good as your standard approach. They have to hold up long term, like the traditional replacements do. Even if there is some early benefit, you can’t sacrifice long-term results for some sort of early recovery.”

**Positions of accreditation bodies**

**CMS**

CMS has no formal position concerning the delineation of privileges for minimally invasive total knee replacement. However, the CMS *Conditions of Participation (CoP)* define a requirement for a criteria-based privileging process in §482.22(c)(6) stating, “The bylaws must include criteria for determining the privileges to be granted to individual practitioners and a procedure for applying the criteria to individuals requesting privileges.”

§482.12(a)(6) states, “The governing body must assure that the medical staff bylaws describe the privileging process. The process articulated in the bylaws, rules or regulations must include criteria for determining the privileges that may be granted to individual practitioners and a procedure for applying the criteria to individual practitioners that considers:

- Individual character
- Individual competence
- Individual training
- Individual experience
- Individual judgment

The governing body must ensure that the hospital’s bylaws governing medical staff membership or the granting of privileges apply equally to all practitioners in each professional category of practitioners.”

Specific privileges must reflect activities that the majority of practitioners in that category can perform competently and that the hospital can support. Privileges are not granted for tasks, procedures, or activities that are not conducted within the hospital, regardless of the practitioner’s ability to perform them.

Each practitioner must be individually evaluated for requested privileges. It cannot be assumed that every practitioner can perform every task, activity, or privilege specific to a specialty, nor can it be assumed that the practitioner should be automatically granted the full range of privileges. The individual
practitioner’s ability to perform each task, activity, or privilege must be individually assessed.

CMS also requires that the organization have a process to ensure that practitioners granted privileges are working within the scope of those privileges.

CMS’ CoPs include the need for a periodic appraisal of practitioners appointed to the medical staff/granted medical staff privileges (§482.22[a][1]). In the absence of a state law that establishes a time frame for the periodic appraisal, CMS recommends that an appraisal be conducted at least every 24 months. The purpose of the periodic appraisal is to determine whether clinical privileges or membership should be continued, discontinued, revised, or otherwise changed.

The Joint Commission The Joint Commission has no formal position concerning the delineation of privileges for minimally invasive total knee replacement. However, in its Comprehensive Accreditation Manual for Hospitals, The Joint Commission states, “The hospital collects information regarding each practitioner’s current license status, training, experience, competence, and ability to perform the requested privilege” (MS.06.01.03).

In the introduction for MS.06.01.03, The Joint Commission states that there must be a reliable and consistent system in place to process applications and verify credentials. The organized medical staff must then review and evaluate the data collected. The resultant privilege recommendations to the governing body are based on the assessment of the data.

The Joint Commission introduces MS.06.01.05 by stating, “The organized medical staff is responsible for planning and implementing a privileging process.” It goes on to state that this process typically includes:

➤ Developing and approving a procedures list
➤ Processing the application
➤ Evaluating applicant-specific information
➤ Submitting recommendations to the governing body for applicant-specific delineated privileges
➤ Notifying the applicant, relevant personnel, and, as required by law, external entities of the privileging decision
➤ Monitoring the use of privileges and quality-of-care issues

MS.06.01.05 further states, “The decision to grant or deny a privilege(s) and/or to renew an existing privilege(s) is an objective, evidence-based process.”

The EPs for standard MS.06.01.05 include several requirements as follows:

➤ The need for all licensed independent practitioners who provide care,
treatment, and services to have a current license, certification, or registration, as required by law and regulation

➤ Established criteria as recommended by the organized medical staff and approved by the governing body with specific evaluation of current licensure and/or certification, specific relevant training, evidence of physical ability, professional practice review data from the applicant’s current organization, peer and/or faculty recommendation, and a review of the practitioner’s performance within the hospital (for renewal of privileges)

➤ Consistent application of criteria

➤ A clearly defined (documented) procedure for processing clinical privilege requests that is approved by the organized medical staff

➤ Documentation and confirmation of the applicant’s statement that no health problems exist that would affect his or her ability to perform privileges requested

➤ A query of the NPDB for initial privileges, renewal of privileges, and when a new privilege is requested

➤ Written peer recommendations that address the practitioner’s current medical/clinical knowledge, technical and clinical skills, clinical judgment, interpersonal skills, communication skills, and professionalism

➤ A list of specific challenges or concerns that the organized medical staff must evaluate prior to recommending privileges (MS.06.01.05, EP 9)

➤ A process to determine whether there is sufficient clinical performance information to make a decision related to privileges

➤ A decision (action) on the completed application for privileges that occurs within the time period specified in the organization’s medical staff bylaws

➤ Information regarding any changes to practitioners’ clinical privileges, updated as they occur

The Joint Commission further states, “The organized medical staff reviews and analyzes information regarding each requesting practitioner’s current licensure status, training, experience, current competence, and ability to perform the requested privilege” (MS.06.01.07).

In the EPs for standard MS.06.01.07, The Joint Commission states that the information review and analysis process is clearly defined and that the decision process must be timely. The organization, based on recommendations by the organized medical staff and approval by the governing body, develops criteria that will be considered in the decision to grant, limit, or deny a request for privileges. The criteria must be consistently applied and directly relate to the quality of care, treatment, and services. Ultimately, the governing body or delegated governing body has the final authority for granting, renewing, or denying clinical privileges. Privileges may not be granted for a period beyond two years.

Criteria that determine a practitioner’s ability to provide patient care, treatment, and services within the scope of the privilege(s) requested are consistently evaluated.
The Joint Commission further states, “Ongoing professional practice evaluation information is factored into the decision to maintain existing privilege(s), to revise existing privileges, or to revoke an existing privilege prior to or at the time of renewal” (MS.08.01.03).

In the EPs for MS.08.01.03, The Joint Commission says there is a clearly defined process facilitating the evaluation of each practitioner’s professional practice, in which the type of information collected is determined by individual departments and approved by the organized medical staff. Information resulting from the ongoing professional practice evaluation is used to determine whether to continue, limit, or revoke any existing privilege.

**HFAP**

The Healthcare Facilities Accreditation Program (HFAP) has no formal position concerning the delineation of privileges for minimally invasive total knee replacement. The bylaws must include the criteria for determining the privileges to be granted to the individual practitioners and the procedure for applying the criteria to individuals requesting privileges (03.01.09). Privileges are granted based on the medical staff’s review of an individual practitioner’s qualifications and its recommendation regarding that individual practitioner to the governing body.

It is also required that the organization have a process to ensure that practitioners granted privileges are working within the scope of those privileges.

Privileges must be granted within the capabilities of the facility. For example, if an organization is not capable of performing open-heart surgery, no physician should be granted that privilege.

In the explanation for standard 03.01.13 related to membership selection criteria, HFAP states, “Basic criteria listed in the bylaws, or the credentials manual, include the items listed in this standard. (Emphasis is placed on training and competence in the requested privileges.)”

The bylaws also define the mechanisms by which the clinical departments, if applicable, or the medical staff as a whole establish criteria for specific privilege delineation.

Periodic appraisals of the suitability for membership and clinical privileges is required to determine whether the individual practitioner’s clinical privileges should be approved, continued, discontinued, revised, or otherwise changed (03.00.04). The appraisals are to be conducted at least every 24 months.
The medical staff is accountable to the governing body for the quality of medical care provided, and quality assessment and performance improvement (03.02.01) information must be used in the process of evaluating and acting on re-privileging and reappointment requests from members and other credentialed staff.

**DNV**

DNV has no formal position concerning the delineation of privileges for minimally invasive total knee replacement. MS.12 Standard Requirement (SR) #1 states, “The medical staff bylaws shall include criteria for determining the privileges to be granted to individual practitioners and a procedure for applying the criteria to those individuals that request privileges.”

The governing body shall ensure that under no circumstances is medical staff membership or professional privileges in the organization dependent solely upon certification, fellowship, or membership in a specialty body or society.

Regarding the Medical Staff Standards related to Clinical Privileges (MS.12), DNV requires specific provisions within the medical staff bylaws for:

- The consideration of automatic suspension of clinical privileges in the following circumstances: revocation/restriction of licensure; revocation, suspension, or probation of a DEA license; failure to maintain professional liability insurance as specified; and noncompliance with written medical record delinquency/deficiency requirements
- Immediate and automatic suspension of clinical privileges due to the termination or revocation of the practitioner’s Medicare/Medicaid status
- Fair hearing and appeal

The Interpretive Guidelines also state that core privileges for general surgery and surgical subspecialties are acceptable as long as the core is properly defined.

DNV also requires a mechanism (outlined in the bylaws) to ensure that all individuals provide services only within the scope of privileges granted (MS.12, SR.4).

Clinical privileges (and appointments or reappointments) are for a period as defined by state law or, if permitted by state law, not to exceed three years (MS.12, SR.2).

Individual practitioner performance data must be measured, utilized, and evaluated as a part of the decision-making for appointment and reappointment. Although not specifically stated, this would apply to the individual practitioner’s respective delineation of privilege requests.
**CRC draft criteria**

The following draft criteria are intended to serve solely as a starting point for the development of an institution’s policy regarding this minimally invasive total knee replacement.

*Minimum threshold criteria for requesting privileges in minimally invasive total knee arthroplasty*

- **Basic education:** MD or DO
- **Minimal formal training:** Successful completion of an ACGME- or AOA-accredited residency in orthopedic surgery, which included minimally invasive total knee arthroplasties. Additionally, the applicant’s first 10 cases may be proctored.
- **Required current experience:** Demonstrated current competence and evidence of the performance of 50 minimally invasive total knee arthroplasties in the past 12 months or completion of training in the past 12 months.

**References**

If the applicant is recently trained, a letter of reference should come from the director of the applicant’s training program. Alternatively, a letter of reference may come from the applicable department chair and/or clinical service chief at the facility where the applicant most recently practiced.

**Reappointment**

Reappointment should be based on unbiased, objective results of care according to a hospital’s quality assurance mechanism as well as demonstrated current competence and evidence of the performance of at least 50 minimally invasive total knee arthroplasties in the past 24 months based on results of ongoing professional practice evaluation and outcomes.

In addition, continuing education related to minimally invasive total knee replacement should be required.

**For more information**

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Minimally invasive total knee arthroplasty

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