



## American Association of Hip and Knee Surgeons Position Statement on Outpatient Joint Replacement

Hospitals, surgeons and payers have recognized the potential benefits to patients that derive from decreasing the length of inpatient hospital stay after total hip and total knee arthroplasty, and even the potential benefits associated with same-day discharge in the outpatient setting for select patients. Further, with the Centers for Medicare & Medicaid Services' (CMS) recent decision to remove total knee arthroplasty from the Medicare inpatient-only list, future demand for same-day outpatient discharge for hip and knee arthroplasty is likely to increase. Therefore, we are composing this position statement regarding the recommendations for outpatient hip and knee arthroplasty procedures to guide hospitals, surgeons and institutions in appropriate and safe patient care.

The peer-reviewed literature on outpatient arthroplasty is evolving. A number of case series have been reported from select institutions with selected patient populations that have been able to perform hip and knee arthroplasty in the outpatient setting with attendant same day discharge. However, it remains uncertain whether this experience can be generalized to a broader population of patients and providers. Many of these early reports come from institutions that may have specific characteristics, including robust outpatient surgery programs with extensive experience, elements and pathways that enable early discharge in the outpatient setting. This position statement is intended to clearly state our priority of preserving patient safety and to outline specific recommendations for surgeons and institutions considering discharge of hip and knee replacement patients on a same-day outpatient basis.

First, the surgeon and institution should have appropriate insight and accompanying data regarding their current performance and their capability to perform early discharge hip and knee arthroplasty. A robust system of measurement should be established to serve as the quality and performance guide. Gradual and thoughtful changes in practice should be informed by their observed impact on quality metrics, including length of stay, readmission rates and complication rates. In addition, the nature of the patient population being served by the provider, including the socio-economic and general health status, must be known and the impacts of these factors understood. If the surgeon or institution currently has a typical length of stay of two days or more after hip and knee replacement, it may not be advisable that the surgeon or institution begin performing outpatient hip and knee replacement until they have gained experience in earlier discharge intervals such as the day following surgery. Further, it is recommended that the surgeon and/or institution understand their specific institutional data (mean and standard deviation) regarding surgical time, blood loss, length of hospital stay, early complication and readmission rates, before considering same-day outpatient hip or knee arthroplasty. If those

metrics are not supportive of same-day discharge, it is recommended that the surgeon or institution not begin until the relevant metrics are improved and refined to demonstrate the capability to optimize and maintain patient safety.

The outpatient program should start with an emphasis on improved quality and safety outcomes. The essential elements of an outpatient surgery program are multiple and are focused around minimizing complications, maximizing patient safety and discharging the patient to an appropriate and safe environment. These essential program elements involve all aspects of the perioperative care continuum starting from the initial encounter with the patient considering hip or knee replacement all the way through the surgical procedure and including the postoperative period until the patient has safely recovered.

The essential elements identified that require optimization are:

- Patient selection (on medical grounds)
- Patient education and expectation management (e.g. preoperative “joint school”)
- Social support and environmental factors (family or professional outpatient support)
- Clinical and surgical team expertise
- Institution facility or surgery center factors (history of successful team work and an environment conducive to optimizing surgical outcomes)
- Evidence based protocols and pathways for pain management, blood conservation, wound management, mobilization, and VTE prophylaxis.

Special attention should be paid to proper patient selection when considering outpatient same-day discharge for total hip and knee arthroplasty. Medical comorbidities should be minimal and patients should generally be relatively healthy, active, and at low risk for medical or surgical complications. While there is not a definitive medical risk stratification system, there are some factors that have proven useful to guide the medical team and practitioners in assessing the number of medical comorbidities and the extent to which they are adequately controlled. Special attention should be paid to those complications that can occur in the first 24 hours after a procedure such as over-sedation, urinary retention, nausea, vomiting, dehydration, and hypotension that could adversely affect patient safety.

The next program element should be a robust and detailed patient and family education program outlining the expectations and the necessary environment for optimal patient recovery and safety once discharged from the hospital or ambulatory surgery center. The patient should have adequate physical and social support during the initial recovery period when at home and must have full access to the medical and surgical team members until sufficiently recovered.

An additional critical program element is a team of medical staff capable and experienced in performing hip and knee arthroplasty in the outpatient setting whether in hospital or in ambulatory surgery center. The anesthesia team, the surgical team, and the recovery room staff should all be facile and experienced in outpatient early recovery discharge modalities that include adequate perioperative pain control, fluid resuscitation, early patient mobilization, and medical

management. The facility in which the surgical procedure and immediate recovery is performed should also have adequate and sufficient equipment, staff, and facilities to ensure patient safety and a successful total hip or knee arthroplasty procedure. Finally, it is important that the outpatient program has either a physical therapist or adequately-trained staff competent in determining the safety of patients to discharge home with respect to their independence and mobility. If the patient discharges to home the day of surgery, it is recommended patients be contacted by a member of the surgical or medical team soon after surgery to assess the patient's safety.

It is our position that some total hip and knee replacements can be appropriately performed in the outpatient setting with safe discharge the day of surgery if the above-mentioned factors, elements, and sufficient practitioner and surgeon experience are maintained. It is recommended that a full discussion with the patient and family as to the risks and potential benefits of same-day discharge after hip and knee replacement be carried out. Further, we recommend that any financial conflicts related to outpatient discharge, such as ownership in an ambulatory surgery center, physician owned distributorship or outpatient services, be transparently disclosed to the patient. If the surgical procedure is to be performed in a stand-alone ambulatory surgery center, it is paramount that protocols be established to effectuate an appropriate response to intra-operative or perioperative complications that may arise. The protocols must provide patients with timely access to medical and surgical care so that patient safety is always maintained and prioritized. If a patient is not appropriate for discharge home on the day of surgery, facilities and staff such as, in an overnight care suite or hospital, must be available to ensure patient safety. Finally, as institutions and surgeons decide that they are capable of instituting outpatient joint programs, it is recommended that they track and record the outcomes of these procedures, and embrace quality assessment and improvement efforts. An analysis of readmissions and complications, as well as determinants of success, can help to confirm and improve the safety and efficacy of any same-day program.

This statement has been endorsed by:

The American Academy of Orthopaedic Surgeons  
The Hip Society  
The Knee Society