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

Increasingly, there is interest by hospitals, surgeons and payers to decrease the length of inpatient hospital stay after total hip and total knee arthroplasty, and even consider same-day discharge in the outpatient setting. Further, with the Centers for Medicare and 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 certain to increase. Therefore, the American Association of Hip and Knee Surgeons (AAHKS) and the American Academy of Orthopaedic Surgeons (AAOS) 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 contains examples of case series 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, generalizing this experience to a broader population of patient and providers should be done with caution, as these institutions may have specific characteristics, including robust outpatient surgery programs with extensive experience, elements and pathways that enable early discharge in the outpatient setting. Recently, the AAHKS Board of Directors and the Industry Relations Committee met with our industry partners and agreed that one of the most pressing issues facing our profession and industry is the current practice of moving a limited number of total hip and knee arthroplasty procedures to the outpatient setting. This position statement is intended to clearly state AAHKS's & AAOS’ 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 must 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 must be established to serve as the quality and performance guide. Gradual and thoughtful changes in practice informed by quality metrics to include length of stay, readmission rates and complication rates, as well as understanding and recognizing the socio-economic and general health status of the population served by the institution as measured by validated metrics. If the surgeon or institution currently has a typical
length of stay of two days or more after hip and knee replacement, it is not 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) about 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 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. The outpatient program will demand higher quality and
safety as a baseline. 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 (experience team)
- Institution facility or surgery center factors (history of successful team work)

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 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 necessary program element must 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 must
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 24 hours a day and 7 days a
week 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 must 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 must 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 crucial 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 the day after surgery to assess the patient’s safety.

It is the position of the AAHKS and AAOS 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. Finally, 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, AAHKS and AAOS 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. Finally, if the surgical procedure is to be performed in a stand-alone ambulatory surgery center, it is mandatory 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 gravitate to outpatient joint programs, it is essential to follow the outcomes of these procedures. An analysis of readmissions, complications as well as successes should be performed to confirm the safety and efficacy of any same-day program.