

## **SUPPLEMENTARY APPENDIX 2: PICO Questions**

### **2023 American College of Rheumatology (ACR) and American Association of Hip and Knee Surgeons (AAHKS) Clinical Practice Guideline for the Optimal Timing of Elective Hip or Knee Arthroplasty for Patients with Symptomatic Moderate to Severe Osteoarthritis or Advanced Symptomatic Osteonecrosis with Secondary Arthritis for Whom Nonoperative Therapy is Ineffective**

**PICO 1.** In our defined population, what is the relative impact of a 3-month “waiting period” prior to arthroplasty versus no waiting period on patient reported outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 2.** In our defined population, what is the relative impact of physical therapy versus arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 3.** In our defined population, what is the relative impact of NSAIDs versus arthroplasty in patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 4.** In our defined population, what is the relative impact of braces/ambulatory aid(s) versus arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 5.** In our defined population, what is the relative impact of glucocorticoid injection(s) versus arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 6.** In our defined population, what is the relative impact of viscosupplementation versus arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 9.** In our defined population with body mass index (BMI) > 50, what is the relative impact of delaying arthroplasty to achieve weight reduction to BMI < 50 versus proceeding to arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 8.** In our defined population with BMI between 40 to 49 , what is the relative impact of delaying arthroplasty to achieve weight reduction to BMI < 40 versus proceeding to arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 7.** In our defined population with BMI between 35 to 39, what is the relative impact of delaying arthroplasty to achieve weight reduction to BMI < 35 versus proceeding to arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 10.** In our defined population with poorly-controlled diabetes mellitus, what is the relative impact of delaying arthroplasty to improve glycemic control versus proceeding to arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 11.** In our defined population with nicotine dependence, what is the relative impact of delaying arthroplasty for nicotine cessation versus proceeding to arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 12.** In our defined population who have bone loss with deformity, or severe ligamentous instability, what is the relative impact of delaying arthroplasty for optimization of non-life-threatening conditions versus proceeding to arthroplasty on patient important outcomes including pain, function, infection, hospitalization, and death, at one year?

**PICO 13.** In our defined population who have a neuropathic joint, what is the relative impact of delaying arthroplasty for optimization of non-life-threatening conditions versus preceding to arthroplasty, at one year?