

## Washington State Health Care Authority, HTA Program Hip Resurfacing Final Key Questions and Background

## Introduction

HTA has selected Hip Resurfacing to undergo a health technology assessment where an independent vendor will systematically review the evidence available on the safety, efficacy, and cost-effectiveness. HTA posted the topic and gathered public input about available evidence. Key questions guide the development of the draft evidence report.

## **Final Key Questions**

Hip Resurfacing is an alternative surgery to total hip replacement (THR). When used as an alternative in patients where total hip replacement is indicated:

- 1. What's the evidence of efficacy and effectiveness of hip resurfacing?
- 2. What is the evidence about the safety profile for hip resurfacing?
- 3. What is the evidence that the use of hip resurfacing improves clinical outcomes compared to conventional total hip replacement?
- 4. Is there evidence of differential efficacy or safety issues with use of hip resurfacing?
- 5. What is the evidence of cost implications and cost effectiveness of hip resurfacing?

## **Technology Background**

*Disease*: Patients with joint pain and dysfunction from non-inflammatory arthritis (degenerative joint disease) such as osteoarthritis, traumatic arthritis, avascular necrosis, dysplasia, or inflammatory arthritis such as rheumatoid arthritis.

*Treatments*: Hip resurfacing is proposed as a bone conserving alternative to the conventional total hip replacement (THR) after optimal medical therapy fails.

*Technology*: Unlike THR, hip resurfacing does not involve the removal of the femoral head and neck or removal of bone from the femur. Rather, the head, neck and femur bone is preserved in an effort to facilitate future surgery should it be necessary and to enable the patient to take advantage of newer technology or treatments in the future. Hip resurfacing is anatomically and biomechanically more similar to the natural hip joint.

Proposed benefits of hip resurfacing include: increased stability, flexibility and range of motion; younger patients needing full joint replacement that are expected to out-live the full replacement may benefit from symptom relief and more bone preservation to tolerate a subsequent replacement surgery later; and risk of dislocation lower and higher activity level possible with less risk than THR

However questions remain about the unknown longevity and durability of the procedure; the reported high failure rates; the appropriate patient selection criteria (e.g. age, gender, tried and failed therapies); impact on long term health outcome; higher surgical risks and complications from multiple surgeries and the health system impacts of a surgery designed to delay but not eliminate need for later surgery.