

*Active Surveillance/Prostatectomy for Clinically-Localized, Low-Risk  
Prostate Cancer*

*Economic Subcommittee Call Summary  
May 4, 2009*

***Present:***

**ICER:** Steve Pearson, Dan Ollendorf, Katy Marttila

**Affiliated Researchers:** Julia Hayes, Pamela McMahon

**Economic Subcommittee:** Alan Rosenberg, David Most, John Ayanian, Lee Newcomer, Marthe Gold, Marty Sanda, Myriam Curet, Scott Gazelle

***Absent:***

**Economic Subcommittee:** Peter Carroll

**Meeting Summary**

- Model Overview and Assumptions
  - There was general agreement regarding the model structure, cycle length, target population, base case, and major assumptions, including the assumption of no difference in major outcomes by surgical approach.
  - There was some confusion regarding the characterization of the model as Markov vs. Monte Carlo. The model is in fact constructed as a Markov model, with patients transitioning between health states, but will be analyzed using Monte Carlo techniques in order to obtain cohort-level costs and QALYs.
  - It was confirmed that, unlike in ICER's previous model, patients on active surveillance can develop metastatic disease. This was questioned by some, as the rate of metastases on modern AS protocols would be expected to be quite low. *ICER Note: as with other model probabilities, the rate of metastases will be varied (including a zero rate) in sensitivity analyses.*

- It was confirmed that only patients whose Gleason score increases to 7 or higher while on active surveillance will move to a higher-risk category (with effects on treatment success as well as life expectancy); those whose progression was due to other factors (e.g., PSA doubling time) as well as those who elect treatment by choice will face the same risks as patients electing immediate treatment.
- Questions were raised regarding the decision not to model adjuvant or salvage radiation therapy, given perceptions regarding differences in positive surgical margins by approach. The low risk of the target populations was emphasized; the rate of positive margins is quite low in low-risk patients, and any between-approach differences in outcomes would therefore be expected to be minimal.
- Utilities
  - Questions were raised regarding the planned sensitivity analysis in which utilities for surgery-related side effects would improve over time. It was felt that patient acclimation to side effects is a phenomenon that occurs with any disease, but does not represent an independent improvement in utility. *ICER Note: we are in the process of following up with selected experts on consideration of utilities for long-term side effects.*
- Costs
  - Concerns were also raised regarding the planned omission of purchase and installation costs for the robotic system (i.e., installation and maintenance). While Medicare reimbursement (at least in theory) provides adjustment for such costs, concerns remain regarding maintenance and upkeep costs as well as the additional procedure-specific costs (e.g., supplies, disposables). *ICER Note: we will consider the possibility of including such costs in a sensitivity analysis; institutional cost estimates will need to be obtained for all surgical approaches, however.*
  - While there was general consensus that there are no demonstrated differences in major outcomes by surgical approach, some felt that

cost savings from reductions in blood loss and transfusion requirements with robotic surgery should be reflected in some way. *ICER Note: if the systematic review does determine that there are differences in these measures by approach, cost differences would be reflected by differential DRG payments; in addition, we will consider the conduct of a “per diem” sensitivity analysis to address this issue as well as differences in LOS between approaches.*

- Sensitivity Analyses
  - A suggestion was made to consider a sensitivity analysis in which reduced rates of complications and side effects are seen with experienced surgeons (but rates remain constant across approaches). *ICER Note: ICER will consider such an analysis if data of sufficient quality on this topic are obtained through the systematic review.*