



Radlink GPS Economic Value Overview

1. Reduces time/cost required for intraoperative imaging

- GPS offers four-second X-ray vs. 12 minutes to process film
- Time savings results in reduced cost per case of approximately \$8,000¹
- Use of the GPS does not require extra time like navigation. Total time for intraoperative x-ray and measurements is less than 2 minutes per case.

2. Use of Radlink GPS eliminates the need to print out C-arm images

- Estimated cost to print C-arm images @ 12 cases/week = \$11,000/year

3. Priced at a fraction of the cost of navigation or robotics

- Radlink GPS cost is less than \$100,000 compared to more than \$1 million for robotics systems
- Unlike navigation or robotics systems, GPS has no disposable costs per case

4. Potential to reduce incidence of dislocation and associated costs of closed reductions and revision surgery

- Ability to verify proper acetabular cup position with GPS may reduce incidence of dislocation
- Improper cup position is leading cause of dislocation
- In one study summarizing costs of hip dislocation following primary THA at Mayo Clinic, hospital saw total of 99 dislocations over 5-year period.²
- Dislocation resulted in \$2,433 additional cost per closed reduction and \$13,717 additional cost per revision surgery²
- Total institutional cost over 5-year period was \$718,713 (\$143,743/year)³

5. May reduce re-admission penalties

- With GPS, X-ray normally taken in recovery room is now taken before closing up
- Medicare charges \$265,000 for each excess readmission after knee or hip replacement surgery that is above the U.S. average

6. Potential to reduce litigation

- Use of GPS to compare limb length of operative and non-operative side may reduce incidence of leg length discrepancy
- Leg length discrepancy is leading reason for malpractice suits in orthopedics

¹Assumes four intraoperative X-rays are taken per case and assumes operating room time is valued at \$100-\$200 per minute

²Sanchez-Sotelo J, Haidukewych J, Boberg C, Hospital Cost of Dislocation After Primary Total Hip Arthroplasty. Journal of Bone and Joint Surgery (88) February 2006

³Costs included operating room and implants, hospital and nursing, orthopedic surgeon, pharmacy, physical therapy, laboratory medicine, anesthesia, radiology, central supply, internal medicine consults, and pathology