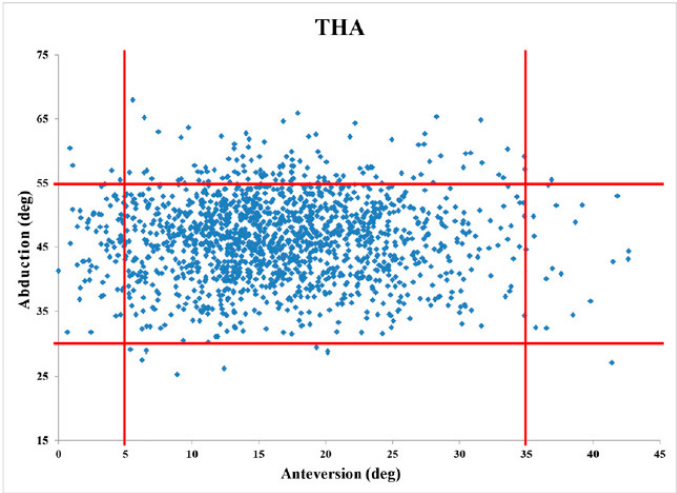


# INCREMENTAL CLINICAL VALUE

## ELIMINATE OUTLIERS

NAKED EYE APPROXIMATION OF COMPONENT POSITIONING MAY RESULT IN OUTLIERS THAT INCREASE COMPLICATIONS AND COMPROMISE SURGICAL RESULTS.



Scatterplot depicting the number of total hip arthroplasties (THA) within defined target ranges, indicated by the red lines, for both abduction (30 to 55) and anteversion (5 to 35).

## RADLINK ROI

- Improved quality and accuracy of implant placement
- Reduced risk of dislocation and implant wear
- Reduce re-admission rates and revision penalties
- Reliable, cost-effective, user-friendly, creates a profound shift in surgeon's ability to influence surgical outcomes

## SEAMLESSLY INTEGRATES INTO EXISTING WORKFLOW

Radlink provides surgeons a tool to do what they do, even better. With Radlink, the surgery is kept in the hands of the surgeon. There are no restrictions in achieving better patient outcomes.

- Open platform - compatible with all implant brands and surgical approaches
- No drastic learning curve

## INCREASES SPEED OF PROCEDURE, SHORTENS OR TIME

Radlink results in a safer, better, more efficient surgical procedure.

- Current workflows require techs to shoot, leave, process, await loading to PACS, and then display. If exposure is off or the site is cut off, the process has to be repeated. This adds considerable time to a case, up to 20 minutes. Over 4 cases this adds nearly 1.5 hours to the room time.
- Because the quality of the X-ray cannot be determined until after it is processed outside of the room, reshoots increase room traffic. This is a known risk factor for infection. If a Radlink image needs to be reshot, you can immediately reshoot without leaving the room.

## TIME / COST ANALYSIS

Radlink	Robotics/CAS
No per case or disposable costs	Disposable costs ~ \$2,000/instrument, replaced every 10 cases
Priced under \$100,000	Priced over \$1 million
Added time = less than 2 minutes per case	Added time = over 30 minutes per case
Pre-op x-ray costs \$70	CT/MRI costs over \$2500

## INNOVATIVE TECHNOLOGY



## FEATURES & BENEFITS





# INNOVATIVE TECHNOLOGY

## IMAGE-BASED SURGICAL VERIFICATION

Radlink’s innovative technology captures intra-operative X-ray images and applies mathematical algorithms that assess angular and linear relationships between important anatomical landmarks. The surgeon can confidently proceed with the procedure knowing the measurements previously done in his or her head are mathematically precise. Radlink technology ensures each patients’ implant will be catered to his or her unique anatomy.



## INTRA-OPERATIVE IMAGING: THE GOLD STANDARD

Obtaining accurate, reproducible positioning of the acetabular component is the greatest challenge in Total Hip Arthroplasty.

Historically, post-op (recovery room) X-ray was the standard of practice for determining the success of the procedure.

Now, intra-operative imaging allows surgeons to measure and adjust for tilt, cup anteversion, inclination, femoral offset, component seating, sizing and orientation BEFORE the patient has left the operating room. Eliminating the need for a post-op X-ray decreases OR costs and increases efficiency.

GPS offers 4 second X-ray vs. over 12 minutes to process film. Approximate cost for one hour of OR time is \$8,000. The total added OR time for intra-op X-ray and measurements is less than 2 minutes per case.

Verification using intra-operative data provided by the GPS improves quality and accuracy of implant placement procedures.

### GPS FEATURES

- **4 second** image acquisition
- **Wireless.** Works with any X-ray generator or C-Arm to capture, display images on any OR monitor
- **Built-in Digital Templating software**
- **PACS** provides access to pre-op images
- **Superior Image Quality**
- **Marketing Program** offers unique, customized materials to promote technology at your facility, attract new patients and surgical talent

## SURGEON’S CHECKLIST SOFTWARE

### NON-INVASIVE, REAL-TIME, INTRA-OPERATIVE FEEDBACK AND VERIFICATION OF COMPONENT MEASUREMENT AND POSITIONING

Surgeon’s Checklist software uses X-ray or C-Arm images and mathematical data analysis to assist surgeons in real time, allowing the surgeon to make faster decisions on component positioning, leg length correction and femoral offset guidance.

#### • TOTAL HIP ARTHROPLASTY

##### • POSTERIOR APPROACH

##### • ANTERIOR APPROACH

##### • PANORAMIC FLUORO

Panoramic view generates a full AP pelvis image captured by any C-Arm without distortion caused by parallax. Pano software captures live fluoro video or static X-ray images as the C-Arm moves across the pelvis to generate a parallax-free full-view of the pelvis.

##### • AUTO-X

Calculates Surgeon’s Checklist measurements automatically. Edge detection technology segments key bony landmarks.

#### • TOTAL KNEE ARTHROPLASTY

##### • TRAUMA

##### • SPINE

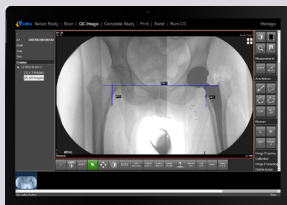
## HARDWARE

Standalone unit for enhanced IT Security



### GPS TOWER

Dual 24” Touch Screen Monitors and Flat Panel Detector



### GPS TABLET

Dedicated Microsoft Surface Book

## SUPERIOR SURGICAL OUTCOMES: Increase Confidence and Precision

### MINIMIZE RISK OF DISLOCATION

- Improper cup position is leading cause of dislocation
- Ability to verify proper acetabular cup position with GPS may reduce incidence of dislocation, associated costs of closed reductions, revision
- Dislocation may result in \$2,433 additional cost per closed reduction and \$13,717 additional cost per revision surgery
- Total institutional cost over 5-year period: \$718,713 (\$143,743/year)

### REDUCE REVISION & 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
- Anteversion and abduction angle determine wear rates and consequently revision rates. Improving these parameters will reduce long term revision costs.

### LEG LENGTH CORRECTION & FEMORAL OFFSET GUIDANCE

- Use of GPS to compare limb length of operative and contra-lateral side may reduce incidence of leg length discrepancy
- Leg length discrepancy is the leading cause of malpractice suits in orthopedics
- Accurately identifying leg length discrepancy can improve patient reported outcomes as well as reduce litigation costs.

## SUPERIOR PATIENT OUTCOMES

No two patients’ have the exact same anatomy. Robotics and CAS create a simulated, virtual reality. Radlink is reality. Radlink uses actual patient images to provide measurements catered to that patients’ unique anatomy.

- Non-invasive, no arrays or ex-pins in patient
- No CT or MRI required
- Reduces patient radiation exposure
- Reduces length of hospital stay, shortens recovery time