Advanced, real-time fluoroscopic grid technology designed to enhance intra-operative decision making in Total Hip Arthroplasty.
Fluoroscopy, utilizing a mobile c-arm, is the most widely used technology for placement and alignment in orthopedics. It’s cost effective and provides real-time, intraoperative x-ray imagery allowing surgeons to directly visualize pelvic position, facilitate improvements to acetabular cup placement, and reduce mean limb length discrepancy.7, 8

While fluoroscopy has shown to have a positive impact on patient outcomes when utilized during total hip arthroplasty, there is one aspect of this technology that is greatly misunderstood: image distortion.

S-DISTORTION is the most prevalent type of distortion and is caused by unseen continuously variable electromagnetic forces (EMF). Distortion can cause up to 19 mm in variation from one side of field of view to the other.9

Fluoroscopic image distortion cannot be detected with the naked eye and could potentially influence surgeons to make incorrect adjustments affecting outcomes negatively.

When utilized for total hip arthroplasty, one study found that grid overlay technology contributed to increased accuracy and precision of implant component placement.6

**UNLOCK THE VALUE OF FLUOROSCOPY WITH HIPGRID**

**SUCCESS**
A typical C-arm image of the pelvis shows what appears to be a highly precise view of the anatomy. However, fluoroscopic distortion is revealed using the HipGrid technology. It is readily apparent that the image is highly imprecise and the effects of the distortion, if not recognized and addressed, could lead to suboptimal intraoperative decision making. Often, physicians will invest a significant amount of time and effort and order up to a dozen or more intraoperative fluoroscopic images as a method of comparing and contrasting images taken from different angles. This requires an excessive amount of time and yet still will not yield an image that is distortion-free.

HipGrid empowers surgeons to more fully evaluate component positioning and anatomical alignment intra-operatively, aiding in the determination of:

- Pelvic Pitch
- Pelvic Obliquity
- Acetabular Cup Position
- Hip Offset
- Leg Length Restoration

HipGrid incorporates seamlessly into the current workflow and has shown to decrease surgical time up to 15 min.6
70% of readmissions are attributed to stability & alignment issues in primary total hip arthroplasty (THA) surgeries\(^1\)

- **Average Readmission Rate**: 10.5% at 90 days after primary THA\(^1\)
- **Average Cost of a Readmission**: $36,068 due to a surgical complication\(^2\)
- **Dislocation** is the main indication for revision for a THA surgery at 17.3%\(^3\)
- **Average total charge for Revision THA Surgery**: $77,852\(^3\)
- **78%** of arthroplasty surgeons have been named in at least 1 malpractice lawsuit\(^4\)
- **Average Indemnity Payment**: $386,153\(^5\) for negligent THA

**Clinical Complications**

- **Hip Offset +/- 10mm**
  - **85%** with grid
  - **67%** without

- **Leg Length +/- 10mm**
  - **100%** with grid
  - **88%** without

- **Cup Abduction 30-50**
  - **97%** with grid
  - **83%** without

**Fluoroscopic Grid Study Results**

- A fluoroscopic grid in supine total hip arthroplasty\(^6\)
- **Increased Efficiency with a Fluoroscopic Grid**
  - **15 Min Decrease in Procedure Time**
## Competitive Market Analysis

**feature**
- Reveals fluoroscopic distortion
- Generates immediate image without delay
- Demonstrated to reduce OR time
- Integrates with virtually no learning curve
- Sales Rep/OR staff support not required
- Fully surgeon operated
- Published clinical data (DAA)
- Reusable with no sterilization required
- Works with existing hospital equipment
- Eliminates disposable costs
- Non-invasive
- Eliminates risk of pin site infection

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<th>Overlay Technique</th>
<th>Radlink</th>
<th>JointPoint</th>
<th>OrthAlign</th>
<th>Intellijoint</th>
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## Clinical Value
Enhances fluoroscopic visualization to assist in component positioning and anatomic alignment to maximize postoperative hip stability.

## Economic Value
Designed to assist the surgeon in preventing common causes of complications and re-operations in Total Hip Arthroplasty as well as, the associated costs of readmissions, additional medical treatments, and potential legal fees.

## Institutional Value
Integrates seamlessly with existing hospital equipment & surgical procedures to potentially save time and obviate the need for expensive medical navigation products.

## Relative Costs

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**Priced to Deliver the Industry’s Best Value**

HipGrid is a patented technology ideal for hospitals seeking scalable, portable technology delivering proven clinical benefits.
Advanced intraoperative alignment technology on your terms.

**CHOICE PLUS™**

Subscribe to HipGrid via a technology licensing program.

- Eliminate surgeon scheduling and availability conflicts with multiple HipGrid devices.
- Access the most current HipGrid technologies at all times.
- Enjoy unlimited use with no per-case or user fees.
- Receive free full coverage warranty and comprehensive staff training & installation.

**PURCHASE PLUS™**

Acquire HipGrid devices via capital purchase.

- Enjoy attractive discounts for multi-unit purchases.
- Access extended warranty and replacement options.
- Receive comprehensive staff training and installation.
- Maintain upgrade “trade-in” value for future OrthoGrid technology enhancements.
REFERENCES


