# ScrewLOCK

## **PROBLEM**

- Over 42,000 Revision knee replacements annually in 2018
- Loosening causes up to 40% of revisions
- Revision surgeries due to loosening cost hospitals on average 156,000 hours and 628 million dollars annually.

## THE SOLUTION

- ScrewLOCK is designed to provide the needed increase in fixation that is not currently available on the market.
- The external threading and physiological taper provide a secure fit into the bone.
- The implantation technique and internal threading provide the means to heavily reduce the risk of infection.

### How does the ScrewLOCK work?



After the surgeon has reamed a tapered cavity into the femur, following the usual procedure for surgery to this point, they prepare the ScrewLOCK for implantation.



The ScrewLOCK is drilled into the femur, tapping itself into the bone.



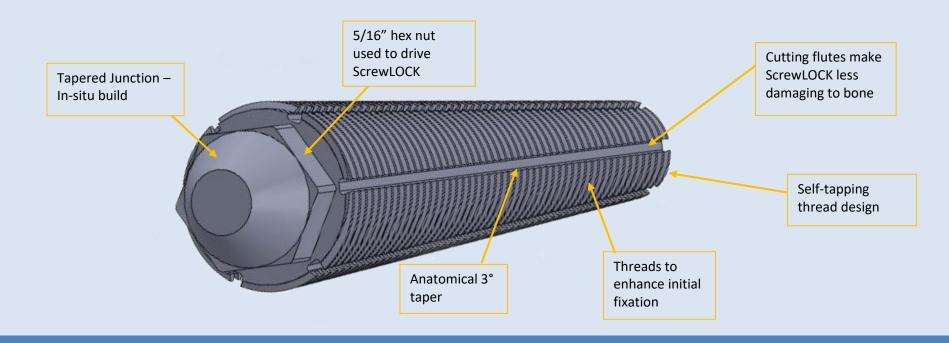
With the ScrewLOCK in place the surgeon can now attach the offset and continue on with the surgery as usual.



The ScrewLOCK shown in an open femur demonstrating the position of the device.







### **KEY FEATURES**

### Physiological Taper

SCREWLOCK FEATURES A
 TAPERED DESIGN THAT
 PROVIDES A PRECISE FIT TO
 THE NATURAL SHAPE OF THE
 MEDULLARY CANAL

# **External Threading**

 THE EXTERNAL THREADING OF SCREWLOCK PROVIDES IMPROVED FIXATION WITHIN THE BONE WITHOUT THE NEED FOR CEMENT

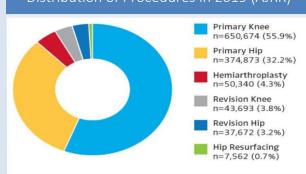
### Internal Threading

THE SCREWLOCK SYSTEM IS
MODULAR WITH THREADING
ON THE PROXIMAL END FOR
INCORPORATING POLYMER
DRUG ELUTING CAPS

### Implantation Technique

SCREWLOCK IS DESIGNED TO BE ASSEMBLED IN-SITU DURING IMPLANTATION, REDUCING THE RISK FOR INFECTION

# Distribution of Procedures in 2019 (AJRR)



## Market Analysis

- KNEE SURGERIES ARE THE MOST COMMON TYPE OF ORTHOPEDIC OPERATION, AS SHOWN ON THE GRAPH TO THE LEFT
- THE TOTAL KNEE REPLACEMENT MARKET IS PROJECTED TO GROW BY 29.5% IN THE NEXT EIGHT YEARS.

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