**Background**: Diagnosing the pathology associated with knee pain is a complicated task that incorporates little quantitative measures and often leads to biased and unnecessary referrals. A simple, cheap, and quantitative measure of intra-articular knee pain must be incorporated into the primary care physician decision matrix to produce referrals more conducive to surgical intervention.

**Question**: We asked (1) if a 10 degree difference in range of motion (r.o.m.) will correlate to clinically significant intra-articular pathology, (2) if differences in age, sex, and BMI within the patient population will cause a significant variation in knee r.o.m., and (3) if patient’s with Medicaid will present with greater knee flexion discrepancies than patients with private insurance or Medicare due to a lack of access to care.

**Methods**: This was a retrospective cohort study on 110 patients seen within the LSU Healthcare Network. They were selected based on the following criteria: (1) No history of contralateral knee pain, injury, or surgery (2) range of motion data collected using a goniometer on both knees at time of diagnosis. (3) MRI confirmed diagnosis of Meniscus tear with ICD9 codes: 717.3, 717.2, 717.42, 717.40, 717.49, 836.1. Patient’s Age, Sex, BMI, Surgical Treatment, Kellegren Lawrence and Albeck X-ray grades, and Insurance coverage was collected to determine if these factors had any effect on knee r.o.m.

**Results**: We found that patients diagnosed with operable derangement of the medial or lateral meniscus averaged a 26 degree reduction in knee flexion, with 97% of those patients having a reduction of 10 degrees or greater, when comparing the symptomatic knee to the unaffected knee. Patients with a BMI over 30 had significant difference in both symptomatic and unaffected knee r.o.m., P values of 0.042 and 8.41E-07 respectively, while age and sex showed no significant variation. The only significant correlation in insurance coverage involved symptomatic r.o.m. between those patients with Medicaid and those insured privately, P-value of 0.042.

**Conclusions**: Our evidence suggests that a pathologic difference of 10 degrees or more between knees may be indicative of a meniscus tear and may be a useful screening tool when evaluating for meniscus tears. Further investigation is necessary to determine the validity of using r.o.m. as a measure for other intra-articular pathologies. Additionally, the significant difference in symptomatic knee r.o.m. between privately insured patients and those with Medicaid warrants further exploration into the source of this disparity.