The Patient Journey in Knee OA: Variations in Patient Characteristics and Treatment by Physician Specialty

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Background

- Knee osteoarthritis (OA) affects an estimated 32.5 million US adults.1
- Knee OA is diagnosed and treated by multiple specialties and comprises conservative and pharmaceutical treatments, intra-articular (IA) injections, and surgery.
- Guidelines provide recommendations in idealized settings, but little documentation exists in real-world settings.
- This retrospective observational chart review aimed to assess patient characteristics and treatment patterns across 4 specialties: orthopedists (OS), rheumatologists (Rh), sports medicine (SM) physicians, and pain specialists (PS).

Methods

- Physicians with ≥2 years of practice and ≥10 knee OA patients per week were interviewed about their 2 most recent knee OA patients. Interviews (structured questions and answers) conducted between March and April 2019 assessed demographics, referrals, comorbidities, time to treatment, and lines of treatment (Table 1 and Figure 1).
- Multiple responses were allowed for first-line treatments (over-the-counter nonsteroidal anti-inflammatory drugs/acetaminophen (OTC NSAIDs/APAP), prescription NSAIDs, IA corticosteroids, and IA hyaluronic acid) and reasons for discontinuation, which resulted in totals >100% (Figure 1 and Table 2).
- As this study was designed to assess effect modifications, a confidence level of 90% was used.
- This project was exempt from IRB review and HIPAA consent as no patient-identifying information was included.
- Limitations included potential selection bias, confounding by risk factors, inability to show causation, small sample size, and missing data.

Discussion and Conclusions

- Patients treated by orthopedists used significantly more OTC NSAIDs/APAP than patients treated by rheumatologists.
- Pain specialists saw more patients with pain syndromes/higher BMIs. Rheumatologists saw more patients with rheumatoid conditions.
- With the exception for opioids (safety), the primary reason for treatment discontinuation was lack of efficacy.
- Safety concerns were the second-line reason for treatment discontinuation for prescription NSAIDs and COX-2 inhibitors.
- Although differences in patient characteristics and comorbidities existed, treatment strategies were similar across specialties. Newer treatments may provide additional options for existing treatments that have efficacy or safety concerns.

Table 1. Demographic and Clinical Characteristics Stratified by Diagnosing Physician

![Table 1](image)

Figure 1. First-Line Treatments

![Figure 1](image)

Table 2. Reasons for Discontinuation

![Table 2](image)


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