# Content Category: Pediatrics

## Session Topic: Juvenile Arthritis

<table>
<thead>
<tr>
<th>Educational Format</th>
<th>Faculty Expertise Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REQUIRED</strong></td>
<td>Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&amp;A during the final 15 minutes of the session are required.</td>
</tr>
<tr>
<td>Interactive Lecture</td>
<td></td>
</tr>
<tr>
<td><strong>OPTIONAL</strong></td>
<td>Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.</td>
</tr>
<tr>
<td>Problem-Based Learning (PBL)</td>
<td></td>
</tr>
</tbody>
</table>

### Professional Practice Gap

- Physicians have statistically significant and meaningful practice gaps with regard to managing pediatric rheumatic diseases, such as lupus, connective tissue disease, Kawasaki disease, fibromyalgia, and arthritis
- Diagnosing pediatric arthritis and other rheumatic diseases is often difficult, as many symptoms are similar among the different diseases
- JIA patients at risk for developing uveitis
- Physicians need to be aware of updates to the 2011 American College of Rheumatology Recommendations for the Treatment of Juvenile Idiopathic Arthritis.

### Learning Objective(s) that will close the gap and meet the need

1. Describe diagnostic principles, appropriate pre-referral evaluation, and red flags in pediatric rheumatologic diseases.
2. Discuss treatment options, including side effects of common medications and what contraindications to immunizations exist for patients in active treatment.
3. Define the subtypes of Juvenile Idiopathic Arthritis (formerly Juvenile Rheumatoid Arthritis) and identify common signs and symptoms of each subtype.

### Outcome Being Measured

Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.

### ACGME Core Competencies Addressed (select all that apply)

<table>
<thead>
<tr>
<th></th>
<th>Patient Care</th>
<th>Practice-Based Learning and Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Medical Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal and Communication Skills</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Professionalism | Systems-Based Practice
--- | ---

**Faculty Instructional Goals**

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations
- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
  - Visit [http://www.aafp.org/journals](http://www.aafp.org/journals) for additional resources
  - Visit [http://familydoctor.org](http://familydoctor.org) for patient education and resources
- Provide updates on new treatment therapies, changes to therapies, or warnings associated with existing therapies. Provide recommendations regarding new FDA approved medications; including safety, efficacy, tolerance, and cost considerations relative to currently available options. **Include relevant FDA REMS education for any applicable medications.**
- Provide recommendations regarding diagnostic principles, appropriate pre-referral evaluation, and red flags in pediatric rheumatologic diseases.
- Provide recommendations for treatment options, including side effects of common medications and what contraindications to immunizations exist for patients in active treatment.
- Provide an overview of the subtypes of Juvenile Idiopathic Arthritis (formerly Juvenile Rheumatoid Arthritis) and identify common signs and symptoms of each subtype.

---

**Needs Assessment**

Pediatric rheumatic diseases affect nearly 300,000 children in the United States, which is more than juvenile diabetes and cystic fibrosis combined.¹

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that family physicians have statistically significant and meaningful practice gaps with regard to managing pediatric rheumatic diseases, such as lupus, connective tissue disease, Kawasaki disease, fibromyalgia, and arthritis.² More specifically, data from a 2016 AAFP CME Training Needs Survey suggests that family physicians have practice gaps with respect to the initial diagnosis of connective tissue disorders; and disease management of fibromyalgia.³

A review of the literature suggests the following knowledge and practice gaps:
Diagnosing pediatric arthritis and other rheumatic diseases is often difficult, as many symptoms are similar among the different diseases. Non-medical variables (e.g., parent emotional distress, social support, self-efficacy) are important explanatory variables in health-related quality of life in children newly diagnosed with juvenile idiopathic arthritis, particularly for psychosocial functioning. Prior to the release of the 2011 American College of Rheumatology Recommendations for the Treatment of Juvenile Idiopathic Arthritis (JIA) guidelines, significant advances in treatment have greatly improved short- and medium-term outcomes for children with JIA, yet no validated guidelines offer recommendations for the treatment of JIA.

There is a void in guidelines regarding when and how (if at all) to use systemic steroids in psoriasis and there are minimal recommendations regarding psoriatic and rheumatoid arthritis.

JIA is clinically managed by a multidisciplinary team, with follow-up through out-patient consultations with a few short hospitalizations; however, patients and caregivers are often stressed by inadequate and timely updates and benchmarks after the initial announcement of a JIA diagnosis.

Approximately 73% of patients with JIA develop uveitis within the first year of arthritis onset, with estimates of 47% of JIA patients at risk for developing uveitis are legally blind in at least one eye at the time of their first visit to the ophthalmologist.

Patient with JIA often experience poor sleep quality; however, this topic is not addressed by current ACR treatment guidelines.

Physicians may improve their care of patients with juvenile arthritis by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:

- Children suspected of having juvenile rheumatoid arthritis should be referred to a subspecialist as early as possible.
- Early therapy with nonsteroidal anti-inflammatory drugs controls inflammation, relieves pain, and may minimize permanent joint damage in children with juvenile arthritis.
- Diagnoses other than juvenile rheumatoid arthritis should be considered in children with a painful inflamed joint, because joint inflammation in juvenile rheumatoid arthritis typically is painless.
- Patients with JIA should be referred for an ophthalmologic examination.
- Incorporating patient reported outcome (PRO) measures into routine clinical care of patients with juvenile idiopathic arthritis can help facilitate movement from physician-centered to patient-centered care.
- PRO measures relevant to juvenile idiopathic arthritis provide information germane to evaluating treatment outcomes and comparative effectiveness of therapies.
- Valid and reliable PRO measures are available that capture the experience of juvenile idiopathic arthritis from the perspective of the patient and parent.
- Length, age, potential discordance between parent and child responses, and clinical validity are among the issues that need to be considered when selecting PRO measures.

Choosing Wisely Recommendation(s):
• Don’t order autoantibody panels unless positive antinuclear antibodies (ANA) and evidence of rheumatic disease. Up to 50% of children develop musculoskeletal pain. There is no evidence that autoantibody panel testing in the absence of history or physical exam evidence of a rheumatologic disease enhances the diagnosis of children with isolated musculoskeletal pain. Autoantibody panels are expensive; evidence has demonstrated cost reduction by limiting autoantibody panel testing. Thus, autoantibody panels should be ordered following confirmed ANA positivity or clinical suspicion that a rheumatologic disease is present in the child.\textsuperscript{14}

Additionally, faculty should be prepared to provide an overview of relevant ACR clinical guidelines, along with recommendations for implantation of key practice recommendations.\textsuperscript{5,6}

Physicians should also be kept up to date on new treatment therapies, changes to therapies, or warnings associated with existing therapies. Provide recommendations regarding new FDA approved medications for the treatment of JIA, and its complications; including safety, efficacy, tolerance, and cost considerations relative to currently available options.

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

• American College of Rheumatology Recommendations for the Treatment of Juvenile Idiopathic Arthritis\textsuperscript{5,6}
• Management of Juvenile Idiopathic Arthritis 2015: A Position Statement from the Pediatric Committee of the Canadian Rheumatology Association\textsuperscript{15}
• Chronic Musculoskeletal Pain in Children: Part II. Rheumatic Causes\textsuperscript{11}
• A Systematic Approach to the Evaluation of a Limping Child\textsuperscript{16}
• Rheumatologic Tests: A Primer for Family Physicians\textsuperscript{17}
• The benefits of using care coordinators in primary care: a case study\textsuperscript{18}
• Engaging Patients in Collaborative Care Plans\textsuperscript{19}
• How to Help Your Patients Choose Wisely\textsuperscript{20}
• Simple tools to increase patient satisfaction with the referral process\textsuperscript{21}
• Coding Changes for Family Medicine in 2018\textsuperscript{22}
• Getting Paid for Screening and Assessment Services\textsuperscript{23}
• Familydoctor.org. Juvenile Rheumatoid Arthritis (patient resource)\textsuperscript{24}
References


