<table>
<thead>
<tr>
<th>Body System: Pain</th>
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<td>Session Topic: Fibromyalgia</td>
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<th>Educational Format</th>
<th>Faculty Expertise Required</th>
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<td><strong>REQUIRED</strong></td>
<td>Interactive Lecture</td>
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<td><strong>OPTIONAL</strong></td>
<td>Problem-Based Learning (PBL)</td>
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**Professional Practice Gap**

- Knowledge gaps with regard to diagnosing fibromyalgia.
- Knowledge gaps with regard to diagnosing and managing comorbid conditions of fibromyalgia.
- Knowledge gaps with regard to developing collaborative treatment plans that include a multidisciplinary clinical approach including education, cognitive behavior strategies, physical training, and medications for management of fibromyalgia.
- Knowledge and practice gaps with regard to inappropriate use of opioids for fibromyalgia pain management; using support groups and community services to encourage adherence to non-pharmacologic

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

1. Use validated criteria, symptom scores, and presence of chronic widespread pain with fatigue and sleep symptoms for diagnosis of fibromyalgia syndrome.
2. Evaluate patients with diagnosed fibromyalgia for comorbid conditions and treat or refer accordingly.
3. Follow an evidence-based, algorithm based on appropriate guidelines, for the pharmacologic management of chronic pain, including fibromyalgia.
4. Develop collaborative treatment to avoid opioids for fibromyalgia, taper off/refer opioid legacy patients, and use opioids appropriately for acute pain incidents.

**Outcome Being Measured**

Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.
treatments; evaluating for comorbidities, especially sleep disturbances and depression; effective patient education and counseling on reducing symptoms; evidence-based pharmacologic management; and effective evaluation and diagnostic criteria

- Fibromyalgia is frequently underdiagnosed
- Fibromyalgia is difficult to diagnose due to the high heterogeneity of symptoms;
- There are often many comorbidities;
- There are often complicated overlapping symptoms associated with other musculoskeletal, rheumatologic and psychiatric disorders;
- There are often other pain-causing conditions (e.g. neuropathic pain)
- Patients often report experiencing discouragement, rejection, suspicion, and stigma during their encounters with health care professionals
- Primary care physicians are frequently not confident in their ability to diagnose fibromyalgia
- Patient adherence to exercise treatments for fibromyalgia, after the structured supervised program has ended, is low

ACGME Core Competencies Addressed (select all that apply)
<table>
<thead>
<tr>
<th>X</th>
<th>Medical Knowledge</th>
<th>Patient Care</th>
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<td>X</td>
<td>Interpersonal and Communication Skills</td>
<td>Practice-Based Learning and Improvement</td>
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<td>Professionalism</td>
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**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 recommendations for using a combination of the American College of Rheumatology criteria, symptom scores, and presence of chronic widespread pain with fatigue and sleep symptoms for diagnosis of fibromyalgia syndrome.
- Provide recommendations for evaluating patients with diagnosed fibromyalgia for comorbid conditions and treat or refer accordingly.
- Provide recommendations and examples of an evidence-based, algorithm based on appropriate guidelines, for the pharmacologic management of chronic pain, including fibromyalgia.
- Provide resources and strategies for developing collaborative treatment plans that include a multidisciplinary clinical approach including education, cognitive behavior strategies, physical training, and medications for management of fibromyalgia.

**Needs Assessment:**

An estimated 52.5 million adults in the United States reported being told by a doctor that they have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. The exact cause of fibromyalgia is unclear, and is a multisystem chronic disease characterized by sleep disturbances, fatigue, headache, morning stiffness, paresthesia, and anxiety.

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that family physicians have a knowledge gap with regard to screening, diagnosing, treating, and overall management of patients with fibromyalgia. More specifically, CME outcomes data from the AAFP CME Bulletin: *Fibromyalgia and Pain Management*, and 2016 AAFP FMX: Fibromyalgia sessions, suggest that physicians have knowledge and practice gaps with regard to inappropriate use of opioids for fibromyalgia pain management; using support groups and community services to encourage adherence to non-pharmacologic...
treatments; evaluating for comorbidities, especially sleep disturbances and depression; effective patient education and counseling (e.g. CBT) on reducing symptoms; evidence-based pharmacologic management; and effective evaluation and diagnostic criteria.\textsuperscript{5,6}

A review of the literature suggests the following practice gaps:\textsuperscript{7-10}

- Fibromyalgia is frequently underdiagnosed
- Fibromyalgia is difficult to diagnose due to the high heterogeneity of symptoms;
- There are often many co-morbidities;
- There are often complicated overlapping symptoms associated with other musculoskeletal, rheumatologic and psychiatric disorders;
- There are often other pain-causing conditions (e.g. neuropathic pain), and patients claim to be able to identify different types and may want to be treated for each
- Patients often report experiencing discouragement, rejection, suspicion for opioid seeking, and stigma during their encounters with health care professionals
- Primary care physicians are frequently not confident in their ability to diagnose fibromyalgia
- Patient adherence to exercise treatments for fibromyalgia, after the structured supervised program has ended, is low

Physicians may improve their care of patients with fibromyalgia 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:\textsuperscript{2,11-15}

- A combination of the 2010 diagnostic criteria from the American College of Rheumatology, symptom scores, and presence of chronic widespread pain with fatigue and sleep symptoms should be used to diagnose fibromyalgia.
- Patients with fibromyalgia should be evaluated for comorbid functional pain syndromes and mood disorders.
- Aerobic exercise (20 to 30 minutes two or three days per week) improves pain symptoms and fatigue in patients with fibromyalgia.
- Tricyclic antidepressants, serotonin-norepinephrine reuptake inhibitors, and cyclobenzaprine (Flexeril) have the strongest evidence of benefit for improvements in pain, sleep, and quality of life in patients with fibromyalgia. Tricyclic antidepressants and serotonin-norepinephrine reuptake inhibitors improve symptoms of fatigue.
- Antiepileptics may provide benefits for pain, sleep, and quality of life in patients with fibromyalgia.
- Use of American College of Rheumatology criteria for diagnosis of fibromyalgia syndrome
- Fibromyalgia Impact Questionnaire (FIQ)
- Patient and family education (including internet resources) regarding diagnosis, signs and symptoms, and treatment options
- Nonpharmacological treatment, including aerobic exercise, cognitive behavioral therapy (CBT), strength training, acupuncture, hypnotherapy, biofeedback, balneotherapy
- Pharmacological therapy, including antidepressants (tricyclic antidepressants, serotonin and norepinephrine reuptake inhibitors, selective serotonin reuptake inhibitors);
anticonvulsants; and other medications, such as cyclobenzaprine and tramadol with or without acetaminophen (including, 2013 FDA acetaminophen notification)

- Oxycodone CR has limited effectiveness for the treatment of diabetic neuropathy or postherpetic neuralgia. Evidence is lacking regarding treatment benefit for other neuropathic pain syndromes or fibromyalgia. Adverse effects of oxycodone CR therapy are common. Long-term use of opioids can lead to central sensitization that is harmful in fibromyalgia.
- Treat fibromyalgia with a multidimensional clinical approach comprising patient education, cognitive behavior therapy, pharmacotherapy, and exercise.
- Use antidepressant medications to improve pain, sleep quality, and global well-being in patients with fibromyalgia.
- Prescribe cyclobenzaprine 10 to 30 mg at bedtime to improve sleep and decrease pain in patients with fibromyalgia.
- Advise patients that aerobic exercise training has beneficial effects on fibromyalgia symptoms.
- Do not test ANA subserologies without a positive ANA and clinical suspicion of immune-mediated disease.
- Do not test for Lyme disease as a cause of musculoskeletal symptoms without an exposure history and appropriate physical examination findings.

In addition to these recommendations, physicians would also be able to improve their overall management of fibromyalgia by receiving evidence-based recommendations based on current Cochrane Reviews and updates on new FDA approved fibromyalgia drugs. Other disorders commonly associated with fibromyalgia include irritable bladder, dysmenorrhea, premenstrual syndrome, restless leg syndrome, temporomandibular joint pain, noncardiac chest pain, Raynaud's phenomenon, and sicca syndrome; therefore, physicians should be prepared to address comorbid conditions with the goal of reducing referrals and unnecessary tests for these patients.

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
- Common Questions About the Diagnosis and Management of Fibromyalgia
- Fibromyalgia
- Management of fibromyalgia syndrome in adults
- Common Questions About the Pharmacologic Management of Depression in Adults
- The Cochrane Library: Fibromyalgia
- FDA Living with Fibromyalgia, Drugs Approved to Manage Pain
- Are you ready to discuss complementary and alternative medicine?
Fibromyalgia | Overview (patient education)\textsuperscript{18}

References


16. The Cochrane Library. Fibromyalgia in Title, Abstract, Keywords. 2014;

17. U.S. Food and Drug Adminstration. Living with Fibromyalgia, Drugs Approved to Manage Pain. 2014;
