



## Needs Assessment

### Guidelines for identifying the needs for a CME activity

Needs assessment can be defined as “any systematic approach to collecting and analyzing information about the educational needs of individuals or organizations.”<sup>1</sup> It is an essential step in the CME planning process so that ultimately CME activities serve to improve outcomes for patients by changing physicians’ practice behaviors.

To achieve this goal, it is of utmost importance to identify what is missing from the optimum practice and what are the actual or potential learning needs of the target audience which can be addressed by providing CME opportunities. Identification of CME needs provide the foundation for the entire educational process. The needs identification process sets the stage for the development of learning objectives (what the participants can expect to get out of the activity) which is then followed by format selection (the best method to deliver content and teach those objectives).

Answers to these questions may help to clarify the need for CME and begin the process of collecting and analyzing information:

- How widespread is the need?
- What sources confirmed this need?
- What are the ramifications to patients if this need is not filled?
- How directly is the need linked to physicians’ practice?
- Will the CME activity improve practice?
- What are the barriers to physicians changing practice behaviors?

Needs assessment sources vary widely but in general, data may come from people, documents and special studies. These sources are commonly classified as follows:

#### Inferred Needs

New diagnosis, treatment, and practice guidelines, derived from:

- New diagnosis techniques
- New treatment options (new medications or indications)
- New practice guidelines
- New acquired technology or equipment
- Legislative regulatory or organizational changes effecting patient care

#### Expressed Needs

Generally coming from internal sources such as:

- Requests submitted on participant’s activity evaluation form
- Formal survey of potential participants

---

<sup>1</sup> Rosof, Adrienne B., Felch, William Campbell. Continuing medical education: a primer. New York, NY: Alliance for Continuing Medical Education, 1992

- Informal comments
- Consensus of faculty members within a department
- Requests from medical quality assurance departments

### **Proven Needs**

Based on objective external or internal sources, which may come from:

- Epidemiological data
- Quality assurance data
- Morbidity and mortality data
- Guidelines and requirements published by professional societies and other health care organizations or associations
- Journal articles and other scientific publications
- News media
- Published national consensus
- Chart reviews
- Hospital data (such as infection control data)
- Patient satisfactions surveys results

### **Indicated by Experts**

- Expert opinion from practitioners or other knowledgeable sources
- Input from planning committee
- Consensus of faculty members within the department

For CME activities, data from all appropriate sources should be gathered and summarized in a needs assessment report. The following is an example of a simple needs assessment report using a number of resources identified above:

## Diagnosis and Treatment of Fibromyalgia

### Needs Assessment Sources<sup>1</sup>

| Inferred/New Diagnosis or Treatment               | Expressed/Participants   | Proven/Observed  | Indicated by Experts                                   |
|---|--------------------------|--|--|
| <input checked="" type="checkbox"/> New treatment | <input type="checkbox"/> | <input checked="" type="checkbox"/> Journal articles     | <input checked="" type="checkbox"/> Course director    |
| <input checked="" type="checkbox"/> New diagnosis | <input type="checkbox"/> | <input checked="" type="checkbox"/> Epidemiological data | <input checked="" type="checkbox"/> Planning committee |
| <input type="checkbox"/>                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> Society guidelines   | <input type="checkbox"/>                               |

### Statement of Need

Fibromyalgia (FM) is a chronic disorder characterized by fatigue, generalized aches, and pain associated with multiple tender points on the body.<sup>1</sup> Current estimates indicate that approximately 2-3% of the general population has FM; with up to 5% of all women being affected.<sup>2</sup> However, because diagnosis is difficult and time-consuming, the actual prevalence may be higher. FM is predominantly considered a disorder of women between the ages of 20-50; however, it has been observed in males, children, adolescents and persons of more advanced age.

FM has been largely ignored as a diagnosis and as a treatable condition until very recently. In fact, some members of the medical community still do not view FM as a valid diagnosis.<sup>3</sup> According to the National Fibromyalgia Association, it takes an average of 5 years to get an accurate diagnosis because of the complexity of the disease and lack of provider education.<sup>4</sup> FM symptoms often overlap with those of other diseases, which lead to a time consuming and costly diagnosis.<sup>5</sup>

Despite multiple national and international guidelines, FM is under-diagnosed, misdiagnosed, or poorly managed by primary care clinicians. Many in the field continue to see it as a psychiatric condition and not a condition with a physical pathophysiology. This is in part due to complexities surrounding diagnosis and treatment of a controversial, multi-faceted condition. This has created many obstacles for patients with the disease, because there has been a recent shift in responsibility of care from rheumatologists to primary care physicians. Due to preconceived notions about the disease, patients with FM often suffer prejudice from healthcare providers, because the disease is seen as time consuming, a source of frustration, and thus a low priority in busy primary care clinical practices.<sup>6,7</sup>

FM is an especially difficult syndrome to evaluate, because there is such controversy about what it is. Although the American College of Rheumatology (ACR) criteria for FM have been generally accepted, it has yet to be recognized as a distinct disease entity by any major medical body.<sup>8</sup> There has also been debate as to whether FM is one entity or a syndrome with several different causes. These differences in ideology have created a dispute over which treatment is the most effective.

**Need 1:** *Clinicians need to know the underlying pathophysiology associated with fibromyalgia and the relationship to the HPA axis in order to improve differential diagnosis of women with fibromyalgia*

FM is an idiopathic, chronic, nonarticular pain syndrome with generalized tender points. It is a multisystem disease characterized by fatigue, headache, morning stiffness, and paresthesias. Several studies have suggested that FM is strongly associated with co-morbid disorders, such as depressive and anxiety symptoms and sleep disturbances.<sup>9</sup> Depression, anxiety, pain, and other physical ailments all have a negative impact on the patients' quality of life. In addition, they may decrease work productivity and increase healthcare utilization. Furthermore, patients suffering from depression and chronic pain syndromes like fibromyalgia are at an increased risk of suicide. Although the pathophysiology of FM is unclear, it seems to cluster in families, suggesting a genetic predisposition. Environmental and psychological factors, which could impact various members of the same family, may contribute to the symptomatology of the disease. Current theories include central sensitization and hypothalamic-pituitary-adrenal axis dysregulation.<sup>7</sup>

Many times, providers lack the skills and confidence in their abilities to differentially diagnose, which presents an enduring barrier, especially in pain syndromes. Fifty eight percent (58%) of general practitioners and 35% of specialists see their ability to make a differential diagnosis from other pain syndromes as a barrier.<sup>3</sup> The differential diagnosis of FM includes myofascial pain syndrome, chronic fatigue syndrome, and hypothyroidism.<sup>7</sup> These conditions can also affect patients with FM, thereby making the diagnosis even more difficult.

Challenges with treatment can be seen in five different areas: analysis, differential diagnosis, referral, treatment and management. The first obstacle that is often encountered by health care providers is assessment of FM. The pathophysiology of this disease is complex, shifting, and ill defined with no conclusive tests available for concrete diagnosis. In addition, the tests that are currently available are inefficient and complicated. A primary concern is that the assessments of pain are highly subjective, so primary care providers have to rely on the patients themselves to give an accurate description of their pain. Another concern is that there are many excessive and unnecessary tests, giving the impression that FM is “a diagnosis of exclusions,” alternately known as Rule Out disorder. Patients may often feel discouraged or defensive, because they feel like they have to “prove” their illness to others instead of focusing on their own recovery.<sup>7,8</sup>

**Need 2:** *Clinicians need to be aware of the new American College of Rheumatology Fibromyalgia Criteria and Severity Scales in order to improve diagnosis of women with fibromyalgia.*

In 2010, the American College of Rheumatology released preliminary Diagnostic Criteria for Fibromyalgia and Measurement of Symptom of Severity. These updated criteria address several issues with the 1990 diagnostic criteria. According to Dr. Wolfe the new criteria tender points were no longer a central element of the definition of fibromyalgia.<sup>10</sup> The new criteria also incorporate the measurement of widespread pain through the Wide Pain Index (WPI) and Symptom Scale (SS).<sup>10</sup> Wolfe also says “the examiner must fully understand the patient’s problems.”

**Need 3:** *Clinicians need to be aware of both non-pharmacologic and pharmacologic treatments for fibromyalgia*

When a diagnosis has been made by a primary care provider, there seems to be a habit to engage in serial referrals due to gaps in knowledge, skills, attitudes, confidence and, many times, resources. Many MDs report insufficient knowledge of treatment options, making valid outcomes impossible to measure.<sup>3</sup> It is difficult for those who assess, diagnose, and treat to allow for the successful management of the patient as a whole. Effective management should allow for improvement of functionality, not just the removal of pain. This idea creates doubt in some capable primary care providers about their own abilities to effectively manage this disease. Even if a primary care provider does decide to initiate treatment for a patient, there seems to be a substantial lack of education on the monitoring tools available.

---

## References

1. Wolfe F, Ross K, Anderson J, Russell IJ, Hebert L. The prevalence and characteristics of fibromyalgia in the general population. *Arthritis and rheumatism*. Jan 1995;38(1):19-28.
2. Spaeth M. Epidemiology, costs, and the economic burden of fibromyalgia. *Arthritis research & therapy*. 2009;11(3):117.
3. Myhal G CM, Hayes, S. Behavioural needs assessment in fibromyalgia. *Canadian Pain Society Annual Meeting*. Quebec City, Quebec 2009.
4. National Fibromyalgia Association. Diagnosis. 2009, [http://www.fmaware.org/PageServer?da3b.html?pagename=fibromyalgia\\_diagnosed](http://www.fmaware.org/PageServer?da3b.html?pagename=fibromyalgia_diagnosed) Accessed April 27, 2011.
5. Millea PJ, Holloway RL. Treating fibromyalgia. *Am Fam Physician*. Oct 1 2000;62(7):1575-1582, 1587.
6. Album D, Westin S. Do diseases have a prestige hierarchy? A survey among physicians and medical students. *Social science & medicine*. Jan 2008;66(1):182-188.
7. Katz RS SS, Helmke N, Small A, Small B, Moss R. Patients with fibromyalgia have greater difficulty coping with their illness than patients with other rheumatic diseases. *American College of Rheumatology 2007 Annual Scientific Meeting*. Boston, Massachusetts 2007:P1534.
8. Inanici F, Yunus MB. History of fibromyalgia: past to present. *Curr Pain Headache Rep*. Oct 2004;8(5):369-378.
9. Harding SM. Sleep in fibromyalgia patients: subjective and objective findings. *The American journal of the medical sciences*. Jun 1998;315(6):367-376.
10. Wolfe F. New American College of Rheumatology criteria for fibromyalgia: a twenty-year journey. *Arthritis Care Res (Hoboken)*. May 2010;62(5):583-584.

## Sources

Many websites (both free and subscription) are available that can provide excellent clinical information and data for needs assessments. For practice guidelines and other data in your specialty, please visit your particular specialty society website.

### **Federal Government**

- **Agency for Healthcare Research and Quality:** <http://www.ahrq.gov/>
  - **HCUPnet:** <http://hcupnet.ahrq.gov/>  
HCUPnet is a free, on-line query system based on data from the Healthcare Cost and Utilization Project (HCUP). It provides access to health statistics and information on hospital inpatient and emergency department utilization.
  - **Quality Information & Improvement:** <http://www.ahrq.gov/qual/qualix.htm>  
Multiple links providing tools, resources, and other information related to quality improvement.
- **Center for Health and Wellness (FDA):** <http://www.fda.org>  
The Center for Health and Wellness provides hundreds of articles and resources related to medicine, nutrition, diet, medical treatments and more.
- **National Guideline Clearinghouse (NGC):** <http://www.guidelines.gov/>  
NGC is a public resource for evidence-based medicine that provides structured, standardized summaries containing information derived from guidelines using the NGC Template of Guideline Attributes.
- **U.S. Department of Health and Human Services**
  - **Centers for Medicare and Medicaid Services:** <http://www.cms.gov/home/rsds.asp>  
CMS offers researchers and other health care professionals a broad range of quantitative information on our programs, from estimates of future Medicare and Medicaid spending to enrollment, spending, and claims data, and a broad range of consumer research to help its partners and staff.
  - **Hospital Compare:**  
[http://www.hospitalcompare.hhs.gov/\(X\(1\)S\(jdqqj45thcp4q55esfgv045\)\)/hospital-search.aspx?AspxAutoDetectCookieSupport=1](http://www.hospitalcompare.hhs.gov/(X(1)S(jdqqj45thcp4q55esfgv045))/hospital-search.aspx?AspxAutoDetectCookieSupport=1)  
The data presented comes from hospitals that volunteered to submit their data for public reporting. The clinical measures reported focus on heart attack, heart failure, pneumonia, asthma (children only) and the surgical care improvement project. Each rate calculation is based on the hospital's relevant discharges.

### **Other Relevant Resources**

*Free Access:*

- **Association of American Medical Colleges:** <https://www.aamc.org/initiatives/cme/quality/>  
These resources have been compiled to assist organizations and individuals seeking information about quality improvement, educational resources, tools for quality and performance improvement, and data and metrics for measuring and evaluating QI/PI outcomes.
- **Bandolier:** <http://www.medicines.ox.ac.uk/bandolier/>  
The online version of Bandolier is an independent journal about evidence-based health care written by Oxford scientists. Data comes from systematic reviews, meta-analysis, randomized trials and observational studies.
- **CDC Wonder:** <http://wonder.cdc.gov/>

Wide-ranging On-line Data for Epidemiologic Research (WONDER) is an easy to use, menu driven system that makes the information resources of the Centers for Disease Control and Prevention (CDC) available to public health professionals and the public at large.

- **Database of Abstracts of Reviews of Effects (DARE):** <http://www.crd.york.ac.uk/CMS2Web/>  
An on-line service for review and assessment of systematic reviews, economic studies, health technologies, summaries of all Cochran reviews and protocols, and summaries of Campbell review.
- **Evidence Based Medicine for Primary Care & Internal Medicine:** <http://ebm.bmj.com/>  
An on-line service which reviews over 100 journals and around 50,000 articles and publishes 120 clinically important articles in primary care.
- **Institute for Clinical Systems Improvement (ICSI):** <http://www.icsi.org/>  
This on-line service provides guidelines on system-based improvements in health care and health to its members primarily in Minnesota.
- **Institute for Healthcare Improvement (IHI):** <http://www.ihl.org>  
IHI is an independent not-for profit-organization based in Cambridge, Massachusetts that focuses on motivating and building the will for change; identifying and testing new models of care in partnership with both patients and health care professionals; and ensuring the broadest possible adoption of best practices and effective innovations.
- **National Committee on Quality Assurance:** <http://www.ncqa.org/>  
Statistics from Healthcare Effectiveness Data and Information Set (HEDIS) measures
- **National Institutes of Health (NIH) Clinical Trials:** <http://clinicaltrials.gov/>  
ClinicalTrials.gov is a registry and results database of federally and privately supported clinical trials conducted in the United States and around the world. This website provides information about a trial's purpose, who may participate, locations, and phone numbers for more details.
- **U.S. Preventive Services Task Force (USPSTF):** <http://www.uspreventiveservicestaskforce.org/>  
The USPSTF is an independent panel of non-Federal experts in prevention and evidence-based medicine and is composed of primary care providers. The USPSTF conducts scientific evidence reviews of a broad range of clinical preventive health care services (such as screening, counseling, and preventive medications) and develops recommendations for primary care clinicians and health systems.

*Subscription Required:*

- **Cochrane:** <http://www.cochrane.org>  
Cochrane Reviews are published in *The Cochrane Library* – an online collection of databases that brings together in one place rigorous and up-to-date research on the effectiveness of healthcare treatments and interventions, as well as methodology and diagnostic tests
- **DynaMed:** <http://www.ebscohost.com/dynamed/>  
DynaMed is clinical resource tool created for health professionals for use primarily at the point-of-care with clinically organized summaries for more than 3200 topics.
- **Essential Evidence Plus:** <http://www.essentialevidenceplus.com/>  
This on-line service provides clinical and evidence based health care information to support decisions at the point of care. The website provides decision support tools, history and physical exam calculators, diagnostic test calculator, and coding information.
- **PEPID:** <http://www.pepid.com/>  
This is an electronic decision-support resource that utilizes PDA, on-line and wireless technologies to deliver point-of-care access to integrated medical, clinical and pharmacological data.
- **Physicians Information and Education Resource (PIER):** <http://pier.acponline.org/index.html>

This is a service of American College of Physicians; available to ACP members only. The on-line information includes diseases, screening and prevention, complementary/alternative medicine, ethical and legal issues, procedures, quality measures and drug resources.

- **UptoDate:** <http://www.uptodate.com/home/index.html>  
UptoDate is a clinical decision support system to help clinicians to get answers to their clinical questions at the point of care. UptoDate is available through the web and mobile devices.