

## CFS Toolkit for Health Care Professionals: Diagnosing CFS

### DIAGNOSTIC CHALLENGES

Diagnosing chronic fatigue syndrome (CFS) can be challenging for health care professionals. A number of factors add to the complexity of making a CFS diagnosis: 1) there is no diagnostic laboratory test or biomarker for CFS, 2) fatigue and other symptoms of CFS are common to many illnesses, 3) many people with CFS do not look sick in spite of their profound disability, 4) symptoms vary from person to person in type, number and severity and 5) symptoms may vary in an individual patient over time.

These factors have contributed to an alarmingly low diagnosis rate. Of the one million or more Americans who have strictly defined CFS, more than 80% have not been diagnosed yet.

### DIAGNOSING CFS

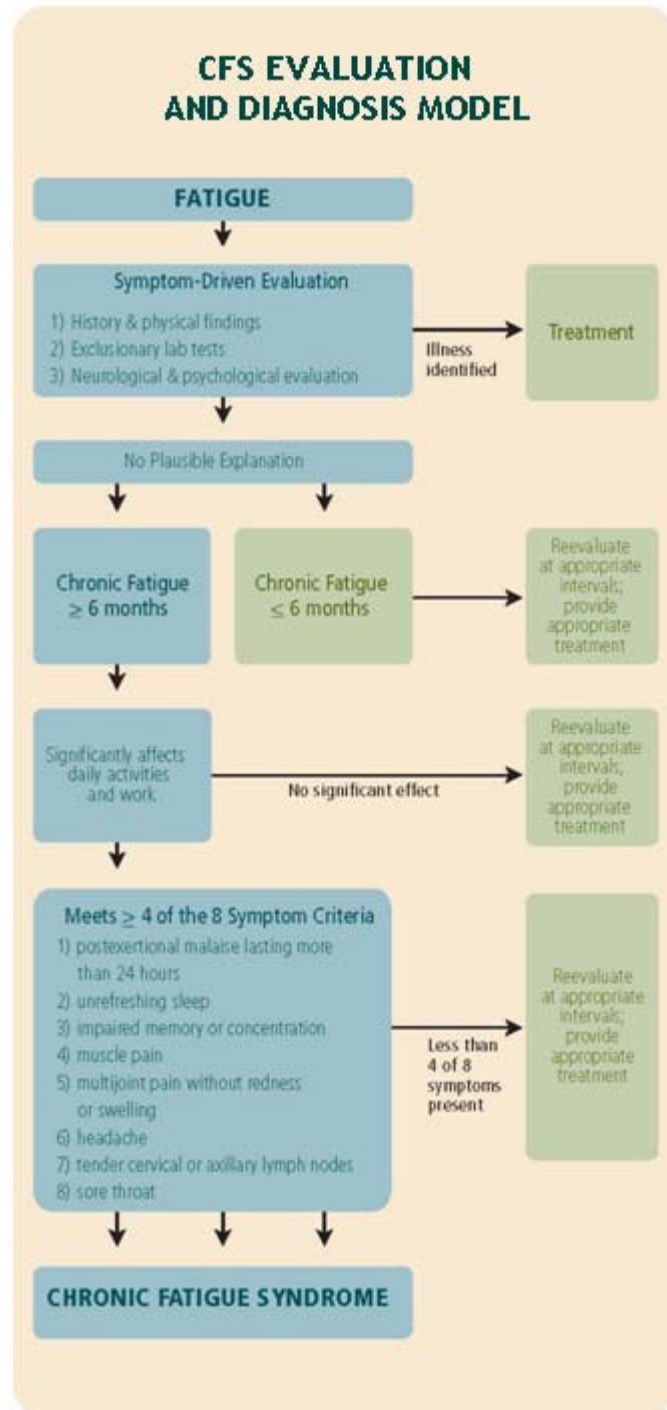
To be diagnosed with CFS, patients must experience significant reduction in their previous ability to perform one or more aspects of daily life (work, household, recreation or school). And by definition, all people suffering from CFS experience severe, all-encompassing mental and physical fatigue that is not relieved by rest and that has lasted longer than six months. The fatigue is accompanied by characteristic symptoms that may be more bothersome to patients than the fatigue itself.

Clinicians should consider a diagnosis of CFS if these two criteria are met:

1. Unexplained, persistent fatigue that is not due to ongoing exertion, is not substantially relieved by rest, is of new onset (not lifelong) and results in a significant reduction in previous levels of activity.

2. Four or more of the following symptoms are present for six months or more:

- Impaired memory or concentration
- Postexertional malaise
- *(extreme, prolonged exhaustion and exacerbation of symptoms following physical or mental exertion)*
- Unrefreshing sleep
- Muscle pain
- Multijoint pain without swelling or redness adults
- Headaches of a new type or severity
- Sore throat that's frequent or recurring
- Tender cervical or axillary lymph nodes



### DIAGNOSTIC MODEL

The 1994 International Case Definition forms the basis for a reliable diagnostic algorithm for CFS, particularly in adults. Clinicians assessing adolescents for pediatric CFS should exercise judgment based on the course of the illness and the patient's medical history.

## CLINICAL EVALUATION

When the CFS criteria are met, health professionals need to exclude other illnesses before a diagnosis can be confirmed. Because there is no diagnostic lab test for CFS, it is a diagnosis of exclusion.

Clinical evaluation of patients with a fatiguing illness requires:

- A detailed patient history, including a review of medications that could cause fatigue
- A thorough physical examination
- A mental status screening
- A minimum battery of laboratory screening tests.

Recommended tests include:

Urinalysis  
Total protein  
Glucose  
C-reactive protein  
Phosphorus  
Electrolyte  
Complete Blood Count (CBC) with leukocyte differential  
Alkaline phosphatase (ALP)  
Creatinine  
Blood urea nitrogen (BUN)  
Albumin  
ANA and rheumatoid factor  
Globulin  
Calcium  
Alanine aminotransferase (ALT) or aspartate transaminase serum level (AST)  
Thyroid function tests (TSH and Free T4)

Further tests or referral to specialists may be indicated to confirm or exclude a diagnosis that better explains the fatigue state or to follow up on results of the initial screening tests.

There are several questionnaires that can assist with the identification and monitoring of CFS patients. These include the MOS SF-36, Multidimensional Fatigue Inventory (MFI), the McGill Pain Score, the Sleep Answer Questionnaire and the CDC Symptom Inventory.

## COMORBID CONDITIONS

It is not uncommon for CFS patients to present with symptoms of other illnesses, and some patients actually receive diagnoses for multiple conditions. Because many of these conditions lack a diagnostic test or biomarker and share symptoms such as fatigue and pain with CFS, unraveling which illnesses are present can be difficult.

Comorbid conditions that clinicians should be alert for include irritable bowel syndrome, multiple chemical sensitivity, Gulf War syndrome, temporomandibular joint disorder and interstitial cystitis. Fibromyalgia appears to be the most common overlapping condition with CFS. Research suggests that between 35-70% of CFS patients also have fibromyalgia, so it is helpful for clinicians treating CFS patients to be familiar with diagnostic and treatment practices for both illnesses.

## **EXCLUSIONARY CONDITIONS**

Chronic fatigue syndrome can resemble many other disorders, including mononucleosis, Lyme disease, lupus, multiple sclerosis, primary sleep disorders like narcolepsy or sleep apnea, hypothyroidism, severe obesity and major depressive disorders. All these conditions must be considered and, if present, receive appropriate treatment. Medications can also cause side effects that mimic the symptoms of CFS.