Appendix A

Appendix A. Work Plan and Causal Pathway

Review of the Current Medical and Scientific Research Related to Disability and Chronic Fatigue Syndrome

Contract # 290-97-0016
December 11, 2001

1. Objective

To conduct a systematic review of the literature and develop an evidence report that will assist the Social Security Administration (SSA) in ensuring that it is using the most current medical knowledge for evaluating disability in persons with Chronic Fatigue Syndrome (CFS). The evidence report will also serve to augment SSA's knowledge base concerning new scientific or medical developments in the diagnosis and treatment of persons with CFS.
Seven key questions were posed to guide the systematic review:

1. What is the evidence that individuals with CFS have a ***discrete physical impairment****?* What is the evidence that individuals with CFS have a ***coexisting mental impairment****?* For example, what is the evidence that comorbid psychiatric/neurologic conditions frequently reported in CFS are present and, if present, are a result of CFS or are an integral part of the CFS disease process?

2. What is the evidence that there are specific clinical tests that can be used to reliably diagnose CFS, for example, are there specific anatomical, psychological, physiological, or medical imaging indices that are diagnostic for CFS?

3. When cognitive deficits are alleged, what is the evidence that individuals with CFS have such deficits and what is the evidence that these potential deficits contribute to ***functional limitations or inability to do work activity****?*

4. Do current neuropsychological tests reliably detect ***cognitive or mental impairments*** in the CFS population? Are there certain tests that are preferred in terms of reliability and validity? Are there certain tests or diagnostic tools that contain reliable correlations between test result(s) and either ***ability or inability to perform designated work-related functions*** (e.g., ability to relate to coworkers and supervision appropriately, ability to maintain concentration or pace, suitable memory capacity for work activities, etc.).

5. What treatments have been shown to be most effective for CFS in terms of restoring an individual's ***ability to do work activity****?*
6. What are the patient characteristics that best define improvement or positive outcomes in the CFS population such that they experience ***improvement in functioning***? Where it occurs, how is this improvement in functioning related to the ***ability to engage in work activity****?*

7. What evidence is available from related fields (e.g., sleep medicine, autonomic nervous system abnormalities, endocrinology, gastrointestinal illness, neurocognitive therapy) that would be applicable to the assessment, ***functional evaluation***, and treatment for CFS?

2. Background

The topic "Review of the Current Medical and Scientific Research Related to Disability and CFS" was nominated by SSA to assist in answering several key questions of diagnosis and management of disability in persons with CFS. This research will assist SSA in ensuring that it is using the most current medical knowledge for evaluating disability in persons with CFS.

Disability is defined by the SSA as the inability to engage in any substantial gainful activity by reason of any medically determinable (by clinical signs, symptoms, and laboratory findings) physical or mental impairment. Disability is thus the crux of this Task Order, and it should be possible to focus the review on CFS literature addressing diagnosis, measurement, and treatment of disability resulting from medically determinable physical and mental impairment in persons with CFS, even though the etiology, diagnosis, and treatment of CFS itself remain elusive.

3. Methods

MetaWorks will apply the latest and established best methods in the evolving science of review research.
A flow diagram outlining the systematic review process is located in Appendix A.
The following tasks will proceed sequentially.

Expert Panel Meeting

In consultation with the Task Order Officer (TOO), through networking with our nominating partner, our co-principal investigator, professional organizations, and purchasers of health care, a panel of experts with a broad range of clinical expertise in CFS was convened in Washington, DC, on November 30, 2001. This meeting had three primary purposes:

1. To establish a working definition of CFS for purposes of this task order.
2. To refine the key questions.
3. To receive the experts' recommendations regarding the breadth of the literature to be reviewed, analyses that should be performed, sources of data that should be accessed, etc., to ensure an evidence report that is responsive to SSA concerns.

A preliminary review of the literature was performed prior to the meeting and the results were shared with the attendees at the meeting. This included the preliminary search strategy and databases used, criteria for determining eligibility for inclusion in evidence synthesis, and results of Level I and Level II screening.

For purposes of guiding the literature review, a draft causal pathway was also developed prior to the meeting and shared with attendees who were asked to provide feedback.
Experts who attended the meeting have been asked to form the Technical Expert Panel (TEP). They will be asked to respond to questions during the process of the literature review, and will be asked to review the draft Evidence Report.

Results of expert meeting

The full report describing the expert meeting has been submitted to AHRQ. The following summarizes the decisions reached at the meeting:

Definition of CFS

It was agreed that four diagnostic criteria for CFS would be accepted for the purpose of this task order:

- 1988 CDC criteria
- 1994 CDC revised criteria
- 1991 Oxford criteria
- 1990 Australia criteria

The details of these criteria are outlined in Appendix B.

Definition of Disability

As defined in the task order and refined and agreed upon by the expert panel, this review will focus on disability in persons with CFS. Disability, per SSA guidelines, is defined based on inability to engage in any substantial gainful activity by reason of any medically determinable (by clinical signs, symptoms, and laboratory findings) physical or mental impairment. Disabled persons cannot do work that they did previously, and cannot adjust to other work. Disability must be expected to last for at least one year. Therefore, treatment and diagnosis will be considered only as they relate to disability in CFS.

Revised Key Questions

1. What is the evidence that some individuals with CFS have discrete impairments that are associated with disability? (Note that impairments include both physical and mental impairments).

2. What is the evidence that in the CFS population, current neuropsychological tests reliably detect cognitive or affective impairments associated with decreased ability to work?

3. What is the evidence that in individuals with CFS, treatments are effective in restoring the ability to work?

4. What patient characteristics best define improvement in functioning or positive outcomes in the CFS population? Where it occurs, how is improvement in functioning related to the ability to engage in work activity?

The previous question 2 was removed, as it was agreed that this question was not directly pertinent to disability. Questions 1 and 3 were combined into Question 1. Question 7 has been removed, as it was agreed that this question falls outside of the scope of this project.
No additional questions were recommended by the expert panel.

Breadth of Literature

It was agreed that the literature search should go back to 1988, when the first case definition of CFS was published. It was also agreed that searching Medline, Current Contents™, Cochrane, Psychlit, and bibliographies of accepted articles and recent review articles should be sufficient to identify the majority of articles that address the key questions.
The inclusion and exclusion criteria were reviewed. It was agreed that English language literature from the United States, Canada, Western Europe, and Australia would be sufficient.
The expert panel did not recommend searching additional databases.

Literature Screening

This task involves identifying and retrieving all potentially relevant literature on the current medical and scientific research related to CFS disability, categorizing by study design, and other key study, patient, and intervention level details for each of the five key questions. Studies which meet the eligibility criteria (see below) will undergo data extraction and data entry.

The published literature, English language and adult population only will be searched from 1988 to 2001, utilizing the following search strategy:
fatigue syndrome, chronic [MeSH] or *chronic fatigue [syndrome*]. Limits: English language, human subjects.

In addition to the MedLine search described above, MetaWorks will search other suitable electronic databases, including Current Contents®, Cochrane Controlled Trials Register (CCTR), and PsychLit, as well as a manual search of accepted study references and review articles published within the past two years. The Cochrane Library and the National Guidelines Clearinghouse will also be searched for additional information on these topics. In addition, pertinent Internet sites will be checked for potential leads to additional studies.

The search cut-off date will be November 15, 2001 and the retrieval cut-off date will be determined after all abstracts have been screened.

All citations and abstracts will be printed and screened at MetaWorks for any mention of diagnosis and/or treatment of CFS disability or impairment (Level 1 screening) and reviewed for the following exclusion criteria:

Exclusion Criteria

Abstracts demonstrating any of the following characteristics will be rejected:

- Review, meta-analysis, abstracts, letters, case reports, editorials, and commentaries.
- Unpublished study reports and abstracts.
- Studies published prior to 1988.
- Studies written in languages other than English.
- Studies not conducted in the US, Canada, Australia or Western Europe.
- Pharmacokinetic and pharmacodynamic studies.
- Animal or *in vitro* or tissue level studies.
- Studies not *related to* or not *specific to* CFS disability or impairment.
- Studies containing < 2 patients as total sample size.
- Pediatric patient population.
- No information related to disability or impairment.
- Outcomes not extractable.
- Mixed population (unable to separate CFS from other populations).
- Studies focused on pathophysiology of CFS (lab findings/lab technique).

In some cases, it may not be possible from the abstract alone to determine the eligibility of the study. Full studies of abstracts lacking obvious exclusion criteria will be retrieved for Level 2 screening, where inclusion and exclusion criteria will be applied.

Inclusion Criteria

The following study designs will be accepted: observational [prospective, retrospective, and cross sectional (XS)], or interventional [randomized controlled trials (RCTs), non-randomized controlled trials (nRCTs), uncontrolled case series (UCS)].

- Adult patients with CFS *and* disability.
- Studies focusing on diagnosis and/or management of a medically determinable physical or mental impairment in CFS.
- Medically determinable impairment must be demonstrated by clinical finding, lab or other test result:
- physical findings, lab tests, imaging tests
- assessment of cognitive or mental impairments
- Studies reporting at least one objective measure related to disability or impairment as measured by:
    - Physical function
    - Work endurance
    - Work or school absenteeism
    - Sick leave

- Days lost
- Light duty
- Productivity
- Activities of Daily Living (ADL)
- Quality of Life (QoL)
- Hospitalizations or admissions to chronic care facilities
- Emergency room or clinic visits
- oxygen capacity (VO_2)
- neuropsychological or QoL measures of functioning that are derived from validated instruments.
- Other
-

Upon completion of Level 2 screening, all accepted articles will be eligible for data extraction.

Causal Pathway

Based on the results of a preliminary literature review, a Causal Pathway was developed (Appendix C). All of the events described in this pathway take place within the CFS universe; i.e., only patients already diagnosed with CFS are included. Patients with fibromyalgia, Gulf War Syndrome, and other related conditions are not included. To diagnose disability in the CFS universe, patients must have a medically determinable condition (defined by clinical signs and symptoms, laboratory abnormalities, or other abnormalities), leading to physical or mental impairment, that results in disability, as defined by the SSA. This Causal Pathway was presented at the Experts Meeting described above.

Assessment of Quality in Primary Studies

All studies will be appraised according to a previously published Level of Evidence (Appendix D). An additional assessment of external and internal validity will be developed.

Data Extraction

Data extraction forms (DEFs) will be created specifically for this project. Data will be extracted onto the DEF independently by one reviewer and the completed DEF will be 100% checked against the original articles by a second reviewer. Any differences will be resolved by consensus; thus, two reviewers must agree on all data. In all cases, at least one physician reviews all data elements. The data will then be entered in MetaWorks' relational database, MetaHub™. At this time, it is anticipated that the following data elements will be extracted.
These preliminary selections may change prior to finalization of the DEF, based on initial review of the literature.

Study level characteristics

- Publication year
- Geographical location of study
- Study design
- Methodological assessment
- Level of Evidence (I-V)
- Assessment of External and Internal Validity
- Total number of patients enrolled
- If RCT, number of patients randomized
- Funding source/industry sponsorship (name if yes or no/NR)
- Intervention duration
- Observation duration
- CFS definition used
  - CDC 1988
  - Revised CDC 1994
  - Oxford 1991
  - Australia 1990
- Elements of CFS definition identified
- Duration of symptoms
- Relation to exertion
- Relation to rest
- Reduction in previous levels of occupational, educational, social, or personal activity
- Laboratory screening tests
- Clinical findings (sore throat, tender lymphadenopathy, muscle pain, joint pain, new headaches)
- Unrefreshing sleep
- Postexertion malaise
- Neuropsychological symptoms

Patient characteristics (by group)

- Age: years (mean or median, range)
- Gender distribution
- Race and/or ethnicity
- Age at diagnosis
- Duration of symptoms
- Presence of symptoms listed in CFS diagnostic criteria
- Baseline healthcare utilization
- Hospitalizations or admissions to chronic care facilities
- Emergency room or clinic visits
- Other
- Baseline work-related characteristics
- Work or school absenteeism
- Use of sick leave
- Productivity

- Other
- Baseline occupation or employment status
- Baseline ADL assessment (instrument and score)
- Baseline QoL (instruments and score or result on domains related to impairment and/or disability
- Baseline VO_2
- Baseline impairment
- Physical _____ determined by _____test and baseline result
- Mental _____ determined by _____test and baseline result
- Other co-morbid conditions

Diagnostic Interventions (by group)

- Physical Impairment (test and baseline result)
- Mental Impairment (test and baseline result)

Treatment interventions (by group)

- Treatment of physical impairment
- Treatment of mental impairment

Impairment or Disability Outcomes (by group)

- Healthcare utilization outcomes
- Hospitalizations or admissions to chronic care facilities
- Emergency room or clinic visits
- Other
- Work-related outcomes
- Work or school absenteeism
- Use of sick leave
- Productivity
- Other
- Number of patients with changed occupation or employment status
- Other outcomes:
- Symptomatic improvement or worsening (documented motor improvement and other manifestations of disease severity)
- Follow-up ADL assessment (instrument and score)
- Follow-up QoL (instruments and score or results on domains related to impairment and/or disability)
- Follow-up VO_2
- Follow-up impairment
- Physical _____ determined by _____test and follow-up result
- Mental _____ determined by _____test and follow-up result

Database Development

All consensed data will be entered into the MetaWorks MetaHub™ database. 100% of entered data is checked back to the DEFs after each form is completely entered. In addition, a 20% random sampling of data in the completed database will be checked by the QC group at MetaWorks against the data extraction forms. All discrepancies in data are reconciled by referring back to the original papers. Error rates in excess of 2% of checked data will trigger a 100% check of all data elements in the data base.

Once the accuracy of the database has been verified as described above, it is locked. No further changes are allowed after the data is locked. This is the dataset that will be used by the statisticians for analysis and to create raw data tables displaying key data elements of interest, by study.

All data are maintained in the MetaHub database, in a manner suitable to allow outputs to: a) spreadsheet programs for customized evidence table displays; b) to statistical programs for analysis.

4. Data Synthesis & Reporting

Qualitative and quantitative syntheses will be performed, as data permit, in order to answer the key questions. Results will be provided in a draft Final Report.

5. Peer Review

The draft Evidence Report will be circulated for feedback to the TEP and external peer reviewers.

Each peer reviewer will also receive a reviewer's form to be completed and returned to MetaWorks. This form will contain a checklist of items to be assessed as well as provide room for free-form text comments. The form will be pre-screened by the AHRQ TOO and SSA representatives prior to being sent to the peer reviewers. Reviewers will be given at least 3 weeks to respond. All feedback will be stored in a project folder at MetaWorks. A statement of response to each reviewer's comments will be prepared and stored with each reviewer's comments. This response will also be returned to the reviewer.

A summary of the main comments and responses will be prepared and shared with the TOO. Reviewer comments and additional analyses and text resulting from the response to reviewer critique will be incorporated into the final iteration of the evidence report.

6. Manuscript

After completion of the final Evidence Report, MetaWorks will prepare a manuscript describing key aspects of the work for publication in a peer reviewed journal. An abstract of same may also be submitted for presentation at professional meetings.

Work Plan Acceptance

AHRQ

By: _____
Name: Marian James, PhD
Title: Task Order Officer

Social Security Administration

By: _____
Name: Frank Schuster, MD
Title: SSA Representative

MetaWorks Inc.

By: _____
Name: Cindy Levine, M.D.
Title: Principal Investigator, MetaWorks

By: _____
Name: Nelson Gantz, M.D.
Title: Co-Principal Investigator, Pinnacle Health System

Attachments

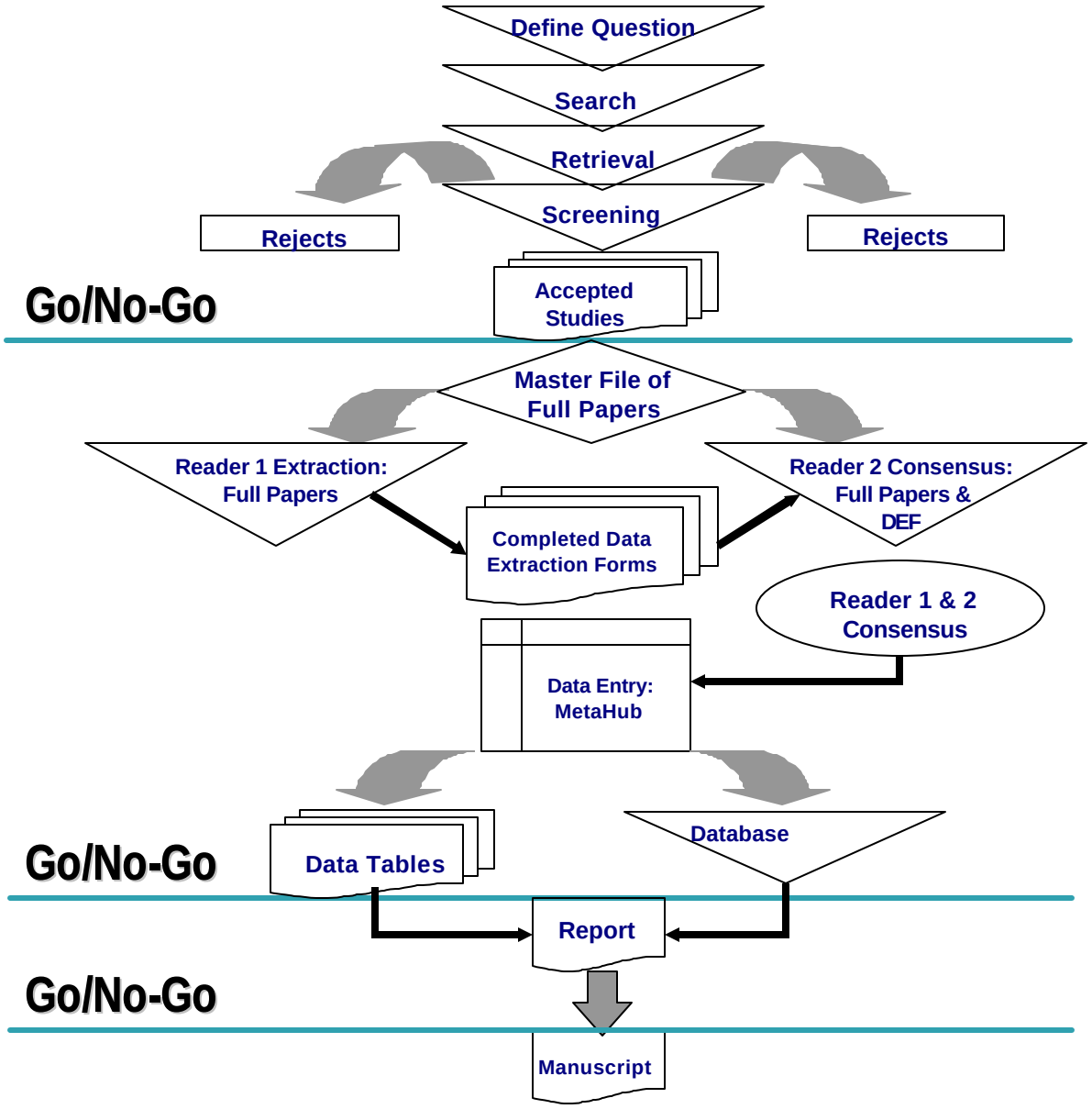
Attachment A: Flow Diagram Systematic Review

Attachment B: CFS Diagnostic Criteria

Attachment C: Causal Pathway

Attachment D: Level of Evidence

Attachment A: MetaWorks Flow Diagram



Attachment B: CFS Diagnostic Criteria

CDC 1988 CFS definition

- Major criteria:
  - new onset of persistent or relapsing, debilitating fatigue in a person without a previous history of such symptoms that does not resolve with bedrest and that is severe enough to reduce or impair average daily activity to less than 50% of the patient's premorbid activity level for at least 6 months
  - fatigue that is not explained by the presence of other evident medical or psychiatric illnesses

- Minor criteria:
  - at least six symptoms plus at least two signs, or at least eight symptoms from the list below
  - Symptoms:
    - mild fever or chills
    - sore throat
    - painful adenopathy (posterior or anterior, cervical or axillary)
    - generalized muscle weakness
    - myalgias
    - prolonged generalized fatigue after previously tolerated levels of physical activity
    - generalized headaches
    - migratory arthralgia without swelling or redness
    - neuropsychologic complaints
    - sleep disturbance
    - main symptom complex developing over a few hours to a few days
  - Physical Signs:
    - low-grade fever
    - nonexudative pharyngitis
    - palpable or tender anterior or posterior, cervical or axillary lymph nodes

From: Holmes GP, Kaplan JE, Gantz NM, et al. Chronic fatigue syndrome: A working case definition. Ann Intern Med 1988; 108: 387-9.

CDC 1994 CFS definition

- Clinically evaluated, unexplained, persistent or relapsing chronic fatigue lasting > 6 months
  - of new or definite onset
  - not the result of ongoing exertion
  - not substantially alleviated by rest
  - substantial reduction in previous levels of occupational, educational, social, or personal activities
  - Clinical evaluation:

    History and Physical, Mental Status examination

    Laboratory screening including CBC, ESR, LFTs, TP, albumin, globulin, CA, PO_4, glucose, BUN, CRE, electrolytes, TSH, urinalysis

- 4 symptoms concurrently present for > 6 months
  - Sore throat
  - Tender cervical or axillary lymph nodes
  - Muscle pain
  - Multijoint pain
  - New headaches
  - Unrefreshing sleep
  - Postexertion malaise

- Exclusion criteria
  - Active, unresolved, or suspected disease likely to cause fatigue
  - Psychotic, melancholic or bipolar depression

    - (but not uncomplicated major depression)
  - Psychotic disorders
  - Dementia
  - Anorexia or bulimia nervosa
  - Alcohol or other substance misuse
  - Severe obesity

From: Fukuda K, Straus SE, Hickie I, et al. The chronic fatigue syndrome: A comprehensive approach to its definition and study. Ann Intern Med 1994; 121: 953-9.

Oxford CFS definition

- Severe, disabling fatigue lasting $\geq$ 6 months that:
  - affects both physical and mental functioning
  - is present for > 50% of the time

- Other symptoms may be present:
  - myalgia
  - sleep disturbances
  - mood disturbance

- Exclusion criteria:
  - Active, unresolved, or suspected disease likely to cause fatigue
  - Psychotic, melancholic or bipolar depression
    - (but not uncomplicated major depression)
  - Psychotic disorders
  - Dementia
  - Anorexia or bulimia nervosa

From: Sharpe MK, Archard LC, Banatvala JE, et al. A report - chronic fatigue syndrome: Guidelines for research. J R Soc Med 1991; 84: 118-21.

Australian CFS definition

- Disabling and prolonged feelings of physical tiredness or fatigue, exacerbated by physical activity.

- Present for at least 6 months.

- Unexplained by an alternative diagnosis reached by history, laboratory, or physical examinations.

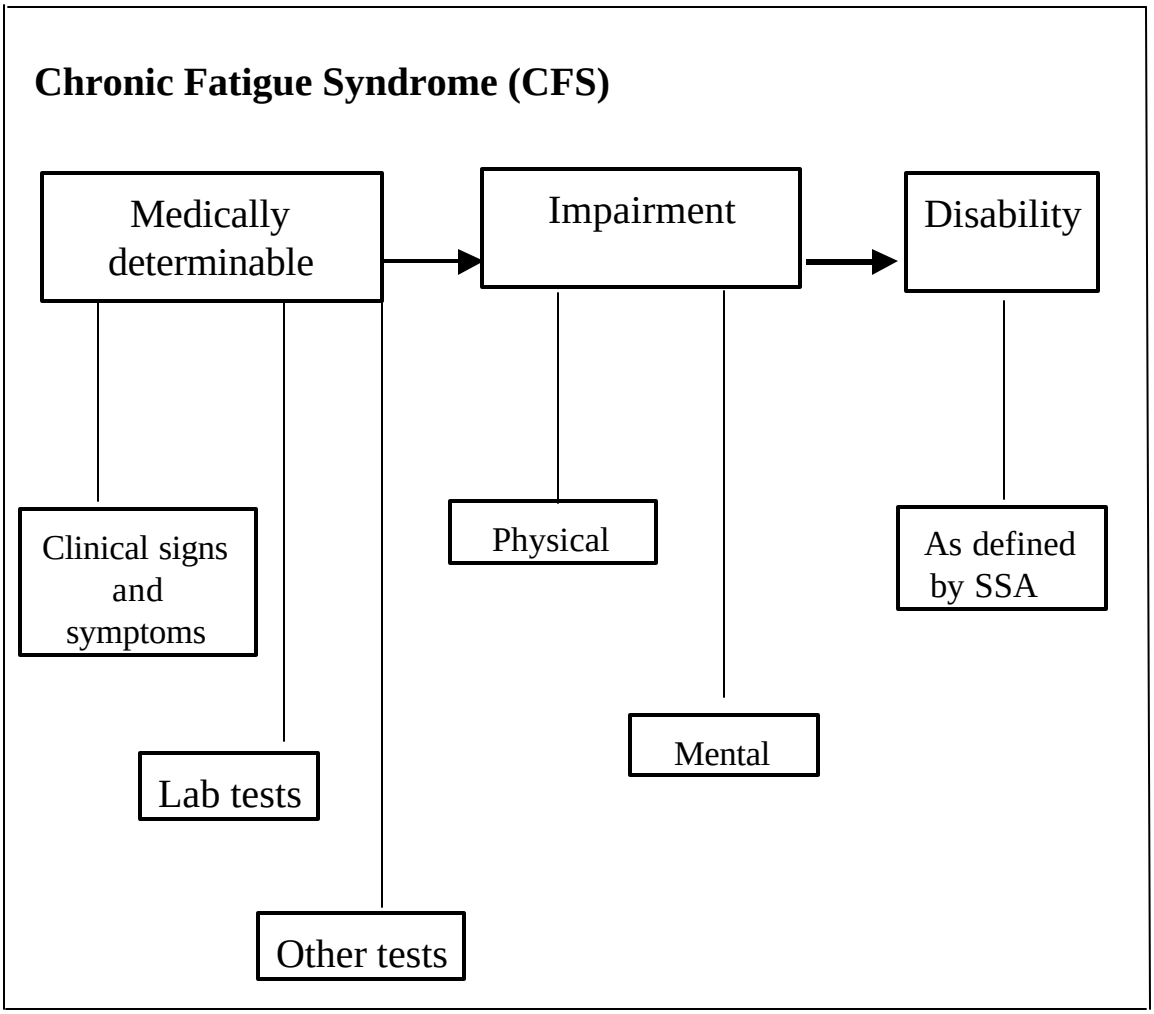
- Accompanied by new onset of neuropsychological symptoms including impaired short-term memory and concentration, decreased libido, and depressed mood. These symptoms usually have their onset at the same time as the physical fatigue, but are typically less severe and less persistent than those seen in classic depressive illness.

- Exclusion criteria:
  - Chronic medical condition that may result in fatigue
  - History of schizophrenia, other psychotic illnesses, or bipolar affective disorder

- Drug or alcohol dependence makes CFS very unlikely.

From: Lloyd AR, Hickie I, Boughton CR, et al. Prevalence of chronic fatigue syndrome in an Australian population. Med J Aust 1990; 153: 522-8.

Attachment C: Causal Pathway



References used:

1. Fukuda K, Straus SE, Hickie I, et al. The chronic fatigue syndrome: A comprehensive approach to its definition and study. Ann Intern Med 1994; 121: 953-9.

2. SSR 99-2p: Policy interpretation ruling Titles II and XVI: Evaluating cases involving chronic fatigue syndrome (CFS).

Attachment D: Level of Evidence

I. Evidence based on randomized controlled clinical trials (or meta-analysis of such trials) of adequate size to ensure a low risk of incorporating false-positive or false-negative results.

II. Evidence based on randomized controlled trials that are too small to provide level I evidence. These may show either positive trends that are not statistically significant or no trends and are associated with a high risk of false-negative results.

III. Evidence based on nonrandomized, controlled or cohort studies, case series, case-controlled studies or cross-sectional studies.

IV. Evidence based on the opinion of respected authorities or that of expert committees as indicated in published consensus conferences or guidelines.

V. Evidence which expresses the opinion of those individuals who have written and reviewed these guidelines, based on their experience, knowledge of the relevant literature and discussion with their peers.

These 5 levels of evidence do not directly describe the quality or credibility of evidence. Rather, they indicate the nature of the evidence being used. In general, a randomized, controlled trial has the greatest credibility (level I); however, it may have defects that diminish its value, and these should be noted. Evidence that is based on too few observations to give a statistically significant result is classified as level II. In general, level III studies carry less credibility than level I or II studies, but credibility is increased when consistent results are obtained from several level III studies carried out at different times and in different places.

Decisions must often be made in the absence of published evidence. In these situations it is necessary to use the opinion of experts based on their knowledge and clinical experience. All such evidence is classified as "opinion" (levels IV and V). Distinction is made between the published opinion of authorities (level IV) and the opinion of those who have contributed to these guidelines (level V). However, it should be noted that by the time level V evidence has gone through the exhaustive consensus-building process used in the preparation of these guidelines, it has achieved a level of credibility that is at least equivalent to level IV evidence.

From: The Steering Committee on Clinical Practice Guidelines for the Care and Treatment of Breast Cancer. CMAJ 1998:158

Appendix B

Appendix B. Expert Meeting Information

Review of Current Medical and Scientific Research Related to Disability and Chronic Fatigue Syndrome

AED Conference Center
Washington, DC
November 15, 2001

I. Introductions/Participants

Bernard J. Arseneau, DO, MPH, Chief Psychiatrist, Office of Disability, SSA.
Michael B. Brimacombe, PhD, Associate Professor, UMDNJ.
Lynn H. Gerber, MD, Chief, Rehabilitation Medicine Department, DHHS, NIH.
Marian James, PhD, Task Order Officer, AHRQ.
James F. Jones, MD, Professor of Pediatrics, University of Colorado School of Medicine, CDC.
Carolyn Kiefer, Policy Analyst, Office of Disability, SSA.
Gudrun Lange, PhD, Associate Professor, Clinical Neuropsychologist, UMDNJ.
Cindy Levine, MD, co-Principal Investigator, MetaWorks.
Paul H. Levine, MD, Clinical Professor of Medicine, GWU Medical Center.
Veronica Ludensky, BA, Research Assistant, MetaWorks.
Robert J. MacBride, MD, Medical Director, Disability Management, Prudential Group Insurance.
Benjamin H. Natelson, MD, Professor, Department of Neurosciences, UMDNJ.
Susan Ross, MD, FRCPC, EPC Director, President, MetaWorks.
Paul J. Scott, Policy Analyst, Office of Disability, SSA.
Frank Schuster, MD, Medical Officer - Musculoskeletal Branch, Office of Disability, SSA.
Norma C. Ware, PhD, Associate Professor, Harvard Medical School.

by phone:
Nelson Gantz, MD, co-Principal Investigator, MCP Hahnemann School of Medicine.

II. Social Security Administration (SSA) Comments on Current Policy (C.Kiefer)

The current state of the Disability Law has a sequential evaluation process in the SSA, which consists of five steps/questions:

1. Are you doing work activity?
2. Do you have a severe impairment? (symptoms, decrease in ability to function must be shown).
   If no, then do not proceed with other steps.
3. Listings – no listings level with CFS.

4. Functional capabilities (physical and mental activities, past employment must be investigated).
5. Can you do anything else? (unskilled sedentary work).

Longitudinal record is very important in the determination of the disability; it must be shown that the impairment has lasted for at least 12 months.

Currently the SSA uses the ruling SSR 99-2p to guide the decisions about the disability status of patients with CFS. The SSA hopes to use this project and its conclusions to identify items that need to be revised to make the ruling more useful and helpful.

III. Introduction of MetaWorks
(C. Levine)

Introduction of the MetaWorks team. Presentations of a brief history and description of MetaWorks Inc, the process it uses during systematic literature reviews and its goals for this project.

IV. Discussion of Causal Pathway
(S. Ross)

A Causal Pathway prepared especially for the purposes of this project was discussed, see Attachment A. All of the events described in this pathway take place within the CFS universe, i.e., only patients already diagnosed with CFS are included. Patients must have medically determinable condition (clinical signs and symptoms, lab results, or other), which leads to physical or mental impairment, which then leads to disability, as defined by the SSA.

V. Definition of disability and CFS
(C. Levine)

It was agreed that 4 definitions for CFS will be used in the scope of this project. These include: CDC 1988, CDC 1994, Oxford, and Australian. See Attachment B for descriptions of these definitions.

Discussion of the definition of disability. Per SSA definitions, disability is based upon inability to work. The disabled person cannot do work that was done before and cannot adjust to other work, and the disability must be expected to last for at least a year.

In the current literature, impairment and loss of function are not well linked to disability. Objective disability outcome measurements should be used (functional limitations, capacity, functional impairment, dysfunction).

VI. Refinement of key questions
(C. Levine)

Original Key Question 1:

What is the evidence that individuals with CFS have a discrete physical impairment? What is the evidence that individuals with CFS have a coexisting mental impairment? For example, what is the evidence that comorbid psychiatric/neurologic conditions frequently reported in CFS are present and, if present, are a result of CFS or are an integral part of the CFS disease process?

Revised Key Question 1:

What is the evidence that some individuals with CFS have discrete impairments that are associated with disability?
Impairment includes both physical and mental impairments.

Original Key Question 2:

What is the evidence that there are specific clinical tests that can be used to reliably diagnose CFS, for example, are there specific anatomical, psychological, physiological, or medical imaging indices that are diagnostic for CFS?

Revised Key Question 2:

It was agreed that this question does not pertain to disability and should be deleted.

Original Key Question 3:

When cognitive deficits are alleged, what is the evidence that individuals with CFS have such deficits and what is the evidence that these potential deficits contribute to functional limitations or inability to do work activity?

Revised Key Question 3:

Same as Revised Key Question 1.

Original Key Question 4:

Do current neuropsychological tests reliably detect cognitive or mental impairments in the CFS population? Are there certain tests that are preferred in terms of reliability and validity? Are there certain tests or diagnostic tools that contain reliable correlations between test result(s) and either ability or inability to perform designated work-related functions (e.g., ability to relate to coworkers and supervision appropriately, ability to maintain concentration or pace, suitable memory capacity for work activities, etc.).

Revised Key Question 4:

What is the evidence that in the CFS population, current neuropsychological tests detect cognitive or affective impairments associated with decreased ability to work?

Original Key Question 5:

What treatments have been shown to be most effective for CFS in terms of restoring an individual's ability to do work activity?

Revised Key Question 5:

What is the evidence that in some individuals with CFS, treatments are effective in restoring the ability to work?

Original Key Question 6:

What are the patient characteristics that best define improvement or positive outcomes in the CFS population such that they experience improvement in functioning? Where it occurs, how is this improvement in functioning related to the ability to engage in work activity?

Revised Key Question 6:

No change, but it was agreed that it was unlikely that the literature would allow us to address the last part of this question.

Original Key Question 7:

What evidence is available from related fields (e.g., sleep medicine, autonomic nervous system abnormalities, endocrinology, gastrointestinal illness, neurocognitive therapy) that would be applicable to the assessment, functional evaluation, and treatment for CFS?

Revised Key Question 7:

No change, although complete searches and reviews of the literature in other fields is beyond the scope of this project. SSA will discuss and propose a modified question.

It was agreed that this question will apply only to literature that pertains to CFS.

VII. Preliminary literature assessment
(C. Levine)

It was agreed that the search needs to be expanded to 1988, to match the first operational definition of CFS, which was published by CDC in 1988. Many important studies about CFS were published immediately after 1988, and need to be included in this project. Number of citations identified will increase; however, the overall number of eligible studies may not change too much, given requirements that studies contain information regarding impairment or disability.

Pubmed, PsychINFO, Current Contents, and Cochrane Database will be the only electronic sources searched for this literature review. Also Journal of Chronic Fatigue Syndrome (JCFS), which is not indexed by Medline, will be searched.

Any study with > than 1 patient with CFS will be included, but individual case reports will not. Fibromyalgia, Gulf War Syndrome, or other related disorders without CFS will

not be included within the scope of this project. Studies pertaining to multiple disorders will only be accepted if information regarding patients with CFS is separately extractable.

VIII. Conclusions/Next Steps
(S. Ross)

- Definitional issues must be recognized regarding disability and impairment.
- MetaWorks will be "monists," not mind-body dualists.
- The words "mental" and "physical" will be removed from the key questions, and the general term impairment will be used instead.
- Four operational definitions of CFS will be used.
- Key questions will be revised as discussed.
- Literature search will be expanded as discussed.

IX. Action Items

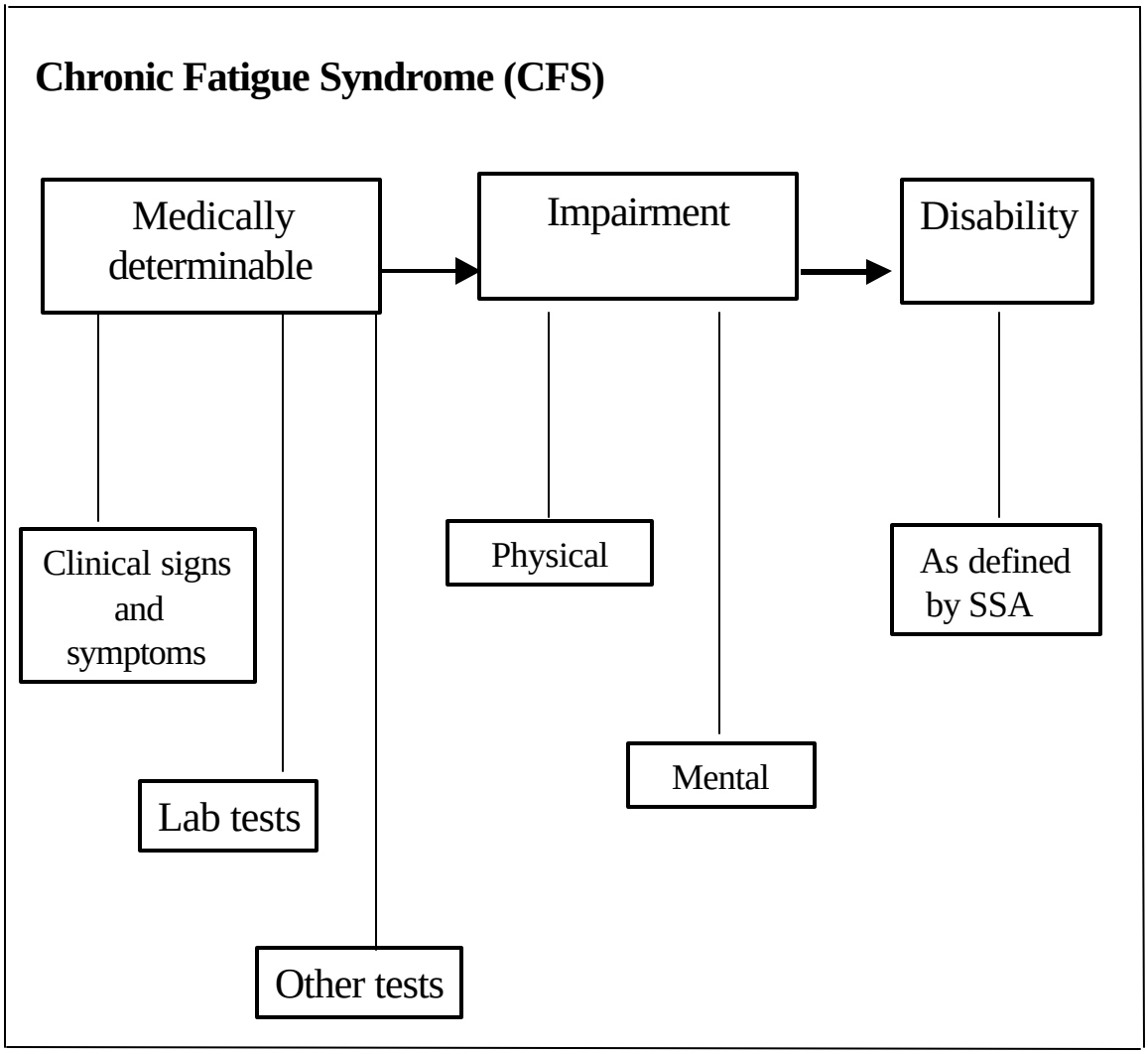
MetaWorks to:

- Distribute meeting minutes.
- Contact members of the expert panel regarding serving on the Technical Experts Panel (TEP).
- Adopt questions and literature search recommendations as discussed in the panel.

SSA to:

- Review Key Question 7 and propose modifications.

Attachment A: Causal Pathway



References used:

1. Fukuda K, Straus SE, Hickie I, et al. The chronic fatigue syndrome: A comprehensive approach to its definition and study. Ann Intern Med 1994; 121: 953-9.

2. SSR 99-2p: Policy interpretation ruling Titles II and XVI: Evaluating cases involving chronic fatigue syndrome (CFS).

Attachment B: CFS Diagnostic Criteria

CDC 1988 CFS definition

- Major criteria:
  - new onset of persistent or relapsing, debilitating fatigue in a person without a previous history of such symptoms that does not resolve with bedrest and that is severe enough to reduce or impair average daily activity to less than 50% of the patient's premorbid activity level for at least 6 months
  - fatigue that is not explained by the presence of other evident medical or psychiatric illnesses
- Minor criteria:
  - at least six symptoms plus at least two signs, or at least eight symptoms from the list below
  - Symptoms:
    - mild fever or chills
    - sore throat
    - painful adenopathy (posterior or anterior, cervical or axillary)
    - generalized muscle weakness
    - myalgias
    - prolonged generalized fatigue after previously tolerated levels of physical activity
    - generalized headaches
    - migratory arthralgia without swelling or redness
    - neuropsychologic complaints
    - sleep disturbance
    - main symptom complex developing over a few hours to a few days
  - Physical Signs:
    - low-grade fever
    - nonexudative pharyngitis
    - palpable or tender anterior or posterior, cervidal or axillary lymph nodes

From: Holmes GP, Kaplan JE, Gantz NM, et al. Chronic fatigue syndrome: A working case definition. Ann Intern Med 1988; 108: 387-9.

CDC 1994 CFS definition

- Clinically evaluated, unexplained, persistent or relapsing chronic fatigue lasting > 6 months
  - of new or definite onset
  - not the result of ongoing exertion
  - not substantially alleviated by rest
  - substantial reduction in previous levels of occupational, educational, social, or personal activities
  - Clinical evaluation:

    History and Physical, Mental Status examination
    Laboratory screening including CBC, ESR, LFTs, TP, albumin, globulin, CA, PO_4, glucose, BUN, CRE, electrolytes, TSH, urinalysis

- 4 symptoms concurrently present for > 6 months
  - Sore throat
  - Tender cervical or axillary lymph nodes
  - Muscle pain
  - Multijoint pain
  - New headaches
  - Unrefreshing sleep
  - Postexertion malaise

- Exclusion criteria
  - Active, unresolved, or suspected disease likely to cause fatigue
  - Psychotic, melancholic or bipolar depression
    - (but not uncomplicated major depression)
  - Psychotic disorders
  - Dementia
  - Anorexia or bulimia nervosa
  - Alcohol or other substance misuse
  - Severe obesity

From: Fukuda K, Straus SE, Hickie I, et al. The chronic fatigue syndrome: A comprehensive approach to its definition and study. Ann Intern Med 1994; 121: 953-9.

Oxford CFS definition

- Severe, disabling fatigue lasting $\geq$ 6 months that:
  - affects both physical and mental functioning
  - is present for > 50% of the time

- Other symptoms may be present:
  - myalgia
  - sleep disturbances
  - mood disturbance

- Exclusion criteria:
  - Active, unresolved, or suspected disease likely to cause fatigue
  - Psychotic, melancholic or bipolar depression
    - (but not uncomplicated major depression)
  - Psychotic disorders
  - Dementia
  - Anorexia or bulimia nervosa

From: Sharpe MK, Archard LC, Banatvala JE, et al. A report - chronic fatigue syndrome: Guidelines for research. J R Soc Med 1991; 84: 118-21.

Australian CFS definition

- Disabling and prolonged feelings of physical tiredness or fatigue, exacerbated by physical activity.
- Present for at least 6 months.
- Unexplained by an alternative diagnosis reached by history, laboratory, or physical examinations.
- Accompanied by new onset of neuropsychological symptoms including impaired short-term memory and concentration, decreased libido, and depressed mood. These symptoms usually have their onset at the same time as the physical fatigue, but are typically less severe and less persistent than those seen in classic depressive illness.

- Exclusion criteria:
  - Chronic medical condition that may result in fatigue
  - History of schizophrenia, other psychotic illnesses, or bipolar affective disorder

- Drug or alcohol dependence makes CFS very unlikely.

From: Lloyd AR, Hickie I, Boughton CR, et al. Prevalence of chronic fatigue syndrome in an Australian population. Med J Aust 1990; 153: 522-8.

Appendix C

Appendix D

Appendix D. Quality Scoring Tools

Study Quality Criteria[1]

Study quality was graded according to design follows:

Ia: Prospective longitudinal study with sufficient patient number, well-matched groups, and well-validated measurement instruments.

Ib: Prospective longitudinal study with low patient number, but with well-matched groups and well-validated measurement instruments.

IIa: Cross-sectional study with sufficient patient number, well-matched groups, and well-validated measurement instruments.

IIb: Cross-sectional study with low patient number, but with well-matched groups and well-validated measurement instruments.

IIIa: Prospective, longitudinal study with sufficient patient number, but with poorly matched groups and/or less well-validated measurement instruments.

IIIb: Prospective, longitudinal study with low patient number, poorly matched groups, and/or less well-validated measurement instruments.

IVa: Cross-sectional study with sufficient patient number, but with poorly matched groups and/or less well-validated measurement instruments.

IVb: Cross-sectional study with low patient number, poorly matched groups, and/or less well-validated measurement instruments.

CFS Disability Validity Rating Scale (developed internally)

Internal Validity

(0-1 points, 0 if absent, 1 if present)

1. CFS is defined according to at least one of the acceptable criteria. All patients meet these criteria.

2. Tests for medically determinable physical and/or mental impairment are specified and reported.

3. Control group was similar in clinically important demographic factors at start of the study (well matched).

4. All subjects enrolled (patients and control groups) were accounted for in follow-up.

5. 95% confidence limits and assessment of chance (p-values) are given for numerical results.

6. Work activity or work/disability status reported.

External Validity

(0-2 points)

7. Patient sample was not self-selected from CFS population (i.e., random or all comers).

Jadad Quality Score Assessment (RCTs only) [2]

Please read the articles and try to answer the following:

1. Was the study described as randomized (this includes the use of words such as randomly, random, and randomization)?

2. Was the study described as double blind?

3. Was there a description of withdrawals and dropouts?

Scoring the items:

Either give a score of 1 point for each 'yes' or 0 for each 'no'. There are no in-between marks.

1 point if:

For question 1, the method to generate the sequence of randomization was described and it was appropriate (table of random numbers, computer generated, coin tossing, etc.)

and/or:

If for question 2 the method of double-blinding was described and it was appropriate (identical placebo, active placebo, dummy, etc.)

For question 1, the method to generate the sequence of randomization was described and it was inappropriate (patients were allocated alternately, or according to date of birth, hospital number, etc.)

and/or:

For question 2 the study was described as double-blind but the method was inappropriate (e.g., comparison of tablet vs. injection with no double dummy)

Guidelines for assessment

1. Randomization:

A method to generate the sequence of randomization will be regarded as appropriate if it allowed each study participant to have the same chance of receiving each intervention and the investigators could not predict which treatment was next. Methods of allocation using date of birth, date of admission, hospital numbers or alternation should not be regarded as appropriate.

2. Double-blinding:

A study must be regarded as double-blind if the word double-blind is used. The method will be regarded as appropriate if it is stated that neither the person doing the assessments nor the study participant could identify the intervention being assessed, or if the absence of such a statement the use of active placebos, identical placebos or dummies is mentioned.

3. Withdrawals and dropouts:

Participants who were included in the study but did not complete the observation period or who were not included in the analysis must be described. The number and the reasons for withdrawal in each group must be stated. If there were no withdrawals, it should be stated in the article. If there is no statement on withdrawals, this item must be given no points.

References:

1. MacMahon KMA, Lip GYH. Psychological factors in heart failure: A review of the literature. Arch Intern Med 2002; 162: 509-16.

2. Jadad AR, Moore A, Carroll D, et al. Assessing the Quality of Reports of Randomized Clinical Trials: Is Blinding Necessary? Controlled Clinical Trials 1996; 17: 1-12.

Appendix E. Scale Names and Citations

Scale Name	Acronym	Reference
Beck Depression Inventory	BDI	Beck AT, Ward H, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. Arch Gen Psychiatry. 1961; 561-71.
Chalder Fatigue Scale		Chalder T, Berelowitz G, Pawlikowska T, Watts L, Wessely S, Wright D, et al. Development of a fatigue scale. J Psychosom Res 1993; 37: 147-53.
Checklist of Individual Strength	CIS	Vercoulen JHMM, Swanink CMA, Galama JMD, Fennis JFM, van der Meer JWM, Bleijenberg G. Dimensional assessment in chronic fatigue syndrome. J Psychosom Res 1994; 38: 383-92.
Everyday Attention Questionnaire	EAQ	Martin M. Human Learning 1986; 5: 63-74.
Hopkins Verbal Learning		Claypoole K, Mahurin R, Fischer ME, Goldberg J, Schmaling KB, Schoene RB, et al. Cognitive compromise following exercise in monozygotic twins discordant for chronic fatigue syndrome: Fact or artifact. Appl Neuropsychol 2001; 8: 31-40.
Karnofsky Performance Score	KPS	Karnofsky DA, Burchenal JH. The clinical evaluation of chemotherapeutic agents in cancer. In: Macleod CM, ed. Evaluation of Chemotherapeutic Agents. New York: New York Columbia University Press; 1949; p.191-205.
Medical Outcomes Study - Short Form 36	MOS SF-36	Ware JE, Sherbourne CD. The MOS 36-item short-form health survey (SF-36). Med Care 1992; 30: 473-83.
Physical Activity Rating Scale	PARS	Vercoulen JH, Bazelmans E, Swanink CM, Fennis JF, Galama JM, Jongen PJ, et al. Physical activity in chronic fatigue syndrome: Assessment and its role in fatigue. J Psychiatr Res 1997; 31: 661-73.
Profile of Fatigue-related Symptoms	PFRS	Ray C, Weir WRC, Phillips S, Cullen S. Development of a measure of symptoms in chronic fatigue syndrome: The Profile of Fatigue-Related Symptoms (PFRS). Psychology and Health. 1992; 7: 27-43.
Profile of Mood States	POMS	McNair DM, Lorr M, Droppelman LF. Profile of Mood States. San Diego, Calif: Educational and Industrial Testing Service, 1981.
Sickness Impact Profile	SIP	Bergner M, Bobbitt RA, Kressel S, Pollard WE, Gilson BS, Morris Jr. The Sickness Impact Profile: Conceptual formulation and methodology for the development of a health status measure. Int J Health Serv 1976; 6: 393-415.
Symptom Checklist 90 - Revised	SCL 90R	Derogatis LR, Melisaratos N. The brief symptom inventory. Psychol Med 1983; 13: 595-605.
Wechsler Adult Intelligence Scale - Revised	WAIS-R	Wechsler D. Wechsler Adult Intelligence Scale - Revised (WAIS-R). 1981. New York: Harcourt Brace.

Appendix F

Appendix F. Technical Expert Panel Members and Peer Reviewers

Members of the Technical Experts Panel

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Appendix G

Appendix G. Reviewer Questionnaire

The following two pages comprise the peer reviewer form to be used in providing comments on the draft evidence report, ***Review of the Current Medical and Scientific Research Related to Chronic Fatigue Syndrome.***

Page 2 is the reviewer "level of agreement"rating form, and page 3 provides a space for written comments. Here we would like you to provide: a) A brief explanation of both positive and negative answers;

b) Suggestions for improvement of the content or format of this review;
c) Suggestions for additional analyses of this dataset worth including in this report, or in future reports;
d) Any other comments you may wish to provide regarding this draft report.

**We would prefer that you complete and return this form electronically. However, you may also fax the forms back to us, or fax back an annotated version of the draft report if you prefer.

Please contact Cindy Levine, M.D., Principal Investigator with any questions regarding the content of the draft report.

As a reminder, the draft evidence report in your possession must remain confidential and is not to be shared or distributed. Once all reviewer comments are received, these will be incorporated as appropriate, into the **final** evidence report that is sent to AHRQ for publication. We ask for your cooperation in maintaining the confidentiality of all information contained in this draft evidence report.

Thank you in advance for your time in completing this form and giving us your feedback. We value your input and greatly appreciate your efforts.

Please send the completed form and comments to MetaWorks by **July 29, 2002.**

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Reviewer Questionnaire

AHRQ Task Order: Review of the Current Medical and Scientific Research Related to Disability and Chronic Fatigue Syndrome

Please indicate your level of agreement with each of the following Statements, by placing an "X" in the appropriate column.				
Statements	**Very much agree**	**Moderately agree**	**Not very much in agreement**	**Do not agree at all**
Accuracy:				
1. Facts are easily distinguished from assumptions, assertions, or opinions in report.				
2. The author's interpretations and conclusions are sound.				
Attribution:				
3. The theoretical or scientific basis used to support assertions, conclusions and discussions within the report is clearly stated.				
4. Given the objectives of this project and the data, all clinically important outcomes were considered.				
Clarity and Composition:				
5. The purpose of the report is apparent and explicitly stated.				
6. The report is well-written and content is organized in a coherent fashion that facilitates understanding.				
7. Content is consistent with the purpose of the report.				
8. The methods are presented in such a way as to be reproducible.				
9. The results are clearly stated.				
Figures and Tables:				
10. Figures and tables are clear, useful, accurate and easy to interpret.				
11. Titles and legends are appropriate.				
Relevance:				
12. This topic is relevant to healthcare decision-making (clinical practice and policy making) in 2002.				
13. Authors should seek publication of a manuscript describing some or all aspects of this report. (please suggest possible journals and priority for publication)				
Study Selection:				
14. Based on selection criteria used, it is not likely that relevant studies were missed.				
Overall:				
15. I agree with the conclusions presented in the report.				

Reviewer Questionnaire

AHRQ Task Order: Review of the Current Medical and Scientific Research Related to Disability and Chronic Fatigue Syndrome

Please print legibly or type comments here:

(signature) (date)

(print name)

Appendix H

Appendix H. Accepted Studies Log

1. Akagi H, Klimes I, Bass C. Cognitive behavioral therapy for chronic fatigue syndrome in a general hospital-feasible and effective. Gen Hosp Psychiatry 2001; 23: 254-60.

2. Anderson JS, Ferrans CE. The quality of life of persons with chronic fatigue syndrome. J Nerv Ment Dis 1997; 185: 359-67.

3. Antoni MH, Brickman A, Lutgendorf S, Klimas N, Imia-Fins A, Ironson G, et al. Psychosocial correlates of illness burden in chronic fatigue syndrome. Clin Infect Dis 1994; 18 Suppl 1: S73-8.

4. Arpino C, Carrieri MP, Valesini G, Pizzigallo E, Rovere P, Tirelli U, et al. Idiopathic chronic fatigue and chronic fatigue syndrome: A comparison of two case-definitions. Ann Ist Super Sanita 1999; 35: 435-41.

5. Bombardier CH, Buchwald D. Outcome and prognosis of patients with chronic fatigue vs chronic fatigue syndrome. Arch Intern Med 1995; 155: 2105-10.

   Bombardier CH, Buchwald D. Chronic fatigue, chronic fatigue syndrome, and fibromyalgia. Disability and health-care use. Med Care 1996; 34: 924-30.

6. Bou-Holaigah I, Rowe PC, Kan J, Calkins H. The relationship between neurally mediated hypotension and the chronic fatigue syndrome. JAMA 1995; 274: 961-7.

7. Buchwald D, Pearlman T, Kith P, Schmaling K. Gender differences in patients with chronic fatigue syndrome. J Gen Intern Med 1994; 9: 397-401.

8. Buchwald D, Pearlman T, Umali J, Schmaling K, Katon W. Functional status in patients with chronic fatigue syndrome, other fatiguing illnesses, and healthy individuals. Am J Med 1996; 101: 364-70.

9. Butler S, Chalder T, Ron M, Wessely S. Cognitive behaviour therapy in chronic fatigue syndrome. J Neurol Neurosurg Psychiatry 1991; 54: 153-8.

   Wessely S, Powell R. Fatigue syndrome: A comparison of chronic "postviral" fatigue with neuromuscular and affective disorders. J Neurol Neurosurg Psychiatry 1989; 52: 940-8.

10. Claypoole K, Mahurin R, Fischer ME, Goldberg J, Schmaling KB, Schoene RB, et al. Cognitive compromise following exercise in monozygotic twins discordant for chronic fatigue syndrome: Fact or artifact. Appl Neuropsychol 2001; 8: 31-40.

11. Creswell C, Chalder T. Defensive coping styles in chronic fatigue syndrome. J Psychosom Res 2001; 51: 607-10.

12. Cruess SE, Klimas N, Antoni MH, Helder L, Maher K, Keller R, et al. Immunologic

status correlates with severity of physical symptoms and perceived illness burden in chronic fatigue syndrome patients. J CFS 2000; 7: 39-52.

13. Deale A, Chalder T, Marks I, Wessely S. Cognitive behavior therapy for chronic fatigue syndrome: A randomized controlled trial. Am J Psychiatry 1997; 154: 408-14.

14. Dyck D, Allen S, Barron J, Marchi J, Price BA, Spavor L, et al. Management of chronic fatigue syndrome: Case study. AAOHN J 1996; 44: 85-92.

15. Fiedler N, Kipen HM, DeLuca J, Kelly-McNeil K, Natelson B. A controlled comparison of multiple chemical sensitivities and chronic fatigue syndrome. Psychosom Med 1996; 58: 38-49.

16. Fischler B, Cluydts R, De Gucht Y, Kaufman L, De Meirleir K. Generalized anxiety disorder in chronic fatigue syndrome. Acta Psychiatr Scand 1997; 95: 405-13.

17. Fulcher KY, White PD. Randomised controlled trial of graded exercise in patients with the chronic fatigue syndrome. BMJ 1997; 314: 1647-52.

    Fulcher KY, White PD. Strength and physiological response to exercise in patients with chronic fatigue syndrome. J Neurol Neurosurg Psychiatry 2000; 69: 302-7.

18. Garcia-Borreguero D, Dale JK, Rosenthal NE, Chiara A, O'Fallon A, Bartko JJ, et al. Lack of seasonal variation of symptoms in patients with chronic fatigue syndrome. Psychiatry Res 1998; 77: 71-7.

19. Jason LA, Fricano G, Taylor RR, Halpert J, Fennell PA, Klein S, et al. Chronic fatigue syndrome: An examination of the phases. J Clin Psychol 2000; 56: 1497-508.

20. Jason LA, Richman JA, Rademaker AW, Jordan KM, Plioplys AV, Taylor RR, et al. A community-based study of chronic fatigue syndrome. Arch Int Med 1999; 159: 2129-37.

    Jason LA, Taylor RR, Kennedy CL. Chronic fatigue syndrome, fibromyalgia, and multiple chemical sensitivities in a community-based sample of persons with chronic fatigue syndrome-like symptoms. Psychosom Med 2000; 62: 655-63.

    Jason LA, Taylor RR, Kennedy CL, Jordan K, Song S, Johnson DE, et al. Chronic fatigue syndrome: Sociodemographic subtypes in a community-based sample. Eval Health Prof 2000; 23: 243-63.

21. Kruesi MJ, Dale J, Straus SE. Psychiatric diagnoses in patients who have chronic fatigue syndrome. J Clin Psychiatry 1989; 50: 53-6.

    Straus SE, Dale JK, Tobi M, Lawley T, Preble O, Blaese RM, et al. Acyclovir treatment of the chronic fatigue syndrome. Lack of efficacy in a placebo-controlled trial. N Engl J Med 1988; 319: 1692-8.

22. Lane TJ, Manu P, Matthews DA. Depression and somatization in the chronic fatigue syndrome. Am J Med 1991; 91: 335-44.

23. Lerner AM, Zervos M, Dworkin HJ, Chang CH, Fitzgerald JT, Goldstein, et al. New cardiomyopathy: Pilot study of intravenous ganciclovir in a subset of the chronic fatigue syndrome. Infect Agents Dis 1997; 6: 110-7.

24. Lloyd A, Gandevia S, Brockman A, Hales J, Wakefield D. Cytokine production and fatigue in patients with chronic fatigue syndrome and healthy control subjects in response to exercise. Clin Infect Dis 1994; 18: S142-6.

25. MacDonald KL, Osterholm MT, LeDell KH, White KE, Schenck CH, Chao CC, et al. A case-control study to assess possible triggers and cofactors in chronic fatigue syndrome. Am J Med 1996; 100: 548-54.

26. Marcel B, Komaroff AL, Fagioli LR, Kornish RJ, Albert MS. Cognitive deficits in patients with chronic fatigue syndrome. Biol Psychiatry 1996; 40: 535-41.

Daly E, Komaroff AL, Bloomingdale K, Wilson S, Albert MS. Neuropsychological function in patients with chronic fatigue syndrome, multiple sclerosis, and depression. Appl Neuropsychol 2001; 8: 12-22.

27. Marlin RG, Anchel H, Gibson JC, Goldberg WM, Swinton M. An evaluation of multidisciplinary intervention for chronic fatigue syndrome with long-term follow-up, and a comparison with untreated controls. Am J Med 1998; 105: 110S-4S.

28. McKenzie R, O'Fallon A, Dale J, Demitrack M, Sharma G, Deloria M, et al. Low-dose hydrocortisone for treatment of chronic fatigue syndrome: A randomized controlled trial. JAMA 1998; 280: 1061-6.

29. Michiels V, Cluydts R, Fischler B, Hoffmann G, Le Bon O, De Meirleir K. Cognitive functioning in patients with chronic fatigue syndrome. J Clin Exp Neuropsychol 1996; 18: 666-77.

30. Moss-Morris R, Petrie KJ. Discriminating between chronic fatigue syndrome and depression: A cognitive analysis. Psychol Med 2001; 31: 469-79.

31. Myers C, Wilks D. Comparison of Euroqol EQ-5D and SF-36 in patients with chronic fatigue syndrome. Qual Life Res 1999; 8: 9-16.

32. Natelson BH, Johnson SK, DeLuca J, Sisto S, Ellis SP, Hill N, et al. Reducing heterogeneity in chronic fatigue syndrome: A comparison with depression and multiple sclerosis. Clin Infect Dis 1995; 21: 1204-10.

33. Peterson PK, Schenck CH, Sherman R. Chronic fatigue syndrome in Minnesota. Minn Med 1991; 74: 21-6.

Peterson PK, Shepard J, Macres M, Schenck C, Crosson J, Rechtman D, et al. A controlled trial of intravenous immunoglobulin G in chronic fatigue syndrome. Am J Med 1990; 89: 554-60.

Pheley AM, Melby D, Schenck C, Mandel J, Peterson PK. Can we predict recovery

in chronic fatigue syndrome. Minn Med 1999; 82: 52-6.

34. Powell P, Bentall RP, Nye FJ, Edwards RH. Randomised controlled trial of patient education to encourage graded exercise in chronic fatigue syndrome. BMJ 2001; 322: 387-90.

35. Prins JB, Bleijenberg G, Bazelmans E, Elving LD, de Boo TM, Severens JL, et al. Cognitive behaviour therapy for chronic fatigue syndrome: A multicentre randomised controlled trial. Lancet 2001; 357: 841-7.

36. Ray C, Jefferies S, Weir WR. Coping with chronic fatigue syndrome: Illness responses and their relationship with fatigue, functional impairment and emotional status. Psychol Med 1995; 25: 937-45.

Ray C, Jefferies S, Weir WR. Coping and other predictors of outcome in chronic fatigue syndrome: A 1-year follow-up. J Psychosom Res 1997; 43: 405-15.

Ray C, Jefferies S, Weir WR. Life-events and the course of chronic fatigue syndrome. Br J Med Psychol 1995; 68: 323-31.

37. Ray C, Phillips L, Weir WR. Quality of attention in chronic fatigue syndrome: Subjective reports of everyday attention and cognitive difficulty, and performance on tasks of focused attention. Br J Clin Psychol 1993; 32:357-64.

38. Rowe PC, Calkins H, DeBusk K, McKenzie R, Anand R, Sharma G, et al. Fludrocortisone acetate to treat neurally mediated hypotension in chronic fatigue syndrome: A randomized controlled trial. JAMA 2001; 285: 52-9.

39. Saltzstein BJ, Wyshak G, Hubbuch JT, Perry JC. A naturalistic study of the chronic fatigue syndrome among women in primary care. Gen Hosp Psychiatry 1998; 20: 307-16.

40. Scheffers MK, Johnson RJ, Grafman J, Dale JK, Straus SE. Attention and short-term memory in chronic fatigue syndrome patients: An event-related potential analysis. Neurology 1992; 42: 1667-75.

41. Schmaling KB, Hamilos DL, DiClementi JD, Jones JF. Pain perception in chronic fatigue syndrome. J CFS 1998; 4:13-22.

42. Schmaling KB, Smith WR, Buchwald DS. Significant other responses are associated with fatigue and functional status among patients with chronic fatigue syndrome. Psychosom Med 2000; 62: 444-50.

43. Shanks MF, Ho-Yen DO. A clinical study of chronic fatigue syndrome. Br J Psychiatry 1995; 166: 798-801.

44. Sharpe M, Hawton K, Simkin S, Surawy C, Hackmann A, Klimes I, et al. Cognitive behaviour therapy for the chronic fatigue syndrome: A randomized controlled trial. Br Med J 1996; 312: 22-6.

45. Sisto SA, LaManca J, Cordero DL, Bergen MT, Ellis SP, Drastal S, et al. Metabolic and cardiovascular effects of a progressive exercise test in patients with chronic fatigue syndrome. Am J Med 1996; 100: 634-40.

46. Tiersky LA, DeLuca J, Hill N, Dhar SK, Johnson SK, Lange G, et al. Longitudinal assessment of neuropsychological functioning, psychiatric status, functional disability and employment status in chronic fatigue syndrome. Appl Neuropsychol 2001; 8: 41-50.

Hill NF, Tiersky LA, Scavalla VR, Lavietes M, Natelson BH. Natural history of severe chronic fatigue syndrome. Arch Phys Med Rehabil 1999; 80: 1090-4.

47. Tuck I, Wallace D. Chronic fatigue syndrome: A woman's dilemma. Health Care Women Int 2000; 21: 457-66.

48. Vercoulen JH, Bazelmans E, Swanink CM, Fennis JF, Galama JM, Jongen PJ, et al. Physical activity in chronic fatigue syndrome: Assessment and its role in fatigue. J Psychiatr Res 1997; 31: 661-73.

Vercoulen JH, Bazelmans E, Swanink CM, Galama JM, Fennis JF, van der Meer JW, et al. Evaluating neuropsychological impairment in chronic fatigue syndrome. J Clin Exp Neuropsychol 1998; 20: 144-56.

Vercoulen JH, Swanink CM, Galama JM, Fennis JF, Jongen PJ, Hommes OR, et al. The persistence of fatigue in chronic fatigue syndrome and multiple sclerosis: Development of a model. J Psychosom Res 1998; 45: 507-17.

49. Vercoulen JH, Swanink CM, Fennis JF, Galama JM, van der Meer JW, Bleijenberg G. Dimensional assessment of chronic fatigue syndrome. J Psychosom Res 1994; 38: 383-92.

Swanink CM, Vercoulen JH, Bleijenberg G, Fennis JF, Galama JM, van der Meer JW. Chronic fatigue syndrome: A clinical and laboratory study with a well matched control group. J Intern Med 1995; 237: 499-506.

Vercoulen JH, Swanink CM, Fennis JF, Galama JM, van der Meer JW, Bleijenberg G. Prognosis in chronic fatigue syndrome: A prospective study on the natural course. J Neurol Neurosurg Psychiatry 1996; 60: 489-94.

50. Vercoulen JH, Swanink CM, Zitman FG, Vreden SG, Hoofs MP, Fennis JF, et al. Randomised, double-blind, placebo-controlled study of fluoxetine in chronic fatigue syndrome. Lancet 1996; 347: 858-61.

51. Wearden AJ, Morriss RK, Mullis R, Strickland PL, Pearson DJ, Appleby L, et al. Randomised, double-blind, placebo-controlled treatment trial of fluoxetine and graded exercise for chronic fatigue syndrome. Br J Psychiatry 1998; 172: 485-90.

Morriss RK, Wearden AJ. Screening instruments for psychiatric morbidity in chronic fatigue syndrome. J R Soc Med 1998; 91: 365-8.

Morriss RK, Wearden AJ, Battersby L. The relation of sleep difficulties to fatigue, mood and disability in chronic fatigue syndrome. J Psychosom Res 1997; 42: 597-605.

Morriss RK, Wearden AJ, Mullis R. Exploring the validity of the Chalder Fatigue scale in chronic fatigue syndrome. J Psychosom Res 1998; 45: 411-7.

52. Wilson A, Hickie I, Hadzi-Pavlovic D, Wakefield D, Parker G, Straus SE, et al. What is chronic fatigue syndrome? Heterogeneity within an international multicentre study. Aust N Z J Psychiatry 2001; 35: 520-7.

53. Yeomans JD, Conway SP. Biopsychosocial aspects of chronic fatigue syndrome (myalgic encephalomyelitis). J Infect 1991; 23: 263-9.

Appendix I

Appendix I. Rejected Studies Log

Rejection Reason: Abstract, letter, comment, review, editorial, case-report, meta-analysis

1. Abbey SE, Garfinkel PE. Chronic fatigue syndrome and depression: Cause, effect, or covariate. Rev Infect Dis 1991; 13:S73-83.

2. Ax S, Gregg VH, Jones D. Coping and illness cognitions: Chronic fatigue syndrome. Clin Psychol Rev 2001; 21:161-82.

3. Aylward M. Government's expert group has reached consensus on prognosis of chronic fatigue syndrome. BMJ 1996; 313:885.

4. Banks J, Prior L. Doing things with illness. The micro politics of the CFS clinic. Soc Sci Med 2001; 52:11-23.

5. Baschetti R. Fibromyalgia, chronic fatigue syndrome, and Addison disease. Arch Int Med 1999; 159:2481-3.

6. Borok G. Committee to investigate chronic fatigue syndrome. S Afr Med J 1996; 86:1301.

7. Brodsky CM. Depression and chronic fatigue in the workplace. Workers' compensation and occupational issues. Prim Care 1991; 18:381-96.

8. Buchwald D, Komaroff AL. Review of laboratory findings for patients with chronic fatigue syndrome. Rev Infect Dis 1991; 13:S12-8.

9. Capen K. Chronic fatigue syndrome gets court's nod of approval as legitimate disorder. CMAJ 1998; 159:533-4.

10. Chagpar A. Chronic fatigue syndrome: A prodrome to psychosis. Can J Psychiatry 1996; 41:536-7.

11. Chaudhuri A. Chronic fatigue syndrome is an acquired neurological channelopathy. Human Psychopharmacology 1999; 14:7-17.

12. Cleare AJ, Wessely SC. Chronic fatigue syndrome: A stress disorder. Br J Hosp Med 1996; 55:571-4.

13. Coetzer P, Lockyer I, Schorn D, Boshoff L. Assessing impairment and disability for syndromes presenting with chronic fatigue. J Insur Med 2001; 33:170-82.

14. Coetzer P, Lockyer I, Schorn D, Boshoff L. Quantitative disability evaluation of syndromes presenting with chronic fatigue. S Afr Med J 2000; 90:1034-52.

15. Cope H, David AS. Neuroimaging in chronic fatigue syndrome. J Neurol Neurosurg Psychiatry 1996; 60:471-3.

16. Couper J. Chronic fatigue syndrome and Australian psychiatry: Lessons from the UK experience. Aust N Z J Psychiatry 2000; 34:762-9.

17. Deale A, David AS. Chronic fatigue syndrome: Evaluation and management. J Neuropsychiatry Clin Neurosci 1994; 6:189-94.

18. Demitrack MA. Neuroendocrine aspects of chronic fatigue syndrome: A commentary. Am J Med 1998; 105:11S-4S.

19. Demitrack MA. Neuroendocrine correlates of chronic fatigue syndrome: A brief review. J Psychiatr Res 1997; 31:69-82.

20. Demitrack MA, Engleberg NC. Chronic fatigue syndrome. Curr Ther Endocrinol Metab 1997; 6:152-60.

21. Demitrack MA, Engleberg NC. Chronic fatigue syndrome. Curr Ther Endocrinol Metab 1994; 5:135-42.

22. Dickinson CJ. Chronic fatigue syndrome: Aetiological aspects. Eur J Clin Invest 1997; 27:257-67.

23. Dille JR. Chronic fatigue syndrome. Aviat Space Environ Med 1991; 62:1008-9.

24. DiPino RK, Kane RL. Neurocognitive functioning in chronic fatigue syndrome. Neuropsychol Rev 1996; 6:47-60.

25. Durlach J. Chronic fatigue syndrome and chronic primary magnesium deficiency (CFS and CPMD). Magnes Res 1992; 5:68.

26. Enserink M. Chronic fatigue syndrome: CDC struggles to recover from debacle over earmark. Science 2000; 287:22-3.

27. Evengard B, Schacterle RS, Komaroff AL. Chronic fatigue syndrome: New insights and old ignorance. J Intern Med 1999; 246:455-69.

28. Feinberg M. Chronic fatigue syndrome and the aviator. Aviat Space Environ Med 2000; 71:965.

29. Friedberg F, Jason LA. Chronic fatigue syndrome and fibromyalgia: Clinical assessment and treatment. J Clin Psychol 2001; 57:433-55.

30. Fry AM, Martin M. Fatigue in the chronic fatigue syndrome: A cognitive phenomenon? J Psychosom Res 1996; 41:415-26.

31. Fuller NS, Morrison RE. Chronic fatigue syndrome. Helping patients cope with this enigmatic illness. Postgrad Med 1998; 103:175-84.

32. Gantz NM, Coldsmith EE. Chronic fatigue syndrome and fibromyalgia resources on the World Wide Web: A descriptive journey. Clin Infect Dis 2001; 32:938-48.

33. Glaser R, Kiecolt-Glaser JK. Stress-associated immune modulation: Relevance to viral infections and chronic fatigue syndrome. Am J Med 1998; 105:35S-42S.

34. Goshorn RK. Chronic fatigue syndrome: A review for clinicians. Semin Neurol 1998; 18:237-42.

35. Hedrick TE. Chronic fatigue syndrome. QJM 1997; 90:723-5.

36. Holoweiko M. Holding the line on elusive ailments. Bus Health 1996; 14:30-7.

37. Hotopf M, Wessely S. Chronic fatigue syndrome: Mapping the interior. Psychol Med 1999; 29:255-8.

38. Jain SS, DeLisa JA. Chronic fatigue syndrome: A literature review from a physiatric perspective. Am J Phys Med Rehabil 1998; 77:160-7.

39. Jason LA, King CP, Frankenberry EL, Jordan KM, Tryon WW, Rademaker F, et al. Chronic fatigue syndrome: Assessing symptoms and activity level. J Clin Psychol 1999; 55:411-24.

40. Jason LA, Melrose H, Lerman A, Burroughs V, Lewis K, King CP, et al. Managing chronic fatigue syndrome: Overview and case study. AAOHN J 1999; 47:17-21.

41. Jason LA, Richman JA, Friedberg F, Wagner L, Taylor R, Jordan KM. Politics, science, and the emergence of a new disease. The case of chronic fatigue syndrome. Am Psychol 1997; 52:973-83.

42. Jason LA, Taylor SL. Monitoring chronic fatigue syndrome. J Nerv Ment Dis 1994; 182:243-4.

43. Jason LA, Tryon WW, Taylor RR, King C, Frankenberry EL, Jordan KM. Monitoring and assessing symptoms of chronic fatigue syndrome: Use of time series regression. Psychol Rep 1999; 85:121-30.

44. Jay SJ. Orthostatic hypotension and chronic fatigue syndrome. JAMA 2001; 285:1442-3.

45. Johnson SK. The biopsychosocial model and chronic fatigue syndrome. Am Psychol 1998; 53:1080-2.

46. Johnson SK, DeLuca J, Natelson BH. Chronic fatigue syndrome: Reviewing the research findings. Ann Behav Med 1999; 21:258-71.

47. Joyce J, Hotopf M, Wessely S. The prognosis of chronic fatigue and chronic fatigue syndrome: A systematic review. QJM 1997; 90:223-33.

48. Joyce J, Rabe-Hesketh S, Wessely S. Reviewing the reviews: The example of chronic fatigue syndrome. JAMA 1998; 280:264-6.

49. Kahn MF. Chronic fatigue syndrome. New developments. Joint Bone Spine 2000; 67:359-61.

50. Keenan PA. Brain MRI abnormalities exist in chronic fatigue syndrome. J Neurol Sci 1999; 171:1-2.

51. Komaroff AL, Buchwald DS. Chronic fatigue syndrome: An update. Annu Rev Med 1998; 49:1-13.

52. Kroenke K, Swindle R. Cognitive-behavioral therapy for somatization and symptom syndromes: A critical review of controlled clinical trials. Psychother Psychosom 2000; 69:205-15.

53. Krupp LB, Pollina D. Neuroimmune and neuropsychiatric aspects of chronic fatigue syndrome. Adv Neuroimmunol 1996; 6:155-67.

54. Lange G, Wang S, DeLuca J, Natelson BH. Neuroimaging in chronic fatigue syndrome. Am J Med 1998; 105:50S-3S.

55. Lawrie SM, MacHale SM, Power MJ, Goodwin GM. Is the chronic fatigue syndrome best understood as a primary disturbance of the sense of effort. Psychol Med 1997; 27:995-9.

56. Layzer RB. Asthenia and the chronic fatigue syndrome. Muscle Nerve 1998; 21:1609-11.

57. Levine PH. What we know about chronic fatigue syndrome and its relevance to the practicing physician. Am J Med 1998; 105:100S-3S.

58. Levine PH. Epidemiologic advances in chronic fatigue syndrome. J Psychiatr Res 1997; 31:7-18.

59. Levine PH. The use of transfer factors in chronic fatigue syndrome: Prospects and problems. Biotherapy 1996; 9:77-9.

60. Lewis SF, Haller RG. Physiologic measurement of exercise and fatigue with special reference to chronic fatigue syndrome. Rev Infect Dis 1991; 13 Suppl 1:S98-108.

61. Lloyd AR. Chronic fatigue and chronic fatigue syndrome: Shifting boundaries and attributions. Am J Med 1998; 105:7S-10S.

62. Lloyd AR, Hickie I, Peterson PK. Chronic fatigue syndrome: Current concepts of pathogenesis and treatment. Curr Clin Top Infect Dis 1999; 19:135-59.

63. Loblay RH. Chronic fatigue syndrome. Lancet 1998; 351:1292.

64. McCluskey DR. Chronic fatigue syndrome: Its cause and a strategy for management. Compr Ther 1998; 24:357-63.

65. McCully KK, Sisto SA, Natelson BH. Use of exercise for treatment of chronic fatigue syndrome. Sports Med 1996; 21:35-48.

66. Meisler JG, Klimas N, Wallace M. Toward optimal health: The experts discuss chronic fatigue syndrome. J Womens Health Gend Based Med 2000; 9:477-82.

67. Michiels V, Cluydts R. Neuropsychological functioning in chronic fatigue syndrome: A review. Acta Psychiatr Scand 2001; 103:84-93.

68. Mildon CA. Clinical observations of chronic fatigue syndrome. Can Dis Wkly Rep 1991; 17 Suppl 1E: 17-9.

69. Moss-Morris R, Petrie KJ, Large RG, Kydd RR. Neuropsychological deficits in chronic fatigue syndrome: Artifact or reality. J Neurol Neurosurg Psychiatry 1996; 60:474-7.

70. Mounstephen A, Sharpe M. Chronic fatigue syndrome and occupational health. Occup Med 1997; 47:217-27.

71. Mulube M. Myths dispelled about chronic fatigue syndrome. BMJ 1996; 313:839.

72. Munson P. Criminal language and poetic jailbreak: Writing chronic fatigue immune dysfunction syndrome. Lit Med 2000; 19:19-24.

73. Murtagh J. Patient education. Chronic fatigue syndrome. Aust Fam Physician 1995; 24:1297.

74. Natelson BH. Chronic fatigue syndrome. JAMA 2001; 285:2557-9.

75. Neeck G, Crofford LJ. Neuroendocrine perturbations in fibromyalgia and chronic fatigue syndrome. Rheum Dis Clin North Am 2000; 26:989-1002.

76. No Author Listed. Chronic fatigue syndrome: Any closer to an answer. Consum Rep 1996; 61:60-1.

77. Pagani M, Lucini D. Chronic fatigue syndrome: A hypothesis focusing on the autonomic nervous system. Clin Sci (Colch) 1999; 96:117-25.

78. Pearn J. Differential diagnosis: The challenge of chronic fatigue. J CFS 2000; 7:17-31.

79. Poole CJM. Guidance on ill health retirement. Br J Rheumatol 1997; 36:573-6.

80. Poole CJM, Baron CE, Gunnyeon WJ, Ohanlon M, Raoof A, Robson SA, et al. Ill health retirement - Guidelines for occupational physicians. Occup Med 1996; 46:402-6.

81. Price JR, Couper J. Cognitive behaviour therapy for chronic fatigue syndrome in adults (Cochrane Review). Cochrane Database Syst Rev 2001; 1-29.

82. Ray C, Weir W, Stewart D, Miller P, Hyde G. Ways of coping with chronic fatigue syndrome: Development of an illness management questionnaire. Soc Sci Med 1993; 37:385-91.

83. Reid S, Chalder T, Cleare A, Hotopf M, Wessely S. Chronic fatigue syndrome. BMJ 2000; 320:292-6.

84. Richman JA, Jason LA, Taylor RR, Jahn SC. Feminist perspectives on the social construction of chronic fatigue syndrome. Health Care Women Int 2000; 21:173-85.

85. Salit IE. The chronic fatigue syndrome: A position paper. J Rheumatol 1996; 23:540-4.

86. Schondorf R, Freeman R. The importance of orthostatic intolerance in the chronic fatigue syndrome. Am J Med Sci 1999; 317:117-23.

87. Sharpe M. Cognitive behavior therapy for chronic fatigue syndrome: Efficacy and implications. Am J Med 1998; 105:104S-9S.

88. Sharpe M. Cognitive behavior therapy for functional somatic complaints: The example of chronic fatigue syndrome. Psychosomatics 1997; 38:356-62.

89. Sharpe M. Chronic fatigue syndrome. Psychiatr Clin North Am 1996; 19:549-73.

90. Sharpe M. Non-pharmacological approaches to treatment. Ciba Found Symp 1993; 173:298-308.

91. Sharpe M, Chalder T, Palmer I, Wessely S. Chronic fatigue syndrome: A practical guide to assessment and management. Gen Hosp Psychiatry 1997; 19:185-99.

92. Sharpe MC, Archard LC, Banatvala JE, Borysiewicz LK, Clare AW, David A, et al. A report - chronic fatigue syndrome: Guidelines for research. J R Soc Med 1991; 84:118-21.

93. Shephard RJ. Chronic fatigue syndrome: An update. Sports Med 1901; 31:167-94.

94. Shepherd C. Chronic fatigue syndrome. Lancet 1997; 349:57-8.

95. Shlaes JL, Jason LA, Ferrari JR. The development of the chronic fatigue syndrome attitudes test:
A psychometric analysis. Eval Health Prof 1999; 22:442-65.

96. Sibbald B. Chronic fatigue syndrome comes out of the closet. CMAJ 1998; 159:537-41.

97. Snell CR, Stevens SR, VanNess JM. Chronic fatigue syndrome, ampligen, and quality of life:
A phenomenological perspective. J CFS 2001; 8:117-21.

98. Social Security Administration. Social Security Ruling, SSR 99-2p.; Titles II and XVI: Evaluating cases involving chronic fatigue syndrome (CFS). Fed Regist 1999; 64:23380-4.

99. Stoner BP, Corey GR. Chronic fatigue syndrome. A practical approach. N C Med J 1992; 53:
267-70.

100. Straus SE. Chronic fatigue syndrome: "Biophysical approach" may be difficult in practice. BMJ 1996; 313:831-2.

101. Streeten DHP. The nature of chronic fatigue. JAMA 1998; 280:1094-5.

102. Tattam A. CFS: An occupational hazard for nurses. Aust Nurs J 1994; 2:21-2.

103. Tiersky LA, Johnson SK, Lange G, Natelson BH, DeLuca J. Neuropsychology of chronic fatigue syndrome: A critical review. J Clin Exp Neuropsychol 1997; 19:560-86.

104. van Middendorp H, Geenen R, Kuis W, Heijnen CJ, Sinnema G. Psychological adjustment of adolescent girls with chronic fatigue syndrome. Pediatrics 2001; 107:E35.

105. Vollmer-Conna U, Lloyd A, Hickie I, Wakefield D. Chronic fatigue syndrome: An immunological perspective. Aust N Z J Psychiatry 1998; 32:523-7.

106. Wagenmakers AJM. Chronic fatigue syndrome: The physiology of people on the low end of the spectrum of physical activity. Clin Sci (Colch) 1999; 97:611-3.

107. Walker TL. Chronic fatigue syndrome. Do you know what it means. Am J Nurs 1999; 99:70-6.

108. Ware NC, Kleinman A. Culture and somatic experience: The social course of illness in neurasthenia and chronic fatigue syndrome. Psychosom Med 1992; 54:546-60.

109. Wearden AJ, Appleby L. Research on cognitive complaints and cognitive functioning in patients with chronic fatigue syndrome (CFS): What conclusions can we draw. J Psychosom Res 1996; 41:197-211.

110. Wessely S. Chronic fatigue: Symptom and syndrome. Ann Intern Med 2001; 134:838-43.

111. Wessely S. Chronic fatigue syndrome: Summary of a report of a joint committee of the Royal Colleges of Physicians, Psychiatrists and General Practitioners. J R Coll Physicians Lond 1996; 30:497-504.

112. White PD. The role of physical inactivity in the chronic fatigue syndrome. J Psychosom Res 2000; 49:283-4.

113. Whiting P, Bagnall AM, Sowden AJ, Cornell JE, Mulrow CD, Ramirez G. Interventions for the treatment and management of chronic fatigue syndrome: A systematic review. JAMA 2001; 286:1360-8.

114. Wilke WS, Fouad-Tarazi FM, Cash JM, Calabrese LH. The connection between chronic fatigue syndrome and neurally mediated hypotension. Cleve Clin J Med 1998; 65:261-6.

115. Wilson A, Hickie I, Lloyd A, Wakefield D. The treatment of chronic fatigue syndrome: Science and speculation. Am J Med 1994; 96:544-50.

Rejection Reason: Accepted CFS diagnostic criteria not defined or fulfilled

1. Ax S, Gregg VH, Jones D. Chronic fatigue syndrome: Illness attributions and perceptions of control. Homeostasis in Health & Disease 1998; 39:44-51.

2. Ax S, Gregg VH, Jones D. Chronic fatigue syndrome: Sufferers' evaluation of medical support. J R Soc Med 1997; 90:250-4.

3. Bazelmans E, Vercoulen JH, Swanink CM, Fennis JF, Galama JM, van Weel C, et al. Chronic fatigue syndrome and primary fibromyalgia syndrome as recognized by GPs. Fam Pract 1999; 16:602-4.

4. Beh HC, Connelly N, Charles M. Effect of noise stress on chronic fatigue syndrome patients. J Nerv Ment Dis 1997; 185:55-8.

5. Blakely AA, Howard RC, Sosich RM, Murdoch JC, Menkes DB, Spears GF. Psychiatric symptoms, personality and ways of coping in chronic fatigue syndrome. Psychol Med 1991; 21:347-62.

6. Bottero P. Role of rickettsiae and chlamydiae in the psychopathology of chronic fatigue syndrome (CFS) patients: A diagnostic and therapeutic report. J CFS 2000; 6:147-61.

7. Clarke JN. Chronic fatigue syndrome: Gender differences in the search for legitimacy. Aust N Z J Ment Health Nurs 1999; 8:123-33.

8. Daugherty SA, Henry BE, Peterson DL, Swarts RL, Bastien S, Thomas RS. Chronic fatigue syndrome in northern Nevada. Rev Infect Dis 1991; 13:S39-44.

9. Findley JC, Kerns R, Weinberg LD, Rosenberg R. Self-efficacy as a psychological moderator of chronic fatigue syndrome. J Behav Med 1998; 21:351-62.

10. Goodwin SS. Couples' perceptions of wives' CFS symptoms, symptom change, and impact on the marital relationship. Issues Ment Health Nurs 2000; 21:347-63.

11. Hamilton WT, Hall GH, Round AP. Frequency of attendance in general practice and symptoms before development of chronic fatigue syndrome: A case-control study. Br J Gen Pract 2001; 51:553-8.

12. Hartz AJ, Kuhn EM, Levine PH. Characteristics of fatigued persons associated with features of chronic fatigue syndrome. J CFS 1998; 4:71-97.

13. Heijmans MJ. Coping and adaptive outcome in chronic fatigue syndrome: Importance of illness cognitions. J Psychosom Res 1998; 45:39-51.

14. Hickie I, Lloyd A, Wakefield D. Immunological and psychological dysfunction in patients receiving immunotherapy for chronic fatigue syndrome. Aust N Z J Psychiatry 1992; 26:249-56.

15. Hoeck AD. Divalent cations, hormones, psyche and soma: Four case reports. J CFS 2000; 6:117-31.

16. Jason LA, Fennell PA, Taylor RR, Fricano G, Halpert JA. An empirical verification of the Fennell phases of the CFS illness. J CFS 2000; 6:47-56.

17. Jason LA, Ferrari JR, Taylor RR, Slavich SP, Stenzel CL. A national assessment of the service, support, and housing preferences by persons with chronic fatigue syndrome. Toward a comprehensive rehabilitation program. Eval Health Prof 1996; 19:194-207.

18. Katon W, Russo J. Chronic fatigue syndrome criteria. A critique of the requirement for multiple physical complaints. Arch Intern Med 1992; 152:1604-9.

19. Levine PH, Jacobson S, Pocinki AG, Cheney P, Peterson D, Connelly RR, et al. Clinical, epidemiologic, and virologic studies in four clusters of the chronic fatigue syndrome. Arch Intern Med 1992; 152:1611-6.

20. Lloyd A, Hickie I, Wakefield D, Boughton C, Dwyer J. A double-blind, placebo-controlled trial of intravenous immunoglobulin therapy in patients with chronic fatigue syndrome. Am J Med 1990; 89:561-8.

21. Lloyd AR, Gandevia SC, Hales JP. Muscle performance, voluntary activation, twitch properties and perceived effort in normal subjects and patients with the chronic fatigue syndrome. Brain 1991; 114:85-98.

22. Lloyd AR, Hickie I, Brockman A, Hickie C, Wilson A, Dwyer J, et al. Immunologic and psychologic therapy for patients with chronic fatigue syndrome: A double-blind, placebo-controlled trial. Am J Med 1993; 94:197-203.

23. Manu P, Lane TJ, Matthews DA, Castriotta RJ, Watson RK, Abeles M. Alpha-delta sleep in patients with a chief complaint of chronic fatigue. South Med J 1994; 87:465-70.

24. Montague TJ, Marrie TJ, Klassen GA, Bewick DJ, Horacek BM. Cardiac function at rest and with exercise in the chronic fatigue syndrome. Chest 1989; 95:779-84.

25. Packer TL, Sauriol A, Brouwer B. Fatigue secondary to chronic illness: Postpolio syndrome, chronic fatigue syndrome, and multiple sclerosis. Arch Phys Med Rehabil 1994; 75:1122-6.

26. Petrie K, Moss-Morris R, Weinman J. The impact of catastrophic beliefs on functioning in chronic fatigue syndrome. J Psychosom Res 1995; 39:31-7.

27. Ray C, Weir WR, Cullen S, Phillips S. Illness perception and symptom components in chronic fatigue syndrome. J Psychosom Res 1992; 36:243-56.

28. Rowe PC, Calkins H. Neurally mediated hypotension and chronic fatigue syndrome. Am J Med 1998; 105:15S-21S.

29. Schaefer KM. Sleep disturbances and fatigue in women with fibromyalgia and chronic fatigue syndrome. J Obstet Gynecol Neonatal Nurs 1995; 24:229-33.

30. Schweitzer R, Kelly B, Foran A, Terry D, Whiting J. Quality of life in chronic fatigue syndrome. Soc Sci Med 1995; 41:1367-72.

31. Soderlund A, Skoge AM, Malterud K. "I could not lift my arm holding the fork...". Living with chronic fatigue syndrome. Scand J Prim Health Care 2000; 18:165-9.

32. Stark FM, Sobetzko HM. Approaches to coping with chronic fatigue syndrome (CFS). Zentralbl Hyg Umweltmed 1999; 202:179-90.

33. Tuck I, Human N. The experience of living with chronic fatigue syndrome. J Psychosoc Nurs Ment Health Serv 1998; 36:15-9.

34. Tuck I, Wallace D, Casalnuova G, May B. Psychosocial response of sufferers of chronic fatigue syndrome. J CFS 2000; 7:49-63.

35. Twemlow SW, Bradshaw SLJ, Coyne L, Lerma BH. Patterns of utilization of medical care and perceptions of the relationship between doctor and patient with chronic illness including chronic fatigue syndrome. Psychol Rep 1997; 80:643-58.

36. Whelton CL, Salit I, Moldofsky H. Sleep, Epstein-Barr virus infection, musculoskeletal pain, and depressive symptoms in chronic fatigue syndrome. J Rheumatol 1992; 19:939-43.

37. Williams G, Pirmohamed J, Minors D, Waterhouse J, Buchan I, Arendt J, et al. Dissociation of body-temperature and melatonin secretion circadian rhythms in patients with chronic fatigue syndrome. Clin Physiol 1996; 16:327-37.

38. Wilson A, Hickie I, Lloyd A, Hadzi-Pavlovic D, Boughton C, Dwyer J, et al. Longitudinal study of outcome of chronic fatigue syndrome. BMJ 1994; 308:756-9.

39. Wilson A, Hickie I, Lloyd A, Hadzi-Pavlovic D, Wakefield D. Cell-mediated immune function and the outcome of chronic fatigue syndrome. Int J Immunopharmacol 1995; 17:691-4.

Rejection Reason: Adult CFS patients not separately extractable

1. Lloyd AR, Hickie I, Boughton CR, Spencer O, Wakefield D. Prevalence of chronic fatigue syndrome in an Australian population. Med J Aust 1990; 153:522-8.

2. Lloyd AR, Pender H. The economic impact of chronic fatigue syndrome. Med J Aust 1992; 157:599-601.

Rejection Reason: CFS population mixed with other populations

1. Cope H, Pernet A, Kendall B, David A. Cognitive functioning and magnetic resonance imaging in chronic fatigue. Br J Psychiatry 1995; 167:86-94.

2. Hotopf M, Noah N, Wessely S. Chronic fatigue and minor psychiatric morbidity after viral meningitis: A controlled study. J Neurol Neurosurg Psychiatry 1996; 60:504-9.

3. Morriss RK, Ahmed M, Wearden AJ, Mullis R, Strickland P, Appleby L, et al. The role of depression in pain, psychophysiological syndromes and medically unexplained symptoms associated with chronic fatigue syndrome. J Affect Disord 1999; 55:143-8.

4. Van Houdenhove B, Neerinckx E, Lysens R, Vertommen H, Van Houdenhove L, Onghena P, et al. Victimization in chronic fatigue syndrome and fibromyalgia in tertiary care: A controlled study on prevalence and characteristics. Psychosomatics 2001; 42:21-8.

5. White KP, Speechley M, Harth M, Ostbye T. Co-existence of chronic fatigue syndrome with fibromyalgia syndrome in the general population. A controlled study. Scand J Rheumatol 2000; 29:44-51.

Rejection Reason: No outcome related to disability

1. Johnson SK, DeLuca J, Natelson BH. Assessing somatization disorder in the chronic fatigue syndrome. Psychosom Med 1996; 58:50-7.

Rejection Reason: No work data

1. Aaron LA, Burke MM, Buchwald D. Overlapping conditions among patients with chronic fatigue syndrome, fibromyalgia, and temporomandibular disorder. Arch Int Med 2000; 160:221-7.

2. Abu-Judeh HH, Levine S, Kumar M, el-Zeftawy H, Naddaf S, Lou JQ, et al. Comparison of SPET brain perfusion and 18F-FDG brain metabolism in patients with chronic fatigue syndrome. Nucl Med Commun 1998; 19:1065-71.

3. Afari N, Schmaling KB, Herrell R, Hartman S, Goldberg J, Buchwald DS. Coping strategies in twins with chronic fatigue and chronic fatigue syndrome. J Psychosom Res 2000; 48:547-54.

4. Bazelmans E, Bleijenberg G, van der Meer JW, Folgering H. Is physical deconditioning a perpetuating factor in chronic fatigue syndrome? A controlled study on maximal exercise performance and relations with fatigue, impairment and physical activity. Psychol Med 2001; 31:107-14.

5. Blackwood SK, MacHale SM, Power MJ, Goodwin GM, Lawrie SM. Effects of exercise on cognitive and motor function in chronic fatigue syndrome and depression. J Neurol Neurosurg Psychiatry 1998; 65:541-6.

6. Blenkiron P, Edwards R, Lynch S. Associations between perfectionism, mood, and fatigue in chronic fatigue syndrome: A pilot study. J Nerv Ment Dis 1999; 187:566-70.

7. Bonner D, Ron M, Chalder T, Butler S, Wessely S. Chronic fatigue syndrome: A follow up study. J Neurol Neurosurg Psychiatry 1994; 57:617-21.

8. Borish L, Schmaling K, DiClementi JD, Streib J, Negri J, Jones JF, et al. Chronic fatigue syndrome: Identification of distinct subgroups on the basis of allergy and psychologic variables. J Allergy Clin Immunol 1998; 102:222-30.

9. Brooks JC, Roberts N, Whitehouse G, Majeed T. Proton magnetic resonance spectroscopy and morphometry of the hippocampus in chronic fatigue syndrome. Br J Radiol 2000; 73:1206-8.

10. Buchwald D, Herrell R, Ashton S, Belcourt M, Schmaling K, Goldberg J. The Chronic Fatigue Twin Registry: Method of construction, composition, and zygosity assignment. Twin Res 1999; 2:203-11.

11. Buchwald D, Pascualy R, Bombardier C, Kith P. Sleep disorders in patients with chronic fatigue. Clin Infect Dis 1994; 18:S68-72.

12. Butler JA, Chalder T, Wessely S. Causal attributions for somatic sensations in patients with chronic fatigue syndrome and their partners. Psychol Med 2001; 31:97-105.

13. Christodoulou C, DeLuca J, Lange G, Johnson SK, Sisto SA, Korn L, et al. Relation between neuropsychological impairment and functional disability in patients with chronic fatigue syndrome. J Neurol Neurosurg Psychiatry 1998; 64:431-4.

14. Clapp LL, Richardson MT, Smith JF, Wang M, Clapp AJ, Pieroni RE. Acute effects of thirty minutes of light-intensity, intermittent exercise on patients with chronic fatigue syndrome. Physical Therapy 1999; 79:749-56.

15. Cleare AJ, Blair D, Chambers S, Wessely S. Urinary free cortisol in chronic fatigue syndrome. Am J Psychiatry 2001; 158:641-3.

16. Clements A, Sharpe M, Simkin S, Borrill J, Hawton K. Chronic fatigue syndrome: A qualitative investigation of patients' beliefs about the illness. J Psychosom Res 1997; 42:615-24.

17. Cook DB, Lange G, DeLuca J, Natelson BH. Relationship of brain MRI abnormalities and physical functional status in chronic fatigue syndrome. Int J Neurosci 2001; 107:1-6.

18. Coutts R, Weatherby R, Davie A. The use of a symptom "self-report" inventory to evaluate the acceptability and efficacy of a walking program for patients suffering with chronic fatigue syndrome. J Psychosom Res 2001; 51:425-9.

19. Cox IM, Campbell MJ, Dowson D. Red blood cell magnesium and chronic fatigue syndrome. Lancet 1991; 337:757-60.

20. Cukor D, Tiersky L, Natelson B. Psychiatric comorbidity and somatic distress in sudden and gradual onset chronic fatigue syndrome. J CFS 2000; 7:33-44.

21. Davey NJ, Puri BK, Nowicky AV, Main J, Zaman R. Voluntary motor function in patients with chronic fatigue syndrome. J Psychosom Res 2001; 50:17-20.

22. De Becker P, Dendale P, De Meirleir K, Campine I, Vandenborne K, Hagers Y. Autonomic testing in patients with chronic fatigue syndrome. Am J Med 1998; 105:22S-6S.

23. De Becker P, McGregor N, De Meirleir K. A definition-based analysis of symptoms in a large cohort of patients with chronic fatigue syndrome. J Intern Med 2001; 250:234-40.

24. De Becker P, Roeykens J, Reynders M, McGregor N, De Meirleir K. Exercise capacity in chronic fatigue syndrome. Arch Int Med 2000; 160:3270-7.

25. De Lorenzo F, Hargreaves J, Kakkar VV. Lung function test findings in patients with chronic fatigue syndrome (CFS). Aust N Z J Med 1996; 26:563-4.

26. De Lorenzo F, Xiao H, Mukherjee M, Harcup J, Suleiman S, Kadziola Z, et al. Chronic fatigue syndrome: Physical and cardiovascular deconditioning. QJM 1998; 91:475-81.

27. Deale A, Chalder T, Wessely S. Illness beliefs and treatment outcome in chronic fatigue syndrome. J Psychosom Res 1998; 45:77-83.

28. Deale A, Wessely S. Patients' perceptions of medical care in chronic fatigue syndrome. Soc Sci Med 2001; 52:1859-64.

29. Deale A, Wessely S. Diagnosis of psychiatric disorder in clinical evaluation of chronic fatigue syndrome. J R Soc Med 2000; 93:310-2.

30. DeLuca J, Johnson SK, Beldowicz D, Natelson BH. Neuropsychological impairments in chronic fatigue syndrome, multiple sclerosis, and depression. J Neurol Neurosurg Psychiatry 1995; 58:38-43.

31. DeLuca J, Johnson SK, Ellis SP, Natelson BH. Cognitive functioning is impaired in patients with chronic fatigue syndrome devoid of psychiatric disease. J Neurol Neurosurg Psychiatry 1997; 62:151-5.

32. DeLuca J, Johnson SK, Ellis SP, Natelson BH. Sudden vs. gradual onset of chronic fatigue syndrome differentiates individuals on cognitive and psychiatric measures. J Psychiatr Res 1997; 31:83-90.

33. DeLuca J, Johnson SK, Natelson BH. Information processing efficiency in chronic fatigue syndrome and multiple sclerosis. Arch Neurol 1993; 50:301-4.

34. Dobbs BM, Dobbs AR, Kiss I. Working memory deficits associated with chronic fatigue syndrome. J Int Neuropsychol Soc 2001; 7:285-93.

35. Dworkin HJ, Lawrie C, Bohdiewicz P, Lerner AM. Abnormal left ventricular myocardial dynamics in eleven patients with chronic fatigue syndrome. Clin Nucl Med 1994; 19:675-7.

36. Edwards R, Suresh R, Lynch S, Clarkson P, Stanley P. Illness perceptions and mood in chronic fatigue syndrome. J Psychosom Res 2001; 50:65-8.

37. Endicott NA. Chronic fatigue syndrome in psychiatric patients: Evidence of premorbid anomalous patterns of brain organization. J CFS 1999; 5:29-45.

38. Endicott NA. Chronic fatigue syndrome in psychiatric patients: Lifetime and premorbid personal history of physical health. Psychosom Med 1998; 60:744-51.

39. Euga R, Chalder T, Deale A, Wessely S. A comparison of the characteristics of chronic fatigue syndrome in primary and tertiary care. Br J Psychiatry 1996; 168:121-6.

40. Farmer A, Chubb H, Jones I, Hillier J, Smith A, Borysiewicz L. Screening for psychiatric morbidity in subjects presenting with chronic fatigue syndrome. Br J Psychiatry 1996; 168:354-8.

41. Fischler B, Dendale P, Michiels V, Cluydts R, Kaufman L, De Meirleir K. Physical fatigability and exercise capacity in chronic fatigue syndrome: Association with disability, somatization and psychopathology. J Psychosom Res 1997; 42:369-78.

42. Fischler B, Le Bon O, Hoffmann G, Cluydts R, Kaufman L, De Meirleir K. Sleep anomalies in the chronic fatigue syndrome. A comorbidity study. Neuropsychobiology 1997; 35:115-22.

43. Forsyth LM, Preuss HG, MacDowell AL, Chiazze LJ, Birkmayer GD, Bellanti JA. Therapeutic effects of oral NADH on the symptoms of patients with chronic fatigue syndrome. Ann Allergy Asthma Immunol 1999; 82:185-91.

44. Friedberg F, Krupp LB. A comparison of cognitive behavioral treatment for chronic fatigue syndrome and primary depression. Clin Infect Dis 1994; 18:S105-10.

45. Fuentes K, Hunter MA, Strauss E, Hultsch DF. Intraindividual variability in cognitive performance in persons with chronic fatigue syndrome. Clin Neuropsychol 2001; 15:210-27.

46. Gibson H, Carroll N, Clague JE, Edwards RH. Exercise performance and fatiguability in patients with chronic fatigue syndrome. J Neurol Neurosurg Psychiatry 1993; 56:993-8.

47. Grafman J, Schwartz V, Dale JK, Scheffers M, Houser C, Straus SE. Analysis of neuropsychological functioning in patients with chronic fatigue syndrome. J Neurol Neurosurg Psychiatry 1993; 56:684-9.

48. Greco A, Tannock C, Brostoff J, Costa DC. Brain MR in chronic fatigue syndrome. Am J Neuroradiol 1997; 18:1265-9.

49. Hall GH, Hamilton WT, Round AP. Increased illness experience preceding chronic fatigue syndrome: A case control study. J R Coll Physicians Lond 1998; 32:44-8.

50. Hardt J, Buchwald D, Wilks D, Sharpe M, Nix WA, Egle UT. Health-related quality of life in patients with chronic fatigue syndrome: An international study. J Psychosom Res 2001; 51:431-4.

51. Harlow BL, Signorello LB, Hall JE, Dailey C, Komaroff AL. Reproductive correlates of chronic fatigue syndrome. Am J Med 1998; 105:94S-9S.

52. Hart B, Grace VM. Fatigue in chronic fatigue syndrome: A discourse analysis of women's experiential narratives. Health Care Women Int 2000; 21:187-201.

53. Hassan IS, Bannister BA, Akbar A, Weir W, Bofill M. A study of the immunology of the chronic fatigue syndrome: Correlation of immunologic parameters to health dysfunction. Clin Immunol Immunopathol 1998; 87:60-7.

54. Hickie I. Nefazodone for patients with chronic fatigue syndrome. Aust N Z J Psychiatry 1999; 33:278-80.

55. Hickie IB, Wilson AJ, Wright JM, Bennett BK, Wakefield D, Lloyd AR. A randomized, double-blind placebo-controlled trial of moclobemide in patients with chronic fatigue syndrome. J Clin Psychiatry 2000; 61:643-8.

56. Himmel PB, Seligman TM. A pilot study employing dehydroepiandrosterone (DHEA) in the treatment of chronic fatigue syndrome. J Clin Rheumatol 1999; 5:56-9.

57. Hudson M, Cleare AJ. The 1microg short Synacthen test in chronic fatigue syndrome. Clin Endocrinol 1999; 51:625-30.

58. Inbar O, Dlin R, Rotstein A, Whipp BJ. Physiological responses to incremental exercise in patients with chronic fatigue syndrome. Med Sci Sports Exerc 2001; 33:1463-70.

59. Johnson SK, DeLuca J, Natelson BH. Personality dimensions in the chronic fatigue syndrome: A comparison with multiple sclerosis and depression. J Psychiatr Res 1996; 30:9-20.

60. Johnson SK, Lange G, Tiersky L, DeLuca J, Natelson BH. Health-related personality variables in chronic fatigue syndrome and multiple sclerosis. J CFS 2001; 8:43-52.

61. Joyce E, Blumenthal S, Wessely S. Memory, attention, and executive function in chronic fatigue syndrome. J Neurol Neurosurg Psychiatry 1996; 60:495-503.

62. Kane RL, Gantz NM, DiPino RK. Neuropsychological and psychological functioning in chronic fatigue syndrome. Neuropsychiatry Neuropsychol Behav Neurol 1997; 10:25-31.

63. Kaslow JE, Rucker L, Onishi R. Liver extract-folic acid-cyanocobalamin vs. placebo for chronic fatigue syndrome. Arch Intern Med 1989; 149:2501-3.

64. Katon WJ, Buchwald DS, Simon GE, Russo JE, Mease PJ. Psychiatric illness in patients with chronic fatigue and those with rheumatoid arthritis. J Gen Intern Med 1991; 6:277-85.

65. Kent-Braun JA, Sharma KB, Weiner MW, Massie B, Miller RG. Central basis of muscle fatigue in chronic fatigue syndrome. Neurology 1993; 43:125-31.

66. Komaroff AL, Fagioli LR, Doolittle TH, Gandek B, Gleit MA, Guerriero RT, et al. Health status in patients with chronic fatigue syndrome and in general population and disease comparison groups. Am J Med 1996; 101:281-90.

67. Komaroff AL, Fagioli LR, Geiger AM, Doolittle TH, Lee J, Kornish RJ, et al. An examination of the working case definition of chronic fatigue syndrome. Am J Med 1996; 100:56-64.

68. Krupp LB, Jandorf L, Coyle PK, Mendelson WB. Sleep disturbance in chronic fatigue syndrome. J Psychosom Res 1993; 37:325-31.

69. Krupp LB, Sliwinski M, Masur DM, Friedberg F, Coyle PK. Cognitive functioning and depression in patients with chronic fatigue syndrome and multiple sclerosis. Arch Neurol 1994; 51:705-10.

70. Lakein DA, Fantie BD, Grafman J, Ross S, O'Fallon A, Dale J, et al. Patients with chronic fatigue syndrome and accurate feeling-of-knowing judgments. J Clin Psychol 1997; 53:635-45.

71. LaManca JJ, Peckerman A, Sisto SA, DeLuca J, Cook S, Natelson BH. Cardiovascular responses of women with chronic fatigue syndrome to stressful cognitive testing before and after strenuous exercise. Psychosom Med 2001; 63:756-64.

72. LaManca JJ, Peckerman A, Walker J, Kesil W, Cook S, Taylor A, et al. Cardiovascular response during head-up tilt in chronic fatigue syndrome. Clin Physiol 1999; 19:111-20.

73. LaManca JJ, Sisto SA, DeLuca J, Johnson SK, Lange G, Pareja J, et al. Influence of exhaustive treadmill exercise on cognitive functioning in chronic fatigue syndrome. Am J Med 1998; 105:59S-65S.

74. LaManca JJ, Sisto SA, Zhou XD, Ottenweller JE, Cook S, Peckerman A, et al. Immunological response in chronic fatigue syndrome following a graded exercise test to exhaustion. J Clin Immunol 1999; 19:135-42.

75. Lawrie SM, MacHale SM, Cavanagh JT, O'Carroll RE, Goodwin GM. The difference in patterns of motor and cognitive function in chronic fatigue syndrome and severe depressive illness. Psychol Med 2000; 30:433-42.

76. MacHale SM, Cavanagh JT, Bennie J, Carroll S, Goodwin GM, Lawrie SM. Diurnal variation of adrenocortical activity in chronic fatigue syndrome. Neuropsychobiology 1998; 38:213-7.

77. MacHale SM, Lawrie SM, Cavanagh JT, Glabus MF, Murray CL, Goodwin GM, et al. Cerebral perfusion in chronic fatigue syndrome and depression. Br J Psychiatry 2000; 176:550-6.

78. Marshall PS, Forstot M, Callies A, Peterson PK, Schenck CH. Cognitive slowing and working memory difficulties in chronic fatigue syndrome. Psychosom Med 1997; 59:58-66.

79. Marshall PS, Watson D, Steinberg P, Cornblatt B, Peterson PK, Callies A, et al. An assessment of cognitive function and mood in chronic fatigue syndrome. Biol Psychiatry 1996; 39:199-206.

80. Michiels V, Cluydts R, Fischler B. Attention and verbal learning in patients with chronic fatigue syndrome. J Int Neuropsychol Soc 1998; 4:456-66.

81. Michiels V, de Gucht V, Cluydts R, Fischler B. Attention and information processing efficiency in patients with Chronic Fatigue Syndrome. J Clin Exp Neuropsychol 1999; 21:709-29.

82. Morriss R, Sharpe M, Sharpley AL, Cowen PJ, Hawton K, Morris J. Abnormalities of sleep in patients with the chronic fatigue syndrome. BMJ 1993; 306:1161-4.

83. Natelson BH, Cheu J, Hill N, Bergen M, Korn L, Denny T, et al. Single-blind, placebo phase-in trial of two escalating doses of selegiline in the chronic fatigue syndrome. Neuropsychobiology 1998; 37:150-4.

84. Nisenbaum R, Reyes M, Mawle AC, Reeves WC. Factor analysis of unexplained severe fatigue and interrelated symptoms: Overlap with criteria for chronic fatigue syndrome. Am J Epidemiol 1998; 148:72-7.

85. Paul L, Wood L, Behan WM, Maclaren WM. Demonstration of delayed recovery from fatiguing exercise in chronic fatigue syndrome. Eur J Neurol 1999; 6:63-9.

86. Peterson PK, Pheley A, Schroeppel J, Schenck C, Marshall P, Kind A, et al. A preliminary placebo-controlled crossover trial of fludrocortisone for chronic fatigue syndrome. Arch Int Med 1998; 158:908-14.

87. Poole J, Herrell R, Ashton S, Goldberg J, Buchwald D. Results of isoproterenol tilt table testing in monozygotic twins discordant for chronic fatigue syndrome. Arch Int Med 2000; 160:3461-8.

88. Riley MS, O'Brien CJ, McCluskey DR, Bell NP, Nicholls DP. Aerobic work capacity in patients with chronic fatigue syndrome. BMJ 1990; 301:953-6.

89. Ross S, Fantie B, Straus SF, Grafman J. Divided attention deficits in patients with chronic fatigue syndrome. Appl Neuropsychol 2001; 8:4-11.

90. Sacco P, Hope PA, Thickbroom GW, Byrnes ML, Mastaglia FL. Corticomotor excitability and perception of effort during sustained exercise in the chronic fatigue syndrome. Clin Neurophysiol 1999; 110:1883-91.

91. Sandman CA, Barron JL, Nackoul K, Goldstein J, Fidler F. Memory deficits associated with chronic fatigue immune dysfunction syndrome. Biol Psychiatry 1993; 33:618-23.

92. Schmaling KB, DiClementi JD, Cullum CM, Jones JF. Cognitive functioning in chronic fatigue syndrome and depression: A preliminary comparison. Psychosom Med 1994; 56:383-8.

93. Schmaling KB, Jones JF. MMPI profiles of patients with chronic fatigue syndrome. J Psychosom Res 1996; 40:67-74.

94. Schondorf R, Benoit J, Wein T, Phaneuf D. Orthostatic intolerance in the chronic fatigue syndrome. J Auton Nerv Syst 1999; 75:192-201.

95. Schwartz SN, Jones R. Measuring outcomes of treatment in chronic fatigue syndrome: A comparison of simple questioning vs. use of a validated outcome instrument (Short Form 36). J CFS 2000; 6:3-10.

96. Schweitzer R, Robertson DL, Kelly B, Whiting J. Illness behaviour of patients with chronic fatigue syndrome. J Psychosom Res 1994; 38:41-9.

97. See DM, Tilles JG. Alpha-interferon treatment of patients with chronic fatigue syndrome. Immunol Invest 1996; 25:153-64.

98. Sendrowski DP, Buker EA, Gee SS. An investigation of sympathetic hypersensitivity in chronic fatigue syndrome. Optom Vis Sci 1997; 74:660-3.

99. Servatius RJ, Tapp WN, Bergen MT, Pollet CA, Drastal SD, Tiersky LA, et al. Impaired associative learning in chronic fatigue syndrome. Neuroreport 1998; 9:1153-7.

100. Sisto SA, Tapp WN, LaManca JJ, Ling W, Korn LR, Nelson AJ, et al. Physical activity before and after exercise in women with chronic fatigue syndrome. QJM 1998; 91:465-73.

101. Smith A, Pollock J, Thomas M, Llewelyn M, Borysiewicz L. The relationship between subjective ratings of sleep and mental functioning in healthy subjects and patients with chronic fatigue syndrome. Hum Psychopharmacol 1996; 11:161-7.

102. Smith AP, Borysiewicz L, Pollock J, Thomas M, Perry K, Llewelyn M. Acute fatigue in chronic fatigue syndrome patients. Psychol Med 1999; 29:283-90.

103. Spath M, Welzel D, Farber L. Treatment of chronic fatigue syndrome with 5-HT3 receptor antagonists: Preliminary results. Scand J Rheumatol Suppl 2000; 113:72-7.

104. Spence VA, Khan F, Belch JJ. Enhanced sensitivity of the peripheral cholinergic vascular response in patients with chronic fatigue syndrome. Am J Med 2000; 108:736-9.

105. Steinberg P, McNutt BE, Marshall P, Schenck C, Lurie N, Pheley A, et al. Double-blind placebo-controlled study of the efficacy of oral terfenadine in the treatment of chronic fatigue syndrome. J Allergy Clin Immunol 1996; 97:119-26.

106. Strayer DR, Carter WA, Brodsky I, Cheney P, Peterson D, Salvato P, et al. A controlled clinical trial with a specifically configured RNA drug, poly(I) - poly(C12U), in chronic fatigue syndrome. Clin Infect Dis 1994; 18:S88-95.

107. Taylor RR, Jason LA, Torres A. Fatigue rating scales: An empirical comparison. Psychol Med 2000; 30:849-56.

108. Tirelli U, Chierichetti F, Tavio M, Simonelli C, Bianchin G, Zanco P, et al. Brain positron emission tomography (PET) in chronic fatigue syndrome: Preliminary data. Am J Med 1998; 105:54S-8S.

109. Trigwell P, Hatcher S, Johnson M, Stanley P, House A. "Abnormal" illness behaviour in chronic fatigue syndrome and multiple sclerosis. BMJ 1995; 311:15-8.

110. Van der Werf SP, Prins JB, Jongen PJ, van der Meer JW, Bleijenberg G. Abnormal neuropsychological findings are not necessarily a sign of cerebral impairment: A matched comparison between chronic fatigue syndrome and multiple sclerosis. Neuropsychiatry Neuropsychol Behav Neurol 2000; 13:199-203.

111. Van der Werf SP, Prins JB, Vercoulen JH, van der Meer JW, Bleijenberg G. Identifying physical activity patterns in chronic fatigue syndrome using actigraphic assessment. J Psychosom Res 2000; 49:373-9.

112. Van Houdenhove B, Neerinckx E, Onghena P, Lysens R, Vertommen H. Premorbid "overactive" lifestyle in chronic fatigue syndrome and fibromyalgia. An etiological factor or proof of good citizenship. J Psychosom Res 2001; 51:571-6.

113. Van Houdenhove B, Onghena P, Neerinckx E, Hellin J. Does high 'action-proneness' make people more vulnerable to chronic fatigue syndrome? A controlled psychometric study. J Psychosom Res 1995; 39:633-40.

114. Vollmer-Conna U, Hickie I, Hadzi-Pavlovic D, Tymms K, Wakefield D, Dwyer J, et al. Intravenous immunoglobulin is ineffective in the treatment of patients with chronic fatigue syndrome. Am J Med 1997; 103:38-43.

115. Vollmer-Conna U, Wakefield D, Lloyd A, Hickie I, Lemon J, Bird KD, et al. Cognitive deficits in patients suffering from chronic fatigue syndrome, acute infective illness or depression. Br J Psychiatry 1997; 171:377-81.

116. Warren G, McKendrick M, Peet M. The role of essential fatty acids in chronic fatigue syndrome. A case-controlled study of red-cell membrane essential fatty acids (EFA) and a placebo-controlled treatment study with high dose of EFA. Acta Neurol Scand 1999; 99:112-6.

117. Wearden A, Appleby L. Cognitive performance and complaints of cognitive impairment in chronic fatigue syndrome (CFS). Psychol Med 1997; 27:81-90.

118. Wessely S, Chalder T, Hirsch S, Wallace P, Wright D. The prevalence and morbidity of chronic fatigue and chronic fatigue syndrome: A prospective primary care study. Am J Public Health 1997; 87:1449-55.

119. White C, Schweitzer R. The role of personality in the development and perpetuation of chronic fatigue syndrome. J Psychosom Res 2000; 48:515-24.

120. White PD, Cleary KJ. An open study of the efficacy and adverse effects of moclobemide in patients with the chronic fatigue syndrome. Int Clin Psychopharmacol 1997; 12:47-52.

121. Wood C, Magnello ME, Sharpe MC. Fluctuations in perceived energy and mood among patients with chronic fatigue syndrome. J R Soc Med 1992; 85:195-8.

122. Woodward RV, Broom DH, Legge DG. Diagnosis in chronic illness: Disabling or enabling--the case of chronic fatigue syndrome. J R Soc Med 1995; 88:325-9.

123. Zaman R, Puri BK, Main J, Nowicky AV, Davey NJ. Corticospinal inhibition appears normal in patients with chronic fatigue syndrome. Exp Physiol 2001; 86:547-50.

124. Zhang QW, Natelson BH, Ottenweller JE, Servatius RJ, Nelson JJ, De Luca J, et al. Chronic fatigue syndrome beginning suddenly occurs seasonally over the year. Chronobiol Int 2000; 17:95-9.

Rejection Reason: Not related to or specific for CFS

1. Aaron LA, Herrell R, Ashton S, Belcourt M, Schmaling K, Goldberg J, et al. Comorbid clinical conditions in chronic fatigue: A co-twin control study. J Gen Intern Med 2001; 16:24-31.

2. Alexander RW, Bradley LA, Alarcon GS, Triana-Alexander M, Aaron LA, Alberts KR, et al. Sexual and physical abuse in women with fibromyalgia: Association with outpatient health care utilization and pain medication usage. Arthritis Care Res 1998; 11:102-15.

3. Asbring P. Chronic illness -- A disruption in life: identity-transformation among women with chronic fatigue syndrome and fibromyalgia. J Adv Nurs 2001; 34:312-9.

4. Ax S. Coping differences between chronic fatigue syndrome sufferers and their carers. J CFS 1999; 5:57-62.

5. Axe EK, Satz P. Depressive comorbidity in the fatiguing illnesses. J CFS 2001; 8:25-9.

6. Buskila D. Fibromyalgia, chronic fatigue syndrome, and myofascial pain syndrome. Curr Opin Rheumatol 2001; 13:117-27.

7. Chalder T, Power MJ, Wessely S. Chronic fatigue in the community: 'A question of attribution'. Psychol Med 1996; 26:791-800.

8. Chida M, Inase N, Ichioka M, Miyazato I, Marumo F. Ratings of perceived exertion in chronic obstructive pulmonary disease: A possible indicator for exercise training in patients with this disease. Eur J Appl Physiol Occup Physiol 1991; 62:390-3.

9. Chisholm D, Godfrey E, Ridsdale L, Chalder T, King M, Seed P, et al. Chronic fatigue in general practice: Economic evaluation of counselling versus cognitive behaviour therapy. Br J Gen Pract 2001; 51:15-8.

10. Clarke JN. The search for legitimacy and the "expertization" of the lay person: The case of chronic fatigue syndrome. Soc Work Health Care 2000; 30:73-93.

11. Cope H, Mann A, Pelosi A, David A. Psychosocial risk factors for chronic fatigue and chronic fatigue syndrome following presumed viral illness: A case-control study. Psychol Med 1996; 26:1197-209.

12. Lorig KR, Sobel DS, Stewart AL, Brown BWJ, Bandura A, Ritter P, et al. Evidence suggesting that a chronic disease self-management program can improve health status while reducing hospitalization: A randomized trial. Med Care 1999; 37:5-14.

13. Matthews DA, Lane TJ, Manu P. Antibodies to Epstein-Barr virus in patients with chronic fatigue. South Med J 1991; 84:832-40.

14. Ray C. Positive and negative social support in a chronic illness. Psychol Rep 1992; 71:977-8.

15. Ridsdale L, Evans A, Jerrett W, Mandalia S, Osler K, Vora H. Patients with fatigue in general practice: A prospective study. BMJ 1993; 307:103-6.

16. Ridsdale L, Godfrey E, Chalder T, Seed P, King M, Wallace P, et al. Chronic fatigue in general practice: Is counselling as good as cognitive behaviour therapy? A UK randomised trial. Br J Gen Pract 2001; 51:19-24.

17. Russo J, Katon W, Clark M, Kith P, Sintay M, Buchwald D. Longitudinal changes associated with improvement in chronic fatigue patients. J Psychosom Res 1998; 45:67-76.

18. Sharpe M, Hawton K, Seagroatt V, Pasvol G. Follow up of patients presenting with fatigue to an infectious diseases clinic. BMJ 1992; 305:147-52.

Rejection Reason: Not US, UK, Canada, Australia or Western Europe

1. Borok G. Chronic fatigue syndrome: An atopic state. J CFS 1998; 4:39-57.

2. Loganovsky KN. Vegetative-vascular dystonia and osteoalgetic syndrome or chronic fatigue syndrome as a characteristic after-effect of radioecological disaster: The Chernobyl accident. J CFS 2000; 7:6-16.

3. Naschitz JE, Rosner I, Rozenbaum M, Gaitini L, Bistritzki I, Zuckerman E, et al. The capnography head-up tilt test for evaluation of chronic fatigue syndrome. Semin Arthritis Rheum 2000; 30:79-86.

Rejection Reason: Outcomes not extractable

1. Cleare AJ, Heap E, Malhi GS, Wessely S, O'Keane V, Miell J. Low-dose hydrocortisone in chronic fatigue syndrome: A randomised crossover trial. Lancet 1999; 353:455-8.

2. Cleare AJ, Miell J, Heap E, Sookdeo S, Young L, Malhi GS, et al. Hypothalamo-pituitary-adrenal axis dysfunction in chronic fatigue syndrome, and the effects of low-dose hydrocortisone therapy. J Clin Endocrinol Metab 2001; 86:3545-54.

3. Jason LA, Taylor RR, Kennedy CL, Song S, Johnson D, Torres S. Chronic fatigue syndrome: Occupation, medical utilization, and subtypes in a community-based sample. J Nerv Ment Dis 2000; 188:568-76.

4. Lerner AM, Lawrie C, Dworkin HS. Repetitively negative changing T waves at 24-h electrocardiographic monitors in patients with the chronic fatigue syndrome. Left ventricular dysfunction in a cohort. Chest 1993; 104:1417-21.

5. Levine PH, Snow PG, Ranum BA, Paul C, Holmes MJ. Epidemic neuromyasthenia and chronic fatigue syndrome in West Otago, New Zealand. A 10-year follow-up. Arch Int Med 1997; 157:750-4.

6. Lovell DM. Chronic fatigue syndrome among overseas development workers: A qualitative study. J Travel Med 1999; 6:16-23.

7. Lutgendorf SK, Antoni MH, Ironson G, Fletcher MA, Penedo F, Baum A, et al. Physical symptoms of chronic fatigue syndrome are exacerbated by the stress of Hurricane Andrew. Psychosom Med 1995; 57:310-23.

8. McCluskey DR. Pharmacological approaches to the therapy of chronic fatigue syndrome. Ciba Found Symp 1993; 173:280-7.

9. Moorkens G, Wynants H, Abs R. Effect of growth hormone treatment in patients with chronic fatigue syndrome: A preliminary study. Growth Horm IGF Res 1998; 8 Suppl B:131-3.

10. Natelson BH, Cheu J, Pareja J, Ellis SP, Policastro T, Findley TW. Randomized, double blind, controlled placebo-phase in trial of low dose phenelzine in the chronic fatigue syndrome. Psychopharmacology (Berl) 1996; 124:226-30.

11. Saisch SG, Deale A, Gardner WN, Wessely S. Hyperventilation and chronic fatigue syndrome. QJM 1994; 87:63-7.

12. Smith AP, Behan PO, Bell W, Millar K, Bakheit M. Behavioural problems associated with the chronic fatigue syndrome. Br J Psychol 1993; 84:411-23.

13. Wagner-Raphael LI, Jason LA, Ferrari JR. Chronic fatigue syndrome, chronic fatigue, and psychiatric disorders: Predictors of functional status in a national nursing sample. J Occup Health Psychol 1999; 4:63-71.

14. Ware NC. Toward a model of social course in chronic illness: The example of chronic fatigue syndrome. Cult Med Psychiatry 1999; 23:303-31.

15. Ware NC. Sociosomatics and illness in chronic fatigue syndrome. Psychosom Med 1998; 60:394-401.

16. Ware NC. Society, mind and body in chronic fatigue syndrome: An anthropological view. Ciba Found Symp 1993; 173:62-73.

Rejection Reason: Studies of lab findings/lab technique or focus on pathophysiology of CFS

1. Altemus M, Dale JK, Michelson D, Demitrack MA, Gold PW, Straus SE. Abnormalities in response to vasopressin infusion in chronic fatigue syndrome. Psychoneuroendocrinology 2001; 26:175-88.

2. Bounous G, Molson J. Competition for glutathione precursors between the immune system and the skeletal muscle: Pathogenesis of chronic fatigue syndrome. Med Hypotheses 1999; 53:347-9.

3. Evengard B, Nilsson CG, Lindh G, Lindquist L, Eneroth P, Fredrikson S, et al. Chronic fatigue syndrome differs from fibromyalgia. No evidence for elevated substance P levels in cerebrospinal fluid of patients with chronic fatigue syndrome. Pain 1998; 78:153-5.

4. Fischler B, D'Haenen H, Cluydts R, Michiels V, Demets K, Bossuyt A, et al. Comparison of 99m Tc HMPAOSPECT scan between chronic fatigue syndrome, major depression and healthy controls: An exploratory study of clinical correlates of regional cerebral blood flow. Neuropsychobiology 1996; 34:175-83.

5. Freeman R, Komaroff AL. Does the chronic fatigue syndrome involve the autonomic nervous system? Am J Med 1997; 102:357-64.

6. Hoskin L, Clifton-Bligh P, Hansen R, Fulcher G, Gates F. Bone density and body composition in young womenwith chronic fatigue syndrome. Ann N Y Acad Sci 2000; 904:625-7.

7. Ichise M, Salit IE, Abbey SE, Chung DG, Gray B, Kirsh JC, et al. Assessment of regional cerebral perfusion by 99Tcm-HMPAO SPECT in chronic fatigue syndrome. Nucl Med Commun 1992; 13:767-72.

8. Krotz D. MR spectroscopy and SPECT capture chronic fatigue. Diagn Imaging (San Franc) 1998; 20:23-5.

9. Landay AL, Jessop C, Lennette ET, Levy JA. Chronic fatigue syndrome: Clinical condition associated with immune activation. Lancet 1991; 338:707-12.

10. Lange G, DeLuca J, Maldjian JA, Lee H, Tiersky LA, Natelson BH. Brain MRI abnormalities exist in a subset of patients with chronic fatigue syndrome. J Neurol Sci 1999; 171:3-7.

11. Lindh G, Samuelson A, Hedlund KO, Evengard B, Lindquist L, Ehrnst A. No findings of enteroviruses in Swedish patients with chronic fatigue syndrome. Scand J Infect Dis 1996; 28:305-7.

12. MacHale SM. Cerebral perfusion in chronic fatigue syndrome and depression. Br J Psychiatry 2000; 176:550-6.

13. Natelson BH, Cohen JM, Brassloff I, Lee HJ. A controlled study of brain magnetic resonance imaging in patients with the chronic fatigue syndrome. J Neurol Sci 1993; 120:213-7.

14. Salit IE. Precipitating factors for the chronic fatigue syndrome. J Psychiatr Res 1997; 31:59-65.

15. Schwartz RB, Garada BM, Komaroff AL, Tice HM, Gleit M, Jolesz FA, et al. Detection of intracranial abnormalities in patients with chronic fatigue syndrome: Comparison of MR imaging and SPECT. AJR 1994; 162:935-41.

16. Scott LV, Medbak S, Dinan TG. Blunted adrenocorticotropin and cortisol responses to corticotropin-releasing hormone stimulation in chronic fatigue syndrome. Acta Psychiatr Scand 1998; 97:450-7.

17. Scott LV, Svec F, Dinan T. A preliminary study of dehydroepiandrosterone response to low-dose ACTH in chronic fatigue syndrome and in healthy subjects. Psychiatry Res 2000; 97:21-8.

18. Soetekouw PM, Wevers RA, Vreken P, Elving LD, Janssen AJ, van der Veen Y, et al. Normal carnitine levels in patients with chronic fatigue syndrome. Neth J Med 2000; 57:20-4.

19. Streeten DH, Thomas D, Bell DS. The roles of orthostatic hypotension, orthostatic tachycardia, and subnormal erythrocyte volume in the pathogenesis of the chronic fatigue syndrome. Am J Med Sci 2000; 320:1-8.

20. Tirelli U, Marotta G, Improta S, Pinto A. Immunological abnormalities in patients with chronic fatigue syndrome. Scand J Immunol 1994; 40:601-8.

21. Visser J, Graffelman W, Blauw B, Haspels I, Lentjes E, de Kloet ER, et al. LPS-induced IL-10 production in whole blood cultures from chronic fatigue syndrome patients is increased but supersensitive to inhibition by dexamethasone. J Neuroimmunol 2001; 119:343-9.

22. Vojdani A, Lapp CW. Interferon-induced proteins are elevated in blood samples of patients with chemically or virally induced chronic fatigue syndrome. Immunopharmacol Immunotoxicol 1999; 21:175-202.

Rejection Reason: Work data not extractable

1. Bruno RL, Creange SJ, Frick NM. Parallels between post-polio fatigue and chronic fatigue syndrome: A common pathophysiology. Am J Med 1998; 105:66S-73.

2. Sadlier M, Evans JR, Phillips C, Broad A. A preliminary study into the effectiveness of multi-convergent therapy in the treatment of heterogeneous patients with chronic fatigue syndrome. J CFS 2000; 7:93-101.

3. Soderberg S, Evengard B. Short-term group therapy for patients with chronic fatigue syndrome. Psychother Psychosom 2001; 70:108-11.

4. Theorell T, Blomkvist V, Lindh G, Evengard B. Critical life events, infections, and symptoms during the year preceding chronic fatigue syndrome (CFS): An examination of CFS patients and subjects with a nonspecific life crisis. Psychosom Med 1999; 61:304-10.