TASK FORCE SUPPLEMENT
FOR
FUNCTIONAL CAPACITY EVALUATION

A. GENERAL PRINCIPLES

Use of a Functional Capacity Evaluation (FCE) is to determine the ability of a patient to safely function within a work environment. It is expected that any and all health care providers that order FCE's, as well as the therapists who perform those evaluations, should adhere to unwavering and unbiased ethical standards as outlined by their state licensing board. The FCE should not be the sole tool to determine magnified illness behavior or malingering. There should be no bias as to the referral or payer source. The first obligation of the treating physicians and therapists involved in ordering and/or obtaining an FCE should be to the patient and not to the payer source.

Healthcare providers must recognize the complexity of both the physical and non-physical factors as they pertain to a patient's ability and/or willingness to return to work. These non-physical factors may affect results and validity of the FCE and therefore impact the final restriction recommendations.

B. EXPLANATION AND CONSENT FORM

An explanation consent form will be utilized (see Appendix A). When English is not the primary language of the patient, resources for interpretation need to be made available.

C. REFERRALS

Referrals for an FCE should be limited to any treating physician, as recognized by Division of Workers' Compensation rules of procedure. IME physician’s recommendations for an FCE is not mandatory. The patient’s treating physician retains the right to approve or disapprove the FCE, providing that reasons for disapproval be presented within 14 days of the IME request.

D. QUALIFICATIONS FOR PERSONNEL

The FCE should be performed by or under the direct on-site supervision of an occupational or physical therapist.
E. CONTRAINDICATIONS

With certain patients, the risks of functional capacity testing outweigh the potential benefits. It is important to have test administrators distinguish between the various levels of contraindications. To simplify this process, two sets of contraindications are established in accordance with the American College of Sports Medicine Guidelines for Exercise Test Administration and the American Heart Association.

1. Absolute Contraindications
   
   a. Recent complicated myocardial infarction (patient needs to be cleared by primary care physician or cardiologist)
   b. Unstable angina
   c. Congestive heart failure
   d. Uncontrolled ventricular dysrhythmia
   e. Aortic aneurysm
   f. Progressive neurological signs that would be exacerbated by testing
   g. Unhealed fracture
   h. Recent abdominal surgery - under 6 weeks
   i. Status post cervical fusion under 3 months and 4-6 months for lumbar fusion with documented solid fusion
   j. Status post-laminectomy - under 8 weeks
   k. All post-operative patients should be cleared for an FCE by the treating surgeon if still under his/her care
   l. Clinical evidence of current intoxication or drug usage that would present concerns regarding safety of test administration
   m. Resting diastolic blood pressure >120 mmHg or resting systolic blood pressure >200 mmHg

2. Relative Contraindications
   
   a. Uncontrolled metabolic disease (i.e., diabetes, thyrotoxicosis, myxedema)
   b. Chronic infectious disease (i.e., mononucleosis, hepatitis, AIDS, etc.)
   c. Pregnancy
   d. Acute injury exacerbation less than 6 weeks affecting performance
   e. Patients who are recommended for surgery prior to FCE should be cleared by treating surgeon
   f. Cauda Equine Syndrome
   g. Severe osteoporosis
   h. Other medical conditions presented to test administrator where there is a potential safety consideration

3. Referral to the treating physician for examination and stress testing are recommended for the following:

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   3/15/98 - This document is not an official part of the Colorado Workers’ Compensation Rules of Procedure.
a. When moderate exercise (40-60% VO₂ maximum) is expected to be obtained during testing and the patient has cardiovascular disease or has symptoms of cardiovascular disease (Table 2), or

b. When vigorous exercise (76% VO₂ maximum) is expected to be obtained during testing and a male is 40 or older, a female is 50 or older, or an individual has two or more coronary risk factors and/or symptoms (see Table 1-1 and Table 1-2 in Appendix C).

F. EVALUATION COMPONENTS

1. Referral Question: Each referral for FCE should be accompanied with a letter/form indicating specific referral questions. Please refer to Appendix B.

2. Intake Interviews: The intake interview should be done on site and not sent to the patient to fill out prior to the FCE. Components of the intake interview should include but not be limited to:

   a. Documentation of worker's current functional tolerances for sitting, standing, walking, lifting, and carrying.
   b. Health questionnaire or variation of current health screen including pain drawing and/or visual analog scale.
   c. Documentation of all medication as well as use of assisting or adaptive equipment.
   d. Patient education regarding components of the FCE and the need for full and consistent effort on the part of the patient.
   e. Signing of the FCE explanation/consent form (Appendix A).

3. Cardiovascular Profile: It is recommended that the American Heart Association screen be used for this evaluation (Appendix C).

4. Aerobic Capacity Assessment: Submaximal testing should be matched on mode selection closest to the job activity (i.e. treadmill, walk test, cycle ergometer, step test). Selection on test protocols should be able to match the MET level requirements of job as well as an assessment of overall aerobic capacity. Measurements should be expressed in 1) MET levels, 2) maximal attained heart rate, 3) maximal respiration rate, 4) time achieved on mode of testing and 5) assessment of aerobic capacity, verbally indicating whether patient "does" or "does not" have the aerobic capacity to perform work or ADL activities.
5. Musculoskeletal Screen: This should be done by a physician or therapist using appropriate physical medicine evaluation forms, and should be done at the time of the FCE or within 30 days prior to that evaluation. It is recommended that this screen include but not be limited to AROM, strength, and flexibility.

6. Non-Material handling Activities: These need to include both generic activities and job specific activities, such as key boarding, light tool use, etc. Refer to Appendix E for list of non-material handling activities.

7. Material Handling Activities: These should be job specific and generic. At least two types of lifting analysis should be performed. This should be a functional box lift protocol and a wall frame lift. Computerized equipment should not be solely used for lifting analysis. Isometric lifting on computerized equipment is endorsed for use only for baseline testing. Please refer to Appendix E for list on material handling activities to be tested.

8. Psychological Screening: An understanding of the physical, psychological, and socioeconomic factors are critical for a complete understanding of the injured worker. The use of psychological and psychosocial testing instruments may be an optional component of an FCE at the discretion of the treating physician and/or evaluation team.

9. Cumulative Trauma Disorder Evaluation Considerations: The use of Appendix D for Upper Extremity/Cumulative trauma type injuries should be utilized as a format for documenting work restrictions.

10. Maximum Voluntary Effort Measure: More than one criteria will be used to determine maximum voluntary effort. Recent studies indicate that the most accurate means of assessing degree of effort is the actual perception of the therapist who is doing the evaluation. The therapist's evaluation should be recorded in the final report and consistencies and inconsistencies, if any, should be noted in detail. Other indicators of inconsistency/magnified illness behavior may include but are not limited to:

   a. Evaluation of non-organic signs
   b. Hand dynamometer maximum grip strength
   c. Rapid alternating grip strength testing
   d. Dynamic and static strength evaluation
   e. Push-pull dynamometer.

Inconsistencies should be discussed directly with the patient and this should be a "gentle confrontation".
tests should then be repeated one time during the same session to see if there is any improvement in consistency. If there is not improvement in effort, the patient should be returned to the physician for assignment of restrictions.

11. Job Description/Analysis: A job description should be obtained from the employee, the employer, and vocational rehabilitation specialist, if available. If the employee and the employer's job description significantly differ, then it is recommended that a job analysis be performed by an unbiased party. The use of video equipment, when appropriate and allowed by the employer, may be helpful, especially with repetitive task-type jobs. The *Dictionary of Occupational Titles* should not be relied upon to give an accurate description of the majority of jobs. This publication should only be used as a last resort.

12. Job Specific Sustained Activity Tolerances: When evaluating an individual's ability to perform a sustained activity e.g., sit, stand, walk, keyboard work that each activity should be tested continuously for 120 minutes. If the patient can continue with this activity for 120 minutes without significant increase in objective findings, then the patient should be recommended as unrestricted in that activity.

13. Length of Evaluation: A 5.5 hour evaluation is reasonable in most cases and this may be extended to seven or eight hours in some instances. The patient should be allowed a one hour lunch break. If a two day evaluation is required, then the reason for this evaluation should be specifically directed to the payer before reimbursement may be approved.

14. Computerized Testing Equipment: Current literature does not support the use of Isomachine testing equipment in determining material handling activities and therefore is not advocated. It may be somewhat helpful in assessing the degree and quality of effort, but the results are not job-specific and therefore cannot, and should not, be used to determine specific restrictions. It is also recommended that these tests not be billed separately, but should be billed at the hourly rate for FCEs.

15. Magnified Illness Behavior and Malingering: The FCE cannot be used as a sole tool to determine malingering. Malingering is a conscious effort on the patient's part to deceive the clinician. Magnified illness behavior is a very complex reaction on the patient's part that includes fear of re-injury as well as many other non-physical and psychological factors. The FCE is one piece of information
that is used to reinforce the clinician's perspective. If the FCE is not valid, then the treating physician should assign restrictions that he or she feels are appropriate. The FCE, if invalid, becomes a test of "minimum effort" and not maximum effort.

16. Communication With Patient: A member of the FCE team should contact the patient the next business day following the evaluation and note comments regarding symptomatic response to activity. Another option would be to have the patient call the therapist.

17. Report Format: Appendix F refers to a recommended report format to be used when communicating with physicians, insurance representatives, attorneys, vocational specialists, case manager employers, employees or other parties involved in workers' compensation cases.