Clinical Practice Guideline: **Physical Performance Testing or Measurement**

Date of Implementation: **November 15, 2018**

Product: **Specialty**

Related Policies:
CPG 135: Physical Therapy Medical Policy
CPG 155: Occupational Therapy Medical Policy
CPG 278: Chiropractic Medical Policy

Under many benefit plans, coverage for Functional Capacity Evaluation (FCE) is subject to the terms, conditions and limitations of the applicable benefit plan's Short Term Rehabilitative Therapy benefit and schedule of copayments. Coverage for return-to-work (RTW) services varies across plans. Refer to the customer's benefit plan document for coverage details. The Functional Capacity Evaluation section of this guideline is for those benefit plans that include coverage for RTW services.

If coverage for RTW services is available, the following conditions of coverage apply.

GUIDELINES

Criteria for specific physical performance testing or measurement are detailed here:

Medically Necessary

Functional Capacity Evaluation (FCE) is considered medically necessary when **ALL of the following criteria are met**:

- A written referral (from physician, carrier, or employer) is forwarded to the evaluator with the purpose of the FCE explicitly stated (i.e., clearly defined goals to guide test selection in the referral document and reflects one or more of the applications of an FCE).
- The evaluation is designed to determine return to work capabilities following a defined injury or following a medically necessary rehabilitation.
- The evaluation is structured to answer a specific question or questions about the worker's performance abilities and is addressed in the evaluation report.
- Reported results must be compared to meaningful standardized norms.
- The FCE must be performed by a qualified provider/evaluator (see requirements below).
    - Prior to the FCE, the qualified evaluator:
        - Obtains a subjective pain assessment with self-reported effect on functional abilities and activities of daily living;
        - Performs a screening examination; and
        - Obtains informed consent.

The FCE is typically not indicated prior to three months post-injury, unless there is a significant documented change in the individual's status which justifies earlier performance. FCEs are limited to 2-4 hours per date of service and one evaluation every 12 months if necessary. If a FCE is necessary within 12 months, cases will be reviewed individually based on individual client/patient objective data compared to standardized norms. A FCE may extend beyond 4 hours or two days to further quantify the ability of the client to sustain the work tasks over a regular work schedule. The length of the FCE is dependent upon:

- The complexity of the illness or injury and the resulting impairments;
- The availability of clearly defined work-related physical demands.

Not Medically Necessary

Return to work/reintegration or vocational programs including work hardening programs are considered vocational training, rather than treatment of illness or injury, and are considered not medically necessary.

Unproven

Quantitative (e.g., isokinetic) muscle testing devices (e.g., MedX, Isostation B-200, Cybex II, Kin-Com, and Biodex) for the assessment of muscle strength are considered unproven.

CPT® Codes and Descriptions

CPT® Code	CPT® Code Description
97750	Physical performance test or measurement (e.g., musculoskeletal, functional capacity), with written report, each 15 minutes
97545*	Work hardening/conditioning; initial 2 hours
97546*	Work hardening/conditioning; each additional hour (List separately in addition to code for primary procedure)

*Considered educational or training in nature/not medically necessary

DESCRIPTION

Physical testing or measurement describes tests and measurements performed by a physician or other qualified health care professional. A physical performance test or measurement may be reasonable and necessary for patients with neurological or musculoskeletal conditions when there is a need to evaluate the ability to perform specific tasks. It may include a number of multi-varied tests and measurements of physical performance of a select area or number of areas. These services are not to be used in lieu of evaluation or re-evaluation services. Testing may be manual and/or performed using equipment. Some examples of testing that are typically reported with CPT® code 97750 include: isokinetic testing for assessing the combination of strength, endurance and power

while performing certain movements with the trunk or extremities, functional capacity testing, and specific test and measures related to balance such as the timed up-and-go test, and 6-minute walk test, with a computerized report of the patient's oxygen saturation levels with increasing stress levels, performed under a PT or OT plan of care on pulmonary rehabilitation patients. Standardized testing batteries may be incorporated into a physical performance test. It would not be appropriate to report a code from the 95851-95852 series in addition to 97750. It is not medically reasonable and necessary to bill this service as part of a routine assessment/evaluation of rehabilitation services. Direct one-on-one patient contact is required.

Functional Capacity Evaluation

A Functional Capacity Evaluation (FCE) is a method commonly used in work rehabilitation for assessing the residual capacity of the injured worker for return to work. The conceptual basis of the FCE is an evaluation of the person's potential to perform the physical demands of work in a safe environment. The FCE is based on the observation of the performance of the physical demands of work. FCEs are used as an adjunct method of making judgments of performance potential and readiness for work following a musculoskeletal injury. The FCE portion of this guideline is to be used when care management is rendered for individuals with musculoskeletal conditions that are medically stable yet demonstrate limitation of function and disability that impairs their ability to work at full capacity.

FCEs provide an objective measurement system to evaluate activity and activity limitations with the specific purpose of matching physical abilities with essential and critical job demands. FCEs also assist with identifying job modifications to enhance worker safety and delineating functional capacities in case of litigation, impairment, and disability. The focus of the FCE is on the job demands and the performance of the job demands. Historically, return-to-work decisions were based upon diagnoses and prognoses of physicians but did not include objective work function information. Practitioners whose core competencies include functional evaluation began to develop relative functional tests. These tests examined and evaluated the ability to perform physical work functions as described in the Selected Characteristics of Occupations as Defined in the Revised Dictionary of Occupational Titles. Functional examination/evaluation, combined with diagnoses and prognoses by trained clinicians has become an accepted tool for safely returning individuals to employment.

Quantitative Muscle Testing Devices

Quantitative muscle testing devices have been used to quantify muscle strength and an individual's response to rehabilitation and therapy. Manual muscle testing is most performed and is used to identify differences in strength between muscles, using qualitative grading to describe the strength of muscles. Computerized technologies have been proposed to quantify muscle strength. The MedX extension machine (MEDX Corp,

Ocala, FL) and Isostation B200 (Isotechnologies, Inc., Hillsborough, NC) are two devices that have been designed for spinal muscle testing, and to improve spinal muscle strength through pelvic stabilization and isolation of specific groups of lumbar muscles. However, evidence in the peer-reviewed scientific literature does not show that use of these devices for muscle testing demonstrates better diagnostic utility than the established method of manual muscle testing. Examples of these devices are described below:

MedX

The MedX lumbar/cervical extension machine is a device that can provide both functional muscle testing of the spine and spinal therapy. It provides resistance over a full range of isolated lumbar motion (72 degrees) or over a preselected limited range. The machine is capable of setting isometric test points every three degrees within an individual's range of motion. During the test, a computer software system plots the individual's actual range of motion and strength in comparison to that of age and gender-matched norms. In exercise mode, the compound weight stack can provide resistance from 10–400-foot pounds in increments of one foot pound. It is proposed that use of this device can specifically test the strength of the lumbar spine, and, through rehabilitation, the device can strengthen muscles. The rehabilitation program typically lasts 12 weeks, with computerized strength and motion testing performed every four weeks.

Isostation B-200

The Isostation B-200 lumbar dynamometer is a device that can measure position, torque, and velocity. It allows measurement of increasing fatigue by measuring the reduction speed in performance and noting increasing motion as muscle substitution becomes necessary. The device has been recommended for use in the treatment of persons with low back pain.

Isokinetic Testing Devices

Other types of quantitative muscle testing and strengthening devices, referred to as isokinetic testing devices, measure muscle strength by applying a constant resistance over a range of motion and speed. It is a rehabilitative exercise device intended for medical purposes to measure, evaluate, and increase the strength of muscles and the range of motion of joints. Based on testing results, strengthening exercises may be recommended. Isokinetic exercise is exercise performed using a specialized apparatus that controls the speed of movement within the range of motion. The exercise device provides variable resistance to movement but allows movement at a constant speed. The device registers the force applied to it by the user and offers the same amount of force as resistance. Cybex, Kin-Com, and Biodex are machines that provide isokinetic testing and muscle strengthening exercise. Evidence in the published scientific literature demonstrating the utility of these specific devices for muscle testing or strengthening therapy or standard procedures and exercise was not found. However, in the context of return to play testing post ACL reconstruction, isokinetic testing is highly recommended as part of a battery of tests. Per Wilk et al. (2023), the current re-injury rates and less than optimal return to sport percentages seen following

anterior cruciate ligament surgery highlights the need for greater focus on what tests and methods are used to make these critical decisions. Isokinetic testing remains the best single method to objectively determine dynamic muscle strength, power, rate of force development and endurance. These factors make it well-suited to play a crucial role in influencing the appropriate patient progression through a rehabilitation program and assisting in determining return to play readiness following injury or surgery.

BACKGROUND

Functional Capacity Evaluation

FCE is a comprehensive, objective testing of a person's abilities in work related functional tasks. At times, it is used as a preliminary test to determine functional status and capabilities prior to beginning a Work Hardening Program.

Work Hardening is a highly specialized rehabilitation program. It commonly begins following traditional rehabilitation therapies. Its goal is to simulate workplace activities and surroundings in a monitored environment to enable the patient to return to work. These programs may be developed and carried out by an occupational therapist and/or a physical therapist. The goal is to create an environment in which returning workers can rebuild psychological self-confidence and physical reconditioning by imitating their customary work routine. Work hardening programs refer to physical conditioning programs for injured workers who are out of work, or who are working at less than full capacity. Work hardening is a highly specialized rehabilitation program that transitions the patient from standard rehabilitation to return to work by simulating workplace activities and surroundings in a monitored environment. A wide range of programs conducted by a number of different health disciplines have been reported in the professional and scientific literature. In general, work hardening programs include a systematic program of gradually progressive, work-related activities performed with proper body mechanics, with the goal of physically and psychologically reconditioning the patient in order to facilitate return to full employment.

An FCE may be indicated for the assessment of the worker's capacity to meet the physical demands of specific duties when other sources do not provide this information. It is noted that a work trial is often the most valid test of a worker's capacity.

An FCE may be used as a source of information for the development of a RTW program/plan at the point of maximal medical improvement when:

- Treatment progress has reached a plateau/medically stationary;
- Discrepancy between subjective complaints and objective findings;
- Difficulty returning to gainful employment;
- Physical limitations and/or functional impairments hinder performance of regular work demands;
- Vocational planning, job placement and/or medico legal case settlement.

The FCE should be approached on a case-by-case basis. Comprehensive functional activities related to work duties should be observed and measured during the evaluation, keeping in mind that isometric or isokinetic tests of extremity or trunk torque are not sufficient, as these values mostly correlate poorly with performance of functional activities. Safety and prevention of further injury should be a main consideration and based on the following principles:

- Communicate risks and contraindications
- Professional judgment is used to determine a safe maximal level for each test component and FCE should only focus on critical job demands
- Cardiovascular system monitoring with modification FCE accordingly if changes in heart rate, blood pressure or respiratory rate change excessively
- Standardized criteria for ceasing a test must be established in advance, including but not limited to:
    - Pain
    - Nausea
    - Dizziness
    - Blurred vision
    - Radicular symptoms
    - Continued use of unsafe body mechanics

Expected outcomes of an FCE include:

- Making recommendations about body mechanics, movements, techniques, and modifications, such as safe manual handling and other actions which facilitate return to work; and
- Specifying proposed return to work duties or different duties.

The FCE should be performed in settings that **meet all of the following**:

- The equipment represents an appropriate reflection of work duties i.e., relevant tests, normative standards, acceptable reliability and validity.
- The environment and space for the equipment meet work and equipment specifications.
- The evaluator understands the equipment used during the FCE (i.e., training completed if necessary).
- Appropriate maintenance and calibration of the equipment is documented and available for review.
- There are appropriate planning, facilities and equipment to respond to emergencies.

Evaluator Qualifications

The FCE shall be performed in its entirety by a physical or occupational therapist currently holding a valid license, or other licensed provider qualified by scope of practice. The FCE should be performed by evaluators who have education, training, and competencies.

Competencies must be evident by certification, where required specific to the FCE system that is being used, and by experience (having satisfactorily performed a minimum of five (5) FCEs. Proof of competencies may include a review by the Credentialing and Risk Management Committee of a sampling of previously completed FCE reports.

Quantitative Muscle Testing Devices

These devices are utilized in rehabilitation settings as a therapeutic exercise and evaluation tool. MedX and Isostation B-200 are devices used for spinal conditions. There are specific protocols that are followed for the specific machines utilized. Testing is completed to determine improvements over time. Isokinetic devices, such as the Biodex or Kin-Com, are used as a form of therapeutic exercise. Typically, these devices are used for the knee joint for strengthening of the quadriceps and hamstrings. However, other attachments are available for the upper extremity joints, and hip and ankle joints. Use of these devices for therapeutic exercise would be considered a form of therapeutic exercise and use of the CPT® codes specified in this guideline would not be appropriate. Testing protocols are utilized to determine improvements and/or muscle strength ratios. Comprehensive reports are produced demonstrating torques of muscles tested at the various speeds of movement. Muscle strength ratios are also reported. CPT® codes stated in this guideline refer to use of these devices for testing and evaluation. Rehabilitation facility use of these devices have dwindled over the years given the cost and space required for use. However, use within the research environment continues with focus on the knee joint. Research published focuses on the relationship of quadriceps and hamstrings strength, quad strength, and rate of force development with functional improvement, return to sport, and re-injury, with a call to action to increase isokinetic testing clinically.

DOCUMENTATION GUIDELINES

As code 97750 is a time-based code, the test or measurement procedure as well as the time spent analyzing and interpreting the results in the presence of the patient are elements of the visit that must be documented. The time element determines the number of units to be reported for this procedure. Three (3) time elements must be documented to correctly report code 97750:

- Total time spent with the patient in providing the test and measurement, including the time spent preparing the patient for the test and measurement procedure;
- The time spent performing the selected protocol; and
- The time spent with the patient in providing any post-testing instructions.

The elements of documentation that support the reporting of code 97750, include documentation of the testing elements and/or protocols, documentation of problem requiring the test and the specific test performed, separate measurement report, including any graphic reports and interpretation of the data collected, and impact on the patient's plan of care (i.e., discharge, return to sport or activities of daily living [ADL], or modification

of treatment). Time spent in direct contact with the patient determines the number of units to be reported for this procedure.

Functional Capacity Evaluation

Prior to the FCE, a written referral (from physician, carrier, or employer) must be forwarded to the evaluator with the purpose of the FCE explicitly stated such as clearly defined goals to guide test selection in the referral document and reflects one or more of the applications of an FCE. The referral source and evaluator should access and review any relevant medical records, work related duties, prior attempts to return to work or FCEs (if occurred) and reason for failure, and identify the RTW goals and potential options in advance. Consideration of any comorbidities and their influence on the FCE and return to work is imperative.

Results should be relevant to and comparable with the physical demands of a job when identified. Written reports are required and must be submitted with the following information:

- Patient demographics including work history;
- Indication for evaluation;
- Type of evaluation performed;
- Raw and tabulated data;
- Normative data values;
  - Test results should be compared with normative data for the FCE employed;
- Narrative coversheet at the beginning of the document describing the results of the evaluation and recommendations.

Where relevant, the detailed report should include the following additional areas:

- Results of subjective interview;
- Results of self-reported measures of disability;
- Results of physical examination/screening;
- Behavioral aspects including pain behavior and effort;
- Pace of work;
- Clinical observations including body mechanics;
- Functional abilities for the assessed physical demands.

EVIDENCE REVIEW

There is limited evidence in the published peer-reviewed scientific literature evaluating the use of quantitative muscle testing devices. These devices have not been shown to be equally effective as other standard exercise equipment utilized in rehabilitation programs, nor is there sufficient evidence to suggest that use of quantitative muscle testing devices improves clinical health outcomes when compared to standard manual muscle testing.

PRACTITIONER SCOPE AND TRAINING

Practitioners should practice only in the areas in which they are competent based on their education, training, and experience. Levels of education, experience, and proficiency may vary among individual practitioners. It is ethically and legally incumbent on a practitioner to determine where they have the knowledge and skills necessary to perform such services and whether the services are within their scope of practice.

It is best practice for the practitioner to appropriately render services to a member only if they are trained, equally skilled, and adequately competent to deliver a service compared to others trained to perform the same procedure. If the service would be most competently delivered by another health care practitioner who has more skill and training, it would be best practice to refer the member to the more expert practitioner.

Best practice can be defined as a clinical, scientific, or professional technique, method, or process that is typically evidence-based and consensus driven and is recognized by a majority of professionals in a particular field as more effective at delivering a particular outcome than any other practice (Joint Commission International Accreditation Standards for Hospitals, 2020).

Depending on the practitioner's scope of practice, training, and experience, a member's condition and/or symptoms during examination or the course of treatment may indicate the need for referral to another practitioner or even emergency care. In such cases it is prudent for the practitioner to refer the member for appropriate co-management (e.g., to their primary care physician) or if immediate emergency care is warranted, to contact 911 as appropriate. See the *Managing Medical Emergencies (CPG 159 – S)* policy for information.

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