



# ***ARE FCEs EFFECTIVE FOR PATIENTS WITH CHRONIC PAIN?***

***Eric Ahonen, ATC, LAT, CFCE***

If you have ever worked in Industrial Rehabilitation, you are well aware of the unique challenges in returning an injured worker to their job when they have chronic pain. This patient population requires great attention to psychosocial factors that may influence their perceived pain. The worst thing to do when working with these patients is to treat them similar to an acute injury patient and ignore the psychosocial factors at play.

Chronic pain is typically defined as pain that persists for greater than three months. Commonly, these patients continue to experience pain, even after the underlying cause has been treated appropriately. This can be a very frustrating and difficult scenario to manage because common logic would indicate that the patient should begin to feel relief of their pain symptoms once these underlying issues have been addressed.

So, what should you do when the typical biomedical approach fails? According to Michael Feuerstein, it is important to understand that “in addition to the nociceptive response from injured tissues, a patient’s perception of pain and behavioral response may be influenced by numerous biobehavioral factors”. Feuerstein goes on to define biobehavioral factors as “a set of psychological, environmental, and psychophysiological processes that can attenuate or exacerbate the discrepancies among pathologies, reports of pain, and function”. This multilevel approach can drastically change the way we perceive and treat patients with chronic pain.





## **Determining Effort in a FCE**

When performing FCEs, it is essential to determine a patient's maximum functional abilities as they relate to work and also support whether this demonstrated ability is a reliable measure of their "true" max ability. Most FCEs use a battery of tests to determine whether the client did or did not put forth full effort throughout the evaluation. Some of the most common methods used include: CoV measures for grip and pinch testing, bell shaped curve during 5-span grip testing, max 3 trial vs. Rapid Exchange Grip Testing, biomechanical consistencies demonstrated throughout the test, ROM/MMT consistencies, material handling consistencies, psychometric testing, Waddell Signs, monitoring heart rate, physiological responses to activity and various pain scales.



## The Downward Spiral

Often when a patient demonstrates submaximal and self-limiting behaviors in an FCE, it is assumed that the patient is a malingerer or seeking secondary gain. This is not always the case and may be a sign that the patient requires further testing and treatment to address the underlying psychosocial factors. The most common of these factors include high fear-avoidance behaviors and low self-efficacy expectations. These patients often deal with depression issues that reduce their willingness to engage in ADLs. As a result of avoiding these activities, the patient not only becomes more deconditioned, but also develop mental doubt in their ability to perform these activities safely. As a result, chronic pain patients avoid the very daily activities that may help them to successfully return to work. This avoidance contributes to the patient growing weaker and less confident in their abilities. These habits continue an ongoing cycle of depression, self-doubt, fear and avoidance.

A client with a high fear-avoidance will likely also limit their effort during an FCE because they often perceive that the activity will result in increased pain. It is commonly this fear of pain, more than the pain itself that limits these clients from putting forth full effort. Patients who suffer from chronic pain very often avoid physical activity because they believe it will increase their pain. Although it may not cause pain at the time, they have an expectation of increased pain following the activity. They also have very poor confidence in their ability to perform the necessary activities to safely return to work.

## What's the Verdict?

In *Stup v. Unum Life Insurance Company of America*, a Functional Capacity Evaluation was performed on a patient who was suffering from lupus and fibromyalgia. The client was unable to complete the FCE, secondary to reports of increased pain. The FCE only lasted 2.5 hours and the evaluator determined that the client was able to perform within the sedentary physical demand category. However, they also cited many inconsistencies and stated that "it would not be prudent to make recommendations regarding specific job duties that this client can or cannot perform due to a lack of consistent and true information". Even though the FCE was never fully completed, a UNUM doctor determined that the FCE was "very thorough and valid" and based his entire report on the evaluation. He stated that "without inconsistencies claimant may well be able to function at a higher work level such as light". In *Brown v. Continental Cas. Co.*, a Functional Capacity Evaluation was performed on someone who suffered from fibromyalgia. The evaluator determined that Ms. Brown could work in the light physical demand category on an occasional basis. Once again, this FCE only lasted "a few hours" and Ms. Brown reports that she needed a day to rest and recover after the evaluation. In *Ballinger v. Eaton Corp.*, 212 F. Supp. 2d 1086 (S.D. Iowa 2002), a Functional Capacity Evaluation was performed on someone with upper and lower back pain. This was another case where the FCE lasted only 2 hours. Because of the brevity of the information within the FCE, it was easily

outweighed by the medical evidence provided by Mr. Ballinger and his physician.

In all of these cases, the FCEs only lasted 2-2.5 hours before being terminated due to the client being unable to tolerate the entire test and, in the first case, the evaluator "agreed that testing should not continue". It is interesting that there seems to be no reference to testing associated with reliability of pain for these clients that would help to support or dispute their complaints of pain, when pain seems to be the main limiting factor for functional activities. Eventually, the court ruled in favor of the plaintiffs in these cases and the FCE carried little to no weight because it was not performed in a way that was conducive to making good clinical decisions regarding these patients' ability or inability to return to work.



## Making Good Decisions

As an FCE evaluator, it is your responsibility to perform adequate testing in order to make good clinical decisions on the patient's ability to perform a variety of work related activities. This challenge is magnified when dealing with chronic pain patients that are primarily limited in their functional abilities due to their subjective reports. When a client reports increases in pain symptoms, it is the responsibility of the evaluator to make a decision as to whether the subjective reports of increased pain should be considered when making decisions on the client's functional abilities. The main way that the evaluator will determine this is through psychometric testing and a thorough interview with the patient.

The interview process is a key component to performing an effective FCE for patients with chronic pain. Do not rush through the interview, instead use this as a time to ask targeted questions of the patient that will help to give you an idea of the factors that may be contributing to their ongoing pain and disability. If the client is complaining about their job or family, they may not be motivated to return to work and that stress may play a role on prolonging their pain symptoms. Another scenario may be someone who has high fear of pain and high levels of perceived disability. These patients typically suffer from depression and anxiety, which can lead to sleep disturbances and abuse of medications that can further complicate the situation. By identifying these factors at the beginning of your evaluation, you



can better understand the underlying issues that the patient is dealing with and leverage this information to make better decisions on abilities and level of effort.

A kinesiophysical FCE approach can also help significantly with this issue. Through this approach, you can identify whether or not a client put forth maximum effort during testing based on objective data that the evaluator may observe. If a task is terminated by the patient due to psychosocial reasons, they should display one or more objective findings to support that they are under some sort of stress and unable to proceed with the current activity. These findings may include a change in their mechanics, true pain behavior (such as grimacing, grunting, holding, crying, etc...) and/or increased heart rate as a physiological response to the pain. If none of these three objective criteria are observed by the evaluator, the current activity should continue to progress until the evaluator has objective information to support that this is the client's max safe ability or the client self-terminates.

## Closing Time

FCEs can be an effective tool to assist in determining a patient's ability to return to work when dealing with chronic pain. They are not intended as a standalone tool and should be used in conjunction with other medical records to create a clear overall picture of the client's current abilities and deficits. The FCE should be thorough enough to test all job related demands and will typically last a minimum of 4 hours. This will give the evaluator enough time to interview the patient and determine what perceived disabilities may exist, including the underlying factors. The evaluator will then perform objective testing to support or dispute these self-reported limitations. The evaluator also needs to observe the patient perform a variety of functional activities to make good clinical decisions on their ability to perform these tasks in a competitive work environment. Just because the patient was able to complete something one time, does not automatically mean that they are able to perform that task safely at work. This is where the experience of the FCE evaluator, along with other medical records are necessary to create a well written document that will be credible and stand up in the court of law.

## Looking to Get Started or Advance your Career?

OccuPro offers FCE training and software for medical professionals. We teach our customers how to perform these objective tests in a way that gives them a solid foundation to ensure high inter-rater and intra-rater reliability. We also provide the freedom and confidence to modify these testing protocol's to better match any job that is being tested, which leads to a more content valid FCE. OccuPro is currently working with the AOTA and APTA to update their FCE guidelines. We have trained thousands of clinicians from across the world and would love the opportunity to work with you as well!

## References

*Ballinger v. Eaton Corp., 212 F. Supp. 2d 1086 (S.D. Iowa 2002), No. 1-00-CV-90075 (United States District Court, S.D. Iowa, Western Division August 5, 2002).*

*Brown v. Continental Cas. Co., No. Civ.A. 99-6124 (United States District Court, E.D. Pennsylvania September 10, 2004).*

*Denning, D. J. (2014). Functional Capacity Evaluations and Psychosocial Screening Tools. The Association of Chartered Physiotherapists in Occupational Health and Ergonomics.*

*M. A. Trippolini, P. U. (2014). Reliability of Clinician Rated Physical Effort Determination During Functional Capacity Evaluation in Patients with Chronic Musculoskeletal Pain. Journal of Occupational Rehabilitation, 361-369.*

*Michael E. Geisser, M. E. (December, 2003). Psychosocial Factors and Functional Capacity Evaluation Among Persons With Chronic Pain. Journal of Occupational Rehabilitation, 259-276.*

*Michael Feuerstein, P. B. (1995). Biobehavioral Factors Affecting Pain and Disability in Low Back Pain: Mechanisms and Assessment. Physical Therapy, 267-280.*

*Michiel F. Reneman, H. R. (June, 2007). Are Pain Intensity and Pain Related Fear Related to Functional Capacity Evaluation Performances of Patients with Chronic Low Back Pain? Journal of Occupational Rehabilitation, 247-258.*

*Michiel F. Reneman, J. H. (June, 2008). General and Specific Self-efficacy Reports of Patients with Chronic Low Back Pain: Are They Related to Performances in a Functional Capacity Evaluation? Journal of Occupational Rehabilitation, 183-189.*

*Stup v. UNUM Life Insurance Company of America, No. 03-2526 (United States Court of Appeals, Fourth Circuit December 1, 2004).*