

## **Neurofeedback Info Packet**

### **What is Neurofeedback?**

Neurofeedback is a form of Biofeedback, and to understand how it works, it's best to start with defining Biofeedback. Biofeedback is a process by which technology measures and mirrors - or 'feeds-back' physiological information to the participant. When given access to our physiological processes, our brains can learn to control them through basic learning.

Biofeedback uses technology to give us access to physiological information that is automatic, or otherwise hard to access. Body temperature is an automatic phenomenon that greatly influences our health and how we feel. However, it is very hard to 'know' what your body temperature is at any given moment. Thermometers are bio-technological instruments that provide access to, or feed-back, physiological information on body temperature. If given fast, accurate, and consistent information on our body temperature, we can learn to voluntarily or intentionally change it. Heart-rate, blood pressure, and breathing are all physiological processes that can be voluntarily altered or controlled with Biofeedback.

### **How does Neurofeedback work?**

Neurofeedback uses small sensors on the scalp to measure and feedback information on the electroencephalogram (EEG), or 'brainwaves.' That is why Neurofeedback is often referred to as EEG-Biofeedback or brainwave-training. By having real-time access to their EEG, clients can learn how to modulate or alter particular brainwave rhythms, and literally change how their brains operate.

The process of Neurofeedback is pretty straightforward. Clients sit comfortably in a chair in their therapist's office with a few small sensors on their head. The client's EEG (brainwaves) is measured by computer software. Individual goals are chosen in the software that correlate with clients' symptoms and goals. Clients receive real-time feedback on their EEG through games (visual feedback) and/or music (auditory feedback). The games or music change as the client's EEG changes, allowing clients to literally train their brains into more flexible or desirable states.

Once our bodies learn a new skill, repeating it with practice becomes more natural and automatic. How often do we need to *think* about walking, talking, or driving? While we can think about and voluntarily control what our feet do while driving, once we learn how to drive, we don't really need to think about it. When we teach and train clients' brains to

better regulate their own activity, they don't have to *try* or *think* about how to do it. It happens automatically.

Every aspect of Neurofeedback training is tailored to the individual client. The specific scalp sites (corresponding to different brain regions and functions) and brainwave rhythms chosen to train depend on the specific goals and challenges of the client. Quantitative or statistical analysis of a client's own EEG can also be a direct way of identifying abnormalities and specific Neurofeedback protocols.

### **Why do we use Neurofeedback?**

Put simply, we use Neurofeedback because it works. There is over 40 years of research showing Neurofeedback's efficacy in treating our clients' most common complaints, such as anxiety, mood disorders, developmental disorders, and ADHD (see ISNR.org). Having access to our clients' EEG helps us find physiological sources of their struggles (bio-markers of mental illness) and allows us to directly train their brains to change how they function. MICA is proud to have multiple BCIA Certified Neurotherapists on staff, and be one of the largest Neurotherapy practices in Maryland.

We often find that combining Neurofeedback with talk-therapy to be more helpful than talk-therapy alone. Cognitive Behavioral Therapy (CBT) is a wonderful and widely used approach or style of psychotherapy that teaches clients strategies to combat negative thinking. CBT is helpful - we use CBT strategies all the time in talk-therapy with clients. One problem with CBT is that people are not always capable of utilizing CBT strategies when they are needed most. Common complaints include: "I know that my thoughts are irrational, but I still *feel* anxious," or "when he's upset and I calmly remind him to use one of his coping skills, he just screams at me." By training the brain how to better alter and regulate itself through Neurofeedback, we find that problems are less intense to begin with and recovery time to feeling normal is greatly reduced.

Neurofeedback is not only effective, it helps make mental health treatment engaging. It can be hard to motivate some clients - especially younger clients to engage in therapy. But what if *therapy was fun*? Neurofeedback is actually enjoyable. Clients train their brains to better operate while playing a video game or watching a movie.

Another reason we use Neurofeedback is that it can be hard to measure progress in therapy. Ratings scales and tracking symptoms can only go so far. Neurofeedback uses real-time EEG biodata. We can literally measure brainwave changes second-by-second, session-by-session, or month-by-month.

Finally, we use Neurofeedback because it's safe and non-invasive. The sensors simply measure the activity already happening in the brain, and at no time is any electrical stimulation or 'shock' going to a client's head. Neurofeedback has many useful applications and there are very few cases where it is contraindicated.

**Side Effects:**

Although no significant side effects have been observed from Neurofeedback, it may be possible to experience skin irritation from the prep-gel and cleaning process, and transient, mild headaches, fatigue or irritability following treatment. These negative effects tend to lessen over the course of 24 hours. It is also possible that as your brain changes through Neurofeedback, that your medications may need to be altered. It is therefore very important to actively communicate with your prescribing physician before and during your Neurofeedback treatment.

**Fees and Insurance:**

Biofeedback is still considered "Experimental" by most insurance companies, including CareFirst BCBS and Cigna/Evernorth. Some plans that do cover Biofeedback only do so for certain medical conditions that we as psychotherapists are not licensed to treat, such as migraines or seizure disorders. It can also be hard to get any straight or consistent answers on coverage from insurance companies. Therefore the Neurofeedback portion of your sessions may be an out-of-pocket expense even if we accept your insurance. Below are a list of the CPT codes dealing with Biofeedback/Neurofeedback and the out-of-pocket fees associated with each code:

90901: Biofeedback of any Modality (untimed)	-	\$50
90875: 20-30-Minute Psycho-Physio Therapy with Biofeedback	-	\$125
90876: 45-Minute Psycho-Physio Therapy with Biofeedback	-	\$175
60-Minute Neurofeedback (No CPT Code)	- - -	\$225
10, 90876 (45-Minute Sessions) Bundle Price	- - -	\$1550
10, 60-Minute Neurofeedback Sessions Bundle Price	- - -	\$1750

If we accept your insurance, we will submit your first claim(s) and wait to see if Neurofeedback/Biofeedback is covered by your plan. We will continue to submit claims so long as your plan covers and reimburses us. Unfortunately we have not had success appealing claim denials and will not submit appeals if our claims are denied by your insurance company. If we do not participate with your insurance or if your insurance denies our claims, we will have to bill you out-of-pocket.



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We also offer a prepaid, 10-session bundle of 90876 sessions for \$1550, or 10-session bundles of 60-Minute Neurofeedback sessions for \$1750. Please note that this deal is for 10 future sessions, can not be used for past sessions, and is non-refundable.

Length of treatment depends on the severity and type of symptoms, and unique goals of the individual. Changes in mood, energy, and cognitive capacity are generally noticed within the first 10 sessions, and it is not uncommon to experience some changes, especially in sleep, after the first 3-5 sessions. We will discuss our best-guess estimation of treatment length after our assessment.

**Discontinuing Neurofeedback:**

MICA's Neurotherapists utilize Neurofeedback training as a therapeutic technique, often in conjunction with talk-therapy. Clients can start or discontinue Neurofeedback training at any time and for any reason and remain a psychotherapy client of MICA.

## **Preparing for Neurofeedback**

As you consider and prepare for your Neurofeedback training remember the following:

**Relax.** The first and most important thing to remember when preparing for Neurofeedback training is to relax. Remember that you don't have to cognitively control or 'figure out' how to change your brainwaves – your brain will figure it out by itself. However, there are some things that can negatively affect your training. Movement and muscle tension can interfere with the sensors measuring a clean signal of your EEG. Too much movement can cause the sensors to move or even fall off of your head. The more you can relax your mind and body, the better your brain can learn from accurate feedback.

**There are no Bad Brainwaves.** And there are no good brainwaves either. Our brains produce all speeds of brainwaves all the time in order to do lots of things all at the same time. Problems happen when our brains get 'stuck' producing too many slow or fast brainwave rhythms when they are not required.

**What are my Goals?** Neurofeedback training requires your intention. Whether your intentions are to better relax, focus, or sleep, reminding yourself of what your goals are will help Neurofeedback be successful. Also, try to frame your goals as positives: "I want to better relax," as opposed to "I want to not be so anxious."

**How can I best Monitor my Progress?** It is likely that you will see some changes within the first few sessions of Neurofeedback. Sleep, energy, and focus are usually the first changes that you will notice. It is important to identify ways of tracking changes between sessions in order for your Neurotherapist to make appropriate changes to your training protocol.



## Informed Consent for Payment and Insurance Coverage of Biofeedback/Neurofeedback

The two insurance networks accepted by MICA, CareFirst BlueCross BlueShield (BCBS) and Cigna/Evernorth, currently consider Biofeedback/Neurofeedback as “Experimental” and therefore do not cover it. However, it has been our experience that sometimes they do cover it - especially the HMO plans from BCBS. There does not seem to be any rhyme or reason to whether or not they cover it, nor a consistent way to verify coverage of Biofeedback/Neurofeedback prior to treatment.

MICA will submit the first claim(s) for Biofeedback/Neurofeedback (CPT: 90876, 90875), and wait for the Explanation of Benefits (EOB) to see if it has been covered or not. If insurance covers it, MICA will continue to submit claims. If insurance denies coverage, clients will be charged out-of-pocket for this service. Unfortunately, MICA will not submit appeals, and will cease submitting claims for Biofeedback/Neurofeedback.

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Please ask your Neurotherapist any questions or concerns you may have.

*“I understand that my insurance considers Biofeedback/Neurofeedback as experimental, and may deny coverage/reimbursement for it. I also understand that in the event that my insurance denies my claim, that I will be charged the full rate of this procedure.”*

Client Name: \_\_\_\_\_ Date: \_\_\_\_\_

Client or Guardian Signature: \_\_\_\_\_