



PALM BEACH WELLNESS INSTITUTE

A Personal Trainer for Your Brain

Your Brain Map Report

A Personalized Assessment of Your Brain's Activity & Opportunities for Growth

PREPARED FOR

John Doe

Program: Brain Health Program

Referred By: PBWI Clinical Team

Assessment Date: August 10, 2026

Prepared by: Palm Beach Wellness Institute

NOTE: THIS IS A SAMPLE REPORT

This sample report is provided for illustrative purposes. Names, personal history, findings, and recommendations have been fictionalized and do not represent a specific patient.

Prepared by the Palm Beach Wellness Institute Brain Health Team



A Message from Your Brain Health Team

What you are holding is not just a report. It is a map of your brain's current patterns — the electrical rhythms that shape how you think, feel, focus, and recover. We created this report to help you understand what was found, what it means for your life, and how the work you are doing is already moving you in the right direction.

You do not need a science background to understand this — and because you're a strong visual thinker, we've leaned on the brain maps and clear layouts to make it easy to follow. Read it at your own pace, and lean on your team to walk through it with you. Everything in these pages was written with respect and care, to give you the clearest possible picture of your unique brain and the most supportive path forward.

YOUR BRAIN HEALTH TEAM

Aya A. <i>M.Sc., QEEG-D, BCN-T</i> Director of Neurofeedback & Brain Mapping Interprets your brain map and designs your personal neurofeedback training plan.	Karen Flannery, MD <i>Medical Director M.D.</i> Medical Director Provides physician-level oversight of your brain health plan and coordinates with your psychiatric and medical providers.
Gus C. <i>Neurofeedback Technician</i> Neurofeedback & Mindfulness Coaching Guides your neurofeedback sessions and grounding practice, bridging the science of your brain map with your lived experience.	Jessica R. <i>Brain Health Care Coordinator MBA</i> Brain Health Coach & Wellness Coordinator Coordinates your care, integrates your brain map findings, and works closely with your treatment team so your program runs smoothly.



WHAT YOU'VE BEEN EXPERIENCING

Before we show you your brain map, we want to pause and honor what brought you here.

Your brain map did not happen in a vacuum. It is a picture of a nervous system that has been shaped by your history — by depression, by big swings in energy and emotion, by broken and unrestful sleep, and by the long work of recovery. Understanding what you've been through helps us make sense of what your brain map shows, and helps us explain it back to you with honesty and care.

In Your Own Words

"I want to feel more balanced and consistent, with the space to process my emotions before I respond."

Patient is an energetic, curious, and insightful 31-year-old who is doing serious work to understand himself and to build a steadier life. He has lived with depression and big swings between feeling drained and shut down on one side and intensely activated and aroused on the other. He carries genuine insight and strong intelligence — and he has stayed engaged in his own healing. When he is supported and steady, real strengths come through: thoughtfulness, a love of gardening and hiking, and a real willingness to try tools like this brain map and neurofeedback. This report is meant to meet all of that with compassion — and to show him, in his brain's own patterns, both what he's been carrying and how much capacity for change is already there.

Areas You've Reported Challenges With

Based on your history and clinical information, here is a summary of some of what you've been experiencing. Your brain map findings — explained in the pages that follow — will speak directly to each of these areas.

Area of Life	What You've Reported
Focus & Follow-Through <i>Starting tasks, memory, goals</i>	Difficulty with task initiation, memory, organization, and following through on goals — turning good intentions into consistent action.
Ruminating Thoughts <i>Getting stuck, hard to disengage</i>	A mind that can get stuck circling on something and finds it hard to disengage once it's locked on, especially when you're distressed.
Big Highs & Lows <i>Shut-down vs. activated</i>	Stretches of feeling drained, low, and withdrawn — hard to get going — that can swing into feeling intensely activated, keyed-up, and hard to settle. Evening out these swings is a central goal.
Depression & Low Energy <i>Fatigue, motivation, withdrawal</i>	Low mood, deep fatigue, and pull toward withdrawal and staying in bed, with real difficulty finding energy and motivation to get moving.
Reactivity <i>Reacting in the moment</i>	When emotions spike quickly, it's hard to find space between the feeling and the reaction — one of the most important, and most trainable, skills there is.
Sleep & Rest <i>Long but non-restorative</i>	Long hours of sleep that still don't leave you rested — waking groggy, heavy, and unrefreshed, with daytime fatigue and sedation.



Your Strengths

Every brain map has strengths, and yours has real ones. We want to name these clearly, because they are the foundation everything else is built on:

Genuine insight and curiosity — you reflect on your own patterns and you're curious about how your brain works. That self-awareness and curiosity are a real head start in this work.

Willingness to engage — you showed up for this brain map and you're open to neurofeedback and new tools. That openness is exactly what makes this work effective.

Strong visual intelligence — you think and learn best when you can see things laid out. That's a genuine cognitive strength, and we build your whole plan around it.

Things that already steady you — hiking, exercise, and gardening genuinely help regulate you — you already know some of what your nervous system needs.

Recent progress and support — real recent improvements in functioning, plus providers and supports you trust and work well with.

Your Areas of Focus

Rather than reducing you to a label, your care team is focused on several connected areas together. Your brain map helps explain the neurological patterns beneath these experiences — and informs the personalized plan designed to support you:

Steadiness — evening out the swings between shut-down and activated

Calm & the pause — settling activation and building space between feeling and acting

Energy & restorative sleep — lifting fatigue and improving the quality of your rest

Focus & follow-through — turning insight and goals into consistent action

Your full clinical picture is being clarified collaboratively with your psychiatric and medical team, and your brain health plan is coordinated closely with them — especially around sleep and medication effects. This report complements — not replaces — the care of your treatment team.

On the following pages, you will see how your brain's electrical patterns reflect the areas above — and exactly what we can do to help support them.



YOUR BRAIN AT A GLANCE

Below is a plain-language snapshot of the most important patterns your brain map revealed. Each finding is explained in detail in the sections that follow.

PATTERNS & OPPORTUNITIES FOR GROWTH

- **Your brain has strong, preserved foundations — an important, hopeful headline.** Several core measures were well preserved: a healthy front-to-back organization, an age-appropriate resting rhythm, balanced left-right symmetry, and well-preserved timing and coordination between regions. This is real strength to build on.
- **Your calming rhythm is harder to reach at rest.** Your calming alpha rhythm was less available where it's normally strongest at rest, which fits the rumination and how hard it can be to disengage once your mind locks on. Encouragingly, it rebalanced when you engaged with the world.
- **Low and activated at the same time — the neurology of your swings.** Your map showed heavy slow-wave activity (the rhythms of fatigue and recovery) AND elevated fast-wave activity (the rhythms of activation and vigilance) together. This is the neurology behind swinging between drained/withdrawn and keyed-up/activated.
- **Your brain is carrying a heavy recovery load — running slow and effortful.** Slow-wave activity (delta and theta) was increased, tied to fatigue, low mood, and slowed thinking. This fits the long, non-restorative sleep and daytime heaviness — and it's strongly shaped by sleep and medication effects your team is monitoring.
- **Your brain adapts well when the situation changes — a key hopeful sign.** When you opened your eyes and engaged with the world, your brain mobilized and rebalanced its activity — proof it CAN shift states on demand. That flexibility is exactly the capacity your plan strengthens.
- **Your front-brain "CEO" is working hard — the seat of the pause.** The front of your brain showed both extra activation and extra effort, which overlaps with the difficulty starting tasks, following through, and — importantly — creating a pause between a strong feeling and a reaction. This is very trainable.

Your Brain in a Snapshot

What you'll find in the pages ahead is not a judgment about who you are or what you've been through. It is a map of what your nervous system has been doing — and why. Every pattern here has a story behind it: depression, years of big swings, broken and unrefreshing sleep, and the toll of everything you've carried. Your brain adapted to all of that — and, importantly, it still shows real capacity to shift and change.

The biggest takeaway from your map is that it helps explain your swings — and that alongside them, there are real, preserved strengths. What it shows is a brain that is carrying a heavy recovery load while also staying activated and vigilant: running low and keyed-up at the same time, which fits the movement between drained/withdrawn and intensely activated. And your front-brain "CEO" — the seat of focus, follow-through, and the pause before reacting — is working especially hard. None of this is a matter of willpower or effort. The genuinely hopeful part is real: your brain clearly can shift states and rebalance when engaged, its timing and coordination are well preserved, and that means the load can be lightened, the calm strengthened, and the pause made stronger. With sleep and steadiness as early anchors, the work starts right where you are.



UNDERSTANDING YOUR BRAIN MAP

What is a Brain Map?

A brain map — or qEEG — is a non-invasive recording of your brain's electrical activity. Nineteen small sensors are placed on the scalp and measure the brainwave patterns being produced across different regions of your brain. The results are then compared against a large database of healthy individuals your age, so we can clearly see where your brain's activity is higher, lower, or different from what's typical. This is not a test you can pass or fail, and it is not a diagnosis. It is an objective, visual window into how your brain is functioning right now — and a roadmap for where and how we can help it feel steadier.

The Five Brainwave Frequencies

Your brain generates multiple frequencies of electrical activity all at once. Each one reflects a different kind of mental state — and each is most active in different regions of your brain:

Band	Also Known As	In Plain Language
Delta 1–4 Hz	Deep Rest & Restoration	Think of delta as your brain's "repair mode." Delta powers deep, restorative sleep and recovery. When it shows up broadly during wakefulness, it often reflects a brain doing extra recovery work — tied to fatigue, low mood, and slowed thinking.
Theta 4–8 Hz	Attention & Memory	Theta is the frequency of memory, imagination, and internal reflection. When elevated during alert states, it's linked to mental fatigue, a mind turned inward, and difficulty sustaining focus and follow-through.
Alpha 8–12 Hz	Calm & Clear	Alpha is your brain's "idle" and rest state — relaxed, present, and settled. Healthy alpha lets you recharge and disengage from rumination. When it's harder to reach, the mind stays stuck and it's hard to unwind.
Beta 15–20 Hz	Focused & Thinking	Beta keeps you sharp, focused, and engaged during tasks. When elevated at rest, it can reflect a mind that stays activated, watchful, and hard to switch off.
High Beta 20–30 Hz	Stress & Hyperarousal	High beta is your brain in high gear — effortful and activated. Elevated high beta is commonly linked to stress, vigilance, rumination, and physical tension.

The Lobes of Your Brain

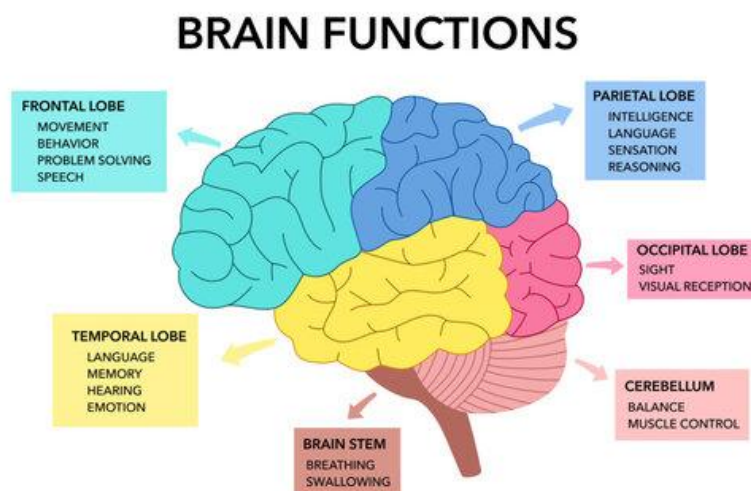
Your brain is divided into four lobes, each responsible for different functions. When your brain map shows patterns in a particular region, understanding the lobe helps explain what you've been experiencing:

Frontal Lobe (front of the brain) — Focus, planning, decision-making, self-monitoring, and emotional regulation. This is the brain's "CEO," and it's central to starting tasks, following through, and pausing between a feeling and an action.

Parietal Lobe (top/back of the brain) — Sensory integration, spatial awareness, and organizing incoming information from the body and the world.

Temporal Lobe (sides of the brain) — Language, memory, emotional meaning, and the way we make sense of experience.

Occipital Lobe (back of the brain) — Visual processing and the anchor point for the brain's calming resting rhythm (alpha), which is normally strongest at the back of the head when your eyes are closed. (This is one of your strengths — your visual processing is sharp.)



Eyes Closed vs. Eyes Open

Your brain was recorded in two conditions:

- **Eyes Closed:** Your brain at rest, without visual input. This shows us your baseline patterns — how your nervous system organizes itself, and whether it can settle, when nothing is being asked of it.
- **Eyes Open:** Your brain engaged with the world. Comparing these two states shows us how flexibly your brain shifts between inner and outer focus — a key measure of regulation, and a real strength in your map.

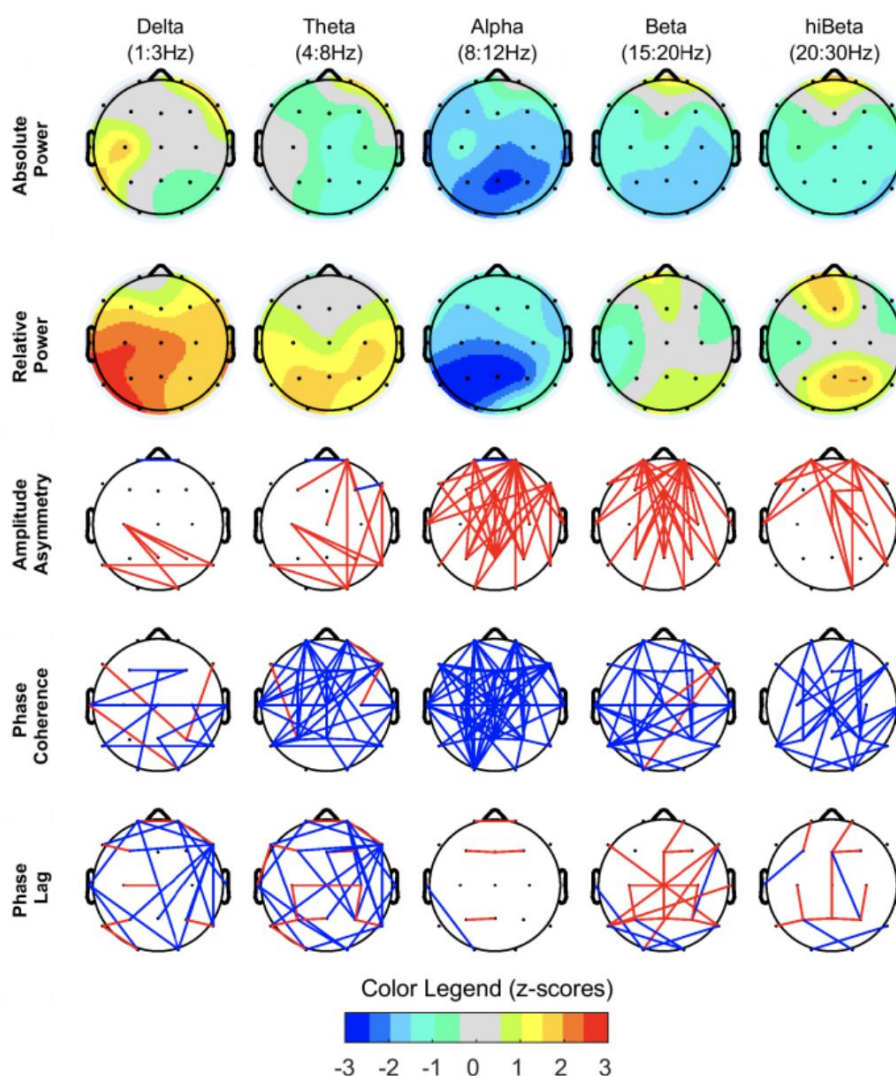
YOUR BRAINWAVE FINDINGS

Below are your results for each brainwave frequency — what the assessment found and what it likely means for your day-to-day experience.

Summary of the Z-score Analyses — Eyes Closed



Summary of the Z-score analyses





Delta (1–4 Hz) Deep Rest & Restoration

WHAT THE ASSESSMENT FOUND

Slow-wave delta activity was notably elevated across your brain. Delta is a restorative, "repair mode" rhythm — normally most active during deep sleep. When it shows up broadly during wakefulness, it usually means the brain is doing a lot of recovery work in the background. In your case, this reflects a nervous system carrying a heavy restorative load — strongly shaped by your long, non-restorative sleep and by medication-related sedation your team is monitoring. Encouragingly, this eased when you opened your eyes, showing your brain can shift when engaged. Importantly, this reflects a brain working hard to recover — not any reduction in your intelligence or ability.

WHAT YOU MIGHT NOTICE

This is one of the clearest explanations for the deep fatigue, the heaviness, the low/withdrawn stretches, and how much effort it takes to get going — especially the groggy, unrefreshed mornings. Your brain is spending energy on recovery. As sleep quality improves and we help lighten that load, energy, clarity, and motivation are among the things that tend to lift.

Theta (4–8 Hz) Attention & Memory

WHAT THE ASSESSMENT FOUND

Theta — another slower rhythm — was also elevated across your brain. Extra theta during wakefulness points to reduced efficiency in the networks that support attention, memory, and steady follow-through, and to a mind that turns inward. Like the delta, this eased when you opened your eyes, showing your brain steps up when it engages — a good sign of capacity.

WHAT YOU MIGHT NOTICE

This maps onto the focus, memory, and follow-through difficulties you've described — the trouble starting and finishing tasks, and turning intentions into action. It reinforces that these struggles are physiological and real, tied to how hard your brain is working — not a matter of effort or willpower.

Alpha (8–12 Hz) Calm & Clear

WHAT THE ASSESSMENT FOUND

Your alpha rhythm showed an interesting pattern. Where it should be strongest — at the back of your brain during rest — it was reduced, meaning it's harder to reach a calm, settled resting state. At the same time, extra alpha showed up toward the front, which is often a sign of reduced alertness or sedation (your medication and unrefreshing sleep are relevant here). Encouragingly, the calming rhythm rebalanced when you opened your eyes — another sign your brain adapts well to engagement.

WHAT YOU MIGHT NOTICE

The reduced resting calm fits the rumination and fixation you've described — how hard it can be to settle and disengage once your mind locks onto something. The frontal pattern fits the heavy, sedated, foggy feeling. The hopeful part is that alpha is one of the most trainable rhythms there is — helping your brain reach calm on purpose is a central goal of your plan.



Beta & High Beta (15–30 Hz) Focus, Vigilance & Arousal

WHAT THE ASSESSMENT FOUND

Here's the other half of your story: your fast-wave (beta and high-beta) activity was also elevated, including toward the front of your brain and, at rest, shifting toward the back. Fast waves are the rhythms of activation and vigilance; when they run high — especially alongside all the slow-wave activity — it signals a brain that stays keyed-up and monitoring even when it's also carrying a heavy, fatigued load. (Some of the front activity reflected muscle tension during recording, which is itself a sign of a body holding stress.)

WHAT YOU MIGHT NOTICE

This is the other side of your swings: the activated, hard-to-settle state — the intense rumination and quick escalation of feeling. Sitting right alongside the heavy slow-wave load, it's the neurology of being drained and wired at the same time. Easing this activation, so your system isn't fighting itself, is a key part of your training.

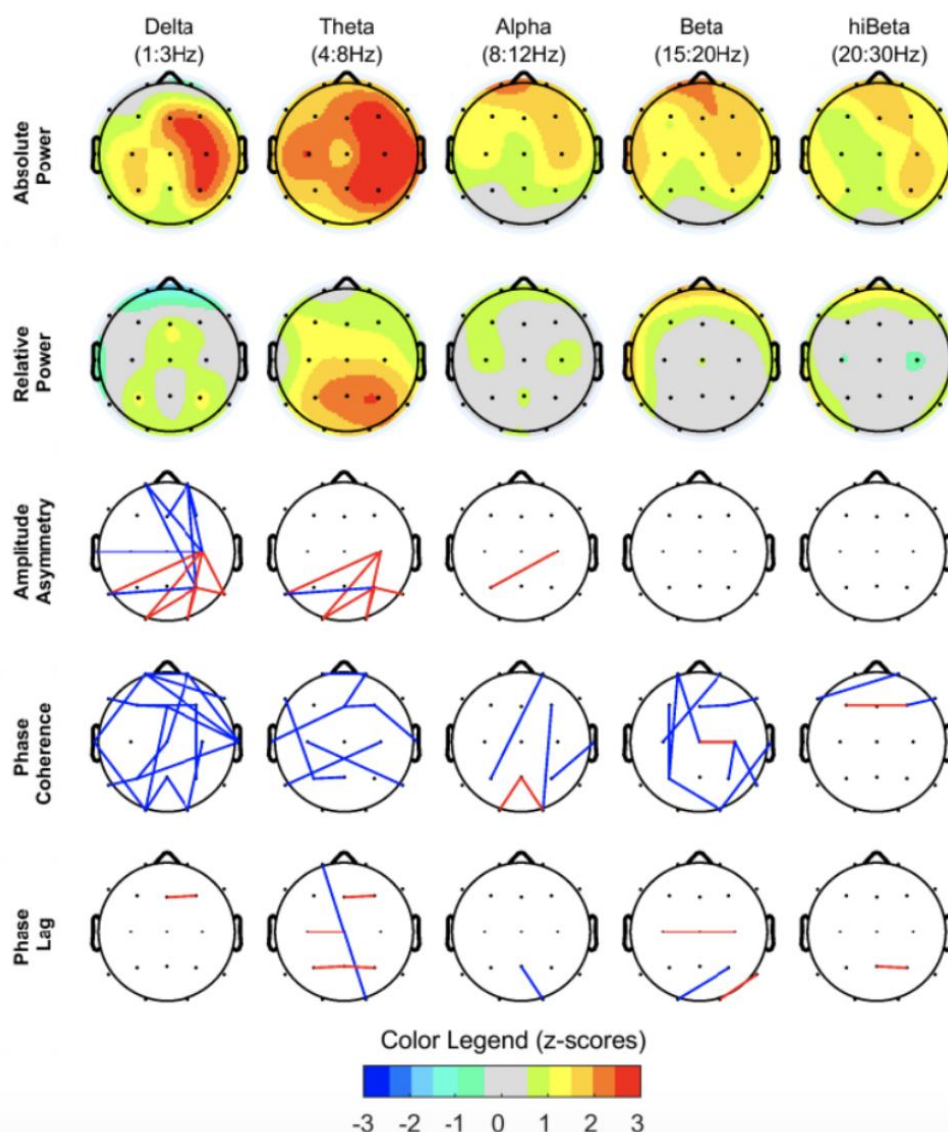
Eyes Open: How Your Brain Shifts

One of the most informative parts of the assessment is comparing how your brain responds when you open your eyes — moving from rest to engagement with the world. A regulated brain typically shows a clear, healthy shift in activity between these two states.

Summary of the Z-score Analyses — Eyes Open



Summary of the Z-score analyses





Gender: Male | Montage: Laplacian | Eyes Open

What was found: When you opened your eyes and engaged with the world, your brain made the healthy shift we most like to see — and it's one of the most hopeful findings in your whole map. The heavy slow-wave (delta and theta) activity eased, and your calming rhythm rebalanced. In plain terms, your brain clearly **CAN** mobilize and adjust its activity when your attention moves outward and there's something to engage with. Some of the fast-wave activation carried over (a sign your system stays somewhat keyed-up), but the overall shift confirms real, preserved capacity to change state. That capacity is exactly the foundation your plan builds on: the calm and steadiness you struggle to reach on your own are genuinely reachable, and training helps you access them on purpose — including in the harder, more activated moments.



HOW YOUR BRAIN COMMUNICATES

In addition to measuring how active each brainwave is, the assessment also looks at how well different parts of your brain talk to each other. Think of it like a team sport — it's not just about how capable each player is, but whether they're passing the ball to each other at the right moments.

Three Things We Look At

Left-Right Balance: Whether both sides of your brain are sharing the load evenly. When one side is carrying more than the other, it can affect mood, focus, and how you process experiences.

Teamwork Between Regions: Whether different brain areas are coordinating and communicating efficiently. Good teamwork means clearer thinking, smoother emotional regulation, and steadier follow-through.

Signal Speed: Whether messages between brain regions are traveling at the right pace — not too fast, not too delayed. Timing matters for how quickly you can process information and shift between mental states.

What the Assessment Found for You

Here is some genuinely good news: your brain's communication was one of the stronger parts of your map. Unlike the activity levels (which showed the heavy load and the intense activation), the way your brain regions coordinate and time their communication was largely well organized. That's a real, reassuring strength — the fundamental wiring is solid.

Left-right balance (amplitude asymmetry) showed some mild unevenness, mostly in the slower rhythms — part of the broader picture of a system under a heavy load, and something that steadies as calm and rest improve.

Teamwork between regions (coherence) showed some reduced connection in the slower rhythms, but — importantly — the calming alpha network's coordination was well preserved, and the faster networks were largely intact. Your brain's timing (phase) was also well preserved across the board. In plain terms, the main opportunity in your map is in the activity levels and the balance of states — not in the underlying wiring, which is a strong foundation to build on.

Technical connectivity details are included in the Assessment Record section at the back of this report.



Your Brain Story

Putting it all together — written for you

This is where we bring everything together into a single, clear picture of what your brain map revealed — and what it means for you personally. Read this section slowly, and lean on your team to go through it with you. This is your story.

The Big Picture

Your brain map tells the story of a capable brain with strong foundations that has been managing two competing demands at once — and it helps explain the swings you live with. The foundation is genuinely solid: a healthy front-to-back organization, an age-appropriate resting rhythm, balanced symmetry, and — a real highlight — well-preserved coordination and timing between regions. Woven through that foundation is a clear pattern: a heavy slow-wave load (the fatigue, the low/withdrawn stretches, the unrefreshing sleep) sitting right alongside elevated fast-wave activation (the keyed-up, ruminating state). Your brain is, in effect, running low and activated at the same time — and your front-brain "CEO," the seat of focus and the pause before reacting, is working especially hard to hold it all together.

Why You've Been Feeling This Way

This pattern makes real sense given everything you've navigated. Depression and a heavy, sedating, non-restorative sleep pattern leave the brain drained and running in recovery mode — that's the low, withdrawn, foggy side. At the same time, a nervous system shaped by years of stress and big emotion stays vigilant and easily activated — that's the ruminating, quick-to-escalate side. When those two run together, the result is exactly what you've described: swinging between not being able to get going and being unable to settle, with a hard-working front brain that struggles to keep focus, follow through, and hold a pause between a strong feeling and a reaction. None of this is a failure of willpower or character. It is a nervous system carrying a lot and working hard — and it is something we can genuinely help you steady.

A Note on Your Strengths

It's worth pausing on how much of your brain map is a strength. The preserved organization, the age-appropriate resting rhythm, the balanced symmetry, the well-preserved network coordination and timing, and — above all — your brain's clear ability to mobilize and rebalance when engaged all point to a fundamentally capable, adaptable brain. Add to that your strong visual intelligence, your genuine insight and curiosity, the activities that already steady you (walking, gardening, exercise), and your willingness to engage in this work — and you have a real, solid platform to build on. This is why there is genuine reason for hope: your brain has already shown us it can change state, its wiring is sound, and the patterns weighing on you are exactly the kind that improve with calm, rest, and steady support.

What This Means for Your Growth

Because your brain is so responsive and its wiring so preserved, the work ahead is about evening out the swings — lightening the heavy load, strengthening the calm, and supporting the front-brain "CEO" so the pause between feeling and acting grows stronger. Two anchors matter most early on: improving the quality of your sleep (with your medical team, since sleep and medication effects shape so much of the heavy load), and building steadiness day to day. From there, your neurofeedback plan helps your brain reach calm on purpose, ease the activation, and support focus and regulation. Paired with mindfulness, grounding, body-based relaxation, DBT-style skills, this helps close the gap between what you know and what you can do, and steadies the highs and lows over time.



Your brain has been running low and activated at the same time — and your map shows, clearly, that it can find a steadier middle. The swings between drained and keyed-up have never been about willpower. They're about a nervous system carrying a heavy load while staying on alert — and your map shows real, preserved strengths and a clear ability to change state. Every neurofeedback session, every night of better sleep, every grounding practice, every visual goal you set and complete strengthens the steadiness and the pause. You are already doing the hardest part by being here, staying curious, and staying in the work. We are walking this with you, one step at a time.



YOUR BRAIN HEALTH PLAN

Two Anchors: Sleep and Steadiness

Because so much of your map traces back to a heavy, non-restorative sleep pattern and medication-related sedation, improving the quality of your sleep — in close coordination with your medical team — is one of the highest-leverage things we can do; it directly affects your energy, mood, focus, and how easily you can stay regulated. Alongside that, we focus on day-to-day steadiness: predictable routine, gentle activity, and evening out the swings. These two anchors set the foundation, and neurofeedback and skills build on top of them.

What is Neurofeedback?

Neurofeedback is like a personal training session for your brain. During each session, sensors on your scalp read your brain's electrical activity in real time. When your brain produces the patterns we want to encourage, you receive a positive signal — a sound, a visual cue, or a response from a simple, engaging video (and given your visual strengths, we'll choose content that's calming and satisfying to watch). When your brain drifts, the feedback changes. Over many repetitions, your brain learns and consolidates calmer, more efficient patterns — not through willpower, but through the same natural learning mechanisms your brain uses for everything else. It is non-invasive, medication-free, and coordinated closely with your psychiatric and medical team.

What We're Training for You

Your protocol is built around the central findings in your map — the heavy slow-wave load, the harder-to-reach calm, the intense activation, and the hard-working front brain. The goal is to even out the swings: calming the over-activation and supporting the front-brain "CEO" (for focus, follow-through, and the pause), rebuilding your access to calm, and directly supporting sleep. The plan often starts by building a steady, calm "ready state" first, and then — once that's more reliable — gently adding training that strengthens regulation while you're focused and engaged.

Protocol 1 — Ready-State Training (Eyes Open): This daytime protocol gently eases excess activity across the slower and faster rhythms at these front-and-right regions — calming elevated cortical activation (the stress response) and supporting cognitive efficiency, attention, mental clarity, and emotional regulation. Once your calm "ready state" is more established, a next phase can add training that strengthens regulation under greater focus and demand. Recommended at least 2 hours after waking and no later than 2 hours before bedtime, around the same time each day under indirect light.

Protocol 2 — Calm (Eyes Closed): This protocol strengthens your calming alpha rhythm (10–12 Hz) and quiets fast-wave activation — producing and reinforcing a physically calm, settled, flexible state, helping you recenter on your body and senses, and directly targeting the rumination and the hard-to-reach rest. Recommended up to twice daily, anytime you can comfortably down-regulate under indirect lighting.

Protocol 3 — Digital Sleeping Pill (Eyes Closed, before bed): This bedtime protocol quiets high-beta over-activation while gently encouraging the slower, restorative rhythms — helping your brain wind down and move into a proper sleep cycle. Over time, patients often experience falling asleep more easily, waking less, and — the key goal for you — feeling more genuinely restored, which directly targets the non-restorative sleep at the heart of your map. Trained 30–60 minutes before bed, removing the cap after the session.



YOUR PERSONALIZED ACTION PLAN

Based on your brain map findings and your goals, here is your personalized brain health action plan.

Your Brain Health Focus

Make sleep quality your top anchor — with your medical team. So much of your map traces back to heavy, non-restorative sleep and sedation. The bedtime protocol, a consistent wind-down routine, steady sleep and wake times, and working with your prescriber on anything affecting your rest are among the highest-leverage things you can do — better-quality sleep will lift your energy, mood, focus, and steadiness.

Come to your neurofeedback sessions consistently — they're the anchor of your program. Your brain's learning is cumulative: each session builds on the last, and the periods in between are when the learning settles in. Some changes feel subtle at first — but every session is teaching your nervous system what a steady, calm state feels like, and repetition is what makes it stick.

Practice grounding and the pause daily — they target exactly what your map shows. Mindfulness, grounding, breathing, and progressive muscle relaxation build the skill of noticing activation early and creating space before you react. The more you practice when things are calm, the more available that pause becomes when things are intense.

Keep leaning on what already steadies you — movement, structure, and support. Walking, exercise, gardening, and predictable routines genuinely regulate your nervous system, and reaching for your team and supports in hard moments isn't a setback — it's exactly the co-regulation your brain is learning from. You're already doing the most important thing by being here and staying engaged.

Your brain has already shown us it can change state and find calm — now we build the steadiness so you can reach it on purpose. Every night of better sleep, every session, every grounded pause, every visual goal you complete evens out the swings a little more. With the strong, preserved foundations your map already shows — and the insight, curiosity, and visual strengths you bring — you are genuinely capable of a steadier, calmer baseline. We're doing this together, one step at a time.



ASSESSMENT RECORD

This section contains the clinical and technical documentation for the care team record. It is included at the back so the patient's report leads with their experience — not paperwork.

Client & Program Information

Field	Value
Full Name	John Doe
Age	31
Program	Brain Health Program
Referred By	PBWI Clinical Team
Assessment Date	August 10, 2026 (qEEG Brain Map)
Provider	Aya Abdelhalim, M.Sc., QEEG-D, BCN-T

Clinical Context & Areas of Focus

The patient presents with a longstanding, complex psychiatric history; the picture is being clarified collaboratively and the report is intentionally framed around steadiness, calm, sleep, and executive/behavioral regulation rather than diagnostic content. Working areas of focus:

- Depression with fatigue, hypoactivation, and withdrawal, alternating with episodes of pronounced emotional/behavioral activation and rapid escalation (state-dependent presentation).
- Executive-function difficulties — task initiation, memory, follow-through, and translating insight into consistent behavior.
- Rumination/fixation and difficulty disengaging once emotionally activated.
- Prolonged, non-restorative sleep with daytime sedation/fatigue (clozapine-related sedation a key consideration).

Clinical context (care-team record): Safety history includes suicidal thoughts and, more recently, homicidal thoughts during acute distress/perceived rejection; safety, risk, and thought-intensity are actively and closely monitored by the psychiatric/clinical team, with safety planning in place and ongoing multidisciplinary oversight (psychiatry, medical/RD, substance-recovery). Emotional/behavioral escalation history is managed within the treatment structure. Nutrition, body-image, and metabolic concerns (including clozapine-associated effects) are followed by the medical/RD team. This qEEG report complements — and does not replace — psychiatric, medical, and safety care, and does not independently diagnose any psychiatric, metabolic, or neurological condition. Note: given documented behavioral/safety considerations, activation/task-based recording (if pursued) should proceed only with the clinical team's clearance and a stabilization plan.

Reason for Referral

Client referred for quantitative EEG (qEEG) evaluation to assess current neurophysiological functioning in the context of severe emotional and behavioral dysregulation, executive dysfunction, substance-use and behavioral-addiction history, and complex psychiatric presentation — to identify overlap between neurophysiological patterns and reported experience and provide adjunctive information for individualized, stabilization-focused treatment planning, in coordination with the psychiatric and medical team.



Current Medications

The client is currently taking quetiapine, empagliflozin, acamprosate, and semaglutide, along with nutritional supplements. Medication-related sedation, prolonged or non-restorative sleep, and fatigue are important considerations when interpreting the slow-wave and alpha findings. Medication changes remain under the direction of the prescribing provider.

Assessment Procedures

A 19-channel quantitative EEG was recorded using the International 10-20 electrode placement system under resting eyes-closed (EC) and eyes-open (EO) conditions. Data were analyzed using Z-score comparison to age-normed databases (Laplacian montage). Artifact correction was applied; transient drowsiness/reduced-vigilance features (anterior alpha extension) and frontal/temporal muscle-tension and eye-movement artifact were noted and considered. qEEG Brain Map date: 08/14/2026.

Raw EEG Background & Recording Quality

EEG recording was continuous with a clearly defined anterior-posterior (AP) gradient during sustained wakefulness (less distinct during transient reduced-vigilance periods). Posterior Dominant Rhythm: 10.29 Hz over the left occipital region (O1), age-appropriate, with no significant O1–O2 amplitude asymmetry (balanced posterior rhythm — a strength). Preserved EEG reactivity and variability were observed. High-voltage temporal alpha and transient anterior extension of alpha are interpreted cautiously as reflecting reduced vigilance/medication-related sedation (clozapine), though thalamocortical regulatory inefficiency cannot be excluded. Frontal/temporal muscle-tension and eye-movement artifact (eyes-open) were noted and considered. Medication-related sedation and significant sleep dysregulation are central interpretive considerations.

Technical Interpretation Notes

EC findings: Delta — absolute and relative delta elevated globally (up to $\sim +3$ SD) — high restorative/cortical-efficiency burden (sleep dysregulation + medication sedation prominent). Theta — elevated globally — reduced cortical efficiency, executive/attention overlap. Alpha — reduced relative posterior alpha (less access to calm resting state; rumination/fixation) with anterior/temporal high-voltage alpha extension (reduced vigilance/sedation). Beta/hiBeta — prefrontal fast-wave excess and posterior shift toward greater relative beta (difficulty disengaging from activation/vigilance at rest). Connectivity — slow-wave hypocoherence and amplitude asymmetry present, BUT alpha coherence preserved, fast-wave coherence inefficiencies limited, and phase largely unremarkable (timing preserved — a strength). **EO findings:** Delta and theta decreased appropriately with engagement (preserved state-dependent mobilization — a strength) though residual slow-wave excess remained; relative alpha rebalanced; fast-wave activation persisted (focal frontal/temporal partly EMG artifact); somewhat broader mild-to-moderate hypocoherence; phase largely preserved. **Overall profile:** a well-organized, adaptable cortical foundation managing competing regulatory demands — a substantial slow-wave/restorative burden (fatigue, hypoactivation, non-restorative sleep, sedation) coexisting with fast-wave over-activation (vigilance, rumination, escalation), and frontal systems showing both increased alpha and fast-wave activation (executive/behavioral-regulation overlap: task initiation, inhibition, the pause between reactive thought and behavior). Notably, connectivity/timing were comparatively preserved (alpha coherence, phase), and background organization (AP gradient, age-appropriate PDR 10.29 Hz, balanced O1–O2, intact reactivity/variability) plus appropriate EC-to-EO mobilization indicate meaningful neuroplastic capacity and state-dependent adaptability. Findings are multifactorial (psychiatric presentation, marked sleep dysregulation, clozapine sedation, historical substance use, behavioral-addiction patterns) and non-diagnostic. Interventions: sleep optimization (with prescriber), neurofeedback (Ready-state at Fz/F4/C4/P4→demand-state; Calm at Pz; Digital Sleeping Pill at Pz), MBSR/grounding, PMR, DBT-based skills, and visual/structured executive supports, integrated with psychiatric/medical oversight and safety monitoring.



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