# PhysioData Solutions, LLC

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### Quantitative Electroencephalograph (QEEG) Analyses

Patient Information	Recording Information	
Name: Johnny Appleseed	Date of Test: 5/22/2014	
Birthdate: 3/27/2010	Time of Test: 10:30:00	
Age: 5	Recorded By: Jane Doe	
Sex: Male	Last Meal: Eggs	
Handedness: Right	Time of Last Meal: 7:00 am	
Medication(s): Vyvanse		
Patient Intake Information & History		
Impulsivity, lack of attention, anger outbursts, defiant behavior, sensory integration issues.		
Raw EEG Description		
Eyes Open:		
Eyes Closed:		

### **Computerized EEG Analyses**

The patient's data has been compared to the Thatcher NeuroGuide database for age ranges 3 months- 88 years of age. The EEG represents a disorganized pattern. The posterior dominant rhythm falls within the 10-12 Hz range.

Linked ears Z-scored FFT Absolute Power Eyes Open single Hz bins. Findings include a noted increase of 5-6 Hz in a dispersed distribution. There was a significant increase of 5 Hz in the frontal sites (FP1, FP2, F3, FZ, F4) at 2.0 standard deviations.

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Linked ears Z-scored FFT Relative Power Eyes Open single Hz bins. Findings include an increase of 4-7Hz in a dispersed distribution, specifically at FP1, FP2, F3, F4. There was an increase in 21-30 Hz at PZ and P4. There was an increase in 28-30 Hz at T3, T4 which are elevations of high frequency beta activity due to the result of EMG artifact and will not contribute to the protocol selection of this patient.

EEG Coherence, Phase, and Asymmetry: There was a significant pattern of elevated coherence between the central and temporal sites.

TBI Discriminant Findings: N/A

Learning Disability Discriminant Findings: There was a positive learning disability discriminant finding in the moderate range suggesting the EEG patterns of this patient resemble similar EEG patterns found in individuals with a history of learning disabilities.

#### Neurofeedback Recommendations:

The following neurofeedback protocols are suggested for initial neurofeedback training upon comprehensive medical and clinical evaluation of the patient. Protocols may be adjusted due to differentiating patient outcomes and objective and subjective reports throughout the training process.

Decrease 4-5 Hz at Fp1 and Fp2 (6-8 Sessions)

Decrease 6-7 Hz at F3 and F4 (6-8 Sessions)

Decrease 21-30 Hz at PZ and P4 (6-8 Sessions)

The protocols recommended should improve the individual's executive functioning processes including: reasoning, decision making, impulsivity control, decision making, attention & concentration. The above protocols should also improve the individual's response to stress and decrease anger outbursts and sensory integration issues.

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