

SUMMARY OF IQCB RECOMMENDED GUIDELINES FOR QUANTITATIVE ELECTROENCEPHALOGRAM (QEEG) REPORT WRITING

This report, written by a committee* of the International QEEG Certification Board (IQCB), for the purpose of setting guidelines for QEEG report writing is meant to give advice to the qualified clinician on the elements important to a full and complete QEEG report. It includes an introduction, the purpose of the QEEG report, caution of the use of AI in report writing, components of a QEEG report, and references.

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INTRODUCTION

Effective report writing is both an art and a critical skill. A well-crafted QEEG report provides a clear, comprehensive assessment of EEG findings from a quantitative analysis perspective while also representing QEEG interpretation's value professionally. Reports should adhere to consistent, high standards and reflect the clinician's individual style within this framework. Content should align with the clinician's scope of practice and address the needs of the intended audience, including patients and healthcare providers. All interpretations must be thoroughly reviewed and signed by a qualified clinician (QEEG-D or QEEG-DL).

PURPOSE OF THE QEEG REPORT

The purpose of the QEEG report is to provide accurate and interpretable results that integrate with salient clinical findings. The QEEG offers insights into brain activity and network connectivity that may relate to presenting symptoms. The clinical correlation of QEEG data with the client's history, symptoms, medications, and treatments can inform interventions such as brain-training or neuromodulatory techniques aimed at improving cognitive, emotional, and behavioral functioning.

Importantly, the QEEG report should include a DISCLAIMER stating it does not infer etiology or diagnose medical or psychological conditions, nor is it a substitute for medical or psychological evaluation; it is based on research linking neuromarkers with functional dysregulation.

CAUTION ON THE USE OF AI IN REPORT WRITING

QEEG reports should be written by the professional responsible for their content and informed observations and recommendations made within the report. AI can assist in QEEG report writing by aiding in data gathering, summarizing information, and automating repetitive tasks, but should not be used as conclusive processing and interpretation of the EEG. With visual interpretation, experience, and integration with clinical information, the qualified clinician must perform tasks such as artifact review and correlation of findings with clinical context to ensure a reliable and meaningful report.

COMPONENTS OF A QEEG REPORT

Standard Format: A QEEG report should follow a systematic format, comprising seven sections with clearly labeled headings and subheadings tailored to the case and intended audience.

Reference the sample report addendum.

1. **Clinician Identifying Information** (to be included in letterhead)

- Clinician name, business name, licensure, certifications, and contact information.
- Clearly defined clinical qualifications and scope of practice.

2. Client Information

- Client Demographics: Patient's name, date of birth, age, date of EEG recording, handedness, level of consciousness, medications (current and past), occupation/education level, referring clinician, etc.
- **Reason for QEEG:** Clearly state purpose of evaluation, such as (1) referral for appropriate specialty evaluation, (2) planning interventions such as bio/neurofeedback, and/or (3) forensic assessment.
- Clinical Presentation and Observations: Document client-reported symptoms, and clinician observations made during assessment.
- Medical and Psychological History: Where appropriate, include pertinent developmental, educational, occupational, and social history, comprehensive medication history, substance use, medical and psychiatric history, and possible genetic and environmental factors.
- Other Clinical Reports or Interventions: Provide a concise summary and attribution of prior relevant tests, interventions, or treatments.

3. Technical Information

- Surface EEG acquisition and methodology: List recording parameters following established guidelines¹
- Recording conditions: Duration of recording, eyes open, eyes closed; awake, drowsy, or asleep.
- **QEEG:** Define QEEG and outline artifacting and analytical methods used.
- **Database Information:** Specify database(s) used.

4. Surface EEG Observations

• Describe EEG features under conditions recorded (e.g., EO and EC).

- Describe quality of EEG acquisition and artifacts present noting adequate/inadequate quality.
- Describe posterior dominant rhythm (PDR) and other background features, including drowsiness.
- Include images of EEG segments.
- Summarize EEG findings.

5. Quantitative EEG

- Include QEEG images such as spectral analysis, surface and connectivity maps, any source imaging, etc., that support findings.²
- **6. Summary and Recommendations** (within the clinician's scope of practice)
 - Summarize test findings and correlate with clinical and behavioral presentation of client.
 - Provide actionable recommendations and possible referrals, including therapeutic or diagnostic steps.

7. **QEEG Report Appendices**

- Additional test results (e.g., cognitive/behavioral or psychological inventories, ERPs) which correlate with clinical and QEEG findings.
- Though a forensic report is beyond the scope of these guidelines, if a forensic report is being created, include detailed historical documentation and synthesize findings by discipline.

REFERENCES

- 1. Tatum, W. O., Olga, S., Ochoa, J. G., Munger Clary, H., Cheek, J., Drislane, F., & Tsuchida, T. N. (2016). American Clinical Neurophysiology Society Guideline 7: Guidelines for EEG Reporting. *Journal of clinical neurophysiology : official publication of the American Electroencephalographic Society*, *33*(4), 328–332. https://doi.org/10.1097/WNP.00000000000000319
- 2. Collura, T., Cantor, D., Chartier, D., Crago, R., Hartzoge, A., Hurd, M., Kerson, C., Lubar, J., Nash, J., Prichep, L. S., Surmeli, T., Thompson, T., Tracy, M., & Turner, R. (2025). International QEEG Certification Board Guideline Minimum Technical Requirements for Performing Clinical Quantitative Electroencephalography. *Clinical EEG and Neuroscience*, 15500594241308654. Advance online publication. https://doi.org/10.1177/15500594241308654