

# Clarifying the Code: Historical Foundations, Current Practices, and Ethical Billing in Neurofeedback and QEEG

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## Abstract

This article addresses the complexities of ethical billing and coding practices for neurofeedback and quantitative EEG (qEEG) services. It explores the historical development of Current Procedural Terminology (CPT) codes related to neurofeedback, examines current best practices in billing, and identifies potential legal and ethical pitfalls, including recent fraud cases. Special attention is given to Medicare's policies, the nuances of *incident to* billing, and the role of technicians in service delivery. The paper underscores the importance of documentation, scope-of-practice considerations, and transparency with payers and patients. Additionally, the advocacy efforts of professional organizations such as the International Society for Neuroregulation & Research (ISNR) and the Association for Applied Psychophysiology and Biofeedback (AAPB) are reviewed, particularly their ongoing initiative to update and refine CPT codes to better reflect clinical practice. Through a comprehensive synthesis of guidance from the AMA, CMS, professional ethics codes, and payer policies, the article serves as both a practical guide and a call to uphold ethical standards in the neuroregulation field.

## *Keywords*: neurofeedback; qEEG; CPT; billing; insurance

**Citation**: Sherlin, L. H., & Longo, R. (2025). Clarifying the code: Historical foundations, current practices, and ethical billing in neurofeedback and qEEG. *NeuroRegulation*, *12*(2), 138–153. https://doi.org/10.15540/nr.12.2.138

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## Introduction

Neurofeedback (EEG biofeedback) and quantitative EEG (gEEG) have evolved from experimental techniques utilized clinical to increasingly neurological interventions for various and psychological conditions (Hammond, 2011). As their use has grown, so too has the complexity surrounding proper billing and coding for these services. Practitioners must navigate a landscape of Current Procedural Terminology (CPT) codes, Medicare and insurance policies, and ethical guidelines to ensure that billing is accurate, compliant, and ethical. Missteps in coding-whether inadvertent or intentional-carry serious legal and professional consequences, as evidenced by recent fraud cases (U.S. Attorney's Office, 2025). This article aims to clarify "the code" by examining the historical foundations of CPT codes relevant to neurofeedback and gEEG, current best practices in ethical billing, Medicare's coverage stance, incident to billing rules, and the ethical implications of improper billing. We also discuss the role of professional organizations like the International Society for Neuroregulation & Research (ISNR) in codes advocating for better and provide recommendations for practitioners to uphold integrity in billing. The goal is to equip clinicians, billing specialists, and stakeholders with a comprehensive understanding of how to code and bill for neurofeedback and qEEG services correctly, thus protecting their practices and advancing the field responsibly.

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# Historical Foundations of Neurofeedback and QEEG CPT Codes

Understanding the present coding framework requires a look back at how these CPT codes were developed and refined. CPT codes are maintained by the American Medical Association (AMA) and are used to uniformly describe medical procedures for billing purposes. Neurofeedback, being a form of biofeedback, has long been associated with biofeedback-related CPT codes (Hammond, 2011). Key milestones in the historical development of relevant CPT codes include:

- Early Biofeedback Coding: Prior to the late 1990s, biofeedback was represented by multiple modality-specific codes (e.g., separate codes for EMG biofeedback, thermal biofeedback, EEG biofeedback, etc.), which made billing cumbersome. In the mid-1990s, the AMA recognized the need for a more unified coding system for biofeedback techniques.
- Introduction of CPT 90901 (1998): In 1998, CPT code 90901 for "biofeedback training by any modality," was established by the AMA to consolidate multiple biofeedback codes into a single, modality-agnostic code. This pivotal change meant that whether a practitioner was providing thermal biofeedback for migraines or EEG biofeedback (neurofeedback) for ADHD, they could use 90901 to bill for the training session. The creation of 90901 explicitly included EEG biofeedback as one of the modalities covered under "any modality," simplifying claims submission. It reflected the AMA CPT Editorial Panel's effort to streamline biofeedback billing and acknowledged that the fundamental service, teaching a patient to self-regulate using biological feedback, was conceptually similar across modalities.
- Psychophysiological Therapy Codes (90875 and 90876): Even before 90901's introduction, CPT had codes 90875 and 90876 to describe "individual psychophysiological therapy incorporating biofeedback training with psychotherapy.' These codes, residing in the psychiatry/psychology section of CPT, were historically defined by session length (90875 for a ~20- to 30-min session: 90876 for ~45 to 50 min), the primary difference being duration. These codes acknowledge that some clinicians (e.g., psychologists) deliver biofeedback not as a stand-alone procedure,

but in the context of psychotherapy. For example, using relaxation and EEG feedback during a counseling session for anxiety. Importantly, the AMA clarified that 90875 and 90876 inherently include the biofeedback component; thus, one should not bill a separate 90901 in addition to 90875 or 90876 for the same session (AMA, 1997). In a 1997 AMA CPT Assistant Q&A, the AMA explicitly stated it is "not appropriate to report code 90901 separately, performing when individual psychophysiological therapy (codes 90875 and 90876)" (AMA, 1997). This guidance, which remains applicable, was aimed at preventing double-billing of the biofeedback portion.

# Role of AMA and the CPT Editorial Process

The AMA's CPT Editorial Panel and its advisors (including representatives from specialties and professional societies) have played a central role in code revisions. For neurofeedback and qEEG, professional advocacy has been crucial in influencing AMA decisions. For instance, the biofeedback community (through organizations like the Association for Applied Psychophysiology and Biofeedback [AAPB] and ISNR) has periodically submitted proposals to the AMA to update or clarify codes. The AMA's process ensures that any new code or revision is justified by clinical practice and utilization data. Over the years, the AMA also updated code descriptors. For example, recent CPT codebook editions standardized the time descriptors for 90875 (now listed as 30 min) and 90876 (45 min) to remove ambiguity and align with typical session durations.

CPT Codes for gEEG and brain mapping, which involves computerized analysis of EEG data (often to create brain maps or to guide neurofeedback protocols), did not receive a dedicated CPT code in the 1990s. Clinicians who performed qEEG assessments historically resorted to using general EEG or biofeedback codes. One code often associated with gEEG is 95957, defined as "digital analysis of electroencephalogram (EEG; e.g., for epileptic spike analysis)." Although 95957 was developed for neurologists analyzing EEG for epilepsy, some practitioners began using it to bill qEEG brain mapping, reasoning that qEEG entails digital EEG analysis (Successful Practitioner, 2021). This practice, however, introduced ambiguity. QEEG for psychological conditions was not the original intent of 95957. Recognizing the need for more appropriate coding, in the 2010s the AMA introduced

code 96020, described as "neurofunctional brain mapping" procedures. By 2019, CPT 96020 was being referenced in neurofeedback circles as a code for functional brain mapping (qEEG; Successful Practitioner, 2021). In practice, 96020 may be used when conducting a qEEG in conjunction with functional tests, though its usage is limited and subject to payer acceptance.

# **Ongoing Evolution**

The coding framework continues to evolve. No specific CPT code exists solely for "neurofeedback," providers must use the general biofeedback codes (90901, 90875, or 90876) as appropriate. This lack of specificity has led to continued efforts for refinement. As of the mid-2020s, professional organizations are advocating at the AMA for updated codes that better distinguish neurofeedback and related services. For example, ISNR and AAPB have launched a CPT Code Initiative to modernize codes for neurofeedback and biofeedback (ISNR & AAPB, 2023). This initiative argues that current codes are outdated and that more precise codes would improve access and reimbursement by clearly communicating the services provided. The AMA's historical role in creating and revising codes like 90901, 90875, and 90876 will likewise be crucial in any forthcoming code changes spurred by these advocacy efforts.

# Current CPT Codes and Best Practices for Ethical Billing

In contemporary practice, clinicians providing neurofeedback or qEEG services typically utilize a handful of CPT codes. Ethical billing requires not only choosing the correct code but also using it properly in a manner consistent with its definition and avoiding practices that could be seen as upcoding or misrepresentation. Below are the primary CPT codes used and best practices for their ethical use:

CPT 90901 - Biofeedback by Any Modality: This code is used for stand-alone biofeedback training where no being concurrently psychotherapy is provided. In the context of neurofeedback, if a practitioner (whether a psychologist, physician, or other qualified provider) conducts a session consisting solely of neurofeedback training (e.g., the patient is connected to EEG sensors and guided through brainwave training protocols), 90901 is the appropriate code. Best practices for using 90901 include:

- Ensuring the session is indeed focused on biofeedback. If substantial psychotherapy or counseling is provided in the same visit, a different code might apply (see 90875 and 90876 below).
- Documenting the modality and duration of the session. Even though 90901 is an untimed code per CPT guidelines (it can be reported once per day regardless of session length), it is wise to record how much time was spent to justify the service volume in case of audits.
- Avoiding "unbundling" or adding  $\circ$ other codes that represent components of the biofeedback session. For example, it would be unethical and incorrect to bill 90901 (biofeedback) plus an EEG recording code (such as 95816) for the same neurofeedback session, neurofeedback inherently since includes the EEG monitoring component. According to CMS therapy billing guidance, "Separate billing for concurrently applied modalities and/or procedures during training is biofeedback not appropriate" (CMS, 2015). In practice, that means if during a 30block you are doing min neurofeedback, you should not also bill a therapeutic exercise or any other intervention for that same time-only the biofeedback code should be billed for that interval (CMS, 2015). This avoids doublecounting time and conforms to CPT coding rules that one cannot bill two codes for the same service time.
- CPT 90875 and 90876 Biofeedback with Psychotherapy: Codes 90875 (typically a 30-min session) and 90876 (45 min) are used when biofeedback is integrated with psychotherapy in a single session. These codes are often utilized by psychologists or other mental health professionals who use biofeedback as an adjunct to therapy, for instance, conducting EEG biofeedback for self-regulation as part of treating anxiety during a counseling session. Ethical use of 90875 and 90876 entails:
  - Only using these codes if you are licensed to provide psychotherapy in your state (e.g., psychologist,

licensed professional counselor, etc.) and vou indeed provided psychotherapy alongside the biofeedback during the session. If the encounter was purely technical neurofeedback without any therapeutic discussion or psychological intervention. then 90875 or 90876 would not be appropriate; 90901 would be the correct code. The CPT code descriptors explicitly require that psychotherapy is a component of these services.

- Choosing 90875 versus 90876 based on session length. It is important not to upcode. If your session was only ~25 min, you should bill 90875 (the shorter session code), not 90876. Documentation should reflect start and end times or total minutes to support the code selection.
- Not billing 90901 in addition to 90875 or 90876 for the same session. As noted earlier, the AMA has made it clear that the biofeedback component is already included in 90875 and 90876 (AMA, 1997). Billing both codes for the same time would be redundant and viewed as improper unbundling. In summary, when performing psychotherapy with neurofeedback, a single code (90875 or 90876, depending on length) should cover the entire session.
- QEEG and EEG Analysis Codes: qEEG, which often precedes or supplements neurofeedback, involves recording EEG and quantitatively analyzing it (e.g., generating brain maps or comparing the data to normative databases). There is no unique CPT code labeled explicitly "gEEG." Instead, practitioners typically use a combination of codes: often an EEG acquisition code (for the recording itself) plus an EEG analysis code. One common approach is to use a standard EEG recording code (e.g., 95816 for a routine EEG) along with 95957 for the digital analysis. By definition, 95957 represents the digital analysis of at least 20 min of EEG data (it was originally intended for analysis of epileptiform activity). Some insurers have reimbursed 95957 when used for qEEG, while others might challenge it as

not medically necessary for certain behavioral health diagnoses. Another code. 96020, as mentioned earlier, has been referenced for "neurofunctional brain mapping," Best practice for gEEG billing is first to verify each payer's policy: many payers consider qEEG investigational for most psychiatric indications (more on this under Medicare and medical necessity). If you do proceed to bill, use the code that most closely fits what you actually did, and never bill a gEEG as if it were a full neuropsychological test or some other unrelated service. In a recent fraud case, a provider improperly billed psychological testing codes (96112, 96130, etc.) in conjunction with neurofeedback services, presumably to get reimbursement for qEEG or cognitive assessments that were not actually separate tests. This was flagged as fraudulent because those CPT codes could not logically be billed together in the way they did (Office of Inspector General, 2025). The lesson is to avoid "creative" coding that isn't clearly supported by CPT definitions or by what actually occurred. If no existing code truly fits a service (for instance, if gEEG brain mapping for ADHD is not covered by insurance), the ethical path is either not to bill the insurer for it (opting for private pay) or to use an unlisted code with full disclosure; not to shoehorn it into payable codes through misrepresentation.

Other Related Codes: In certain scenarios. other CPT codes might come into play for biofeedback services. For example, 90911 (biofeedback for pelvic floor training for incontinence) and the newer 90912 and 90913 (time-based codes for pelvic floor biofeedback) are designated exclusively for pelvic muscle rehabilitation. These codes are not to be used for neurofeedback under any circumstances, as they pertain to a completely different physiological system and clinical application. Although they fall under the broader category of biofeedback. their use is strictly limited to treatment of pelvic floor dysfunction and should not be repurposed or reinterpreted to describe neurofeedback or any central nervous system intervention. Another set of codes sometimes discussed are the Health and Behavior Assessment/Intervention (HBAI) series (96150-96155), which allow billing for behavioral services related to physical health conditions (e.g., pain, adherence to

treatment) without requiring a psychiatric diagnosis. While some neurofeedback providers mav consider these when addressing chronic pain or related symptoms, these codes also are not appropriate for use with neurofeedback unless the intervention is explicitly targeting a physical health issue and is clearly within the provider's scope of practice. These codes should never be used to circumvent coverage limitations on psychotherapy or neurofeedback-specific biofeedback codes. In all cases, coding must accurately reflect the nature of the service delivered and remain within legal and ethical billing parameters.

In all cases, accurate documentation is a cornerstone of ethical billing. Practitioners should record what intervention was done, for how long, and by whom. This information justifies the CPT code used and serves as evidence of proper billing. For example, therapy notes for a 90876 session should clearly reflect that psychotherapy was provided alongside biofeedback and that the session lasted around 45 min. For a 90901 session, the notes might focus on the neurofeedback training protocol used and response. the patient's Proper documentation not only supports billing but also encourages clinicians to stay within the boundaries of the code (knowing that an auditor might later read the note has a way of keeping one honest about what was done and billed). Finally, when in doubt about how to code a unique scenario, practitioners should consult authoritative sources (e.g., AMA CPT Assistant articles, insurer billing coding quidelines. or professional specialists). Adhering to the official definitions and guidelines is part of ethical practice. It demonstrates honesty and transparency in an often-confusing reimbursement environment.

# Current Medicare Policies and Neurofeedback Coverage

of biofeedback Medicare's coverage and neurofeedback services has historically been limited, and it remains a critical area for practitioners to understand to avoid denied claims or inadvertent fraud. Medicare, through National Coverage Determinations (NCDs) and Local Coverage Determinations (LCDs) by Medicare Administrative Contractors (MACs), defines what it considers medically reasonable and necessary. For biofeedback, Medicare's policies draw a distinction between certain approved uses (primarily for specific medical conditions) and noncovered uses (including most psychological applications of neurofeedback).

## Noncoverage for Psychiatric Applications

Medicare does not broadly cover neurofeedback (EEG biofeedback) for the treatment of psychological or psychiatric conditions such as ADHD, anxiety, depression, etc. In fact, the Medicare NCD for biofeedback (NCD 30.1) dates back decades and was written with traditional biofeedback (like EMG biofeedback for muscle retraining or thermal biofeedback for vascular headaches) in mind. It does not explicitly endorse neurofeedback for mental health. A long-standing Medicare policy statement is that "biofeedback is not covered by Medicare for treatment of psychosomatic conditions" (CMS, 2011; "Psychosomatic" in this context includes stress-related disorders, anxiety, and other psychological conditions). Moreover, an official Medicare contractor billing guideline explicitly notes: "Biofeedback for the treatment of psychiatric disorders (90875 and 90876) is not covered under Medicare" (CMS, 2011). This means that if a provider submits a claim to Medicare for CPT 90875 or 90876 for, say, a diagnosis of generalized anxiety disorder or ADHD, Medicare will deny that claim as not medically necessary. Similarly, CPT 90901, when billed for a primarily psychiatric indication, is typically deemed noncovered. For example, a regional Medicare Advantage policy states "CPT codes 90875, 90876, and 90901 will be considered not medically necessary and not covered" for the psychiatric or psychological indications addressed by the policy (Providence Health Plan, 2022).

What does Medicare cover in this realm? Medicare has a narrow scope of coverage for biofeedback, mainly limited to certain medical conditions. For instance, there is an NCD approving biofeedback (pelvic floor muscle biofeedback) for urinary incontinence, because sufficient evidence supported its efficacy for that condition. Thus, CPT 90911 (pelvic floor biofeedback) is covered for urge or stress incontinence when specific criteria are met. For other issues like chronic pain or hypertension, older guidance documents offered little support, and there's no explicit national Medicare coverage for those conditions either. Neurofeedback, being essentially EEG biofeedback, was not included as a covered treatment for psychological conditions in any Medicare coverage decisions. In summary, for Medicare Part B (outpatient services), one should assume that neurofeedback for mental health

indications is noncovered. Patients must either pay out-of-pocket or the provider must find an alternate justification (e.g., perhaps billing 90901 for an offlabel use with an Advance Beneficiary Notice (ABN) on file, if appropriate). Providers must not attempt to camouflage neurofeedback as something else for Medicare billing; doing so could be considered fraudulent. An illustrative (and cautionary) example: In the 2025 case of U.S. v. Luthor et al., a Medicare fraud indictment in Minnesota, one allegation was that the defendants billed Medicare for CPT 90901 (biofeedback) while actually providing neurofeedback to treat mental health conditions. despite Medicare's position that 90901 biofeedback is intended for physiological conditions like incontinence or hypertension, not for psychological therapy. The claims were deemed false because the service (neurofeedback for mental health) didn't align with the code's covered purpose. This case underscores the importance of respecting Medicare's coverage rules. Even if neurofeedback has clear clinical benefit for a patient, if Medicare doesn't cover it for that indication, billing Medicare anyway (under a code for which the service is not covered) is considered a false claim (U.S. Attornev's Office, 2025).

# Recent Changes and Developments

Medicare's fundamental While stance on neurofeedback coverage has not dramatically changed (it remains largely noncovered for psychiatric indications), there have been some recent developments worth noting. One has been in the context of telehealth and the COVID-19 Public Health Emergency. In 2020-2023, the Centers for Medicare & Medicaid Services (CMS) added many services to the list of those eligible for telehealth reimbursement. Interestingly, CPT codes 90875 and 90901 were among the codes temporarily added to Medicare's telehealth services list, allowing providers to perform psychophysiological therapy or biofeedback training via telehealth and bill Medicare as if the services were provided in person (APA, 2023). This telehealth inclusion was extended through at least the end of 2024 by legislation and CMS rulemaking (APA, 2023). However, providers must be cautious. Just because Medicare would process 90875 or 90901 when delivered via telehealth does not mean Medicare has started covering neurofeedback for new diagnoses. It simply means if you were providing, say, pelvic floor biofeedback (90901 for incontinence) or other biofeedback for a covered indication, you could do it via telehealth during the waiver period. It would be a misinterpretation to assume "Medicare now covers neurofeedback for ADHD because 90901 is on the telehealth list"; that is not the case. The telehealth list change is about the delivery method, not the coverage criteria.

Another development involves local Medicare contractors potentially reconsidering their biofeedback policies. There have been instances of LCDs being retired or revised in recent years. For example, one MAC had an LCD (e.g., L34898) that explicitly detailed noncovered diagnoses for biofeedback; if such an LCD is retired, it doesn't automatically mean coverage now exists. This might simply mean the contractor is deferring to general Medicare noncoverage unless new evidence emerges. As of 2025, there is no indication that Medicare has positivelv beaun covering neurofeedback for conditions like ADHD or anxiety. The field is watching ongoing research (some large trials are underway for neurofeedback in PTSD, etc.) and, should that evidence base reach a tipping point, professional societies like the APA or ISNR might lobby Medicare for a national coverage change. Until then, practitioners must assume neurofeedback is a cash-pay service for Medicare beneficiaries or attempt to bill it as incident to physician services in very limited scenarios (with great care, as discussed below).

For completeness, note that Medicare Advantage plans (offered by private insurers but generally mirroring Medicare's coverage decisions) also tend to follow Medicare policy in this area. Many have explicit medical policies declaring neurofeedback investigational or not covered for psychiatric indications (Providence Health Plan, 2022). Some commercial non-Medicare insurers, however, do cover neurofeedback for certain conditions like ADHD on a case-by-case basis, but those decisions do not apply to Medicare beneficiaries. Therefore, for any patient population that includes Medicare recipients, practitioners should be extremely diligent: verify each patient's eligibility and coverage, obtain ABNs where required for noncovered services, and never bill a code to Medicare that mischaracterizes the service (e.g., billing 90834 psychotherapy for a session that was really neurofeedback training, which would be improper).

In summary, current Medicare policy disallows coverage of neurofeedback for mental health, and the recent telehealth allowances do not equate to a coverage expansion. Ethical practice demands that providers inform Medicare patients upfront if a service is noncovered and not attempt to "game" the system. Later in this paper, we discuss a case study exemplifying the severe penalties that can result from flouting these rules.

## **Incident to Billing and Technician Involvement**

Delivering neurofeedback often involves a teambased approach. Thus, a licensed clinician may design and supervise the treatment protocol, while trained technicians or assistants carry out the dayto-day training sessions. This model raises important billing questions. How can services provided by a technician be billed? Can they be billed under the supervising provider's credentials? The concept of incident to billing in Medicare (and analogous rules for some private insurers) is central here, as are state scope-of-practice regulations that dictate what tasks unlicensed individuals can perform.

## Understanding Incident to

In Medicare parlance, an incident to service is one that is furnished incident to a physician's (or certain nonphysician practitioner's) professional services in the course of diagnosis or treatment. Classic examples include a nurse or medical assistant providing a service in a physician's office under the physician's supervision, with the physician then billing for it. If all Medicare requirements are met, the service can be billed under the physician's NPI as if the physician personally rendered it, allowing reimbursement at 100% of the physician fee schedule. In the neurofeedback context, this could theoretically apply if, for instance, a psychiatrist or neurologist initiates a plan of care for neurofeedback and has a technician administer the sessions under direct supervision (meaning the physician is physically present in the office suite and immediately available). Under those conditions, the physician might bill 90901 for those sessions as incident to his or her service. However, it is crucial to note several caveats:

- Medicare's incident to rules only allow this billing provision in an office setting (not in hospital or facility settings) and require that the physician has seen the patient first and established the treatment plan. The services must be an integral, commonly rendered part of the physician's practice, and the physician must remain actively involved in the patient's care. If any piece is missing (e.g., the patient is new without a physician initial visit or the supervision is off-site), then billing incident to is not allowed.
- Provider Type Eligibility: Physicians (MD/DO) and a few others (certain licensed NPPs like PAs and NPs, and in some cases clinical psychologists for their own services)

are eligible to use incident to. However, not all Medicare-recognized provider types have this privilege in the same way. For example, clinical psychologists treating Medicare patients cannot bill medical services that are outside their license, and Medicare generally expects a clinical psychologist to personally provide the psychotherapy services they bill. The concept of incident to is a gray area for psychologists. Medicare does not clearly allow psychologists to bill incident to themselves for services performed by, say, an unlicensed technician. In practice, most psychological services must be performed by the clinician or by a trainee where the clinician is supervising but the trainee isn't separately billing. So, a psychologist in private practice likely cannot hire an unlicensed neurofeedback technician and bill Medicare incident to the psychologist. That would be viewed as the technician providing psychotherapy without a license, which is illegal in many states and not billable to Medicare. On the other hand, a physician (e.g., a psychiatrist) might be able to incorporate a neurofeedback technician under incident to rules. Thus, scope-ofpractice laws and Medicare rules intersect. If your professional license does not allow delegation of a particular task, incident to billing cannot circumvent that. Always check state law; many states consider the application of biofeedback and neurofeedback to be the practice of psychology or medicine, meaning the individual hooking a patient uр to neurofeedback equipment and altering treatment parameters should either be licensed or be supervised in a manner consistent with professional regulations (such as under a formal psychological associate and assistant arrangement).

## **Private Insurance and Delegation**

Outside of Medicare, some private insurers may pay for services delivered by auxiliary personnel if billed under a qualified provider, but policies vary widely. Some insurers require that the person actually providing a biofeedback service be individually credentialed with them (e.g., some insurers will credential masters-level therapists for biofeedback, while others will only reimburse services provided by physicians or licensed psychologists). Other insurers allow a supervised billing model similar to incident to. It is essential to clarify the policy with each payer. As a rule of thumb, billing should never misrepresent who performed the service. Even when using incident to, transparency in the record is needed. The ISNR and Biofeedback Certification International Alliance (BCIA) ethical guidelines emphasize this, stating that practitioners must "clearly specify which services the practitioner provided directly and which were provided under supervision" when billing third parties (BCIA, 2017). For instance. if a technician conducts а neurofeedback session under Dr. Smith's supervision, the progress note should reflect that "Jane Doe, Neurofeedback Technician, conducted the session per Dr. Smith's plan, with Dr. Smith on site." The insurance claim might still be submitted under Dr. Smith's name (if incident to criteria are met), but there is no deception in the documentation. This clarity is not only ethical but also provides a defense that you weren't trying to fool the insurer about who did what.

# Risks of Improper Incident to Usage

Improper use of incident to can result in serious repercussions. In the Minnesota case of U.S. v. Luthor, part of the scheme involved ungualified individuals (in that case, friends of the clinic owners who had no medical licenses) administering neurofeedback and other services, with billing submitted as though performed by qualified providers. The indictment described how the couple "enlisted the help of Luthor's girlfriends" to assist in providing services, and then billed insurers falsely (U.S. Attorney's Office, 2025). This highlights that simply having someone present in the office does not justify billing as if a clinician provided the service. Additionally, each payer may have specific rules; for example, some states require licensure for anyone performing any kind of behavioral health service, which would preclude even having a technician perform neurofeedback unless that technician is on a path to licensure or otherwise exempt. It is also important to note that incident to does not apply at all in institutional settings (for instance, if you are working within a hospital outpatient department or facility, you cannot bill incident to-you'd have to credential the person through the facility or bill under the facility's rules).

Guidance for Practitioners: If you utilize technicians or assistants for neurofeedback services, consider the following guidelines:

 Verify that your state license permits delegation. Some psychology licensing boards allow unlicensed individuals to provide certain services under supervision (often requiring the supervisor to take legal responsibility for the supervisee's work). Other states do not allow this at all, considering it unlicensed practice. Your ability to use support staff for neurofeedback may be determined by these regulations alone.

- 2. If delegation is permitted, ensure rigorous training and supervision of the technician. From an ethical standpoint, the patient should receive the same quality of care as if provider were licensed directly the administering the treatment. The supervising provider should be the one formulating the treatment plan. directlv training the technician, and reviewing progress regularly. (This is also a requirement under Medicare's incident to rules-the physician's involvement must be ongoing and active.)
- 3. When billing, follow the payer's rules to the letter. For Medicare, only bill incident to if all criteria are met (appropriate setting, established plan of care by the physician, direct supervision, etc.) and be sure to use the supervising provider's NPI on the claim (and keep documentation of their presence and active role). For private insurers, if they credential "technician-assisted explicitly biofeedback," follow their billing instructions (some might require a specific modifier or a supervision attestation). If an insurer does not allow incident to and expects the identity of the actual rendering provider, do not list the licensed provider as rendering if they were not actually present, that could be construed as fraud if discovered. Instead, either get the technician independently credentialed with that insurer (if possible) or don't bill that insurer for those services (have the patient pay privately).
- 4. Inform patients about the involvement of a technician. Be transparent that a technician will be working with them and assure them that the supervising professional will be overseeing the process. Transparency builds trust and also preempts any concern or confusion if, for example, a patient later sees an Explanation of Benefits that lists a doctor's name even though they remember mostly working with "Coach Jane" during sessions.

In sum, incident to billing can be a useful but tricky tool. It should be used only in strict accordance with regulations. When done properly, it allows neurofeedback practices to expand capacity (through the help of technicians) without running afoul of the rules. When done improperly, it becomes a pathway to fraudulent billing. Ethical practice demands that patient care and honesty take priority over maximizing reimbursement.

# Ethical and Legal Implications of Incorrect Billing

The landscape of neurofeedback and qEEG billing is not just about getting paid—it is also fraught with ethical and legal landmines. "Incorrect billing" can refer to a range of behaviors: using the wrong code by mistake, deliberately upcoding to obtain higher reimbursement, unbundling services to increase revenue, billing for services not actually rendered or not covered, or misrepresenting who provided the service. The implications of such actions vary from claims denials and demands for repayment, to professional disciplinary action, and in the worst cases, to civil or criminal liability for fraud. This section examines these implications, with real-world examples to illustrate the high stakes involved.

# Ethical Duties and Professional Standards

Fundamentally, healthcare providers have an ethical duty to be honest in billing. The American Psychological Association's Ethics Code insists on accuracy in representing services and fees (APA, 2017). ISNR's own Professional Standards and Ethical Principles (most recently updated in 2020) similarly emphasize that clinicians should comply with all third-party payer rules and accurately represent the services provided, and the BCIA ethics code explicitly requires that practitioners "only charge for services actually provided by them or by those under their legal supervision" and, when billing, to "clearly specify which services were provided directly and which were supervised" (ISNR, 2020; BCIA, 2017). Such guidelines echo what we've detailed throughout this article: be truthful in billing and follow the established rules. Misbilling also violates patient trust-even if the patient isn't paying out of pocket, they rely on the provider's integrity in dealings with their insurer. Ethically, "padding" a bill or manipulating coding is tantamount to lying, which erodes the moral fabric of both the provider-patient relationship and the provider-payer relationship. It can also harm the field as a whole. If neurofeedback practitioners develop a reputation for shadv billing practices, insurance companies are likely to become more restrictive and suspicious, potentially limiting coverage or access for all patients (Providence Health Plan, 2022). Therefore, ethical billing is a form of professional responsibility to protect the viability and credibility of neurofeedback as a legitimate treatment modality.

# **Common Improper Billing Practices to Avoid**

- Unbundling and Double Billing: This occurs when a provider bills two or more codes for what is actually a single service. For example, billing both 90901 and 90834 (individual psychotherapy) for the same time period of a session-claiming one code was for biofeedback and one for therapy, when in reality it was one integrated session. Or billing an EEG recording code in addition to 90901 for a neurofeedback session (where the EEG recording is inherent to the neurofeedback service). As discussed rules earlier. CPT prohibit these combinations, and payers have automated edits in place to detect many of them. If audited, the provider would have to pay back the improperly billed amount and could face penalties. Such unbundling clearly violates coding guidelines (CMS, 2015).
- Upcoding Duration or Intensity: Using a code that represents a higher intensity or longer duration service than what was actually provided. For instance, routinely billing 90876 (the 45-min psychotherapy /biofeedback code) when sessions are in fact only 30 min, or reporting multiple units of 90901 on the same day (remember that 90901 is per day, not per hour). In the Department of Justice's Minnesota case example, the defendants allegedly billed codes indicating longer durations than they actually provided (U.S. Attorney's Office, 2025). Excessive duration billing is a red flag in claims data-if a practice is routinely billing an improbably high number of hours of service per day or per patient, it will attract payer scrutiny.
- Misusing Evaluation Codes: Some neurofeedback providers have patients fill out symptom questionnaires or complete a continuous performance test and then attempt to bill those activities as psychological testing or evaluation services. If those assessments are not truly separate services, or if they are part of the routine neurofeedback evaluation and feedback process that should be encompassed by the session code, then billing them separately is inappropriate. In U.S. v. Luthor, the clinic psychological testing billed code combinations that "by definition could not be combined": for example, billing a code that represents test administration alongside another code that represents the same test's interpretation, in a way that double-counted

the work (Office of Inspector General, 2025). Such practices are false billing and were cited in the indictment as part of the fraudulent scheme.

- Billing Unqualified Services: As discussed in the incident to section, billing as if a licensed professional provided the service when it was actually delivered by an unqualified person (e.g., an unlicensed technician) is both unethical and illegal. If the rules for supervised billing aren't met, one cannot simply put the service under someone else's name on a claim. That is considered a false claim.
- Billing for Noncovered Services as if Covered: This is a subtle but important point, particularly for neurofeedback. If a service is not covered by an insurer, you cannot simply bill it under a different code that is covered. For example, some providers have attempted to bill neurofeedback (noncovered for a given diagnosis or plan) as 90834 (standard psychotherapy) in order to get paid. Unless that patient truly received a legitimate psychotherapy session (which neurofeedback training is not, in most cases), that is misrepresentation. The proper approach for a noncovered service is to have the patient pay privately or, if the insurer allows, submit the claim with a modifier (for instance, Medicare's -GY modifier for noncovered services) so that it is transparently denied and the patient can be charged. Misrepresenting the nature of the service is fraud. The Luthor case again exemplifies this: by billing neurofeedback under codes for which it didn't qualify (using 90901 for conditions it shouldn't be used for, or billing inappropriate code combinations), the defendants crossed into fraud territory (U.S. Attorney's Office, 2025).

# Illustrative Case Study – U.S. v. Luthor et al. (2025, Minnesota)

This case provides a concrete illustration of what can happen when billing goes awry. Gabriel Luthor and Elizabeth Brown ran a company providing neurofeedback in Minnesota and, as per a federal indictment, engaged in systematic overbilling. They allegedly submitted "hundreds of thousands of false claims" totaling roughly \$15 million in billed charges (U.S. Attorney's Office, 2025). Their tactics included using codes that didn't apply to neurofeedback, combining codes that shouldn't be billed together, and inflating session times. Notably, evidence showed they ignored repeated warnings-insurers had warned them, an outside auditor warned them, and even CMS sent warnings, yet they persisted (Office of Inspector General, 2025). This willful disregard led to a major healthcare fraud case, with charges including wire fraud and money laundering (U.S. Attorney's Office, 2025). The fallout: arrests, an indictment, frozen assets (the DOJ moved to seize a mansion the couple had purchased with the proceeds), and the prospect of years in prison if convicted. While this is an extreme example, it starkly highlights the legal risks. A provider doesn't have to be making \$15 million to get into trouble: even small practices have been audited by Medicare or insurers and forced to repay tens of thousands of dollars, or face exclusion from insurance panels, due to improper coding.

## **Civil and Criminal Consequences**

On the civil side, insurers can demand repayment for any improperly paid claims. They may also impose interest on the overpayments and even civil monetary penalties in some cases (Medicare's Office of Inspector General has authority to levy fines for fraud or false billing). If the behavior is deemed knowing and willful, the False Claims Act can come into play, allowing treble damages (three times the amount of the false claims) and enabling whistleblower (qui tam) lawsuits. For instance, if a technician in a clinic realizes the boss is billing fraudulently, that employee could potentially become a whistleblower, leading to an investigation. On the criminal side, as with the Luthor case, prosecutors may charge healthcare fraud or related offenses (such as wire fraud if electronic claims were sent, or mail fraud if paper claims were involved). A conviction can result in hefty fines and incarceration, as well as loss of professional licenses and exclusion from Medicare and Medicaid participation for at least 5 years (often much longer, effectively ending one's insurance-based practice).

## **Professional Discipline**

Even short of criminal court, providers face their own professional licensing boards. A psychologist or physician could be sanctioned or lose their license for unethical billing practices. Many state boards have specific rules against insurance fraud or broadly against "unprofessional conduct," which would include deceptive billing. Thus, a practitioner might survive an audit or investigation by an insurer, but still face a licensure complaint from, say, an unhappy patient or an insurance company that detected improper billing.

## **Preventive Measures**

The best protection is prevention. Regular compliance training and internal audits within one's practice are essential. Many larger clinics hire coding experts or consultants to review their billing periodically and ensure everything aligns with current guidelines. Solo practitioners can make use of resources from professional associations (e.g., the APA's practice organization provides billing guidelines, and ISNR often offers webinars on ethics in coding) to stay informed. When an error is discovered, it should be voluntarily corrected; for example, if you realize you accidentally billed 90876 when you only provided a 25-min session (which should have been 90875), correct the error or refund the difference rather than hoping it goes unnoticed. Showing a pattern of prompt corrective action can mitigate penalties if an insurer or Medicare audits vou. Maintaining open communication with pavers is also key. If unsure how to bill something, ask the insurer (many have provider relations representatives who can give guidance, preferably in writing). Keep records of any authorization or quidance you receive from payers, in case it is questioned later.

In conclusion, the ethical mantra is "When in doubt, bill honestly and modestly." It is far better to underbill (or not get paid for something) than to overbill and risk the cascade of consequences. No financial gain is worth one's professional integrity or freedom. By adhering to correct coding principles and erring on the side of caution, neurofeedback practitioners can avoid the nightmare scenarios and instead focus on helping patients.

## The Role of ISNR and Professional Advocacy in Ethical Billing

ISNR, along with related bodies like AAPB and BCIA, plays a crucial role in guiding practitioners toward ethical billing and pushing for systemic improvements in how neurofeedback and qEEG are coded and reimbursed. These organizations serve as a bridge between the clinical community and regulatory entities (such as the AMA, CMS, and insurers), and they provide education and resources that directly address the challenges discussed in this article.

## Code of Ethics and Professional Guidelines

ISNR has promulgated ethical principles and practice standards that encompass billing ethics. For example, the ISNR Professional Standards and Ethical Principles (PSEP) document (most recently updated in 2020) reinforces that clinicians should comply with all third-party payer rules and accurately represent their services. Similarly, the BCIA, which certifies neurofeedback practitioners, mandates in its ethical standards that certificants "only charge for services actually provided by them or by those under their legal supervision" and that when billing, they "clearly specify which services were provided directly and which were supervised." (BCIA, 2017). These guidelines essentially echo what we've detailed in this paper: be truthful in billing and follow the rules. ISNR expects its members to uphold these standards. Through webinars and conference workshops, ISNR often addresses topics like "Ethics in qEEG and Neuromodulation," where appropriate coding is highlighted as an ethical issue, not just a financial one. Members are encouraged to seek mentorship or peer consultation if they are unsure about billing practices, fostering a community standard of integrity.

## Advocacy for CPT Code Refinement

ISNR, in collaboration with AAPB, has been actively working to improve the CPT coding system to better fit neurofeedback. As noted earlier, they launched a CPT Code Initiative (ISNR & AAPB, 2023). The rationale behind this advocacy is partly ethical and partly practical. Current codes are outdated, which can put well-intentioned providers in ambiguous situations. For instance, a psychologist treating PTSD with neurofeedback might struggle with which code to use, since 90901 is a biofeedback code that many insurers won't reimburse for PTSD, yet 90875 requires psychotherapy and might not be recognized either for neurofeedback alone. By advocating to the AMA for new codes or revised definitions that explicitly include neurofeedback for certain conditions, ISNR and AAPB hope to reduce ambiguity and thereby reduce inadvertent miscoding. This initiative, if successful, could lead to something like a dedicated neurofeedback therapy code, or a modifier to existing codes, or at least clearer guidance in CPT Assistant publications. The advocacy involves assembling research evidence, utilization data, and a strong case for why better codes would benefit patient care, aligning with the AMA's criteria for considering code changes. ISNR also communicates with insurers to encourage coverage by sharing research demonstrating neurofeedback's efficacy for certain disorders. The doal is twofold: make neurofeedback more accessible (in terms of insurance coverage) and ensure it is reimbursed only for appropriate uses with proper coding (thus rewarding ethical providers and weeding out unscrupulous actors).

## Educating Membership on Compliance

Both ISNR and AAPB provide educational materials focused on billing compliance. They often invite coding experts or healthcare attorneys to speak at annual conferences. Their newsletters and journals (e.g., NeuroRegulation, ISNR's journal) periodically cover updates on Medicare policies or present case studies of billing dilemmas. Notably, plenary sessions and workshops at ISNR's annual conferences have been devoted to "Update on CPT Codina and Insurance Reimbursement for Neurofeedback and gEEG," led by domain expert Mark Trullinger, indicating how high a priority this topic is for the organization. Through these efforts, ISNR helps keep practitioners up to date, which is vital since rules can change annually.

## **ISNR as an Ethical Watchdog**

Professional organizations also serve a selfregulatory function. They encourage members to report unethical practices (perhaps privately to an ethics committee). While ISNR is not a licensing board and cannot revoke someone's license, it can censure members or even revoke membership for ethical violations. More importantly, by publicly emphasizing ethics (in articles like this one or official statements), ISNR sets a tone that deters misconduct. In fields that are somewhat fringe or under skepticism (and neurofeedback has at times faced skepticism within mainstream medicine), selfpolicing is crucial to maintain credibility. ISNR's Code of Ethics includes clauses about not misrepresenting one's services and credentials, which would encompass billing fraud as a form of misrepresentation.

## **Collaboration With Regulators**

ISNR has, in some cases, worked with regulatory agencies or at least provided input when asked. For example, if CMS or a state insurance commission seeks expert input on how neurofeedback is practiced, ISNR can provide informed opinions or data. This can help shape policies that are fair and evidence-based. An example might be an insurer whether considering to start covering neurofeedback, ISNR might supply outcome data or practice guidelines to help them make an informed decision (advocating for coverage when appropriate, along with clear guidelines to avoid misuse).

In summary, ISNR's role is integral in both guiding individual practitioners and shaping the broader billing environment. By advocating for clearer codes and educating professionals about ethical billing, ISNR helps reduce the ambiguity and confusion that can lead to inadvertent errors, and it shines a light on the "high road" in billing practices. Practitioners are strongly advised to engage with such professional bodies, as membership offers access to the latest information and a network of peers committed to ethical practice. Ultimately, every provider's honest billing is a brick in the wall of the field's integrity and organizations like ISNR provide the blueprint for how to lay those bricks correctly.

## Ambiguities in CPT Coding and Associated Risks

Despite the best efforts of the AMA, CMS, and professional organizations, some ambiguities in CPT coding for neurofeedback and qEEG persist. These gray areas create risks for well-meaning clinicians who must interpret how to bill novel or hybrid services. Ambiguities can arise from vague code definitions, evolving technology that outpaces code updates, or differing interpretations between payers. Let's explore a few of these ambiguities and the potential pitfalls they pose:

- Biofeedback versus Psychotherapy Fuzzy • Boundaries: Neurofeedback straddles the line between physiological training and psychological therapy. Some providers struggle with whether a session should be coded as "psychophysiological therapy with biofeedback" (90875 or 90876) or just "biofeedback" (90901). The ambiguity might arise if, for example, a clinician spends part of the session discussing emotions or strategies (which feels copina like psychotherapy) and part of it running neurofeedback. How much talking turns a 90901 session into a 90875 session? CPT doesn't quantify this, leaving it to clinical judgment. This ambiguity could lead to inconsistent coding—one clinician might always use 90875 if there was any counseling, while another uses 90901 unless it was predominantly therapy. The risk here is that if audited, one might have to justify why a certain code was chosen. The safer approach is to decide at the outset the session's primary purpose. If therapy is only a minor adjunct to a primarily neurofeedback session, lean towards 90901; if substantive psychotherapy is a major component of the visit, use 90875 or 90876. Document the session content accordingly to support the choice. In all cases, avoid coding both 90901 and 90875 or 90876 for the same session (as that is clearly disallowed).
- Quantitative EEG Coding: As discussed, no single CPT code explicitly says "qEEG brain

map." Some clinicians use 95957 (digital EEG analysis) to bill for gEEG, but not all payers accept that usage for behavioral health indications. Others might resort to an unlisted code (such as 94999, unlisted neurological procedure), which is harder to get reimbursed. The lack of a dedicated qEEG code creates ambiguity, practitioners must choose between not billing for the service at all (perhaps bundling its cost into a self-pay neurofeedback program fee), billing something like 95957 and hoping it passes scrutiny, or billing an evaluation code that isn't truly appropriate. Each option has risks. Not billing means no reimbursement: billing 95957 might get denied or could be viewed as misbilling if the payer later specifies that qEEG wasn't covered for that diagnosis; and billing an evaluation code (like 96132 for neurocognitive test interpretation) would improper unless likelv be formal neuropsychological testing was actually done. In a policy by Anthem Blue Cross Blue Shield, for example, the insurer lists CPT codes 90875, 90901, and 95957 in a document regarding neurofeedback, essentially warning providers not to use 95957 in the context of EEG biofeedback for psychological conditions (Anthem Blue Cross Blue Shield, 2021). This implies they are watching for misuse of that neurological code for neurofeedback. Until a clear gEEG code exists, the ambiguity remains. Practitioners should tread carefully: if using 95957, ensure you truly have an EEG recording and a separate analytical report that could stand up to scrutiny as a legitimate service (preferably with a neurologist or qEEG-certified expert's involvement). This aligns with suggestions some have made to involve a neurologist to read the raw EEG as part of the qEEG process, which can lend credibility and perhaps provide a legitimate billing route (e.g., the neurologist might bill an EEG interpretation code separately).

 Home Training and Remote Neurofeedback: With newer technologies, some practitioners are supervising neurofeedback that patients do at home (e.g., loaning the patient equipment or using remote neurofeedback software). How to bill this is ambiguous. Is it billable at all if the patient is essentially training themselves? If the clinician is monitoring in real time via an internet connection, is that effectively a telehealth session (and thus maybe could be billed as 90901 with a telehealth modifier)? CPT does not yet have a code for "remote biofeedback monitoring." This ambiguity can lead some to incorrectly bill multiple units of 90901 for unsupervised home use (which would be wrong). The safer interpretation is that if a clinician is actively supervising the neurofeedback in real time (e.g., via telehealth video session), then one could bill the session as a telehealth service (e.g., 90901 with the appropriate telehealth placeof-service or modifier). If the patient is training solo and the clinician only reviews the data later, it might not be a billable service at all, except possibly as a data analysis or review (which would likely fall under an unlisted code if anything). It is a gray area that needs clarification in the future. Until then, clarity with patients on fees is crucial (perhaps charging a flat program fee for home training use) to avoid attempting to force-fit these services into insurance billing where they don't fit well.

Payer Policy versus CPT Definition: Sometimes the ambiguity isn't within CPT itself, but between what a CPT code technically allows and what an insurer's policy will reimburse. For instance, CPT 90901 technically does not restrict the conditions it can be used for-it simply says, "biofeedback by any modality." But an insurer's medical policy might say "we only cover 90901 for these three diagnoses." This creates a trap. A provider might see the CPT code description and think, "I can use this for neurofeedback applied to a client experiencing ADHD," which is true in terms of coding submission, but the insurer will deny it as not covered for ADHD. The provider might then be tempted to think, "maybe if I use 90875 (since it is in the mental health section), it will get paid." That could result in payment but would violate coding integrity if no psychotherapy was actually done. The conflict between what a code can describe and what an insurer will reimburse is a common frustration. The ethical approach is not to twist your coding to chase coverage. Instead, either obtain a preauthorization or special exception from the insurer for the service, or inform the patient that it is not covered and make payment arrangements accordingly. Many neurofeedback providers end up with a mix

of insurance and self-pay precisely because of these coverage gaps. Trying to solve a coverage gap by coding slight-of-hand usually backfires eventually.

Risks of Ambiguity: Ambiguities increase the risk of inconsistent billing across the fieldwhich insurers' algorithms may flag. If five providers all treat ADHD with neurofeedback but one bills 90876, another 90901, another 96110, etc., insurers see inconsistency and may initiate audits to determine which (if any) are billing correctly. Ambiguity also poses a problem for training and knowledge transfer. New providers might inadvertently learn poor coding habits from others. One clinician's "creative" billing can become a staffer's standard practice at a clinic, and then that staffer carries those habits to a new job, spreading the misuse. Over time, this can lead to industry-wide patterns that attract regulator attention (e.g., CMS or the OIG issuing a fraud alert or policy clarification).

To manage these ambiguities, practitioners should seek clarity whenever possible. Consult CPT Assistant archives, ask insurers for written guidance, and discuss tricky situations with colleagues through professional forums or consultation. Often, an ambiguity can be resolved or at least reduced by simply verifying information directly with authoritative sources. When something remains ambiguous, make a conservative choice and document your rationale. For example, a note to file might state, "Chose 90901 instead of 90876 because although some counseling was done, it was less than 50% of session; primary service was biofeedback." A contemporaneous note like that shows you were not attempting deception but rather thoughtfully navigating a gray area.

Ultimately, the push by ISNR and AAPB to refine CPT codes is aimed at eliminating these ambiguities. Clear codes that match neurofeedback's usage will let clinicians focus on therapy rather than coding dilemmas and will reduce inadvertent noncompliance. Until that happens, awareness of the pitfalls is the best defense.

# Recommendations

Navigating the thicket of neurofeedback and qEEG billing requires diligence, honesty, and up-to-date knowledge. The following recommendations summarize best practices and professional responsibilities that can help clinicians bill ethically and avoid pitfalls:

- 1. Commit to Ongoing Education: Billing rules and codes change over time. Clinicians and billing staff should engage in continuing education specifically around coding and compliance. This might include attending webinars (such as those offered by ISNR, AAPB, or APA), subscribing to coding newsletters, and reading updates from CMS and major insurers each year. Staying current is critical. For example, knowing that 90875 and 90901 were added to Medicare's telehealth list temporarily (APA, 2023), that CPT code descriptors have subtle changes, or that a new CPT code is on the horizon can all influence how you practice and bill. Remember, ignorance is not a defense in audits; investment in education pays off by preventing errors.
- 2. Use Established Codes as Intended: Follow the definitions and guidelines for CPT codes to the letter. If using 90901, ensure it is indeed a biofeedback session without separate psychotherapy. If using 90876, ensure you did provide psychotherapy alongside the biofeedback. Keep a copy of AMA CPT Assistant guidance or other authoritative advice on these codes handy, so if there's any question from you or an insurer, you can demonstrate adherence to official guidance (e.g., by showing the AMA Q&A stating not to pair 90901 with 90875 [AMA, 1997]). Avoid "code drift," where over time one might start using a code more loosely than intended. It can help to periodically self-audit a few charts and compare your documentation to the codes billed.
- 3. Consult Payer Policies Before Billing New Services: When integrating a new service like qEEG, review the major payers' medical policies first. If United Healthcare, Aetna, Blue Cross, etc., all state that gEEG is experimental for certain conditions, then you know billing it to those insurers will be problematic. You can then plan accordingly (maybe treat it as a self-pay service with proper patient consent). If a payer does cover biofeedback but only for certain diagnoses, make sure those diagnoses are documented in the record if applicable. Essentially, try to align your billing with each payer's rules as much as possible. When in doubt, seek a preauthorization or guidance from the insurer-and get it in writing if you

can. Keep records of any authorization or payer instruction in case it is questioned later.

- 4. Emphasize Documentation and Transparency: Good documentation is your ally. Always document what intervention was done, for how long, by whom, and for what purpose (i.e., the patient's goals or medical necessity). If a technician was involved, document their role and the supervision in place. If you decide to bill something in an situation, document ambiquous your reasoning for the coding choice. This creates a contemporaneous record that you were acting in good faith. Additionally, be transparent with patients. If something isn't covered by their insurance, inform them beforehand. If you are billing in an unusual (perhaps billing 90834 for wav psychotherapy time and 90901 for neurofeedback time separately on the same day, with distinct documentation for each), let the patient know so that if they see two services on their insurance Explanation of Benefits, they aren't confused and won't inadvertently raise concerns. Honesty with patients about billing not only is ethical in itself, it also reinforces diligence and honesty in the billing process.
- Avoid Pressure to "Make Insurance Pay": 5. Sometimes patients really want their insurance to cover neurofeedback, or a practice might financially depend on squeezing reimbursement from insurers. This can create pressure to bend rules. Stay vigilant against this pressure. Educate patients that not all services are covered and that you must bill accurately for legal and ethical reasons. Many patients will understand when you frame it as an obligation to do the right thing. You can provide them with resources (for instance, a copy of the insurer's policy that shows neurofeedback is not covered for their condition) to help explain the situation. Consider offering a superbill for out-ofnetwork or noncovered services that accurately describes the service provided (even if it uses a numeric code, you might add a descriptor like "gEEG brain map: experimental service" so the payer has full information). The bottom line: do not let financial incentives erode your ethical standards. It may mean slower growth of your practice or more out-of-pocket costs for

patients, but it is the right path in the long run.

- 6. Engage in Peer Consultation or Hire Experts: If you are unsure about your billing practices, seek a peer review or outside consultation. You might ask a colleague knowledgeable in coding to review some of your superbills or claims for feedback. Larger clinics might even employ a compliance officer or hire a consultant periodically to audit charts and billing. An external eye can catch issues you might miss due to familiarity or bias. If you ever receive an audit notice or you suspect past errors that need correction, consult a healthcare attorney or compliance expert early-their guidance can help resolve issues with minimal damage. Proactivity is key; don't wait until a minor billing issue becomes a major legal problem.
- 7. Support Professional Advocacy: Lend your voice and support to organizations like ISNR and AAPB in their efforts to improve the coding system. This could mean participating in surveys about practice patterns and code utilization, contributing de-identified data that helps justify new codes, or even donating to advocacy funds if you are able. The more the coding system reflects the reality of neurofeedback practice, the easier it will be for ethical practitioners to stay compliant. By being involved in these advocacy efforts, practitioners also stay informed—advocacy updates often include summaries of the current coding and reimbursement climate.

# Conclusion

Billing for neurofeedback and qEEG is undoubtedly complex. It is a mix of applying old codes to new techniques, navigating varied payer rules, and keeping up with evolving standards of practice. Yet, the overarching principle is simple: billing must accurately reflect clinical reality. When it does, providers not only safeguard themselves from legal trouble but also contribute to a culture of integrity that benefits the entire profession. Historical missteps and high-profile fraud cases have taught us that the costs of getting it wrong are enormous for patients, for practitioners, and for the credibility of neurofeedback therapy itself. Conversely, by clarifying coding questions, adhering to ethical norms, and advocating for clearer guidelines, we chart a path where neurofeedback can fully "come of age" in the healthcare system, recognized and reimbursed appropriately.

As we clarify the code, through articles like this, collective advocacv. and dav-to-dav conscientiousness, we move toward a future in which clinicians can focus on neuroregulation interventions without the shadow of billing uncertainty. Achieving that clarity will require continued collaboration between practitioners, professional societies, payers, and regulators. Each claim form we fill out correctly is a small but meaningful step in that direction. Let this paper serve not only as an informational resource but as a reaffirmation of our commitment to ethical practice. In the end, doing the right thing in billing is an extension of doing the right thing in clinical careboth are essential to truly help our patients and advance our field.

## Disclaimer

This article is intended for general educational guidance on neurofeedback and gEEG billing practices and does not constitute legal advice. The content may not encompass all rules or scenarios and might not reflect changes after publication. Practitioners should consult current official sources, paver bulletins, and, when needed, seek advice from qualified healthcare attorneys or compliance professionals to address their specific situations. Clinical providers are responsible for ensuring their own billing compliance with federal, state, and payer regulations. Always verify how rules apply in your locality and practice setting. The authors and publisher assume no liability for actions taken based on this educational content. Readers are strongly advised to consult legal counsel and the relevant insurance carriers or Medicare contractors for definitive guidance to ensure full compliance with all applicable laws and policies.

## **Author Disclosure**

The authors declare that there are no conflicts of interest, financial interests, or funding sources to disclose. No grants or external financial support were received for the development of this manuscript. Both authors affirm that the content represents their independent scholarly and professional analysis.

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**Received:** May 5, 2025 **Accepted:** May 5, 2025 **Published:** June 27, 2025