

A Neurologist's Perspective on the National Football League and Retired Players Settlement

The settlement raises significant professional and ethical concerns for the field and practitioners of neurology.

By Frank X. Conidi, DO, MS



Introduction

In the National Football League's recent \$1 billion settlement of a class action suit brought by players retired from the NFL, the class' attorneys receive approximately \$113 million, plus 5% of all awards players receive in addition to the \$1 billion. Players are eligible for awards based on a sliding scale for standard diagnoses including amyotrophic lateral sclerosis (ALS), Parkinson's disease (PD), and Alzheimer's disease (AD). Chronic traumatic encephalopathy (CTE) was removed from the list of disorders eligible for award at the 11th hour of the settlement negotiation. Players are also eligible for awards if they are diagnosed with what is termed *level 1.5* and *level 2 neurocognitive impairments*, neither of which correlate with known neuropsychologic diagnoses; these are thus perhaps best termed as *fictional diagnoses*. Another fictional diagnostic category is level 1 neurocognitive impairment, although this diagnosis does not make a retired player eligible for an award in the settlement.¹

The settlement calls for players to be evaluated by a neurologist and possibly by a neuropsychologist under 2 possible tracks, the monetary award fund (MAF) or baseline assessment program (BAP).¹ Review of the evaluation process, potential diagnoses, and the BAP and MAF contracts and fee schedule raises a number of concerns for neurologists and ethical concerns for the retired NFL players and the field of neurology.

Monetary Award Fund Track

Under the MAF track, the player or their representative must independently seek an evaluation by an MAF-participating physician (a board-certified neurologist, neurosurgeon, or other neurospecialist approved by both the NFL and the class). The player or their representative pays all fees related to the evalu-

ation. The MAF physician may diagnose the player with normal neurocognitive function, levels 1, 1.5, or 2 neurocognitive impairment, PD, or ALS based on clinical evaluation and use of the Clinical Dementia Rating Scale (CDR). Neuropsychologic testing, neuroimaging, and blood work are not required. To diagnose AD, the MAF doctor is expected to follow the DSM-5 criteria or World Health Organization Classification of Diseases (9th or 10th edition). All MAF physicians are required to carry malpractice liability insurance coverage of \$3 million.

Baseline Assessment Track

The BAP tract is an extensive independent medical examination lasting 1 to 2 hours plus record review conducted by a board-certified neurologist, neurosurgeon, or other neurospecialist also approved by the NFL and the class. Neuropsychologic testing is included and must be reviewed by the BAP physician. In both the MAF and BAP, neuropsychological testing must be conducted by a board-certified neuropsychologist (there are approximately 1,300 in the US).² In the BAP evaluation, the physician may only diagnose level 1, 1.5, or 2 neurocognitive impairments. If a player wants to make a claim related to a diagnosis of PD, AD, or ALS, he must see an MAF physician. Payment for a BAP evaluation is made directly to the neurologist (approximately \$500) and neuropsychologist (approximately \$2,500) by the settlement claims administrator. All BAP physicians are required to carry malpractice liability insurance coverage of \$1 million.

Concerns for Neurologists Malpractice Implications

There is a high potential for malpractice lawsuits for failure to diagnose AD (MAF and BAP physicians) or failure to diagnose PD and ALS (BAP physicians). Current diagnostic criteria

and guidelines³ call for early diagnosis of AD. Yet under the criteria in the settlement, any player receiving a level 1, 1.5, or 2 neurocognitive impairment could also be classified as having a stage of AD making a possible and even probable AD diagnosis apply to every individual diagnosed with any of these neurocognitive impairments. Because there are different levels of awards for the various diagnoses, it is easy to imagine this leading to a failure-to-diagnose suit. Perhaps there is good reason for requiring \$1 million and \$3 million in malpractice coverage.

Standard of Care for Dementia Diagnosis

The evaluation process does not follow the standard of care for the diagnosis of dementia in the young. A majority of the retired players are under age 65, making any dementia diagnosis an early dementia diagnosis.³ Numerous organizations outline a standard evaluation for diagnosis of early dementia and other causes of neurocognitive impairment that include basic neuroimaging to screen for multiinfarct dementia (MID), vascular dementia (VaD), normal pressure hydrocephalus (NPH), traumatic brain injury (TBI), and others and routine blood work for possible reversible causes of dementia (ie, vitamin B₁₂ or vitamin D deficiencies, hypothyroidism, or neurosyphilis). In addition, fluorodeoxyglucose-positron emission tomography (FDG-PET) is available and useful in distinguishing between dementia and TBI, which is highly significant given that TBI is a likely etiology of the neurocognitive symptoms in the class.⁴ Imaging of amyloid- β (A β) with PET may also be used to rule out an AD diagnosis and could be extremely helpful. Although some would argue that technology should still be used for research purposes, it is showing promise and being widely used in older patients through the CMS-sponsored IDEAS trial and is also utilized in the latest recommendations for making a diagnosis of early AD.³

Ethical Patient Care

Under the settlement, many retired players will receive a diagnosis that is not a true medical diagnosis with no organized follow-up or treatment. Neurologists are obligated to their patients to make the most accurate and specific diagnosis possible and to treat or refer the patient for proper treatment whenever possible. As described previously, a number of the diagnoses outlined in the settlement are fictional in nature, leaving the player confused about the cause of his symptoms. Although the settlement mentions that players who receive a rating of level 1 would be eligible for continued evaluation and those who receive a diagnosis of level 1.5 or higher will be eligible for continued care and medications, I have not been able to locate any programs or instructions for the players relating to the same.

Fair and Equitable Reimbursement

Reimbursement for the BAP exams are not fair and reason-

able and do not properly reimburse for the scope of work, level of expertise, legal requirements, or assumed risk required to evaluate the players. As stated, the neurologist is paid between \$300 and \$500 for what is in essence a complex independent medical examination with extensive record review. In Florida, the average reimbursement for such an evaluation is \$1,500 or more. In addition, the neurologist is required to make the final diagnosis (the neuropsychologist acts only as consultant), assuming all the risk in a player's diagnosis.

Recommendations

Reassess Risks and Benefits of Participation

Neurologists should reassess the risks and benefits of continuing to participate in the BAP and MAF programs until an adequate legal review of possible malpractice issues has been conducted and, if necessary, changes have been made to the settlement to protect diagnosing physicians from litigation for failure to diagnose. If a neurologist chooses to continue participating until such review and possible changes are made, she or he should have a low threshold for diagnosing possible or probable AD. A BAP physician who cannot make a diagnosis of AD for members of this class should strongly consider documenting in writing a recommendation and/or referral for any player diagnosed with a level 1 or higher neurocognitive impairment to see an MAF doctor for further evaluation.

Development of a Protocol for Diagnosis

A protocol should be developed with the AAN and other organizations involved in AD and PD that includes a standard workup for dementia, PD, and ALS with appropriate neuroimaging studies (eg, MRI, FDG-PET and A β -PET) and blood tests as discussed earlier in this article. Once the diagnostic criteria and protocol are resolved, the BAP physicians should be allowed to diagnose AD, PD, and ALS because there is no reason a board-certified neurologist should not be able to make neurologic diagnoses.

Improve Access to Care

Given the diagnostic issues discussed and that several are for neurologic conditions, reimbursement to neurologists performing BAP exams should be equivalent to reimbursement to BAP neuropsychologists. This will improve participation in the BAP program, which is having issues recruiting physicians, allowing retired NFL players to access the care they need in a timelier matter.

The AAN should work with the claims administrator, class representative, and the NFL with other related agencies to implement a fair and reasonable fee/reimbursement schedule that allows retired players who qualify under the lawsuit to receive continued care, evaluations, and treatment including medications. Because the recognized clinical diagnoses in the settlement are neurologic, the program should be open to all

neurologists and other physicians qualified to diagnose cognitive impairments and neurologic illnesses.

Neuropsychology Requirements

Given that only 4% of psychologists in the US are board-certified, removing the board certification requirement for neuropsychologists will also allow improved access for retired alumni.

Research Funding

There remains a lack of well-defined biomarkers for the neurocognitive conditions in the settlement and our understanding of the etiology of neurocognitive decline in people under age 65 is still limited. In this context, the \$75 million dollars outlined in the settlement for research should be allocated immediately. The NFL should be asked to consider increasing it tenfold for research into the cause, treatment, and prevention of neurocognitive and other neurologic issues retired NFL players are experiencing at significantly higher rates than the general population.

Research funding should be administered by an independent organization without any interference or stipulations from the NFL or its affiliated organizations. Funding should also be easily accessible through multiple types of governmental and nongovernmental funding agencies. The NFL might consider setting up centers of excellence that are geographically diverse and logically located based on the geographic distribution of players in the class, similar to the Defense Centers of Excellence at Walter Reed Medical Center. This would allow a more controlled and longitudinal evaluation of the immediate and long-term effects of high-impact contact sports. ■

1. United States District Court Eastern District of Pennsylvania. Plaintiffs v. National Football League and NFL Properties, LLC. Class action settlement agreement of civil action no. 14-cv-0029. <https://www.nflconcussionsettlement.com/ViewPDFDoc.aspx>. Accessed September 18, 2018.

2. Application information FAQs. American Board of Professional Psychology website. <https://abpp.org/Applicant-Information/Specialty-Boards/Clinical-Neuropsychology/FAQs.aspx#How%20many%20ABCN%20board%20certified%20Clinical%20Neuropsychologists%20are%20there?> Accessed September 18, 2018.

3. Diagnostic criteria and guidelines. Alzheimer's Association website. https://www.alz.org/research/for_researchers/diagnostic-criteria-guidelines. Accessed September 18, 2018.

4. Semple BD, Zamani A, Rayner G, Shultz SR, Jones NC. Affective, neurocognitive and psychosocial disorders associated with traumatic brain injury and post-traumatic epilepsy. *Neurobiol Dis*. 2018 Jul 27. pii: S0969-9961(18)30284-5. doi: 10.1016/j.nbd.2018.07.018.

Frank X. Conidi, DO, MS

Immediate Past President
Florida Neurologic Society
Director
Florida Center for Headache and Sports Neurology
Palm Beach, FL

Disclosures

The author has no relevant financial or other relationships to disclose.