

Complementary and alternative medicine in multiple sclerosis

Payment policy perspectives

Heidi Moawad, MD

Katie M. Shepard

Saty Satya-Murti, MD

Summary

This article identifies payment policy perspectives of the American Academy of Neurology's guideline on complementary and alternative medicine (CAM) in multiple sclerosis (MS). The guideline is a reliable repository of information for advocating or not recommending certain CAM treatments in MS. It eases the burden of searching for information on each separate CAM treatment. It frequently emphasizes the need for patient counseling. To provide such generally undervalued, but needed, cognitive services, neurologists could use advanced practice providers and patient-friendly visual aids during or between visits. They should also rely on evaluation and management codes that recognize time spent predominantly on counseling or coordination of care. The guideline's categorization of probable effectiveness of certain therapies will not influence coverage decisions because payers do not generally cover CAM therapies.



This article identifies payment policy perspectives resulting from the series of recommendations put forward in the American Academy of Neurology (AAN)'s evidence-based guideline on complementary and alternative medicine (CAM) in MS.¹ CAM therapies are sometimes used to relieve symptoms in persons with multiple sclerosis (MS).

The guideline evaluates existing, objective data on many, but not all, alternative therapies for MS. It does not address some existing CAM practices because of a lack of reviewable evidence. In selecting publications for review, the guideline authors have adhered to the evidence-based guideline development standards already established by the AAN.² Patients often discuss

John Carroll University (HM), Cleveland, OH; American Academy of Neurology (KMS), Minneapolis, MN; and Health Policy Consultant (SS-M), Santa Maria, CA.

Funding information and disclosures are provided at the end of the article. Full disclosure form information provided by the authors is available with the **full text of this article at Neurology.org/cp**

Correspondence to: kshepard@aan.com

The National MS Society includes descriptive material on CAM in MS but does not analyze the evidence in such depth as does the AAN guideline.

complementary medicine in support groups, and learn from patient-targeted publications using personal narratives and experiences. The guideline assembles objective data that evaluate the effectiveness of CAM on a variety of MS signs and symptoms, and provides a comprehensive overview of the specific outcomes of CAM use in MS. The guideline is important because patients' self-directed CAM therapy may affect their outcome. Physicians who prescribe traditional medical therapies should have a scientifically based reference with which to evaluate and discuss CAM therapies. Another resource available to practicing neurologists is a Guide to Treatment and Management of MS.³

The guideline eases the laborious process of researching available evidence on each individual CAM modality. It concludes that in several instances a CAM treatment is "probably effective." While very useful to physicians in choosing whether or not to use certain treatments, statements of "probable" effectiveness are unlikely to be a source of affirmative or negative coverage decisions by payers who do not generally cover CAM therapies at present. The responsibility of paying for these services falls on the patient. This increases the likelihood of patients seeking professional medical advice regarding the effectiveness of these therapies.

The guideline finds no evidence available to evaluate whether CAM use may worsen MS or interfere with MS disease-modifying therapies. Although not yet a factor, payers could begin to look into the potential for adverse effects of some of the treatments.

Position statements from other resources also provide helpful information about CAM. For instance, the Department of Veterans Affairs supports the use of an integrative medicine approach that combines CAM with conventional medicine. It continues to research safety and effectiveness of CAM in the treatment of MS (<http://www.va.gov/ms/multiple-sclerosis-complementary-and-alternative-medicine.asp>).

The National MS Society includes descriptive material on CAM in MS but does not analyze the evidence in such depth as does the AAN guideline (<http://www.nationalmssociety.org/about-multiple-sclerosis/what-we-know-about-ms/treatments/index.aspx>).

Counseling patients about CAM therapies

Patients use CAM therapy when they perceive CAM to be more effective than conventional medicines.⁴⁻⁶ Much of the CAM use is either self-administered or self-initiated.⁷ Since CAM therapies are seldom covered by payers, most users pay out-of-pocket for them. Patients do not always discuss their use of CAM—including their beneficial or potential harms—with their health care providers. The compiled summary of the information included in the guideline evaluates numerous studies comparing CAM therapies to established treatments, to placebo, and to no treatment.

Specifically, the guideline emphasizes the need for patient counseling. Chronic neurologic diseases, unlike self-limiting treatable conditions, lead patients to seek unconventional treatments. CAM use often results in challenging return office visits. In a 2007 study of 23,393 US adults (>18 years of age) questioned by the National Health Interview Survey (NHIS), 44.1% of patients with neurologic conditions used at least 1 CAM therapy as compared with 32.6% without a neurologic condition ($p < 0.0001$).⁶ Patients not only need, but expect, knowledgeable advice and counsel under these circumstances. In a national survey, 4 out of 8 cited reasons for patients not discussing CAM with their providers were insufficient office

Counseling requires active listening, empathy, and considerable time from neurologists. This nonprocedural service is not separately reimbursable; it is an integral part of patient evaluation and management services.

visit time, expectation of provider ignorance on the topic, dismissive attitude, and discomfort with discussing the topic.⁸

Counseling requires active listening, empathy, and considerable time from neurologists. This nonprocedural service is not separately reimbursable; it is an integral part of patient evaluation and management services. Evaluation and management services (known collectively as “cognitive care”) are not unique to CAM and are represented for reimbursement purposes by 5-digit numeric codes in the American Medical Association *Current Procedural Terminology* book (e.g., new patient 99201–99205; established patient 99211–99215). Detailed and specific information about billing requirements for counseling and prolonged services may be gathered from the Medicare Web site and Medicare manuals (chapter 12, Medicare Claims Processing Manual and Transmittal 1490, April 11, 2008). These services are thought to be undervalued at present. Neurologist reimbursement suffers further for these services as a result of payment differentials for primary care physicians stipulated in the Patient Protection and Affordable Care Act (2010).

The value-added commitment from a neurologist to provide comprehensive counseling that addresses all of the patients’ questions is unlikely to diminish in the future, though additional resources may help. Visual aids—either in print or electronic format—summarizing current effectiveness data will assist in reducing the need for repetitive verbal advice. Distributing copies of the guideline or a patient-friendly summary, or both, would reinforce the information transmitted during face-to-face time. Advanced practice providers such as trained office staff, nurse practitioners, and clinical nurse specialists would be able to free up physician time.

Biofeedback

Biofeedback is a therapeutic method in which monitored volitional effort attempts to modify physical symptoms. Biofeedback is often a covered benefit for certain disorders; for instance, stress or urinary urge incontinence. It may be questioned, however, if it is undertaken in connection with MS symptoms based on the newly available guideline document. The guideline concludes that data are inadequate on use of biofeedback in MS. Therefore, providers should be sure to document monitored metrics that might have led to patient improvement while undergoing biofeedback. It is prudent to read payer contract language and seek prior authorization before referring the patient for biofeedback. Most of the time, facilities that provide this service will attempt to obtain prior authorization or patient agreement for payment before initiating treatment.

Herbs—Ginkgo biloba

Ginkgo biloba is ineffective for cognition, including improving concentration, selective attention, mental flexibility, and interference susceptibility (Stroop color word test) in MS; however, Ginkgo biloba is probably effective for reliving fatigue. Payers do not typically consider this popular tree derivative for inclusion in their formulary.

Massage therapy

Physiotherapy is distinct from “massage therapy.” Dedicated massage therapy is unlikely to be viewed as physiotherapy by payers. Reflexology, a similar type of “physical pressure” therapy,

was found in studies to be possibly effective in reducing MS-associated paresthesias. Mindfulness training improved quality of life, depression, and anxiety in one study, but data are inadequate at this time to reach a conclusion. It is advisable to read policy benefit language, if any, to understand how the payer views massage therapy.

Magnetic therapy

Magnetic therapy is an umbrella term that includes several techniques. Transcranial magnetic stimulation (TMS) is a procedure in which a large electromagnetic coil is placed against the scalp to create electric currents for the purpose of stimulating neurons. Pulsed magnetic fields (PMF) delivered as repetitive TMS could induce long-lasting behavioral effects in neurologic or psychiatric disorders. Suprathreshold TMS can induce cortical action potentials. The resulting physiologic responses may be useful for mapping or diagnosing cortical dysfunction. PMF, the therapy evaluated in this guideline, are subthreshold stimuli that can modify cortical excitability in a delayed fashion.

The guideline states that magnetic therapy is probably effective for reducing fatigue in relapsing-remitting MS. While magnetic stimulation is an emerging technology with variable coverage status currently, PMF therapy is not in the same class. If PMF therapy is undertaken, it is best to check with payers. Evidence included in the guideline will be valuable in this process.

Cannabis

The cannabis plant is a source of several cannabinoid-derived products. These substances elicit varying psychoactive and physiologic effects in humans. Cannabis products range from “street drugs” containing large variations in delta-9-tetrahydrocannabinol (THC) levels to formulated extracts of THC and cannabidiol (CBD). One such formulated extract, not yet approved in the United States, is Sativex.⁹ Another is a synthetic dronabinol (Marinol, Food and Drug Administration–approved), a Schedule III controlled substance, indicated for treating chemotherapy-induced nausea and vomiting and AIDS-related anorexia and wasting.

The guideline found oral cannabis extract to be probably effective for patients for whom the primary symptom was pain, and possibly effective for reducing symptoms of spasticity. More than assessing mere evidence, the guideline prudently recognizes that medical marijuana, generally considered synonymous with smoked or vaporized botanical cannabis, is different from pharmaceutical cannabinoids. Medical marijuana is available commercially, and many states allow its cultivation or purchase and use at a personal level. The levels of THC vary largely in these preparations depending on the parts of the plants used and their age. This is one reason that “street use” of botanical marijuana may carry risks due to undetermined contents of active pharmacologic compounds.

The practicing neurologist will bear the onus of explaining the distinction between botanical and pharmaceutical products and the potential for widely variable beneficial and adverse pharmacophysiologic effects on their patients. Current awareness of applicable medical marijuana state laws is important. This guideline, a recent review by Bostwick,¹⁰ and an editorial by Mechoulam¹¹ will be helpful in this regard.

Vitamin D

Vitamin D has been implicated in both the progression and prognosis of MS. A recent systematic review found that the evidence for clinical efficacy of vitamin D is inclusive.¹² Other preliminary data seem to indicate that low serum levels of 25-hydroxy vitamin D may predict an adverse prognosis in recently diagnosed patients with MS.¹³ It will be prudent for the physician to ensure that testing for vitamin D levels (vitamin D 25 hydroxy, including fractions) will be reimbursed for a diagnosis of MS or as a screening procedure. While many health insurers might pay for this test, not all of them would recognize MS or screening as covered indications. Questions about testing and oral vitamin supplementation, if not posed by patients, need to be brought up for proactive discussion.

Cigarette smoking

Cigarette smoking may have an adverse effect on progression of disease, and smoking cessation may slow the rate progression in MS.^{14,15} Although not discussed in the guideline, these findings will be of relevance and require active discussion with patients.

Dietary approaches

Studies were inadequate and therefore inconclusive regarding the effect of dietary approaches to symptoms, signs, and disease progression in MS.

Future considerations

Neurologists, patients and payers need more than anecdotal evidence before accepting CAM or other therapies. Patients will continue to seek sage counseling from neurologists. Should some CAM treatments become accepted as the standard of care, they will cease to be “alternative” and quality control will become critical to improve monitoring of adverse effects, interactions—especially herb–drug interactions—variability, adulteration, or contamination in production.

REFERENCES

1. Yadav V, Bever C Jr., Bowen JB, et al. Summary of evidence-based guideline: Complementary and alternative medicine in multiple sclerosis. Report of the Guideline Development Subcommittee of the American Academy of Neurology. *Neurology* 2014;82:1083–1092.
2. American Academy of Neurology. Clinical Practice Guideline Process Manual, 2004 ed. St. Paul, MN: The American Academy of Neurology; 2004. Available at: <https://www.aan.com/Guidelines/Home/Development>. Accessed February 2014.
3. Murray TJ, Bowling AC, Polman C, Thompson A, Noseworthy J. *Multiple Sclerosis: The Guide to Treatment and Management*, sixth ed. New York: Demos Medical Publishing, LLC; 2006.
4. Zhang Y, Lao L, Chen H, Ceballos R. Acupuncture use among American adults: what acupuncture practitioners can learn from national health interview survey 2007? *Evid Based Complement Alternat Med* 2012;2012:710–750.
5. Carlson MJ, Krahn G. Use of complementary and alternative medicine practitioners by people with physical disabilities: estimates from a National US Survey. *Disabil Rehabil* 2006;28:505–513.
6. Wells RE, Phillips RS, Schachter SC, McCarthy EP. Complementary and alternative medicine use among US adults with common neurological conditions. *J Neurol* 2010;257:1822–1831.
7. Briggs JP, Killen J. Perspectives on complementary and alternative research. *JAMA* 2013;310:691–692.
8. AARP, NCCAM. Reasons CAM Was Not Discussed With Health Care Provider. *Complementary and Alternative Medicine: What People Aged 50 and Older Discuss With Their Health Care Providers*. Consumer Survey Report; April 13, 2010. The National Center for Complementary and Alternative Medicine. Available at: <http://nccam.nih.gov/news/camstats/2010/graphics.htm>. Accessed November 2, 2013.
9. Sativex, GW Pharmaceuticals. <http://www.gwpharm.com/Sativex.aspx>. Accessed November 2, 2013.
10. Bostwick JM. Blurred boundaries: the therapeutics and politics of medical marijuana. *Mayo Clin Proc* 2012;87:172–186.
11. Mechoulam R. Cannabis: a valuable drug that deserves better treatment. *Mayo Clin Proc* 2012;87:107–109.
12. Pozuelo-Moyano B, Benito-León J, Mitchell AJ, Hernández-Gallego J. A systematic review of randomized, double-blind, placebo-controlled trials examining the clinical efficacy of vitamin D in multiple sclerosis. *Neuroepidemiology* 2013;40:147–153.
13. Ascherio A, Munger KL, White R, et al. Vitamin D as an early predictor of multiple sclerosis activity and progression. *JAMA Neurol Epub* 2014 Jan 20.
14. Manouchehrinia A, Tench CR, Maxted J, et al. Tobacco smoking and disability progression in multiple sclerosis: United Kingdom cohort study. *Brain* 2013;136:2298–304.
15. Healy BC, Ali EN, Guttmann CR, Chitnis T, et al. Smoking and disease progression in multiple sclerosis. *Arch Neurol* 2009;66:858–864.

ACKNOWLEDGMENT

The authors thank Joel M. Kaufman, MD, FAAN; AAN Payment Policy Subcommittee; and AAN guideline authors: Vijayshree Yadav, MD, MCR; Christopher Bever Jr., MD, MBA, FAAN; James Bowen, MD; Allen Bowling, MD, PhD; Bianca Weinstock-Guttman, MD; Michelle Cameron, MD, PT, MD; Dennis Bourdette, MD, FAAN; and Pushpa Narayanaswami, MBBS, DM, FAAN.

STUDY FUNDING

No targeted funding reported.

DISCLOSURES

H. Moawad serves on the Editorial Board of *Neurology*[®] *Clinical Practice*. K. Shepard is a full-time employee of the American Academy of Neurology. S. Satya-Murti participated between February 2012 and February 2014 in telephone consultations and/or in-person Medical Advisory Board meetings for United BioSource Corporation (UBC), Medical Market Strategists, Pfizer, Simon-Kucher Consultants, Stratas Consultants, AstraZeneca, Avalere LLC, Covidien, Evidera Consulting Group, and 1798 Consultants; has received travel honoraria from UBC, Medical Market Strategists, Pfizer, AstraZeneca, and Avalere LLC; serves on the Editorial Board of *Neurology*[®] *Clinical Practice*; has served as panelist, and later (2010–2011) Vice-Chair CMS-Medcac (Medicare Evidence Development and Coverage Advisory Committee); has served as a consultant for UBC, Medical Market Strategists, Pfizer, Simon-Kucher Consultants, Stratas Consultants, AstraZeneca, Avalere LLC, Covidien, Evidera Consulting Group, and 1798 Consultants; and served as a member of the AAN Payment Policy Subcommittee from 2006 to 2011. Full disclosure form information provided by the authors is available with the **full text of this article at Neurology.org/cp**.

Related articles from AAN physician and patient resources

Neurology[®] ● Neurology.org

Emerging subspecialties in neurology: Palliative care

February 18, 2014;82:640–642.

Ginkgo biloba does not improve cognitive function in MS: A randomized placebo-controlled trial

September 18, 2012;79:1278–1284.

Continuum[®] ● ContinuumJournal.com

Complementary and Alternative Medicine in Multiple Sclerosis

October 2010;78–89.

Neurology Now[®] ● Neurologynow.com

Meditation as Medicine

August–September 2012;8:30–33.

Neurology Today[®] ● Neurotodayonline.com

IN THE FIELD: David Simon, MD: On Integrating Conventional Neurology and Complementary Medicine

September 17, 2009;9:22–24.