## It is illegal to post this copyrighted PDF on any website. Roles and Qualifications of

## **TMS Treatment Team Members**

To the Editor: As representatives of the Clinical TMS Society, a professional organization representing approximately 400 providers of repetitive transcranial magnetic stimulation (rTMS) therapy from a variety of practice settings, we welcome the recent publication of consensus recommendations for rTMS treatment of depression developed by the National Network of Depression Centers (NNDC) and the American Psychiatric Association Council on Research (APACR).<sup>1</sup> It is auspicious that this set of consensus recommendations comports highly with our own society's consensus recommendations published in 2016.<sup>2</sup> The high degree of concordance between them is an indication that the clinical practice of treating depression with rTMS has matured significantly since the first FDA clearance of a TMS device for major depression in 2008 and signals that the basic features of a standard of care has emerged for this modality of depression treatment.

However, the NNDC/APACR paper provides surprisingly little specific guidance on the appropriate role of the physician in the TMS treating team. Our position, which is delineated in our 2016 consensus recommendations,<sup>2</sup> is that the prescribing TMS physician is responsible for obtaining informed consent and assessing a patient's suitability for rTMS, although we disagree that this routinely requires a full physical examination. The physician is also ultimately responsible for the overall daily management of the TMS treatment and should regularly review the clinical course of treatments to determine if the treatment plan remains appropriate or needs modification.

Regarding qualifications for the TMS physician, we believe that the NNDC/APACR recommendation that he or she be "a clinician with prescriptive privileges who is knowledgeable about, trained, and credentialed in rTMS" is too broad. It is our current position that for all rTMS indications, the TMS physician should have the extensive background in brain physiology that is obtained during residency training in psychiatry, neurology, or neurosurgery. The physician should also have a deep understanding about the neurophysiological effects of rTMS and certification in administration of rTMS. Moreover, the complex psychiatric status of the typical patient undergoing rTMS for depression (chronic, severe, resistant to medication and therapy, and commonly comorbid with other psychiatric conditions) warrants that when the indication is depression, the TMS physician should be a psychiatrist or one of the other medical brain specialists collaborating very closely with a psychiatrist in the patient's treatment.

with the NNDC/APACR recommendations of the THE operators, he agree with the NNDC/APACR recommendations that he or she should be trained to recognize and effectively respond to seizures. However, we do not agree that operators should have professional medical training. The last 8 years has revealed that rTMS treatment is very safe and seizures are rare. Furthermore, the limited actions expected of first responders to a seizure in an office setting can readily be acquired by nonmedical office staff. Because of the complexity of the typical mood disorder patient undergoing TMS for depression, we feel that knowledge of and experience with mental illness may be more relevant for TMS operators and that training them to recognize potentially serious changes in a patient's mental status and know when to alert an attending physician is as important as training on seizure management.

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**Potential conflicts of interest:** Dr Feifel has received grant/research support from Brainsway and Neosync. Drs Dunner and Press report no potential conflict of interest.

Funding/support: None.

J Clin Psychiatry 2018;79(1):17lr11887

*To cite:* Feifel D, Dunner DL, Press DZ, on behalf of the Board of Directors and Clinical Standards Committee of the Clinical TMS Society. Roles and qualifications of TMS treatment team members. *J Clin Psychiatry*. 2018;79(1):17lr11887.

To share: https://doi.org/10.4088/JCP.17lr11887 © Copyright 2018 Physicians Postgraduate Press, Inc.

# t is illegal to post this copyrighted PDF on any website Dr McClintock and Colleagues Reply copyrighted regarding the clinical practice of rTMS for the treatment

**To the Editor:** We appreciate the interest of Drs Feifel, Dunner, and Press in our consensus recommendations for the clinical use of repetitive transcranial magnetic stimulation (rTMS) in the treatment of depression.<sup>1</sup> They raised 3 main points about our consensus recommendations, focused on physical examination, qualifications of the TMS clinician, and qualifications of the TMS operator.

Regarding physical examination, Drs Feifel, Dunner, and Press disagree with the recommendation for physical examination in assessing a patient's suitability for rTMS. However, as we noted in our consensus recommendations<sup>1</sup> and in our reply to Tendler and Gersner,<sup>2</sup> physical examination<sup>3,4</sup> provides useful evidence to inform medical decisions, medical safety, and necessity of rTMS. Also, the American Psychiatric Association Practice Guideline for the Treatment of Patients With Major Depressive Disorder<sup>5</sup> noted that pretreatment evaluation should include physical examination and clinical care coordination between the psychiatrist and other health professional(s), such as a primary care provider, who may perform the physical examination. On the basis of this information, we recommend that a targeted physical examination (either newly conducted or previously conducted and documented in the medical record) be a component of the pre-rTMS treatment evaluation.

Regarding qualifications of the TMS clinician, we agree that the individual should have an extensive background in brain physiology, competency in the neurophysiological (and antidepressant) effects of rTMS, and certification and/or credentialing in rTMS administration. However, we disagree with Drs Feifel, Dunner, and Press that "the TMS physician should be a psychiatrist." The TMS clinician needs to be a properly trained physician or clinician with prescriptive authority (eg, nurse practitioner or physician assistant with a cooperative agreement with a physician with expertise in TMS) who practices within his or her scope of practice as defined by the respective state licensing board. For example, if TMS is being used to treat depression, the clinician should have treatment of depression within his or her scope of practice. While the clinician may be a psychiatrist, it is possible that the clinician could be a primary care physician, neurologist, nurse practitioner, or physician assistant with expertise and scope of practice in treating depression and TMS training and credentialing. As the clinical practice of TMS continues to evolve, continued conversations among multiple stakeholders (eg, clinicians, policy makers) will be warranted regarding who can be a TMS clinician.

Regarding qualifications of the TMS operator, while the risk of seizure with rTMS has been found to be low,<sup>6</sup> we nonetheless recommend that the TMS operator have basic life support training certification and be trained as a first responder to a seizure.<sup>7</sup> As the TMS operator will already be in the room with the patient, he or she can take immediate action to minimize complications and ensure patient safety. We agree that it would be beneficial for the TMS operator to have a knowledge base of mental illness, particularly major depressive disorder given the current US Food and Drug Administration label for rTMS.

We appreciate the comments by Drs Feifel, Dunner, and Press as they highlight practical questions that clinicians may of depression. Continued discussions such as these are helpful to the clinical growth of TMS, and we hope our consensus recommendations will help to advance, inform, and strengthen such discussions.

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Funding/support: None.

J Clin Psychiatry 2018;79(1):17lr11887a

*To cite:* McClintock SM, Reti IM, Carpenter LL, et al. Dr McClintock and colleagues reply. *J Clin Psychiatry*. 2018;79(1):17lr11887a.

To share: https://doi.org/10.4088/JCP.17lr11887a

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