resources are required to deliver NIBS, including the technology itself as well as trained staff. The burdens of this treatment include the need to travel to the treatment site repeatedly for the series of interventions. These resources are unavailable in some areas throughout the VA and DoD health care systems.

The Work Group systematically reviewed evidence related to this recommendation.(61, 62, 228-231, 233-253) Therefore, it is categorized as *Reviewed, New-replaced.* The Work Group's confidence in the quality of evidence was very low. The body of evidence had some limitations, including small sample size; confounders in the analysis, such as lack of participant, study personnel, and outcome assessor blinding; and wide heterogeneity in subject characteristics. The potential harms of NIBS, including headaches, local site irritation, and the theoretical risk of seizure, outweighed the potential benefits of NIBS. Patient values and preferences varied largely because some patients favor innovative or passive interventions or both, although others do not. Thus, the Work Group made the following recommendation: There is insufficient evidence to recommend for or against non-invasive brain stimulation (e.g., repetitive transcranial magnetic stimulation, transcranial direct current stimulation, and continuous theta burst stimulation) for patients in stroke rehabilitation.

X. Research Priorities

During the development of the 2024 VA/DoD Stroke Rehabilitation CPG, the Work Group identified topics needing additional research, including areas requiring stronger evidence to support current recommendations and research exploring new areas to guide future CPGs.

A. Review of Stroke Rehabilitation Evidence Base

The evidence base in stroke rehabilitation is limited by the inherent difficulties in conducting research in rehabilitation in general.(254, 255) Rehabilitation research is done in the "real world," and the introduction of bias is unavoidable in most studies. For example, the stroke population is, by its nature, heterogeneous. An attempt to limit studies to more homogeneous populations (e.g., first ever left middle cerebral artery ischemic strokes) would result in very small sample sizes and limit the generalizability of study results. Several other sources of bias exist in rehabilitation research. First, difficulties might arise with recruitment because of the existence of multiple comorbidities in patients with stroke that restrict inclusion. Second, regarding randomization, study participants often hesitate to participate for fear they will be assigned to the control group, especially if the control condition includes no intervention. Third, blinding of participants and personnel is sometimes impossible because of the nature of some interventions (e.g., mirror therapy for USN), which might lead to performance bias and placebo effect. Fourth, control groups are often usual care rehabilitation, and the intervention arm often includes usual care rehabilitation. Usual care rehabilitation, by necessity, varies from patient to patient, from day to day, to