



## Major US scientific academy proposes significant changes in understanding and managing TMDs

This guest editorial is intended to inform the dental community about the release of a comprehensive consensus report on the state of affairs regarding the topic of temporomandibular disorders (TMDs). With the stated goal of improving the care of patients suffering from TMDs and providing impetus for future TMD-related research, the US National Academies of Sciences, Engineering, and Medicine (NASEM) published the result of their deliberations from 2020 – in the form of an impressive open-access 426-page document.<sup>1</sup>

Involved in the work were 18 committee members including representatives from many branches of the health care community, 7 study staff, 3 consultants, and 15 reviewers. In addition, there was extensive input from affected TMD patients and their families, itself commendable, because the perspective of the recipients of our diagnostic and therapeutic efforts, ie, the patients, is generally ignored in textbooks and professional consensus meetings. The 11 recommendations in this document strongly indicate that the current dental-focused treatments for TMDs must be reconceived toward a multidisciplinary, interprofessional team approach involving specialists within the broader medical community.<sup>2</sup>

The first four recommendations focus on developing a national research consortium for TMDs and setting priorities for basic and translational TMD research, public health research, and burden of disease, as well as bolstering clinical TMD research; all four priorities form the basis for improving patient-centered care. In response, the National Institutes of Health (NIH) and the National Institute of Dental and Craniofacial Research (NIDCR) established a Temporomandibular Joint Disorders Multi-Council Working Group to review the NASEM report and the recommendations, and then to develop strategies for NIH to better support research efforts in this area. The work of this group is underway.

Recommendations 5 and 6 aim to improve the quality of care for TMD patients through improved disease risk assessment and stratification, diagnostics, and dissemination of clinical practice guidelines and metrics of care. A current focus of

the US Food and Drug Administration (FDA) and its MDEpiNet (Medical Device Epidemiology Network) initiative is the Coordinated Registry Network (CRN), which gathers real-world evidence data on patients' health status and care in several linked registries, to be used in health care decision-making and post-market monitoring of approved devices and other treatments. Acting as the catalyst to advance the needs of patients with temporomandibular joint (TMJ) implants, the TMJ Association (TMJA) developed the TMJ Patient-led RoundTable (RT) – the first patient-centered, public-private collaboration among the federal government, scientists, clinicians, dental practitioners, advocates, manufacturers and others – a registry for TMD that will be part of the CRN and that will provide a large dataset to be used in determining risk assessments for various TMD treatments. The ultimate goal is establishing clinical guidelines for care of patients suffering from TMDs.

Recommendation 7 focuses on improved reimbursement and access to assessment, treatment, and management of TMDs. These recommendations will be addressed in a more long-term fashion, pending outcomes of results from other recommendations.

Recommendations 8 to 10 are centered on improving TMD patient treatments and propose to develop “Centers of Excellence for TMDs and Orofacial Pain Treatment” (Recommendation 8), improve professional school education (Recommendation 9), and expand specialized continuing education for health care providers (Recommendation 10). To improve dental education, the TMJA and the American Academy of Orofacial Pain (AAOP) recommended to the Committee on Dental Accreditation (CODA) that TMDs must be included in dental school curriculums. That recommendation was approved and will be implemented in 2022, and as a result the AAOP is developing TMD predoctoral core curriculum outlines. Separately, the TMJA has established a Working Group on Interprofessional Models of TMD Care. This group is exploring ways to develop a new multidisciplinary model of TMD care involving expertise across medicine, dentistry, nursing, physical therapy, psychologic therapies, and other relevant areas of health care.



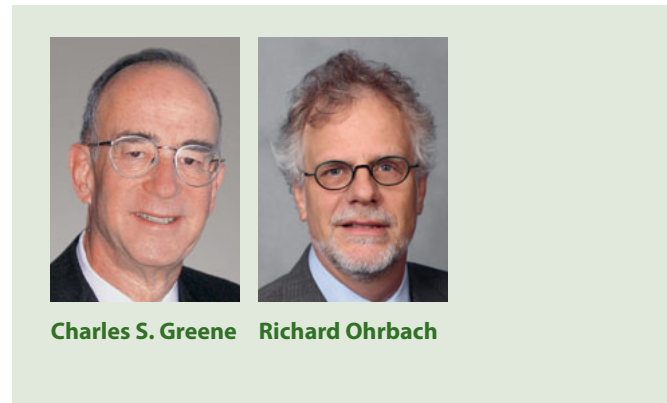
Recommendation 11 addresses patient education and awareness about TMDs and reducing the stigma of disease. The NASEM recommends that the TMJA, American Dental Education Association (ADEA), TMJ Patient-Led RoundTable, American Chronic Pain Association, and AAOP collaborate with other stakeholders (eg, the American Medical Association [AMA] Education group, and the NIDCR Office of Communications and Health Education) to develop educational materials for TMDs, based on the current understanding of this disorder as summarized in the NASEM report. These materials will include brochures, videos, and virtual educational workshops addressing many aspects of TMD management and care, access to quality treatments, and approaches to stigma reduction.

Following these recommendations, there are four appendices. Of special interest is an analytic commentary on the “Prevalence, impact, and cost of CMD therapy.” The volume concludes with a paper on the “Masticatory system: anatomy and function.”

This report represents a watershed for the dental profession. Better care for patients with TMDs is at stake.

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2. Greene CS, Manfredini D. Treating temporomandibular disorders in the 21st century: can we finally eliminate the “third pathway”? *J Oral Facial Pain Headache* 2020;34:206–216.