

# Reply to GSJ Letter to Editor: Telemedicine in Spine Surgery: Global Perspectives and Practices

Grant J. Riew, AB<sup>1</sup>  and Sravisht Iyer, MD<sup>2</sup>

To whom it may concern,

We would like to thank you for taking the time to respond to our study. We appreciate your thoughtful response to the findings in our paper entitled “Telemedicine in Spine Surgery: Global Perspectives and Practices.” Our manuscript chronicled the accelerated adoption of telemedicine in spine care due to the COVID-19 pandemic. While it is possible to look at telemedicine as a “problem to be solved,” we would prefer to look at it as an opportunity, a new way to deliver care to our patients in a manner that is convenient and appreciated by both the patient and provider.<sup>1,2</sup>

As with any new technology, there are important questions to be answered. We fully agree that the virtual physical exam presents challenges that can hinder diagnosis and evaluation.<sup>3</sup> Several findings, such as tone and hyper/hyporeflexia are difficult to assess remotely. However, some aspects of the physical exam—such as assessing gait, strength, and sensation—are possible to perform via telemedicine, depending on the patient and setting. We have elaborated on the limitations of the telemedicine physical examination and have provided strategies for the virtual spine evaluation in recent manuscripts.<sup>4,5</sup>

As you mention, telemedicine as the first consultation for surgical recommendation is an interesting area of study. In a recently published consensus document, we surveyed an international panel of spine surgeons using Delphi methodology to determine the visit types and diagnoses that could be evaluated using telemedicine.<sup>6</sup> The results demonstrated that patients with lumbar stenosis and lumbar radiculopathy could be indicated for surgery following a telemedicine evaluation. These findings are in keeping with data showing that surgical plans generally do not change for spine patients who had a virtual encounter prior to in-person pre-surgery evaluation.<sup>7</sup> Similar findings have been reported across other orthopedic specialties.<sup>8</sup>

It is important to note, however, that telemedicine is not appropriate for all diagnoses. The same study suggested that

for cervical myelopathy (where reflex and special testing is relatively more important) and adult deformity, an in-person evaluation is necessary prior to recommending surgery.<sup>6</sup>

While the medicolegal environment surrounding telemedicine remains murky, these studies help inform best practices for incorporating telemedicine into our practices. Legal frameworks have changed rapidly to accommodate liability coverage and financial reimbursement.<sup>3</sup> Many of these mandates are, however, temporary, and several questions remain unanswered.<sup>9,10</sup> Collaboration between policymakers, institutions, insurance companies, and healthcare providers is necessary to clarify the legal landscape.

That said, there is little doubt the telemedicine is likely to become a routine way to deliver care to our patients moving forward. As we transition to a “new normal” following the COVID-19, telemedicine still represents approximately 10% of all new patient evaluations and 30% of all follow up visits for spine patients at our institution.

We would like to thank you again for your perceptive comments. Additional research to evaluate the efficacy of spine telemedicine, formal guidelines for best practices, and legal clarity will hopefully help determine where telemedicine can be utilized within spine care in the future.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

<sup>1</sup> Harvard Medical School, Boston, MA, USA

<sup>2</sup> Hospital for Special Surgery, New York, NY, USA

## Corresponding Author:

Sravisht Iyer, Hospital for Special Surgery, 535 E 70th St, New York, NY 10021, USA.

Email: [iyers@hss.edu](mailto:iyers@hss.edu)



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## ORCID iD

Grant J. Riew, AB  <https://orcid.org/0000-0001-8035-7357>

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