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Letter to the Editor

## Virtual Clinical Services for Rehabilitation in Hand Surgery



We read with interest the articles “Telemedicine Evaluation and Techniques in Hand Surgery”<sup>1</sup> and “A Call to Arms: Emergency Hand and Upper-Extremity Operations During the COVID-19 Pandemic.”<sup>2</sup> The coronavirus disease 2019 pandemic has catapulted us into the digital health services era and accelerated the growth of telemedicine,<sup>3</sup> and there has been increased interest in virtual clinical services for hand surgery.<sup>4</sup> However, both articles fall short in elaborating the use of digital technology for physical and occupational therapy in hand surgery. This letter aims to highlight the potential of virtual clinical services to complement rehabilitation in hand surgery, while acknowledging its limitations.

Virtual services in rehabilitation were previously found to be effective. In their study, Lade et al<sup>5</sup> reported substantial agreement between conventional face-to-face and telerehabilitation physiotherapy assessment. In addition, Worboys et al<sup>6</sup> reported good outcomes in delivering therapy services to rural and remote patients. With increased patient willingness for telemedicine, we believe there is now an unprecedented opportunity for the development of digital tools for rehabilitation in hand surgery. This can include one-way delivery of information for therapeutic education such as therapy exercise videos or the use of an app to enhance patient compliance to therapy,<sup>7</sup> as well as interactive videoconferencing for teleconsultations with occupational and physiotherapists.

Although the potential application of digital technology in rehabilitation is promising, challenges of digital security and data protection remain. Information shared over video-conferencing tools needs to be transmitted over secured platforms to maintain patient confidentiality. Digital infrastructure is required to ensure reliable delivery of quality diagnostic images and audio. Reimbursement for virtual clinical services should be sufficient to address related equipment and expertise costs while remaining affordable and reasonable for patients. Furthermore, virtual clinical services will not be able to replace traditional rehabilitation, because certain services such as the fabrication of orthoses and controlled mobilization would still require physical contact.

There is a paucity of discussion regarding the use of digital technology for rehabilitation in hand surgery. Telerehabilitation was previously reported to have success and good efficacy for stroke

survivors<sup>8</sup> and the management of other musculoskeletal conditions.<sup>9</sup> We are encountering a new era of digital technology for clinical services, and more can be done to harness its potential to complement traditional face-to-face rehabilitation in hand surgery.

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