



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

# A Telemedicine Checklist for Effective Communication During Virtual Surgical Visits



Nisarg A. Patel, DMD, MBI, \*Jack A. Harris, BS, †  
Yisi D. Ji, DMD, ‡ and Sampeter L. Odera, DMD, MD §

Telemedicine, which refers to the application of electronic and digital platforms to assist health care providers in providing remote health services, patient-level education, and information on public health, has remained a relatively underused approach to enhancing access to medical services nationally.<sup>1</sup> Traditionally, telemedicine has primarily provided health care services to individuals residing in rural communities, those impacted by natural disasters, military personnel, and veterans, as well as for emergency department consultations and the delivery of mental health services.<sup>2</sup> In early 2020, Medicare began paying clinicians for e-visits, which are patient-initiated non-face-to-face communications through an online patient portal.

However, in response to the coronavirus disease 2019 (COVID-19) pandemic and associated social distancing guidelines, interest and utilization in telemedicine has surged. Before the pandemic, approximately 13,000 Medicare beneficiaries received telemedicine services each week. By the last week of April 2020, nearly 1.7 million beneficiaries received telemedicine services each week. Through mid-June, more than 9 million beneficiaries had received telemedicine services. While telemedicine visits have been most prevalent in ambulatory primary care, there is value in using this technology for nonprocedural visits in surgical specialties. However, major challenges with telemedicine in practice, including differ-

ences in state-specific policies and jurisdiction of medical practice, unreadiness for telemedicine visits among the elderly and underserved, and disparities in access to care owing to regional gaps in Internet access, merit discussion when considering the scope and deployment of telemedicine technology.

This perspective characterizes the payer response to telemedicine, the process by which oral and maxillofacial surgeons (OMSS) can initiate and bill for telemedicine visits, and provides practical guidance for surgeons to virtually care for a diverse patient population, many of whom may be experiencing this unfamiliar treatment modality for the first time.

Payers have launched initiatives to support the adoption of telemedicine services, including professional education, regulatory guidance, and reimbursement incentives. In March 2020, in response to the COVID-19 pandemic, the Centers for Medicare and Medicaid Services (CMS) expanded telemedicine coverage on a temporary and emergency basis through the Coronavirus Preparedness and Response Supplemental Appropriations Act and a Section 1135 waiver, permissible under the 1935 Social Security Act. Under this expansion, Medicare will cover ambulatory visits conducted via telemedicine anywhere nationally, pay providers the same rate as inperson visits, and offer flexibility for providers to reduce or waive Medicare cost sharing, including coinsurance and deductibles, for telemedicine visits.

\*Resident, Department of Oral and Maxillofacial Surgery, University of California San Francisco, San Francisco, CA; and Research Affiliate, Department of Biomedical Informatics, Harvard Medical School, Boston, MA.

†DMD Candidate, Harvard School of Dental Medicine, Boston, MA.

‡MD Candidate, Harvard Medical School, Boston, MA.

§Assistant Professor, Department of Oral and Maxillofacial Surgery, University of California San Francisco, San Francisco, CA.

Conflict of Interest Disclosures: Dr. Patel is a cofounder of and shareholder in Memora Health, Inc. All other authors do not have any relevant financial relationship(s) with a commercial interest.

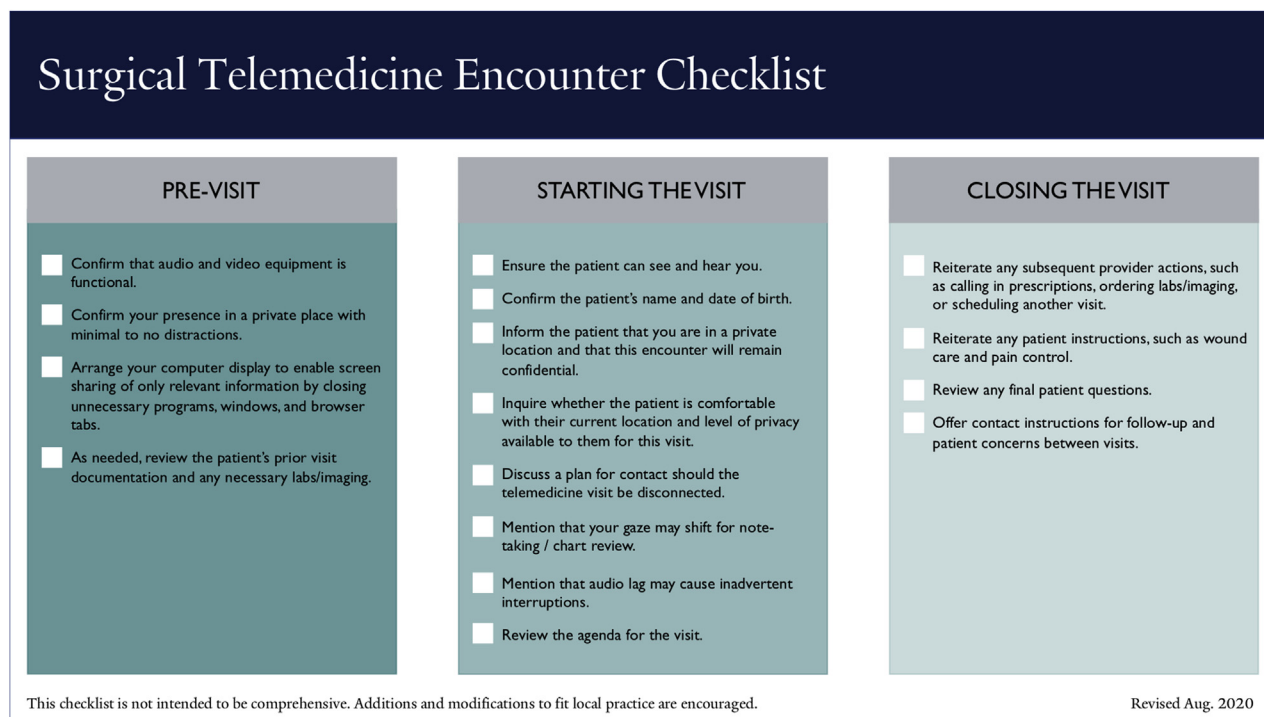
Address correspondence and reprint requests to Dr Patel: Box 0440, 533 Parnassus Ave, UB-10, San Francisco, CA 94143-0440; e-mail: [nisarg.patel@ucsf.edu](mailto:nisarg.patel@ucsf.edu)

Received August 21 2020

Accepted October 10 2020

© 2020 American Association of Oral and Maxillofacial Surgeons  
0278-2391/20/31309-4

<https://doi.org/10.1016/j.joms.2020.10.031>



**FIGURE 1.** Telemedicine checklist for surgical encounters.

Patel et al. Telemedicine checklist. *J Oral Maxillofac Surg* 2021.

In contrast, each state has jurisdiction over its Medicaid coverage and benefits, including which, if any, telemedicine services are covered, and flexibility in the method of reimbursement. In response to the COVID-19 pandemic, CMS has issued guidance documents providing statutory and regulatory infrastructure issues for states to consider as they evaluate whether to expand their telemedicine coverage under Medicaid and the Children's Health Insurance Program.

Private insurance coverage for telemedicine services may vary by both payer and plan type. Nonetheless, Anthem, UnitedHealthcare, Cigna, Aetna, and Humana, the 5 largest U.S. health insurance companies covering 145 million Americans, have all expanded coverage for numerous types of telehealth services for the duration of the pandemic. Similarly, more than half of 2020 Medicare Advantage plans offer telehealth benefits, reaching approximately 14 million Medicare Advantage enrollees.

Furthermore, the American Association of Oral and Maxillofacial Surgeons (AAOMS) has published guidelines for the application and billing of telemedicine services by OMSs.<sup>3</sup> Specifically, the AAOMS encourages telemedicine to be used exclusively for triage, non-emergent consultations, preoperative history and physical examination visits, and postoperative follow-up visits. The AAOMS also provides a summary of the current procedural terminology (CPT) coding system for

telemedicine services, including telephone services (CPT 99441-99443), online evaluation and management visits (CPT 99421-99423 or G2010/G2012), and interprofessional digital health record consultation (CPT 99446-99452), as well as the use of modifiers to designate services rendered virtually.

Oral and maxillofacial surgery-specific vendors have also designed products for telemedicine services. OMSVision, a practice management software product designed and developed for oral-maxillofacial surgery practices, has recently expanded its capabilities to deliver telemedicine services for oral and maxillofacial surgery providers and practices. The Oral and Maxillofacial Surgery National Insurance Company, endorsed by the AAOMS, has also expanded its liability coverage to include telemedicine and virtual office visits insofar as they are provided in accordance with local, state, and federal regulations. Regardless of services rendered, it is crucial that OMSs are aware of local and state mandates and provide health care within their scope of practice as recognized by the appropriate authorities and licensing boards.

Although the technical and payment infrastructure for telemedicine is now in place, demographic challenges continue to limit the scope of telemedicine services. Approximately 40% of Medicare beneficiaries lacked access to a desktop or laptop computer with high-speed Internet connection at home, and 26% of beneficiaries had neither a computer or smartphone

with a wireless data plan. Among those, 100% were lower than the federal poverty level, 50% lacked digital access, compared with only 11% of those with incomes more than 400% of the federal poverty level.<sup>4</sup> This gap highlights the challenge of reaching Medicaid patients with telemedicine services. In addition, among the Medicare population, 38% are not ready for video visits, predominantly owing to inexperience with technology. Other factors contributing to unreadiness include difficulty hearing, communicating, or dementia.<sup>5</sup>

To ease patient and provider unfamiliarity with medical-grade video conferencing software during the COVID-19 pandemic, the Department of Health and Human Services announced that they would waive penalties for Health Insurance Portability and Accountability Act violations against health care providers that serve patients through more familiar consumer products, such as Apple FaceTime, Zoom, or Skype. Furthermore, akin to the World Health Organization Surgical Safety Checklist, we have developed a telemedicine-specific checklist for surgeons to quickly onboard patients into this unfamiliar visit modality, define comfort and expectations, and reduce the risk for technical errors and privacy violations during virtual encounters (Fig 1).

Although the permanence of CMS changes to telemedicine policy and payment rate parity remain uncertain, the rapid adoption of telemedicine services

by both providers and patients is a promising sign for the longevity of this technology. OMSs can proactively help CMS and other payers determine when telemedicine visits, as opposed to inperson visits, are clinically appropriate for specific acute patient needs in oral-maxillofacial surgery to inform future coverage policies and payment rate adjustments. Telemedicine has served as a lifeline for both providers and patients during this state of national emergency; however, this crisis may also be the spark the technology needs to level access to care for our nation's underserved.

### *Acknowledgments*

No funding was allocated for this study. Nisarg A. Patel is a cofounder of and shareholder in Memora Health, Inc.

### **References**

1. Harvey JB, Valenta S, Simpson K, et al: Utilization of Outpatient telehealth services in parity and Nonparity states 2010–2015. *Telemed e-Health* 25:132, 2019
2. Lurie N, Carr BG: The Role of telehealth in the medical response to disasters. *JAMA Intern Med* 178:745, 2018
3. Telehealth Resources. American Academy of oral and maxillofacial surgeons. Available at: <https://www.aaoms.org/practice-resources/telehealth-resources>. Accessed August 12, 2020
4. Roberts ET, Mehrotra A: Assessment of disparities in digital access among Medicare beneficiaries and Implications for telemedicine. *JAMA Intern Med* 180:1386, 2020
5. Lam K, Lu AD, Shi Y, Covinsky KE: Assessing telemedicine unreadiness among Older Adults in the United States during the COVID-19 pandemic. *JAMA Intern Med* 180:1389, 2020