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Teledermatology in the wake of COVID-19: Advantages and challenges to continued care in a time of disarray



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T eledermatology has developed rapidly in recent years.¹ As public health guidance endorses social distancing, this technology can aid physicians and patients during the COVID-19 emergency to overcome barriers in access to care.² Mitigating the spread of contagion places patients at a difficult impasse: receiving care while minimizing exposure. This is especially true for dermatology patients, who often require ongoing care and use long-term immunomodulatory medications.

Recently, the Centers for Medicare and Medicaid Services (CMS) and some major private payers, including UnitedHealthCare, Cigna, and Aetna, have expanded telehealth coverage during this pandemic. CMS has additionally issued a 1135 waiver providing compensation for office, hospital, and other visits delivered via telehealth, including in patients' own homes. Potential penalties for Health Insurance Portability and Accountability Act (HIPAA) violations when serving patients in good faith via FaceTime, Skype, and other commonplace communication technologies also will be waived during this emergency.

Since its inception, teledermatology has aided in triaging, diagnosing, and managing many dermatologic conditions, ranging from inflammatory to neoplastic.¹ Although the current social distancing guidelines impede in-person assessments, dermatologists can use teledermatology for routine follow-up and triage of urgent concerns, subsequently setting up in-person appointments, if needed. In addition, teledermatology can reach patients of various socioeconomic levels who

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Abbrevia	ations used:
CMS:	Centers for Medicare and Medicaid Services
HIPAA:	Health Insurance Portability and Accountability Act

would otherwise not seek a dermatologist during this crisis.² Finally, the American Academy of Dermatology has released guidance facilitating teledermatology implementation.³

Teledermatology presents an opportunity for greater access to care, but it has limitations. One challenge is the lack of a reliable reimbursement system.⁴ The newly implemented policies from CMS and participating private payers partially alleviate this issue; however, many will offer coverage for a limited time (ie, 90 days or until mid-June). The impact of these policies on patient-provider expectations for continued telehealth care remains unclear. In addition, institutions may lack the infrastructure or technology required to implement teledermatology.

Furthermore, doctors and patients may experience challenges using this technology. Patients will require specialized guidance before virtual visits. Even with proper instruction, patients may struggle to display lesions properly, and visits may lag due to technologic malfunctions and bandwidth limitations. Using "virtual in-person visits" in tandem with "store and forward" formats alleviates these challenges, but dermatologists may encounter workflow disruptions.

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Besides this, some patients and clinicians perceive online visits as impersonal and nonprivate.⁵ Privacy concerns remain salient because telemedicine currently lacks a standardized system for preserving patient confidentiality.⁴ Although CMS policy has waived potential telehealth HIPAA violations, this is temporary; given the COVID-19 emergency, this may encourage vendors to develop HIPAA-compliant technologies, akin to Zoom for Healthcare.

The COVID-19 pandemic has necessitated the development of novel assessment strategies. During this time of rapid change, dermatologists must simultaneously aim to protect and remain available to patients while preserving their own safety. The expansion of telehealth by CMS and private payers acknowledges these needs. While challenges exist with teledermatology, the pandemic has created the opportunity to explore and refine this technology. Dermatologists are uniquely situated to champion the cause for telemedicine, paving the way for continued access and infrastructural development far beyond this pandemic.

REFERENCES

- 1. Trettel A, Eissing L, Augustin M. Telemedicine in dermatology: findings and experiences worldwide-a systematic literature review. *J Eur Acad Dermatol Venereol.* 2018;32:215-224.
- 2. Vaidya T, Zubritsky L, Alikhan A, Housholder A. Socioeconomic and geographic barriers to dermatology care in urban and rural US populations. *J Am Acad Dermatol.* 2018;78:406-408.
- 3. American Academy of Dermatology Association. Coronavirus Resources: Teledermatology. COVID-19: Teledermatology. Available at: https://www.aad.org/member/practice/managing/ coronavirus/teledermatology. Accessed April 15, 2020.
- 4. Wang RH, Barbieri JS, Nguyen HP, et al. Clinical effectiveness and cost-effectiveness of teledermatology: where are we now and what are the barriers to adoption? *J Am Acad Dermatol.* 2020;83:299-307.
- Bull TP, Dewar AR, Malvey DM, Szalma JL. Considerations for the telehealth systems of tomorrow: an analysis of student perceptions of telehealth technologies. *JMIR Med Educ.* 2016; 2:e11.