Conducting inpatient dermatology consultations and maintaining resident education in the COVID-19 telemedicine era

To the Editor: Telemedicine is being used to provide care while minimizing coronavirus disease 2019 (COVID-19) exposure to patients and providers and preserving scarce personal protective equipment. This has led to anxiety among providers about how to accomplish this without sacrificing quality of care. The commentary by Lee et al[1] summarized steps for outpatient telemedicine using existing platforms, prioritizing high-risk or urgent visits, and postponing nonessential visits. Here we aim to supplement their work by sharing our experience with inpatient teledermatology and maintaining trainee involvement in telehealth.

Inpatient dermatology consult services, like other health care providers during this crisis, can take steps to conserve personal protective equipment. Telemedicine can be used to triage consults and determine who needs an in-person consultation (Fig 1). For patients who can be managed with telemedicine, a live interactive encounter supplemented by photographs is preferred. Video allows evaluation from multiple angles and maintains a "face-to-face" interaction, while photographs add greater detail. When video is not possible, adding direct audio interaction with the patient while viewing their photographs helps maintain the usual history taking and counseling.

The feasibility of performing telemedicine may vary across institutions. Obtaining photographs may be a challenge. Many health systems have the ability to easily and securely send photographs between providers. Alternatively, photographs can be requested directly from the patient. For a live interactive visit, patients will need a video-compatible device. While 81% of American adults own a smartphone, including 53% of those older than 65 years,[2] many hospitals are now providing tablets to patients in isolation and have seen a resultant 50% reduction in personal protective equipment use.[3] Health Insurance Portability and Accountability Act-compliant telehealth platforms are listed in the American Academy of Dermatology Teledermatology Toolkit.[4]

Billing for these services is evolving as payers loosen restrictions. The Centers for Medicare and Medicaid Services have temporary waivers for initial hospital care and initial/subsequent observation codes. Restrictions on frequency of subsequent inpatient care have also been temporarily lifted.[5] Hospital billing departments, the Centers for Medicare and Medicaid Services website,[5] and the American Academy of Dermatology Teledermatology Toolkit[4] are excellent resources.

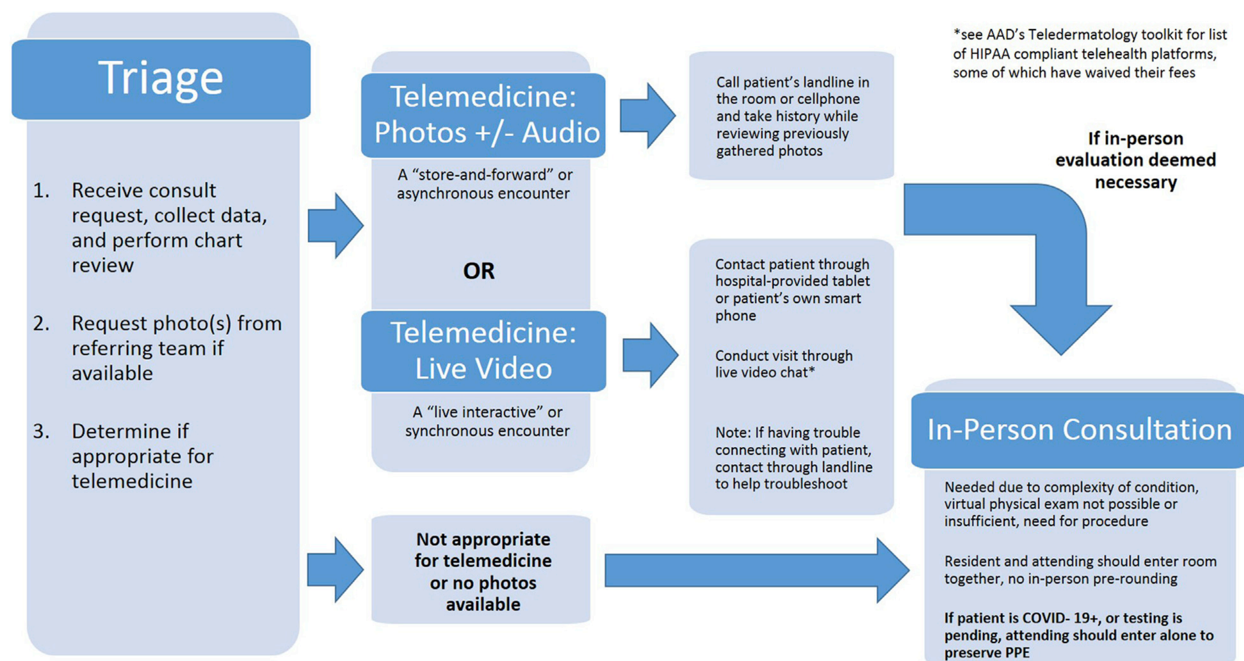

Fig 1. Proposed telemedicine workflow for inpatient consults. *COVID-19*, Coronavirus disease 2019.

Table I. Telemedicine workflow maintaining resident preceptorship

Component of encounter	Description of workflow
Initial history and examination	The resident initiates the video call with the patient and conducts the history taking and physical examination portion of the visit.
Staffing with attending	The resident then *virtually* leaves the patient encounter to discuss the case with the attending, either through the same video platform or even over a simple phone call. This allows the typical flow of resident-patient interactions, followed by attending staffing, to continue. The attending, resident, and patient then reconvene in a group call over the videoconferencing platform during which the visit is completed. The AAD's Teledermatology Toolkit provides a list of HIPAA-compliant telehealth platforms, some of which have waived their fees.[4]
Patient counseling	As in live appointments, the attending may leave the room after completing their examination and detailing the plan of care, allowing the resident to remain in the call to perform patient education.
Documentation	After the call, the resident completes documentation and other clinical duties such as sending prescriptions or communicating with specialists as they normally would.

AAD, American Academy of Dermatology; *HIPAA*, Health Insurance Portability and Accountability Act.

The pandemic poses unique challenges in trainee education. Residents learn by being included in clinical and ethical discussions where they can contribute meaningfully. Residents can create and execute triage algorithms for telehealth or live visits with patients. To maintain resident preceptorship, we created a workflow (Table I)[4] that mimics an in-person encounter. In addition, video conferencing promotes faculty attendance and engagement in didactics by reducing time and travel constraints.

In summary, telemedicine can be used judiciously in the inpatient setting to meet the needs of the current health crisis. Telehealth could even be used after the pandemic to provide access to dermatology for remote hospitals. The teledermatologist could assist the primary team with their clinical decision making but still recommend transfer if needed. Residents can play a valuable role in the transition to telehealth while continuing to meet educational objectives. Preserving preceptorship and didactic education can lead to fulfillment for both resident and attending physicians alike.

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