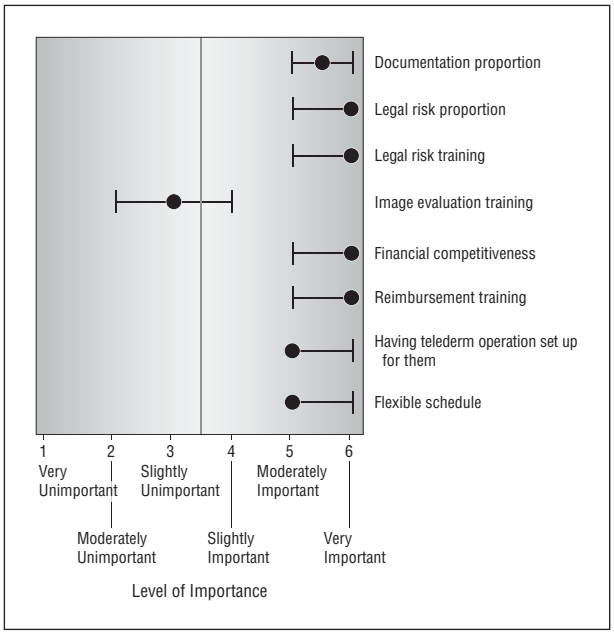

Figure 2. Importance of incentives. Bubble indicates median rank; error bars, interquartile range.

vanize the dermatology workforce to participate in teledermatology. Adoption of new health policies that address the perceived barriers to teledermatology and provide incentives for provider participation will be important for sustainability of teledermatology practices.

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PRACTICE GAPS

The Barriers and the Promise of Teledermatology

The study by Armstrong et al calls attention to an important practice gap facing our specialty. Many Americans do not have meaningful access to expert dermatologic care because they are uninsured or underinsured, and many more lack access simply because of where they live. Teledermatology technologies currently available are of high quality and have become affordable. Why are they not more widely used? This study points to several perceived barriers among nonusers, particularly concerns about liability and reimbursement. Also, most dermatologists currently practicing in the United States have not received training or mentoring in the use of store-and-forward (S&F) teledermatology or information about reimbursement during residency training. Furthermore, most have more patients seeking in-person services than they can handle, as evidenced by the marked increase in the use of mid-level dermatology providers to meet the demand. Of note, a lack of comfort with diagnosing via teledermatology was not an important barrier even among nonusers. In sum, incentives have not been strong enough to encourage most dermatologists to try S&F teledermatology.

While the health care landscape of the future with "accountable care organizations" and "patient-centered medical homes" is uncertain, many expect that dermatologists will be asked to practice in a more integrative way with primary care colleagues and others. Store-and-forward teledermatology can be used to overcome one of the major ob-

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stacles to patient-centered dermatologic care—timely access. We can expect to be reimbursed for this service. Medicare pays for S&F teledermatology in Alaska and Hawaii, and Medicaid provides some type of reimbursement for telehealth services in 39 states,[1] including the state of California, where this study was conducted. Private payers across the country are increasingly willing to do so. Payment is generally the same as in-person care regardless of payer source; however, a half day spent doing S&F teledermatology with today's payment schema is less profitable than a half day spent in clinic doing procedures. Provider payment reforms may alter this differential in the future. Teledermatology has been transitioning from research to implementation for some time now, and as that conversion matures, payers are increasingly willing to reimburse for S&F teledermatology.

Teledermatology training and mentoring should be incorporated into our residency and continuing education programs. Primary care providers also need to be educated about how teledermatology can improve access to timely dermatologic expertise. Staff members and/or patients, depending on the structure of the service, need to be trained to take high-quality digital photographs and to send them securely.

Changes in health care overall may facilitate the adoption of S&F teledermatology. Programs resulting from the federal stimulus of 2009 are working to encourage the meaningful use of electronic health records and to accomplish secure, interoperable health information exchange in all states. A mature electronic environment in health care may facilitate the broader use of S&F teledermatology.

This study shows that concerns about liability are a perceived barrier to using S&F teledermatology. Improvements in the medical liability landscape in general could help and may encourage dermatologists to contribute expertise through S&F teledermatology, which can be done from anywhere that a reliable and secure computer connection exists.

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RESEARCH LETTERS

Autoantibody and Clinical Profiles in Patients With Discoid Lupus and Borderline Systemic Lupus

Discoid lupus erythematosus (DLE) is 1 of 11 American College of Rheumatology (ACR) systemic lupus erythematosus (SLE) diagnostic criteria,[1] of which 4 are required to fulfill the diagnosis of SLE. By meeting mainly skin-related ACR criteria, patients with DLE can be easily diagnosed as having SLE without having other organ involvement. These patients are defined as having borderline DLE/SLE. To determine whether SLE diagnosis is appropriate in these patients, we compared their autoantibody and clinical profiles with those of DLE patients who do not have SLE (DLE only) and those who do have SLE (DLE/SLE).

Methods. A pilot cross-sectional study was conducted comparing age- and sex-matched borderline DLE/SLE, DLE-only, and DLE/SLE patients selected from the Cutaneous Lupus Erythematosus Registry at The University of Texas Southwestern (UTSW) Medical Center in Dallas. For all patients, the diagnosis of DLE, which represented the discoid subtype of chronic cutaneous lupus, was confirmed by clinicopathologic correlation. Borderline DLE/SLE patients had either 3 or 4 skin-related ACR SLE diagnostic criteria (including DLE, self-reported malar eruption, oral ulcers, and photosensitivity) and positive findings of antinuclear antibody (ANA) to fulfill the SLE diagnosis. The DLE-only patients had fewer than 4 ACR SLE diagnostic criteria. The DLE/SLE patients met at least 4 ACR SLE diagnostic criteria with at least 1 non–skin-related, non–ANA-related criterion. Patients with absence of DLE, history of drug-related DLE, or DLE diagnosis before age 18 years were excluded. The study was approved by the UTSW institutional review board.

Autoantibodies were quantified using (1) an enzyme-linked immunosorbent assay (ELISA) kit manufactured by INOVA Diagnostics for ANA; (2) an ELISA kit manufactured by ORENTEC Diagnostika for double-stranded DNA (dsDNA) and single-stranded DNA (ssDNA) antibodies; and (3) a QUANTA Plex fluorescent immunoassay system manufactured by INOVA Diagnostics for ribonucleoprotein (RNP), Smith (Sm), Scl-70, 60-kDa SS-A, 52-kDa SS-A, and SS-B antibodies. Treat-

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