

# Tele dermatology: Improving Access or Widening Healthcare Disparities?

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## INTRODUCTION

Tele dermatology, the form of telemedicine directed toward dermatology patients, is one of the earliest technological innovations that advanced remote medical care. Developed in 1995, tele dermatology was established with the mission of increasing healthcare access among patients in rural geographic locations who had limited access to specialist care.<sup>1</sup>

The COVID-19 pandemic has brought about newfound interest in the development of tele dermatology, and we expect its growth to continue once the pandemic is over. While the advancement of tele dermatology presents exciting opportunities to increase the efficiency of dermatology practices around the country, the question arises, will tele dermatology truly improve access to patients who need the care most?

Certain cases have highlighted the potential to improve access to patients. A case documented by the University of Pennsylvania School of Medicine describes an instance where a tele dermatology triage program was used by a community health clinic to diagnose Reed Syndrome, a condition that confers high likelihood to multiple hereditary malignancies.<sup>2</sup> In community volunteer settings such as this, tele dermatology demonstrates its ability to identify high-risk patients and extend appropriate care or instructions.

However, when considering the patient population on a national scale, multiple barriers are evident. In theory, it makes sense that remote care would allow practitioners to communicate with patients' miles away, though studies suggest that telemedicine services are least used by many of the patients it originally intended to serve. A report from the Census Bureau's 2011 Current Population Survey Computer and Internet Use Supplement surveyed over 53,000 households in the United States. It included questions specifically about telemedicine usage. Participants who utilized telemedical services the least included those with no high school diploma, low income (< \$25,000), users over the age of 65, and most surprisingly, those living in rural areas.<sup>3</sup> Additionally, African American and Hispanic households owned computers and had broadband adoption rates well below the national average, which are critical components to conducting any successful telehealth visit. Later, a study by George Washington University reviewing data of over 22,000 participants surveyed from 2013 to 2016, corroborated these results. They found that the populations who

were least likely to use telemedical services included patients from low income families and rural areas.<sup>4</sup> Also, they found that, of the insured population, patients covered by Medicare (age 65 or older) and Medicaid used telemedical services the least. Of note, patients over the age of 65 and those insured by Medicare make up a substantial proportion of the dermatology patient population.<sup>5</sup>

We highlight, from a population level, the barriers tele dermatology patients face. Age, insurance status, race and ethnicity, and health literacy should all be accounted for as more dermatology practices transition to remote care. These patients should receive additional counseling to ensure they are appropriately equipped to adapt to changing practices.

Dermatologists and institutions should continue to foster awareness about the barriers faced by many patients, ensuring new advancements in the field of tele dermatology do not improve practices at the expense of losing patients who need care most. Furthermore, as practices continue to adopt new telemedical platforms, more studies are needed to characterize the dermatology patient population before and after this transition, to better understand which patients are being lost to care.

## DISCLOSURES

The authors have no conflicts of interest to declare.

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