

# Teledermatology in Tijuana, Mexico

Megan Brown, MD



*The Health Frontiers in Tijuana (HFiT) clinic is a binational partnership between the University of California, San Diego School of Medicine (San Diego, California); the Universidad Autónoma de Baja California School of Medicine (Tijuana, Mexico); and Desayunador Salesiano Padre Chava, a community grassroots organization in Tijuana, Mexico. Health Frontiers in Tijuana provides accessible quality health care for the underserved in Tijuana's Zona Norte. This article is a narrative meant to share my clinical experience as a dermatology resident who worked with HFiT to establish teledermatology services at this clinic.*

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## Teledermatology in Tijuana

The patient population served by the HFiT clinic includes substance users, sex workers, the homeless,

deportees, indigent patients, and recently Haitian immigrants.<sup>1</sup> We established teledermatology services under the faculty leadership of Casey Carlos, MD, who was awarded a SkinCare for Developing Countries grant from the American Academy of Dermatology in April 2015 to address the need for teledermatology support for the clinic.<sup>2</sup>

Over the last 2 years, we have worked closely with 2 medical students from the University of California, San Diego—Nicole Herrick, BS, and Nicole DeMartinis, BA—to apply for the grant and create a system whereby volunteer residents and faculty consultants at the University of California, San Diego, can provide teledermatology services on a weekly basis to support the HFiT staff as they see patients with dermatologic conditions. Initially, we purchased touch screen tablets to use the Africa Teledermatology Project ([africa.telederm.org](http://africa.telederm.org)) web-based program. The clinic was already functioning with electronic medical records with volunteers who carried tablets and scribed for the providers as they saw patients. We felt this method would be a great way to incorporate teledermatology into the clinic, and it functioned moderately well for several weeks but was very labor intensive on our part, as we frequently had to travel to Tijuana to retrain rotating clinic volunteers on how to use the program. Often, the Internet connection was slow, which made pulling up the Africa Teledermatology Project website difficult, and photographs also would take too long to upload in the middle of a busy clinic.

We are now exploring how to use a more simple email format to send the teledermatology consultations while still being compliant with the Health Insurance Portability and Accountability Act. We currently use secure university email accounts. Although we are still working out the details, this email-based method seems to work well. It has been a simple solution to accommodate a slow Internet

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connection and many rotating volunteers without requiring additional training. The email format also allows the photographs to be saved in draft messages, even if the Internet connection times out.

Once the teledermatology consultation is sent, the medical students and I review them and then get an attending physician's input on our proposed working diagnosis and plan. We work to have this process complete within several days to return the answered consultation to the requesting provider.

### Final Thoughts

The HFiT providers have shared a lot of positive verbal feedback about this project. One frequent comment is how helpful it is to have access to a dermatologist for challenging cases. We also have heard many times that this project has inspired medical students and volunteers to expand their knowledge of dermatology. We are continuing to form new collaborative relationships with physicians in Tijuana. We will soon have the ability to

train primary care providers at HFiT on performing simple skin biopsies and managing basic dermatologic conditions. Through our support of these providers, we are creating a sustainable partnership that is mutually beneficial to the patients in Tijuana as well as the medical students and residents in the United States. It is highly rewarding to all those involved with this project, and I am excited to see what challenges this next year will bring as we welcome many new patients from Haiti into the HFiT patient population.

### REFERENCES

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