

TELEDERM AS A MODEL FOR TRAINING FAMILY MEDICINE RESIDENTS

Momah T.¹ Adedara, C.¹

1. UMMC Department of Family Medicine

INTRODUCTION

- Family Medicine (FM) residents have very little elective opportunities to rotate in dermatology during residency.
- Majority of dermatology residencies are located in big metropolitan cities, far from rural areas (where majority of Family medicine residents are trained).
- Telederm training is a virtual model of training where dermatologists discuss cases presented and teach didactics.
- 60% of dermatological cases are seen initially by primary care physicians^{1,2} and Telederm affords an opportunity to train these personnel.



POST- TELEDERM REVIEWS

- Telederm evaluations by FM residents showed **Improved Clinical Competency:** Participants reported increased confidence in recognizing and managing common dermatologic conditions, including hidradenitis suppurativa, benign skin neoplasms, etc.
- Notable improvement was seen in diagnostic skills for conditions such as basal cell carcinoma, squamous cell carcinoma, and melanoma

- Residents exhibited better prescription practices for common and utilized in-office diagnostic procedures.

High Satisfaction and Engagement: Participants rated overall high satisfaction with the Telederm sessions with respondents scoring Telederm between 4 and 5.

- The case-based discussions, and accessibility of the sessions via Zoom were frequently cited as valuable
- Opportunities for interactive learning, direct dermatologist consultation, and real-time feedback were key drivers of engagement.

Broader Impact on Patient Care: Residents reported that knowledge gained from Project ECHO sessions directly translated to improved patient counseling, early detection of serious conditions, and better management of chronic skin diseases.

Practical Application and Accessibility: Telederm is cost-effective, flexible, and accessible across the state of Mississippi and ensures that even residents in geographically isolated areas benefit from specialized dermatology training.

- Visual case presentations, combined with concise didactics, allowed participants to appreciate the clinical appearance of a wide range of dermatologic conditions.

DISCUSSION

- Telederm showcases how tele-education can be utilized across all geographical areas with computer and internet access.
- It is noteworthy that compared to other medical and surgical specialties, physical exams during telederm sessions appear well on virtual platforms.
- Telederm can bridge educational gaps in residency programs and improve patient care delivery in primary care settings.
- By fostering early recognition and management of dermatologic conditions, the Telederm initiative empowers FM residents to provide comprehensive care, reducing unnecessary specialist referrals and enhancing patient

CONCLUSION

- Telederm, through Project ECHO, enhanced dermatologic education for Family Medicine residents, improved diagnostic skills, patient care, and reduced unnecessary referrals especially in underserved areas.
- Residents reported high satisfaction, increased confidence, and practical application from the use of Telederm via ECHO.
- Telederm is a cost-effective, accessible solution that bridges educational gaps in primary care

REFERENCES

1. Lowell BA, Froelich CW, Federman DG, Kirsner RS. Dermatology in primary care: Prevalence and patient disposition. *J Am Acad Dermatol.* 2001 Aug;45(2):250-5. doi: 10.1067/mjd.2001.114598. PMID: 11464187.
2. Federman DG, Reid MC, Feldman SR, Greenhoe J, Kirsner RS. The Primary Care Provider and the Care of Skin Disease: The Patient's Perspective. *Arch Dermatol.* 2001;137(1):25–29.

RESULTS

- Telederm offers a virtual opportunity to train these residents, who will form the bulk of those who will treat patients with mild to moderate skin conditions.
- It involves using a platform (in this case ZOOM) to teach a 10 to 15 minutes didactics (by a dermatologist), and via a visual screen discuss conditions commonly seen by FM residents.
- These residents present to dermatologists, and best practice options are highlighted and buttressed.
- These telederm sessions have been running on a monthly basis since 2020, with an average of 2-3 clinical cases and 1 didactic case presented monthly.
- The number of participants has progressively increased from 86 in 2020, to 66 in 2021, to 247 in 2022, to 294 in 2023, and then up to 298 in 2024.
- Several didactic topics presented included malignant neoplasm of the skin, disorders of the nail, papulosquamous dermatoses, neurodermatoses, cutaneous signs of systemic diseases, blistering disorders, hidradenitis, benign skin neoplasms, eczematous dermatoses, topical therapeutics, hemangiomas, photosensitive dermatoses, sun damage to skin, pregnancy dermatoses etc.