

# Clinicians' Online Neurology Network Empowering Communities through Telemedicine - Multiple Sclerosis (CONNECT-MS)

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## Introduction

- California's deserts and Central Coast are medically underserved areas for people living with multiple sclerosis.
- The National Multiple Sclerosis Society's Southern California and Nevada Chapter estimated that there are many clients living with multiple sclerosis in geographic areas of highest need of specialized MS care:

Riverside County.....1818  
San Luis Obispo County.....487  
Bakersfield/Kern County.....692  
Visalia/Tulare County.....205

## Objective

To develop and deliver a comprehensive telemedicine program for neurologists, primary care clinicians and patients that increases both providers' and patients' awareness of state-of-the-art care while creating quantifiable improvements in quality and coordination of care

## Acknowledgment

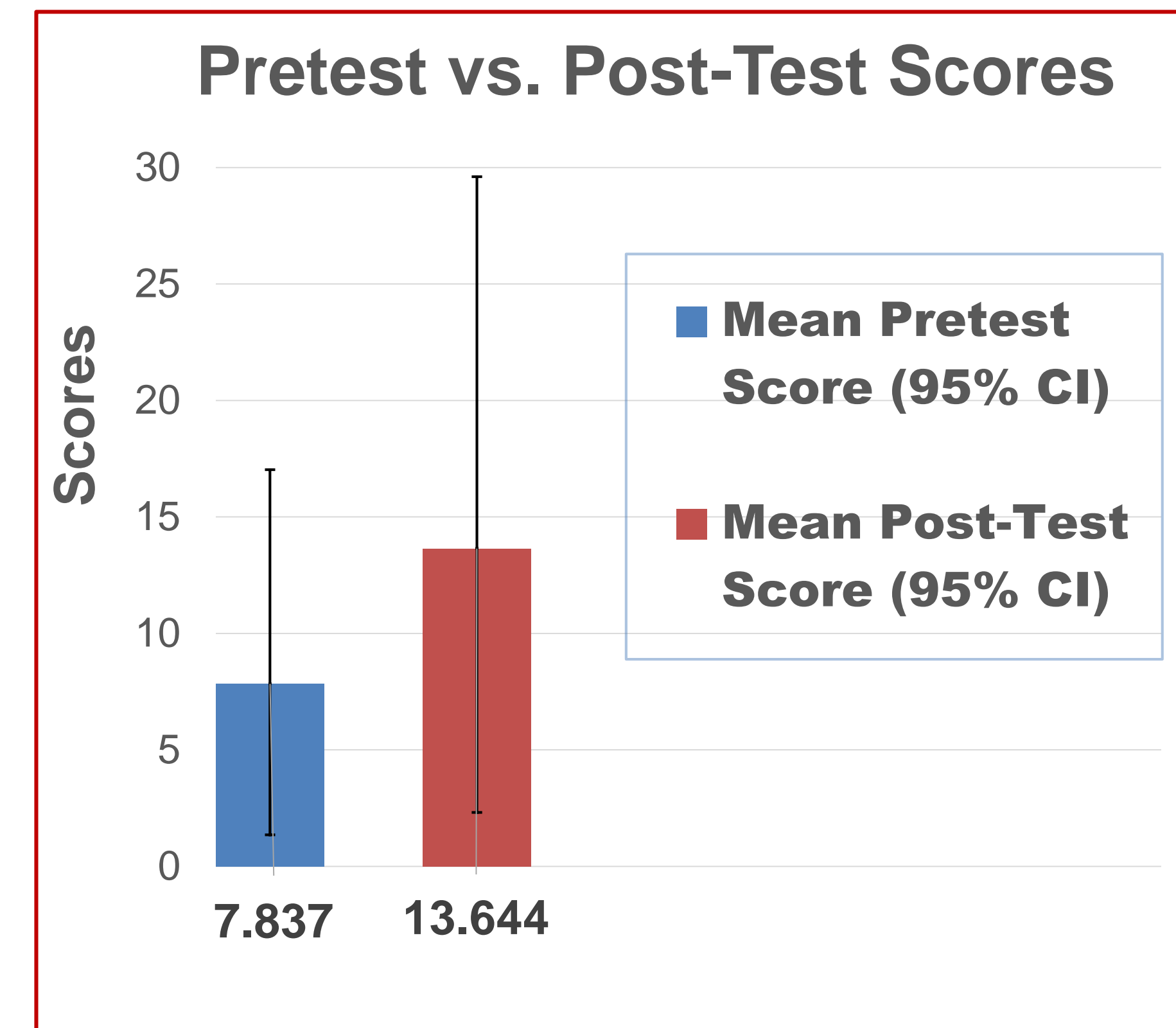
This study was sponsored by a grant from Genentech.

## Methods

- Participating clinicians chose their preferred formats to receive continuing education including on-site training and online videos.
- Clinicians completed a pre-test to identify specific learning needs for MS care and demographics of their patients.
- The curriculum included early identification of MS, neurological examination, work-up, disease-modifying therapies, managing exacerbations, pediatric MS, progressive MS, and symptom management including exacerbations, mobility, bladder and bowel issues, depression and other comorbidities, and mistreatment of people with MS.
- Using HIPAA-compliant telemedicine software, a fellowship-trained neuroimmunologist offered remote consultations to neurologists for their most complex MS patients.
- We established a new telemedicine clinic for teenagers living with MS in Ventura County.

## Results

- The project team provided:
  - 12 educational presentations
  - 39 telemedicine consultations
- Before and after participating in the MS education program, 17 clinicians completed a 24-item multiple-choice test of their medical knowledge about MS.



## Results

- Mean scores:
  - Pretest: 7.84 ± 0.6 (95% CI 6.49 - 9.19)
  - Post-test: 13.64 ± 1.1 (95% CI 11.33 – 15.96)
- Robust effect size of 1.30 was equal across all clinician types ( $p$  value < 0.001).
- Participating clinicians, patients and families provided positive feedback.

## Conclusion

We established a comprehensive telemedicine network throughout the Central California Coast in collaboration with Ventura County Medical Center and the University of California, Riverside School of Medicine.

## References

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