

NYDHA EMPIRE CONFERENCE

**Friday, Nov. 6, 2026
- from 3:30-5:30 p.m.**

**Course 2
2 CE hours**

Artificial Intelligence for Assessing and Classifying Periodontal Disease

Description: Artificial intelligence (AI) has the capability to improve the accuracy and efficiency of periodontal disease classification and assessment, which is vital to achieving the best outcomes for patient care. Currently, there has not been a significant improvement in the methodology for detecting bone loss and assessing the severity of attachment apparatus loss despite the recent updates in the periodontal classification system.

This course introduces the clinician to artificial intelligence and its application to periodontal disease assessment. It provides an overview of AI concepts and terminology and explains how AI systems provide more efficient, reliable data configurations for appropriate therapy recommendations. Attendees will have an opportunity to visualize examples of AI applications depicting clinical attachment loss and compare the exam findings to non-AI periodontal charting.

Learning Objectives: Participants will learn to:

- Attain an understanding of Artificial Intelligence (AI) and its use in dentistry.
- Compare and contrast artificial neural networks (ANNs) and convolutional neural networks (CNNs) and their roles in periodontal disease assessment.
- Identify the value of incorporating AI into the staging and grading process as it relates to clinical efficiency and calibration.
- Recognize the impact AI has on patient communication, ethical detachment, and treatment acceptance.
- Discover the value of AI as it relates to documentation accuracy and speed of dental insurance processing.

About Our Speaker

Marianne Dryer, MEd, RDH, is a dynamic national and international speaker, published author, and dental hygiene educator known for her expertise in periodontal instrumentation, ultrasonic technology, clinical calibration, and risk-based care. She earned her Bachelor of Science in Dental Hygiene from Old Dominion University and her Master of Education from Saint Joseph's College of Maine.



She currently serves as the Program Director of Dental Hygiene at Cape Cod Community College in Massachusetts, where she leads curriculum innovation, faculty development, and competency-based clinical education.

She is the 2025 Sunstar Award of Distinction recipient in Academia and the 2025 Dr. Esther Wilkins Distinguished Alumni Award honoree from the Forsyth School of Dental Hygiene. She has authored multiple articles in dental hygiene journals and is recognized for integrating AI-supported assessment, ultrasonic science, and microbiome strategies—including probiotics such as *Lactobacillus reuteri*—into modern preventive and periodontal care.

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