

Beth Sanford, DNP, RN

Beyond Deficiency: System-Specific Vitamin D Targeting

About the Speaker

Dr. Sanford earned her BSN and MSN in Rural Health Nursing with a specialization in Nursing Education from the University of North Dakota and completed her DNP in Public Health and Policy at Rasmussen University. Dr. Sanford later earned a postgraduate certificate in Applied Clinical Nutrition to close the research-practice gap to address vitamin D deficiency in patients and populations, improving workforce physical and mental health and decreasing healthcare costs. Dr. Sanford is a full-time graduate nursing educator and is the Director of Education and Clinical Practice for GrassrootsHealth Nutrient Research Institute. Her 30 years of nursing experience have encompassed bedside care, public and community health, education, research, and health policy. She has worked and volunteered with underserved populations locally and globally, including tribal communities, incarcerated and homeless teens in the U.S. and Canada, orphans in Mexico, rural communities in the Amazon and human trafficking survivors in Asia. In 2005, she lived in China for five years, where she served as a Nurse Consultant and teaching English. After relocating to Fargo, she co-founded a non-profit supporting micro-businesses for women in poverty in Afghanistan and further served local underserved populations through refugee health advocacy. Beth is deeply committed to strengthening the nursing profession through education, workforce development, advancing health policy, and fostering professional growth. She enjoys serving as the current President the North Dakota Nurses Association and the North Dakota Center for Nursing, advocating for nurses and nursing students across the state and nation.

Session Description

Vitamin D influences multiple physiological systems—including cardiovascular, immune, endocrine, reproductive, musculoskeletal, and neurological health—yet most clinical practice continues to rely on population-level recommendations rather than individualized, serum-guided care. A precision approach requires clinicians to integrate population risk patterns with individual factors—demographics, personal and family history, genetic influences—and align them with emerging evidence on system-specific thresholds for optimal 25(OH)D function.

Participants will learn how to apply this multidimensional framework to justify ordering 25(OH)D labs and guide targeted supplementation. Using an evidence-based e-tool, attendees will practice calculating individualized dosing to reach serum concentrations that support system-specific needs. The session also acknowledges that workflows differ across clinical environments, ensuring that precision vitamin D strategies can be adapted for both private-practice clinicians and those working within healthcare systems. Clinicians will leave with a clear, actionable framework for implementing serum-guided vitamin D optimization in routine patient care.

Learning Objectives

At the conclusion of this session, participants will be able to:

- Identify population-level and individual-level risk factors—including demographics, personal and family history, and genetic influences—that justify ordering a 25(OH)D laboratory assessment.
- Interpret system-specific threshold evidence to determine appropriate serum 25(OH)D targets that support optimal physiological function across multiple body systems.
- Use an evidence-based e-tool to calculate individualized vitamin D dosing needed to reach targeted serum concentrations based on a patient's multidimensional risk profile.
- Differentiate how precision vitamin D workflows can be implemented across diverse clinical practice settings, including private practice and healthcare systems."