## UNIVERSITY OF HARTFORD

## COLLEGE OF EDUCATION, NURSING AND HEALTH PROFESSIONS

The Doctoral Program in Educational Leadership presents -

Quality Appraisal of Diagnostic Medical Sonography Education: An Outcomes-Based Analysis of Training Pathways

Friday, November 20<sup>th</sup> 9:00 – 10:30 am

Zoom: <a href="https://zoom.us/my/karlaloya">https://zoom.us/my/karlaloya</a> Passcode: EDD Meeting ID: 598 861 3813 Dial-In Number: +1 646-876-9923

Dissertation Defense by Kimberly Sorrentino, MS, RDMS, RDCS, RVT

This quantitative, outcomes-focused study compared sonography credentialing exam performance by applicant educational pathway. This secondary analysis was conducted on a nationwide sonography credentialing agency dataset that included pass rates, exam scores, educational pathways, specialty exams, exam years, ages, genders, and geographical locations for 70,403 first-time test-takers. The study was guided by The Lumina Foundation Quality Credentials Task Force's Conceptual Model of Credential Quality: From Design to Outcomes that highlights quality assurance by integrating individual and societal outcomes with educational design, policies, and practices focused on student success, equity, and cross-sectional collaboration (Humphreys et al., 2019). Data were examined through descriptive and inferential statistics, including 252 chi-square and ANOVA tests.

The findings of the three primary and two secondary research questions demonstrated many statistically significant differences in first-time exam performance. Test-takers who possessed a bachelor's degree in sonography or completed a sonography program with specialized accreditation consistently achieved the highest pass rates and/or mean exam scores. In addition, many analyses showed that exam performance significantly improved over time and that exam performance was significantly impacted by applicant geographical location. A number of analyses also showed that exam performance declined as the age category increased and that females outperformed males.

These findings have important implications for sonography students, educators, professional societies, credentialing agencies, employers, and patients and the study led to noteworthy recommendations for practice, policy, and future research.

Kimberly Sorrentino works in the Connecticut State Colleges & University System as the Interim Director of Regional & Specialized Accreditation for Connecticut State Community College. She is also an Associate Professor in the Diagnostic Medical Sonography Program at Gateway Community College and the College's New England Commission of Higher Education Accreditation Liaison Officer. Kimberly Sorrentino holds a graduate degree in Evaluative Clinical Sciences (with a specialization in Health Care Improvement) from Dartmouth College, a degree in Biology and Psychology from Boston University, a certificate in Diagnostic Medical Sonography from Quinnipiac University, and a certificate in Echocardiography from Yale-New Haven Hospital.