

# Development of a Valid and Reliable Lifestyle Medicine Competency Examination

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## Abstract

Increasing morbidity and mortality from noncommunicable diseases (NCDs) in recent decades have created an overwhelming burden on population health. Many NCDs are closely associated with lifestyle-related behaviors, such as an unhealthy diet, physical inactivity, tobacco smoking, heavy alcohol consumption, high stress levels, poor sleep habits, and lack of meaningful social relationships. The concept and practice of lifestyle medicine (LM) advocates for adoption of low-risk lifestyle behaviors and improved cardiovascular health metrics, which reduces mortality secondary to chronic disease. Medical providers have received demonstrably inadequate education in lifestyle interventions historically. Medical education programs throughout the United States are starting to adopt LM into existing curriculum. This project developed a valid and reliable written LM competency examination for healthcare trainees to act as a curricular assessment tool in educational institutions. This was accomplished utilizing a four-round Delphi study, using a panel of 12 healthcare professionals certified in LM for examination development. This process resulted in dozens of valid multiple-choice questions. A physician expert panel of five LM-certified physicians then performed a review to further establish content validity. Finally, a cross-sectional pilot examination occurred, completed by 89 licensed healthcare providers to establish further the reliability. The pilot exam results demonstrate strong reliability of the final 75 questions. ANOVA results indicated the exam differentiates between those with no previous training in LM and those with training. This validated and reliable written exam fills a previous gap in LM education and research and provides the medical community at large with a vital tool to assist with successfully implementing LM education and training into new and existing medical education programs.

*Key Words: Non-communicable diseases, Lifestyle medicine, Medical education*