NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

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Title

Effect of brief dermoscopy training on primary care providers' diagnostic accuracy on a test and in practice

Priority 1 (Research Category)

Education and training

Presenters

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Abstract

Context: Brief dermoscopy training has been shown to improve diagnostic accuracy on image recognition tests, but few, if any, studies have examined its effect on clinician behavior and clinical outcome measures. Objective: To evaluate the effect of brief dermoscopy training on primary care providers' diagnostic accuracy on a test and in clinical practice. Study Design and analysis: Phase 1) Primary care providers completed a skin lesion identification test before and after brief dermoscopy training, and Phase 2) Diagnostic accuracy and biopsy and referral practices for the year prior to the course and the year following the course were compared. Setting: Divisions of Family Medicine and Community Internal Medicine at a large academic medical center in Southeast Minnesota. Population studied: Primary care providers (physicians, nurse practitioners, and physician assistants), 43 in phase 1 and 13 in phase 2. Intervention: Two-hour asynchronous dermoscopy course teaching the Triage Amalgamated Dermoscopy Algorithm (TADA) plus a 30 minute hands-on workshop teaching how to operate and obtain images with a dermatoscope. Outcome measures: Phase 1) Change in score from pretest to posttest, and Phase 2) Change in diagnostic accuracy from before to after dermoscopy training. Results: Phase 1) Mean score on the lesion identification test improved from 42% to 58% ($p<0.001$) after training with statistically significant improvement in all lesion types except actinic keratosis and benign nevus, and Phase 2) Mean diagnostic accuracy during the year prior to training was 39.4% and improved to 70.4% for the year after training ($p=0.003$). Five of thirteen subjects improved significantly after training and five others improved to a level that was not statistically significant. Conclusions: Brief dermoscopy training can improve primary care providers' skin lesion diagnostic accuracy in clinical practice.