

Screening Hispanic/Latino Patients for Non-Alcoholic Fatty Liver Disease using Butterfly iQ Point-of-Care Ultrasound

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Non-alcoholic fatty liver disease (NAFLD) is one of the most common causes of chronic liver disease, particularly among patients of Hispanic/Latino heritage, and can result in significant morbidity if not adequately recognized. This study aims to evaluate the sensitivity and specificity of the Butterfly iQ point-of-care ultrasound device as a screening tool for the detection of NAFLD in Hispanic/Latino patients using MRI proton-density fat fraction as a reference standard. Hispanic/Latino patients scheduled for outpatient abdominal MRI exams will be concurrently scanned using the Butterfly iQ device, and the presence or absence of hepatic steatosis as determined by ultrasound will be compared with quantitative measurements of liver fat using MRI. These ultrasound images will also be used to develop an AI algorithm for the detection of hepatic steatosis; this study hopes to demonstrate the viability of an AI-augmented point-of-care ultrasound program to screen for NAFLD among Hispanic/Latino patients in resource-limited settings.