

UWF retinal imaging process could reduce practice burden

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(HealthDay)—Real-time ultrawide field (UWF) retinal image evaluation by nonphysician imagers can accurately detect diabetic retinopathy (DR) and help reduce center image grading burden, according to a study published online June 1 in *Diabetes Care*.

Paolo S. Silva, M.D., from the Joslin Diabetes Center in Boston, and colleagues examined the ability of trained nonphysician retinal imagers to perform DR assessment at the time of UWF retinal imaging. A total of 3,978 eyes of 1,989 patients with [diabetes](#) were imaged, of which 94.7 percent were gradable for DR. At the time of capture, retinal imagers evaluated UWF [images](#) for referable DR. Imagers underwent training that included four hours of standardized didactic lectures and 12 hours of guided image review. Real-time assessments were compared

with standard masked gradings that were performed at a centralized reading center.

The researchers found that 36.5 percent of eyes had DR and 15.3 percent had referable DR. Real-time image evaluation had a sensitivity and specificity for identifying more than minimal DR of 0.95 and 0.84, respectively, compared with the centralized center. For detecting referable DR, the specificity and sensitivity of real-time image evaluation was 0.99 and 0.76, respectively. Three of 580 patients with referable DR were not identified with real-time imager evaluation.

"This study demonstrates that appropriately trained and certified imagers following a defined imaging and grading protocol can accurately evaluate images for the presence of either DR or referable DR at the time of UWF retinal imaging," the authors write. "With immediate image evaluation,

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