EHR review can measure diagnostic uncertainty

August 19 2018

(HealthDay)—Retrospective review of clinician documentation in the

electronic health record (EHR) can help identify diagnostic uncertainty with moderate reliability, according to a study published in the June issue of the *Journal of Evaluation in Clinical Practice*.

Viraj Bhise, M.D., M.P.H., from the Michael E. DeBakey Veterans Affairs Medical Center in Houston, and colleagues sought to understand how diagnostic uncertainty was documented in the EHR and explore a strategy to retrospectively identify it using clinician documentation. The authors reviewed the literature to pinpoint language that could identify both direct expression (e.g., question marks; differential diagnoses; symptoms as diagnosis; or vocabulary such as "probably," "maybe," "likely," "unclear," or "unknown") and indirect inference of diagnostic uncertainty (e.g., absence of documented diagnosis at the end of the visit, ordering of multiple consultations or diagnostic tests).

The researchers found that 218 of 389 patient records had evidence of diagnostic activity, so they included them in subsequent analysis. In 71.6 percent of visits, reviewers identified clinicians who experienced diagnostic uncertainty (moderate inter-reviewer agreement, 81.7 percent). The majority of these cases (80.1 percent) showed evidence of both direct expression and indirect inference. Uncertainty was directly expressed in 89.1 percent of cases, most often through the use of symptoms as diagnosis (62.8 percent). Uncertainty was inferred in 92.3 percent of cases. In 37.2 percent of visits, diagnostic uncertainty was recorded incorrectly with ICD-9 codes.

"Better measurement and understanding of diagnostic uncertainty could help inform strategies to improve the safety and efficiency of diagnosis," the authors write.

More information: Abstract/Full Text (subscription or payment may be required)