Practice patterns in the diagnosis of pulmonary embolism vary, study suggests

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The imaging tests used in the diagnosis of possible pulmonary embolism (PE) vary by physician specialty and geographic region, which suggests that some of this imaging may be inappropriate, according to a study in the April issue of the *American Journal of Roentgenology*.

PE, the formation of a blood clot in the lung, is the third-leading cardiovascular cause of death. As such, it requires prompt diagnosis and treatment. The most common imaging tests used in the diagnosis of PE include computed tomography (CT) angiography and ventilation-perfusion scintigraphy (VQ scanning). Other imaging tests frequently performed on patients with symptoms of PE — often to rule out other diagnoses — include echocardiography, cardiac perfusion imaging, and duplex ultrasound.

Researchers from the American College of Radiology in Reston, VA, Philadelphia, PA, and the University of Pennsylvania analyzed data on Medicare patients with emergency department visits or inpatient stays with a diagnosis of PE or for symptoms related to PE. "For patients for whom PE might have been suspected, many large variations were found in practice patterns among physician specialties and geographic locations," said Rebecca Lewis, an author of the study. "There were fewer variations among patients with the inpatient diagnosis of PE," said Lewis.

"There are substantial differences in patterns of use of tests across geographic areas, probably reflecting differences in physician practice
patterns," she said.

"Although physician practice in the diagnosis of PE is broadly consistent with recommendations, variations by physician specialty and geographic location may be evidence of inappropriate imaging," said Lewis.

**More information:** [www.ajronline.org](http://www.ajronline.org)

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