

# Automated models can identify acute back pain in EMRs

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(HealthDay)—Administrative data models can discriminate acute low back pain (LBP) from nonacute cases in electronic medical records (EMRs), according to a study published in the June 15 issue of *Spine*.

Anthony J. Lisi, D.C., from the Veterans Affairs (VA) Connecticut Health Care System in West Haven, and colleagues retrospectively reviewed administrative data from all consecutive Iraq and/or Afghanistan veterans seen in a VA primary care service during a six-month period. Patients with at least one encounter that was coded with at least one LBP-related *International Classification of Diseases*, Ninth Edition (ICD-9) code were included. Acute LBP cases were determined using structured chart review of free text in EMRs.

The researchers found that 83 of 354 patient encounters with complete

data were designated acute upon chart review. No diagnostic code was more likely to be used for acute cases than for nonacute cases. An administrative data model of 18 variables was identified; the variables were significantly and positively associated with an acute case, although a reduced model of five variables (including a lumbar magnetic resonance imaging order, tramadol prescription, skeletal muscle relaxant prescription, physical therapy order, and addition of a new LBP-related ICD-9 code to the EMR) remained reasonable.

"Our results suggest that a decision model can identify acute from nonacute LBP cases in veterans using readily available VA administrative data," the authors write.

Relevant financial activities outside the submitted work were disclosed: grants.

**More information:** [Abstract](#)  
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