

## Risk factors associated with the transition from acute to chronic low back pain in primary care settings in US patients seeking primary care

Previous research indicates a wide range of estimates (2%-48%) of how often patients in primary care settings transition from acute to chronic low back pain (LBP). This study determined the risk factors associated with the transition from acute to chronic LBP in patients from 77 primary care practices in 4 geographic regions across the United States between 2016-2018.

A cohort of 5,233 patients with acute LBP were enrolled from a randomized clinical trial. Chronic LBP was defined as the presence of pain for more than 3 months and pain on at least half the days in the past 6 months ([NIH LBP task force definition](#)). Patients not meeting this definition were classified as having acute LBP. The [STarT Back tool](#) evaluates risk of persistent functional limitations due to LBP. It was used to classify patients with acute LBP into 3 risk groups for developing chronic LBP: low, medium, or high. At the 6-month follow up visit:

- 32% of patients transitioned from acute to chronic LBP
- Guideline nonconcordant care (including prescribed opioids, systemic corticosteroids, benzodiazepines, and acetaminophen medications; diagnostic imaging; and medical specialty referrals) were associated with patients transitioning from acute to chronic LBP, after controlling for demographic and clinical characteristics such as baseline disability, psychological comorbidities, obesity and smoking.
- Patients in higher STarT Back risk groups more commonly transitioned to chronic LBP (19% in the lowrisk, 33% medium-risk and 49% high-risk), after controlling for demographic and clinical characteristics.

### *Take Home Message*

Historically, identifying risk factors in patients with acute LBP is not common because it has been believed that acute LBP usually resolves by itself. However, in this study 32% of patients with acute LBP transitioned to chronic LBP at 6 months. Higher risk as defined by the STarT Back tool was associated with patients transitioning from acute to chronic LBP.

### *Practical Application*

Clinicians should follow guideline concordant care and consider using the STarT Back tool to guide care plans for patients with acute LBP, which may reduce the development of chronic LBP.

### *Reference*

Stevens JM, Delitto A, Khoja S, Patterson CG, Smith CN, Schneider MJ, et al. **Risk Factors Associated with Transition From Acute to Chronic Low Back Pain in US Patients Seeking Primary Care.** *JAMA Network Open.* 2021;4(2).

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