

# Are We Following ACP Guidelines with regard to Lower Back Pain



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## Background

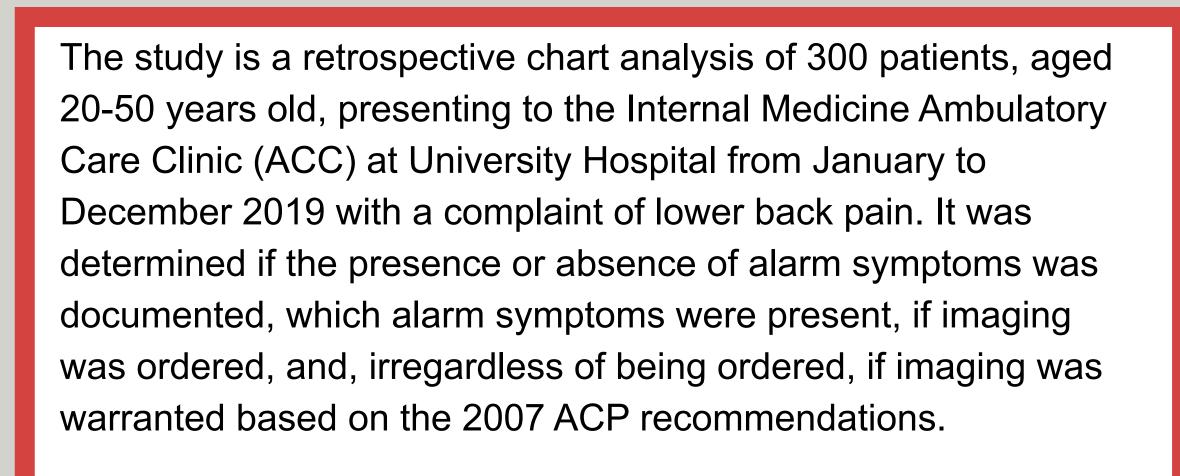
Lower back pain is a common chief complaint of patients, particularly in the office setting. Spinal imaging is often ordered as part of the assessment and diagnosis of lower back pain despite the American College of Physicians (ACP) very specific recommendations for when imaging should be ordered for these patients (1). This can impact the efficiency of treatment and cause an unnecessary financial burden to the patient as well as the healthcare system (2). The Internal Medicine Ambulatory Care Clinic in Newark, NJ evaluates many patients a year with back pain. In order to follow ACP guidelines with regard to lower back pain, the health care provider must ask specific questions pertaining to back pain alarm symptoms in order to determine the appropriateness of imaging in patients, and to guide treatment. The alarm symptoms that warrant initial imaging are: cancer history or risk, IV drug use or recent infection, urinary or fecal incontinence, saddle anesthesia and progressive motor weakness (1). Knowing these guidelines helps clinicians make appropriate decisions with regard to the workup, diagnosis, and treatment of lower back pain.

## Purpose

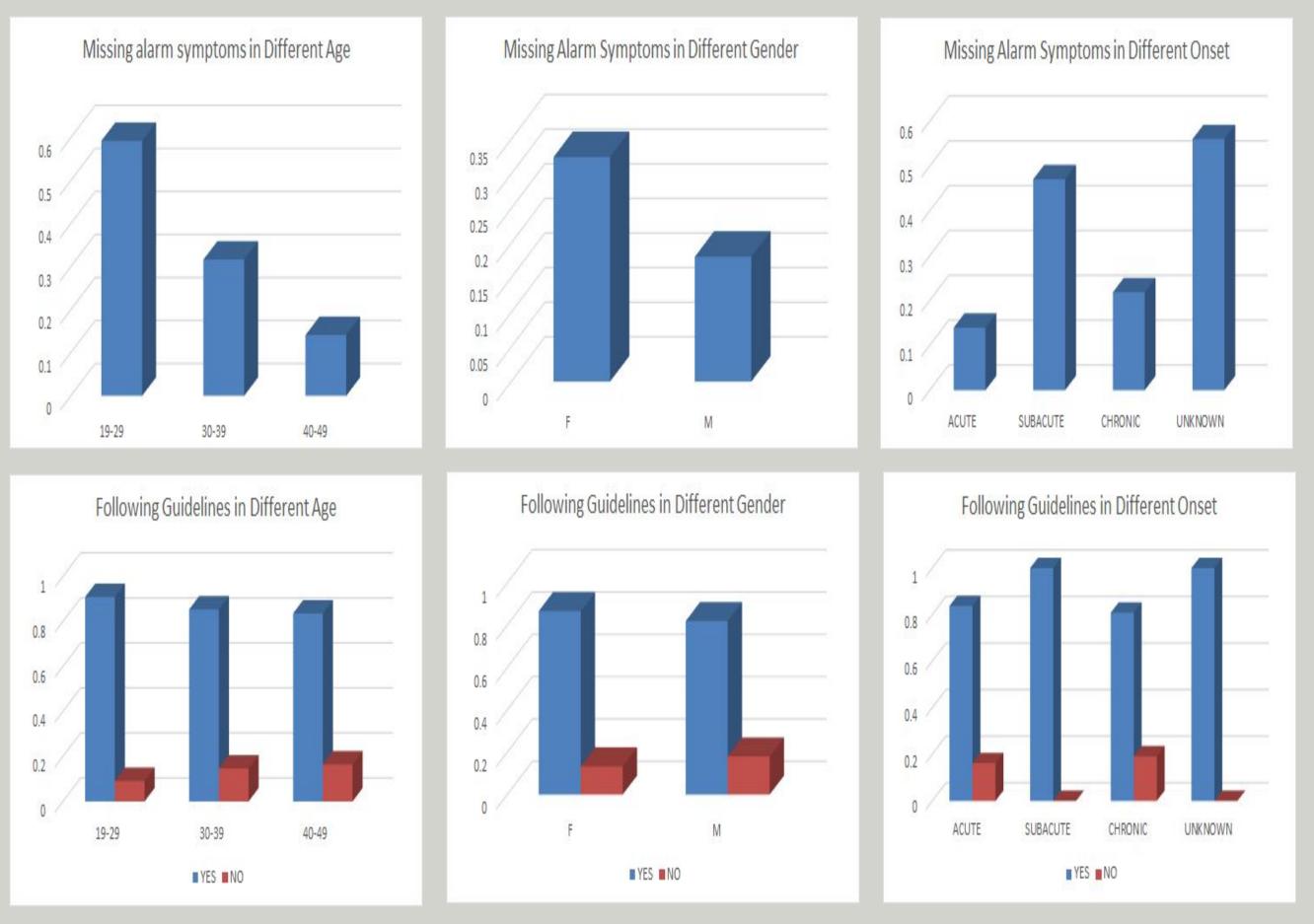
Our study aims to determine compliance of Internal Medicine ACC practitioners in evaluating patients with alarm symptoms presenting with low back pain. It was determined if symptoms were documented and if imaging was ordered as per 2007 ACP guidelines.



## Factors Affecting Guideline Application



Methods



#### Results

Data from a total of 172 patients, 111 females and 61 males aging 19 to 49 years from January to December of 2019 received primary care at UH internal medicine ambulatory clinic with a chief complaint of back pain were extracted through retrospective chart review. We found 61.6% following, 11.0% not following and 27.3% unknown following the ACP imaging guidelines 2017 for back pain. To further understand factors affecting guideline application, Chi square test was used to study the differences in missing alarm symptoms among age, gender and pain onset. Significant differences were found in age, gender and onset related missing alarm symptom documentation (P < 0.05). We also compared guideline application in patients with alarm symptom documentation and found no differences in age, gender and pain onset (P>0.05) for guideline applications.

#### Conclusions

These results demonstrate that there is room for improvement in capturing alarm symptoms in patients with back pain. It is important to capture back pain alarm symptoms in different demographics of our patient population such as women and young people. We must also acknowledge that many of our patients have visited the emergency department prior to coming in to our clinic, and often already had imaging done while there. Along with clinicians being aware of ACP guidelines for back pain, another way to help improve outcomes would be to create dot phrases that include back pain alarm symptoms to the Epic EMR.

1. Chou, R. (2011). Diagnostic Imaging for Low Back Pain: Advice for High-Value Health Care From the American College of Physicians. *Annals of Internal Medicine*, 154(3), 181. https://doi.org/10.7326/0003-4819-154-3-201102010-00008

2. Kim, L. H., Vail, D., Azad, T. D., Bentley, J. P., Zhang, Y., Ho, A. L., ... Ratliff, J. K. (2019). Expenditures and Health Care Utilization Among Adults With Newly Diagnosed Low Back and Lower Extremity Pain. JAMA Network Open, 2(5). https://doi.org/10.1001/jamanetworkopen.2019.3676