

The Contrarian Effect: How Does a Choosing Wisely Focused Knowledge Translation Initiative Affect Emergency Physician Practice in a High Awareness - Low Investigation Environment?

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Introduction

We previously reported that a targeted knowledge translation (KT) intervention was associated with a trend towards increased awareness and knowledge of the Choosing Wisely Canada (CWC) emergency medicine (EM) recommendations. We wished to assess if the intervention changed physician practice, specifically looking at the imperative “do not order lumbar XRs for non-traumatic low back pain unless red flags exist”.

Methods

A departmental KT initiative was implemented in April 2016 and consisted of a 1-hour seminar reviewing the CWC-EM recommendations, access to a video cast, departmental posters, and a before and after awareness survey. The effectiveness of our intervention was assessed by analyzing the frequency of lumbar XR imaging conducted for low back pain before and after the introduction of our intervention at a tertiary teaching hospital emergency department. All patient visits for the complaint of low back pain were included. The rates of XR imaging from June 2014 to September 2014 for the pre-intervention period and June 2016 to September 2016 for the post-intervention period were collected and analyzed using Fisher exact tests. A sample size of 683 was required to detect a 5% change with an alpha of 0.05 and a power of 80%.

Results

Baseline characteristics of patients were similar for the pre- and post-intervention periods. There was a total of 781 patient visits for low back pain in June to September 2014 and 672 in June to September 2016. The XR imaging rate for low back pain increased from 12% (95% CI 9.9-14.5) to 16.2% (95% CI 13.6-19.2) following the intervention ($p=0.023$).

Conclusion

We previously demonstrated a trend towards increased awareness and knowledge of the CWC EM recommendations following a knowledge translation initiative. Baseline XR imaging rates for low back pain were lower than what has been reported. We observed that our intervention was associated with an increased frequency of imaging for low back pain. This may be due to a contrarian effect. We feel this calls into question the role of knowledge translation initiatives where physician practice already closely adheres to pre-established recommendations.