CAPSULE COMMENTARIES

Capsule Commentary on Laroche et al., Reducing Excess Biomarker Testing at an Academic Medical Center

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Laroche et al.¹ test a multimodality intervention to prevent unnecessary use of CK and CK-MB testing and overuse of troponin testing in the diagnosis of cardiac chest pain. The authors modified the electronic medical record cardiac order set, removing the option for CK and CK-MB testing and promoting serial troponin ordering in adherence with established guidelines. In addition, the authors conducted informational sessions related to the above guidelines and distributed pocket cards for information reinforcement. The study, completed as an interrupted times series design, cited an absolute increase of guideline-concordant ordering of cardiac biomarkers of 38.4 % with an associated \$1.25 million decrease in charges over the first year.

This paper is an excellent example of how a “forced” intervention of EMR modifications can be combined with a weaker intervention based on educational sessions to create clinically meaningful and sustainable results through the use of quality improvement techniques and human factors engineering principles.² In an era where healthcare spending is at an all-time high and with foreseeable significant reimbursement changes with the adoption of the Affordable Healthcare Act, healthcare institutions will need to continue to find ways to provide smarter care at a smaller price.³ The lessons from this article could easily be applied to countless other clinical scenarios such as inappropriate ordering of head CTs in the setting of mild trauma⁴ and inappropriate use of hepatocellular screening guidelines in patients with hepatitis C cirrhosis,⁵ simply to name two.

The authors successfully demonstrate how a low-cost multimodality intervention can provide exceptional cost savings without compromising clinical care. What is more, the cost savings cited likely are an underestimate given the implied cost savings of unnecessary additional testing such as cardiac stress tests and heart catheterizations. We should all take a cue from the authors to evaluate our daily clinical practices within our own institutions to improve the cost and quality of the care we deliver.

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