Capsule Commentary on Silvestri et al., Impact of Cost Display on Ordering Patterns for Hospital Laboratory and Imaging Services

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Silvestri et al. evaluated an economics-based intervention that is relatively innovative in healthcare but would be considered commonsense in other fields—namely, providing buyers (physicians) with information about costs of the services they purchase.¹ Using a pre-post design, they found that displaying costs in the EHR for lab and imaging tests was associated with a decrease in the number of studies ordered for hospitalized patients and a decrease in overall lab and imaging costs.

Inferences about causal relationships in non-randomized studies are fraught with risks. However, initiation of the intervention was associated with a sharp step-off in cost trends, so I am persuaded to believe that it causally influenced physician decision-making. While the effects were quantitatively modest, they are substantial at the hospital or health system level, assuming no untoward health effects of decreased testing. Altogether, these are important findings.

But what appears to “only” be a study about cost display is really something much more. The authors’ study introduces a trove of scientific areas of inquiry that have intrigued economists and psychologists alike. The purchase of services by physicians on behalf of patients is really a classic principal-agent problem in economics.² In providing care, physicians act as agents for their patients, the principals. Implied in the results of Silvestri et al. is that physicians, when presented with cost information,

increasingly concluded that the marginal cost of a lab or imaging test exceeded its marginal benefit. But how well do physicians know the preferences of their patients? Would a well-informed patient feel similarly to his or her physician about the cost-benefit balance of a test or study? Another interesting issue relates to the decision psychology of interpreting prices. For example, physicians may be more likely to order a test if its price is adjacent to another test that is more expensive,³ and we are all familiar with the purchase-inducing effects of ending prices with the number 9, compared to other numbers.⁴ We should recognize that the study by Silvestri et al. serves as a bridge to areas of investigation at the heart of physician decision-making and the patient-doctor relationship.

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