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## Re: Clinical Decisions Made in Primary Care Clinics Before and After Choosing Wisely™

*To the Editor:* Kost and Genoa demonstrated that physician adherence to guidelines for 5 low-value clinical decisions improved through educational interventions.<sup>1</sup> They concluded that “primary care physicians respond to training and publicity in low-value care.” This intervention strategy decreased physician-initiated testing that provide little clinical value. In this way, the Choosing Wisely initiative may help to achieve the health care triple aim.<sup>2</sup> However, the authors failed to explain why there were drastic differences in responses among the intervention groups. Of the 5 clinical decisions that were targeted, 2 groups (antibiotics for acute sinusitis, dual-energy X-ray absorptiometry for osteoporosis screening) improved in adherence markedly, and 3 groups (cervical cancer screening, heart disease screening, back pain imaging) did not change significantly. This disparity merits thoughtful discussion and a call for further research.

The authors propose that the groups showing no improvement shared very high adherence before the intervention, “limiting the opportunity for change.” This is one plausible explanation for the lack of improvement in these 3 groups. However, there are numerous other possible explanations for the difference in improvement. Perhaps different clinical decision groups were subjected to different interventions, and thus produced different results. The article states that groups were provided with an in-person seminar or a webinar, but does not reveal which groups had each intervention. Active learning is superior to lecture for learner retention.<sup>3</sup> If the groups that improved were given the webinar, this could account for their change. The difference may also be explained by confounding variables. Avoiding certain low-value decisions may have been reinforced outside of the study. Billboards, posters, or other resident lectures may have given publicity to the lack of value in giving antibiotics for sinusitis, for example. If residents were not exposed to similar materials on back pain, this inequality could have caused the differences found by the authors. Examining

every possible reason for the difference may not have been within the authors’ intent. However, the identification of different responses to their intervention strategy is important. It is a loss to allow the difference to disappear by averaging all 5 groups together.

The goal of the Choosing Wisely initiative is to expose clinical decisions whose necessity should be questioned or discussed.<sup>4</sup> This article clearly highlights one way to help reach the initiative’s goal. It shows that physicians respond to education regarding certain clinical decisions. However, it just as clearly shows that some low-value decisions did not change as a result of educational interventions. To achieve the health care triple aim, we must discover interventions that will help physicians avoid low-value testing. We cannot reach this ideal without thoughtful examination of both successful and unsuccessful interventions for low-value decisions.

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The above letter was referred to the authors of the article in question, who offer the following reply.

## Response: Re: Clinical Decisions Made in Primary Care Clinics Before and After Choosing Wisely™

*To the Editor:* We thank Dr. Gladwell for his thoughtful comments regarding our article about the impact of the Choosing Wisely campaign on clinical decisions made in primary care clinics. As he notes, achieving value in health care is a critical component of improving our health care system. Thus it is necessary to know what kinds of interventions might be successful at increasing the rates of high-value care.

Space limitations precluded a full discussion of limitations in our study, so we welcome Dr. Gladwell’s elaboration of the known limitations of the quasi-experimental design we used. Clinics were not randomly assigned, and all received the educational intervention and exposure to the launch of the Choosing Wisely campaign. We agree that it is not possible to quantify all potential aspects of this exposure. The launch of the Choosing

Wisely campaign constituted a natural experiment that allowed us to compare the clinical decisions made before and after its national rollout. Our intervention was designed to achieve 3 goals: first, to make clinicians at each site aware of the Choosing Wisely campaign in general; second, to orient them to the 5 specific areas of low-value care; and third, to give them a tool to respond to patients who desired a care plan that did not adhere to the recommendations.

As Dr. Gladwell notes, the 5 areas of low-value care in the study were quite different. Two areas involved the correct use of screening tests (Papanicolaou test and dual-energy X-ray absorptiometry). One was a type of screening test that should be avoided altogether (electrocardiography). Two other areas—low back pain and sinusitis—responded to patient symptoms. In each of these areas clinicians needed to avoid doing something, either imaging or prescribing medication. Decision making around each of these types of clinical scenarios is different and may account for some of the variation we saw in our study.

High-value care in general and Choosing Wisely in particular are areas that require significant future research. One potential avenue is to investigate how clinicians are implementing the various Choosing Wisely recommendations (correct use of screening tests, avoidance of low-value screening tests, avoidance of diagnostic testing or certain treatment modalities for given conditions). Clinical decisions that fall into these larger categories could be studied across specialties to identify trends and potential areas for intervention. Perhaps it is easier for clinicians to improve their adherence to screening recommendations (eg, for dual-energy X-ray absorptiometry) than it is to not order a test that a patient desires (low back pain imaging).

To ensure all patients receive high-value care, a variety of interventions are needed. Some, such as ours, are educational, meant to generate awareness among clinicians and help them develop the skills needed to implement high-value care. System-based or point-of-care interventions could increase high-value care such as electronic health record flags that remind clinicians to order screening tests when indicated and remind them when they have requested a screening test that is not indicated for a specific patient. Patient-directed interventions, such as what is being done with Consumer Reports in conjunction with the Choosing Wisely campaign, will help patients become more savvy consumers of health care. Finally, policy-level interventions can also drive value, such as creating financial incentives for performing screening tests or vaccinations or, conversely, creating financial disincentives, such as not paying to catheter-associated urinary tract infections. High-value care for all patients is possible, although the path to get there will be long and complicated.

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