

# Correspondence

## Re: Estimating the Cardiovascular Disease Risk Reduction of a Quality Improvement Initiative in Primary Care: Findings from EvidenceNOW

*To the Editor:* The recent article by Lindner et al concluded, “This [cardiovascular disease] risk reduction would . . . avoid \$150 million in 90-day direct costs.”<sup>1</sup> It was grossly irresponsible of the authors to write this and for the editors to publish this.

This medical economic calculation did not apply the methodologies for cost-effectiveness evaluation and reporting that have been followed for over 25 years.<sup>2</sup> But we do not even need to understand the intricacies of these extensive guidelines to see the problem. The authors’ “spin” on this issue is identifiable through common sense: they included no upfront costs in their calculation.

They made no effort to include the intervention costs to achieve the preventive outcomes: no clinic visits, medications, lab tests, nothing. My back-of-the-envelope calculation using modest assumptions on cost and utilization (see Table 1) shows that, at a minimum, \$3.73 billion must be spent to achieve the \$150 million “savings.”

Sloppily reported conclusions like this reinforce the fiction that preventive services save total health care costs. Our national academy, the American Academy of Family Physicians, reinforced this fiction recently when it submitted with the American Medical Association an *amici curiae* brief to the US Supreme Court that said, “. . . preventive care . . . saves money.”<sup>3</sup>

For the US to achieve a lower-cost, more equitable health care system, Americans must accept the realities of costs and outcomes that every health care system in every other developed country understands. Most often, an ounce of prevention costs a ton of money. Giving a platform to false statements with the imprimatur of scientific truth only digs our country further into a financial hole and delays even further the development of a sustainable national solution to our exorbitant health care costs.

Richard A. Young, MD  
Co-Associate Program Director and  
Director of Research, John Peter Smith Family Medicine  
Residency Program, Fort Worth, TX  
E-mail: [ryoung01@jpshealth.org](mailto:ryoung01@jpshealth.org)

*To see this article online, please go to: <http://jabfm.org/content/36/6/1087.full>.*

**Table 1. Calculations**

Estimated costs for delivering preventive services from EvidenceNow		
Assumptions from the Lindner article, Table 1		
Population: 3,961,384		
Timeframe: 10 years		
Percent population only requiring smoking intervention		49.80%
Percent population requiring smoking and blood pressure intervention		33.90%
Percent population requiring smoking and cholesterol intervention		1.60%
Percent population requiring aspirin, cholesterol, and smoking intervention		4.20%
Percent population requiring aspirin, cholesterol, blood pressure, and smoking intervention		7.80%
Cost assumptions		
Clinic visit (99213 Medicare rate)	\$75	1 extra clinic visit per year to address the issue(s)
Medications		
Statin 1-year supply	\$16	Walmart price
Blood pressure 1-year supply (2 meds)	\$32	Walmart price
Verincline, attempt per smoker	\$144	GoodRx price
Aspirin	free	
Labs		
Basic metabolic profile	\$9	Medicare allowable
Lipid panel	\$14	Medicare allowable

*Continued*

**Table 1. Continued**

Intervention Costs				
Intervention Category	Number of Extra Uses Over 10 Years	Cost/Unit	Total Cost Per Capita	Total Absolute Cost (% Affected Times Total Population)
Smoking only				
Clinic visit	4	75	300	\$591,830,770
Medications	2	144	288	\$568,157,539
Smoking and blood pressure				
Clinic visit	10	75	750	\$1,007,181,882
Smoking medications	2	144	288	\$386,757,843
Blood pressure medications	10	32	320	\$429,730,936
Smoking and cholesterol				
Clinic visit	10	75	750	\$47,536,608
Smoking medications	2	144	288	\$18,254,057
Cholesterol medication	10	16	160	\$10,141,143
Smoking and cholesterol and aspirin				
Clinic visit	10	75	750	\$124,783,596
Smoking medications	2	144	288	\$47,916,901
Cholesterol medication	10	16	160	\$26,620,500
Aspirin		Free		
Smoking, cholesterol, blood pressure, and aspirin				
Clinic visit	10	75	750	\$231,740,964
Smoking medications	2	144	288	\$88,988,530
Cholesterol medication	10	16	160	\$49,438,072
Blood pressure medications	10	32	320	\$98,876,145
Aspirin		Free		
			Grand Total	\$3,727,955,486

**References**

1. Lindner SR, Balasubramanian B, Marino M, et al. Estimating the cardiovascular disease risk reduction of a quality improvement initiative in primary care: findings from EvidenceNOW. *J Am Board Fam Med* 2023;36:462–76.
2. Neumann PJ, Sanders GD, Russell LB, Siegel JB, Ganiats TG. *Cost-effectiveness in health and medicine*. 2nd ed. Oxford University Press; 2016.
3. Waddill K. AMA defends Affordable Care Act’s preventive care coverage requirement. *Health Payer Intelligence*. 2022. Dec 2, 2022. Accessed Jan 18, 2023. Available at: <https://healthpayerintelligence.com/news/ama-defends-affordable-care-acts-preventive-care-coverage-requirement>.

doi: 10.3122/jabfm.2023.230230R0

**Response: Re: Estimating the Cardiovascular Disease Risk Reduction of a Quality Improvement Initiative in Primary Care: Findings from EvidenceNOW**

*To the Editor:* In a comment regarding our recent publication,<sup>1</sup> Young states that the phrase “[cardiovascular disease] risk reduction would (. . .) avoid \$150 million in

90-day direct costs” was misleading because our calculations did not include intervention costs.<sup>2</sup>

We would like to respond to his comment:

1. We disagree that the statement was misleading because we did not refer to total costs savings of the initiative. We reported this cost reduction as the implied reduction in direct medical costs only due to the estimated atherosclerotic cardiovascular disease (ASCVD) events. Specifically, we wrote: “A recent study estimated that the average direct 90-day medical cost of a major cardiovascular event was \$47,433. Thus, the prevention of 3,169 ASCVD events would save approximately \$150 million in direct medical costs.” (p. 5) These sentences make it clear that we simply multiplied the number of events (3,169) with associated costs (\$47,443) to obtain an estimate of medical costs avoided. By removing the context of these calculations in his response to our article, Young creates the impression that our statement was misleading in the first place when instead it was rather precise.
2. Our study was not a cost-effectiveness study. Right at the beginning of the abstract, we describe the objective of this study as to estimate