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## Effect of Cost Sharing on Screening Mammography

**TO THE EDITOR:** The study of cost sharing on mammography by Trivedi et al. (Jan. 26 issue)<sup>1</sup> and the editorial by Bach<sup>2</sup> may lead policymakers to favor value-based insurance over high-deductible health plans. Following the principles of value-based insurance to their logical end, Americans might consider health insurance that imposes no cost sharing whatsoever for cost-effective health care while excluding unproved technologies from coverage. Such insurance does exist — the National Health Service in the United Kingdom and Medicare in Canada are two examples.

The hypothetical paradox described by Bach, in which a value-based insurance plan might encourage the use of implantable cardioverter-defibrillators (ICDs) while discouraging prostate-specific antigen (PSA) testing, accurately describes reality in Ontario, Canada. ICDs are free, but asymptomatic men currently pay the full cost of PSA testing — about \$25. (Notably, with evidence accumulating that PSA testing may have contributed to reductions in mortality due to prostate cancer, Ontario's Minister of Health has pledged to add PSA testing to the list of covered benefits.)

Although the Canadian system does have problems,<sup>3</sup> it is sustainable,<sup>4</sup> health outcomes are relatively good,<sup>5</sup> and administrative costs are low.<sup>6</sup>

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**TO THE EDITOR:** Trivedi et al. describe cost sharing by patients as a mechanism “designed to control health care spending.” They report that fewer women have biennial mammograms when they must pay part of the cost of screening. What is not reported is whether health care spending is decreased and, if so, by how much.

It seems reasonable to assume that there will always be trade-offs in calculating how much to spend for health care and that some care for some people will be judged “unaffordable.” The details of that calculation in a publicly financed system are a public policy matter and should be democratically determined. To do that rationally, both the health costs and dollar costs must be known.

The article by Trivedi et al. provides only one element of this important calculation. To conclude that cost sharing for mammograms is bad policy when the patient must pay requires that we know both elements.

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**THE AUTHORS REPLY:** As Dhalla and Kiran indicate, our study supports policies to reduce or eliminate copayments for cost-effective health services, such as screening mammography, that provide relatively greater value than other screening services, such as PSA testing. Ironically, the

traditional Medicare program in the United States takes the opposite approach to cost sharing for these two tests. Although PSA testing has not been conclusively demonstrated to improve health outcomes and is thus not recommended for universal screening,<sup>1</sup> PSA testing is free for Medicare beneficiaries with Part B coverage.<sup>2</sup> In contrast, screening mammography reduces mortality from breast cancer and is strongly recommended in national guidelines,<sup>3,4</sup> but traditional Medicare beneficiaries with Part B coverage must pay 20% of the cost of screening mammograms.<sup>2</sup> Our findings from Medicare health plans, therefore, also have implications for cost sharing in the traditional Medicare program.

Golden correctly notes that our study did not include estimates of changes in health spending associated with imposing a copayment for screening mammography. Previous research has found screening mammography for women over the age of 65 years to be highly cost-effective, with a cost per life-year saved similar to that of single-drug therapy for mild-to-moderate hypertension — approximately \$34,000 to \$88,000.<sup>5</sup> By detecting breast cancers at an earlier stage, mammography may also avert treatment costs and morbidity associated with later-stage disease. Combined

with our finding that modest copayments of \$12 to \$35 reduced biennial screening rates among elderly women by 8 percentage points, these factors provide a compelling rationale to eliminate cost sharing for screening mammography in the Medicare program.

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## Systemic Lupus Erythematosus

**TO THE EDITOR:** In their review article, Rahman and Isenberg (Feb. 28 issue)<sup>1</sup> emphasize the role of anti-double-stranded DNA antibodies in the pathogenesis of systemic lupus erythematosus. Such antibodies also occur, however, in 23 to 64% of patients with type 1 autoimmune hepatitis, depending on the assay used.<sup>2</sup> Interestingly, 36% of patients with type 1 autoimmune hepatitis and antibodies against double-stranded DNA have the HLA allele DR3, which is a genetic risk factor in both systemic lupus erythematosus and type 1 autoimmune hepatitis.<sup>3</sup> However, there is no evidence of a pathogenic role of anti-double-stranded DNA antibodies in type 1 autoimmune hepatitis.

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**TO THE EDITOR:** Rahman and Isenberg highlight the role of the interferon- $\alpha$  cytokine, and polymorphisms of genes that control interferon- $\alpha$  production or its downstream signaling pathways, in systemic lupus erythematosus. In this context, it is important to mention the role of plasmacytoid dendritic cells, which are professional type I interferon-producing cells.<sup>1</sup> Immune complexes in systemic lupus erythematosus can be internalized by plasmacytoid dendritic cells, and thus trigger these cells to secrete interferon- $\alpha$ ,<sup>2</sup> through activation of toll-like receptor (TLR) 9.<sup>3</sup> In addition, highly conserved RNA sequences