

Can High Deductibles Discourage Use of Low-Value Health Care?

Why This Study Is Important

This study brings new data and new analytic rigor to the question of whether high deductibles can encourage patients to make more judicious decisions about their health care use, specifically estimating their causal impact on spending for a set of "low-value" services widely judged to provide little or no clinical benefit. Overall, results indicate that high deductibles cause patients to make deeper cuts in their use of and spending for this low-value care than they do for health care services overall. The more targeted reductions for low-value care suggest that high deductibles may be a viable approach to promoting value-based decision making by patients, helping to trim unnecessary health care spending and reducing the potential harm to patients arising from low-value care.

What This Study Found

- Over the three years after a firm began offering a health plan with a deductible of at least \$500, its spending for a set of 24 low-value outpatient services fell by an average of 13.7% compared to firms that never offered such a plan. This represents a decline of \$5.23 relative to mean per-person spending of \$39.51 for these services.
- Spending for low-value imaging and laboratory services fell by 21 and 22 percent (or \$4.81 and \$1.41), respectively, after firm offer of a high deductible plan.
- The percent reductions in spending were significantly larger for low-value services than for all outpatient care and all laboratory services, suggesting some ability and willingness of patients to selectively curtail low-value care. A similar pattern for low-value vs. overall imaging spending reductions existed but was not statistically significant.
- Employee enrollment in a high deductible plan was estimated to lead to \$6.40 less spending on low-value outpatient care, a \$5.70 reduction in spending on low-value imaging and a \$2.56 reduction in spending on low-value lab services.
- Decomposition of spending changes into quantity and price components suggests that the spending reductions were mainly due to less use of low-value services but there does appear to be some price shopping, as well.

What These Findings Mean

This work provides evidence, for the first time, that high deductible plans cause working age employees to reduce spending for low-value care disproportionately relative to overall spending reductions. Results also suggest that these patients are not simply shopping for better prices on care that provides little benefit, but are reducing use of low-value care specifically. Together, these findings show the potential for high deductibles to incentivize smarter health care use and spending. Additional research is still needed, however, to assess more directly how high deductibles affect use of high-value care and patient health outcomes and to understand differential impacts on more economically vulnerable populations, such as those not working for large employers.

More About This Study

Estimates of spending impacts may be biased if enrollees in high deductible plans differ systematically from non-enrollees in unobservable ways that affect health care spending. This study uses five years of claims data from 30 large self-insured employers to implement two econometric methods designed to mitigate this selection bias. The intent-to-treat analysis uses a difference-in-differences model to compare annual spending measures at the firm level for employers who began offering a high deductible plan versus those who did not. The local average treatment effect analysis uses the firm's plan offer as an instrument to predict employee enrollment in the plan and then estimates spending for individuals based on their conditional probability of plan enrollment. All analyses examine spending for a set of 24 low-value outpatient services, subsets of low-value imaging and low-value lab services, and all outpatient, all imaging and all lab services. Spending impacts are decomposed into quantity and price components by considering the number of services and the average payment per service.

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