**Patterns in Prescription Utilization for High-Deductible Health Plan Enrollees Show Concerning Trends**

<http://www.ajmc.com/contributor/neeraj-sood-phd/2016/01/patterns-in-prescription-utilization-for-high-deductible-health-plan-enrollees-show-concerning-trends>

[**Neeraj Sood, PhD**](http://www.ajmc.com/contributor/neeraj-sood-phd)

Top of Form



Bottom of Form

*Monday, January 18, 2016*

High-deductible health plans are growing in popularity and there is evidence these health plans result in reduced healthcare costs. However, there is little consensus on how cost savings are achieved.

High-deductible health plans (HDHPs) are growing in popularity, with 20% of employees in these plans in 2013 compared to only 4% in 2006. Sometimes referred to as consumer-directed health plans, HDHPs aim to encourage consumers to make smarter or more value-based decisions through higher initial out-of-pocket (OOP) costs.

According to an [**analysis**](http://www.nber.org/papers/w21031.pdf) my colleagues and I conducted, there is evidence that these HDHPs result in reduced healthcare costs up to 3 years after employers start offering the plan option. Furthermore, savings were driven by reductions in outpatient care and drug spending and there was little or no effect on emergency room or inpatient spending. However, there is little consensus on how cost savings are achieved.

**Do Individuals Put Off Care Because of the Perceived OOP Expense?**

Cost savings could be achieved through a number of behavioral changes: enrollees could be indiscriminately reducing care, switching or reducing to low-value procedures and treatments, or changing the time of when they receive care to periods of lower cost-sharing. These scenarios have obvious important implications for the overall health of society and the efficiency of the healthcare industry. If consumers are reducing their use of high-value services—such as preventative care, screenings, and drugs for chronic illness—because of the perceived high OOP cost, the long-term consequences could far outweigh the short-term cost savings that are being seen.

**A Case Study: Drug Utilization for Chronic Illness**

Patterns in drug utilization for chronic illness provide a valuable case study for assessing an individual’s response to being enrolled in a HDHP. In theory, chronic illness treatment regimens are an example of:

* “high-value” care—the type of care we hope individuals do not reduce
* a repeat purchase that is non-trivial in cost but well below the deductible, thereby allowing the enrollee to engage in the benefit structure
* lower cost alternatives such as generic drugs are available so smart behavioral responses to changes in cost sharing are possible.

My colleagues and I [**assessed**](http://www.nber.org/papers/w20927.pdf) how enrollees in HDHPs changed their use of pharmaceuticals for 3 drug classes: diabetes, statins, and antihypertensives. We found evidence that employees in HDHPs with pharmaceuticals subject to the deductible saved money through 3 channels:

1. Shifting the timing of purchases to periods with lower cost sharing such as the end of the year, when they had exhausted the deductible and faced little cost sharing
2. Using lower-cost drugs such as generics when available
3. Overall reduced utilization or lower adherence.

Though each channel seemed to play a role, we found the overwhelming percentage of total savings came from reducing use of therapies. Specifically, the reduction in utilization accounted for 90% of total savings for statins, 93% for antihypertensives, and 58% for diabetes drugs. Furthermore, when we looked at employees in HDHPs with drugs exempt from the deductible, we also found this pattern of reduced overall use of drugs, although the reduction was smaller compared to the situation where drugs were subject to the deductible.

**The Decision to Reduce or Stop Taking Prescriptions Has Consequences**

Adherence to drugs treating chronic illnesses like diabetes, high cholesterol, and hypertension is a critical public health concern. Serious complications and long-term impacts on health can result from the mismanagement of these chronic illnesses. Not only do these implications extend to negatively impact the overall quality of life for these individuals and families, they could also result in a significant cost.

Reducing wasteful and inefficient spending in the healthcare system is a priority for policymakers and industry leaders.  Moving towards more HDHPs has proven to be a way to reduce some costs and is thought to nudge patients towards reducing use of services that are deemed low-value. This analysis of pharmaceutical use patterns sheds light on a potential disconnect between system-level priorities and individual-level behavior and knowledge about the value of healthcare treatments. What we ned are more innovative plan designs that encourage consumers with chronic illness to use appropriate healthcare, but at the same discourage inappropriate use of healthcare by relatively healthy consumers.

See more at: <http://www.ajmc.com/contributor/neeraj-sood-phd/2016/01/patterns-in-prescription-utilization-for-high-deductible-health-plan-enrollees-show-concerning-trends#sthash.6vpuI70m.dpuf>

*Neeraj Sood, PhD, is director of research at the Leonard D. Schaeffer Center for Health Policy and Economics, vice dean for research at the Price School for Public Policy, and associate professor at the Titus Family Department of Clinical Pharmacy and Pharmaceutical Economics and Pharmaceutical Economics & Policy at the University of Southern California. His prior work has focused on the economics of innovation, HIV/AIDS, health care financing, and global health. His research has been published in several peer-reviewed journals and books, including leading journals in economics, medicine, and health policy. Dr Sood is on the editorial boards of Health Services Research and Forum for Health Economics and Policy. He is a research associate at the National Bureau of Economic Research and standing member of the Health Services Organization and Delivery study section at the National Institutes of Health. Prior to joining USC, Dr Sood was a senior economist at RAND and Professor at the Pardee RAND Graduate School.*