Therapeutic substitution could help reduce money spent on prescription drugs

9 May 2016

An extra $73 billion was spent between 2010 and 2012 on brand name medications and the practice of therapeutic substitution (substituting chemically different compounds within the same class of drugs for one another) could help to drive down those costs, according to a new study published online by JAMA Internal Medicine.

Therapeutic substitution is a controversial way to improve the efficiency of the pharmaceutical market because it is opposed by many physician organizations as an attack on physician autonomy.

Michael E. Johansen, M.D., M.S., of Ohio State University, Columbus, and Caroline Richardson, M.D., of the University of Michigan, Ann Arbor, used data on 107,132 individuals in the Medical Expenditure Panel Survey, along with their reported prescription medicine use, to estimate potential savings through therapeutic substitution. The authors looked at overall and out-of-pocket expenditures.

The study included drug classes that in a given year contained both a generic or widely accessible over-the-counter (OTC) drug and a brand name drug without an available chemically equivalent generic.

Of the 107,132 individuals, 62.1 percent reported using prescribed medicine between 2010 and 2012 and 31.5 percent used medication from an included drug. A branded drug from an included class was used by 16.6 percent of individuals compared with 24 percent who used a generic and 9.1 percent who used both, according to the results.

Overall, $760 billion was spent on prescription medications between 2010 and 2012. The extra money spent because of brand drug overuse accounted for 9.6 percent of total prescription medication expenditures. Total out-of-pocket expenditures between 2010 and 2012 were $175 billion, of which 14.1 percent were because of brand drug overuse, according to the results.

Drug classes where the most extra money was spent included statins, atypical antipsychotics, proton pump inhibitors, selective serotonin reuptake inhibitors and angiotensin receptor blockers, the study notes.

The authors note a number of study limitations, including estimates of pharmaceutical rebates and the overuse of branded drugs within drug classes.

"There was a large amount of excess expenditure on branded drugs between 2010 and 2012 in classes that could have incorporated therapeutic substitution. Although therapeutic substitution is controversial, it offers a potential mechanism to decrease drug costs if it can be implemented in a way that does not negatively affect quality of care," the authors conclude.

More information: JAMA Intern Med. Published online May 9, 2016. DOI: 10.1001/jamainternmed.2016.1704

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