How Prescription Drug Use Affects Health Care Utilization and Spending by Older Americans: A Review of the Literature

This In Brief looks at prescription drug use by older adults and its effect on use of non-drug medical services and suggests factors policy makers should consider.

A number of research studies have examined prescription drug use by older adults and how it affects their use of non-drug health care services, such as hospitalization and doctors’ visits. This In Brief summarizes areas of agreement, disagreement and policy implications.

What do experts generally agree on about prescription drug use based on published studies?

- Prescription drug coverage can produce cost offsets from reductions in non-drug services, such as hospitalizations and emergency visits.
- Studies that incorporate increased longevity into spending projections suggest that cost offsets may diminish over time.
- Appropriate use of prescription drugs leads to improved health outcomes for many chronic conditions in the elderly.
- Prescription drug coverage improves patient adherence to medication regimens and may increase prescription drug use by as much as 20%.
- As patients shoulder more of the cost for prescription drugs, they use fewer drugs. A 10 percent increase in cost-sharing results in a one to six percent decline in drug use, for both essential and non-essential drugs.
- When prescription drug benefits are strictly limited (spending caps or number of prescriptions) prescription drug spending declines but patients may increase their use of other medical services, including acute and long-term care services.
- Increased prescription drug cost sharing decreases the use of essential, as well as non-essential, classes of medications.

While this review of prescription drug use summarizes some important findings, these findings are subject to several caveats and experts do not agree on some important issues. For example, researchers still have not determined the magnitude of cost offsets connected to broad changes in drug coverage or the impact on spending and health of high cost-sharing and significant gaps in drug coverage, such as those found in high deductible health plans (i.e., health savings accounts) and the Medicare Part D drug benefit (i.e., the “donut hole”).

Common sense tells us that we might expect prescription drug use to lead to fewer complications, decreased disability, improved health outcomes
and lower overall health costs. But, the link among these factors has not been well documented. Also, there is little evidence on how broad changes in drug coverage affect morbidity, mortality, or quality of life.

**Implications for Policy Makers**

- Appropriate drug use should be encouraged, especially among older adults with chronic conditions.
- Reducing cost sharing for those with prescription drug insurance and adding prescription drug coverage for the uninsured will encourage older adults to stick to prescribed drug regimens.
- Increased cost sharing for prescription drugs may need to be targeted by type of medication and patient condition.
- Avoiding strict benefit limits on prescription drug use may reduce unintended consequences in other areas such as non-drug spending and health outcomes.
- The effects of gaining prescription drug coverage, changes in cost sharing, use of other medical services and impacts on health outcomes are often delayed for at least a year. Studies that don’t take delayed effects into account should be viewed with skepticism.

**Future Research**

There is hope that the Medicare prescription drug benefit will spur further significant research on the impact of prescription drug coverage. As the author notes, properly designed studies based on relevant data sets should take into account the effect of increased prescription drug use, not only on utilization and cost of non-drug services, but also on changes in health status, such as morbidity, mortality and quality of life. Future studies should assess the impact of the new Part D drug benefit on access of Medicare beneficiaries to different types of prescription drugs, effects on sub-populations within Medicare and the effects of different health care delivery systems, such as HMO versus fee-for-service.

**Methodology**

The author conducted a systematic review of professional literature by searching the National Library of Medicine, EconLit, Web of Science, Google Scholar and other online sources. In addition, the author reviewed government website publications and published foundation reports. Outside experts were interviewed to determine the most influential papers on the topic.