

IMPROVING PRESCRIPTION MEDICINE ADHERENCE IS KEY TO BETTER HEALTH CARE

Taking Medicines as Prescribed Can Lower Costs and Improve Health Outcomes

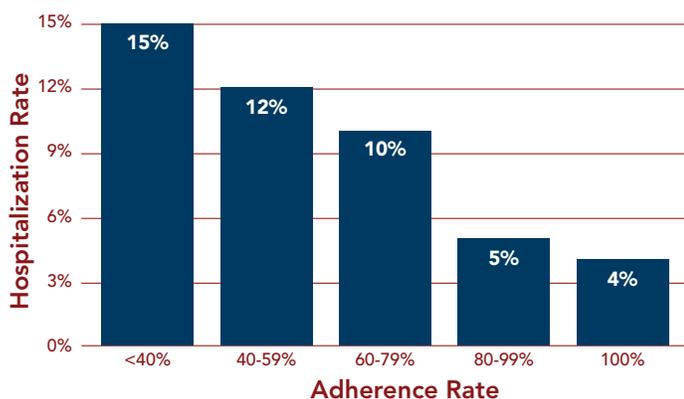


Successful treatment of disease with prescription medicines requires consistent use of the medicines as prescribed. Yet numerous studies show that medicines commonly are not used as directed, leading to poor clinical outcomes, higher health care costs, and lost productivity.

Poor adherence to medication is a particularly important problem for patients with chronic conditions, for which medications can dramatically improve health. Chronic conditions such as heart disease, asthma, cancer and diabetes are among the greatest threats to health and treating patients with chronic conditions accounts for \$3 out of every \$4 spent on medical care in the U.S.

Closing the adherence gap is important to the success of initiatives to improve the quality of health care, encourage better chronic care management, and promote better outcomes.

RELATIONSHIP BETWEEN ADHERENCE AND HOSPITALIZATION IN PATIENTS WITH DIABETES



Source: D.T. Lau and D. P. Nau, "Oral Antihyperglycemic Medication Nonadherence and Subsequent Hospitalization Among Individuals with Type 2 Diabetes." *Diabetes Care*, September 2004.

Improving Medication Adherence Would Yield Significant Health Gains And Economic Benefits.

- Overall, nearly 75 percent of adults do not follow their doctor's orders when it comes to taking medicines. This may include not filling a new prescription, taking less than the recommended dose, or stopping the medicine without the doctor's knowledge.ⁱ
- Research has found that controlling for other factors, medication nonadherence is associated with:
 - 5.4 times increased risk of hospitalization, rehospitalization, or premature death for patients with high blood pressure.ⁱⁱ
 - 2.5 times increased risk of hospitalization for patients with diabetes.ⁱⁱⁱ
 - As many as 40 percent of nursing home admissions.^{iv}
 - An additional \$2,000 per year per patient in physician visit costs.^v
 - An economic burden of \$100 billion to \$300 billion per year.^{vi}

Pharmacy Benefit Design Influences Adherence To Medicines.

- Research indicates that doubling copays for medicines can reduce adherence by as much as 25 percent to 45 percent and that every 10 percent increase in cost sharing results in a 2 percent to 6 percent decrease in prescription drug spending, depending on therapeutic class and patient condition.^{vii, viii}
- In one study, seniors subject to an annual benefit cap on prescriptions were less likely to use medicines appropriately, and experienced unfavorable clinical outcomes, including poor control of blood pressure, lipid levels, and glucose levels as a result.^{ix}

- On the other hand, researchers estimate that eliminating copayments for patients at medium to high risk of heart disease would improve adherence sufficiently to avoid 90,000 hospitalizations and generate savings exceeding \$1 billion.^x

Forward-Looking Employers, Health Plans, And Other Stakeholders Have Begun Implementing Programs To Encourage Improved Adherence To Medicines.

- Investment in reduced copays and other economic incentives by employers has been shown to both improve adherence and generate positive returns on investments through productivity gains and lower overall health care spending.
- Health insurance plans and pharmacy benefit managers also recognize the value of improving patient adherence and are experimenting with a range of efforts to encourage patients to use their medicines as directed, including lowering or eliminating copays for patients who refill their medicines on time.

- In Medicare and Medicaid, improved adherence can be achieved through medication therapy management programs, a greater focus on care transition, adoption of health information technology, and a range of newly-established grant, demonstration, and pilot programs to encourage greater care coordination.

Efforts To Improve Adherence Represent Win-Win Solutions In Which Patients, Employers, Insurers And The Public All Benefit.

- Many of the human and economic costs associated with nonadherence can be avoided, making improving patient adherence one of the best opportunities to get better results and greater value from our health care system.
- According to researchers at Harvard University, "efforts to stimulate better prescribing of, and adherence to, essential medications will increase value by improving population health, averting costly emergency department visits and hospitalizations, and improving quality of life and productivity."^{xi}

ENDNOTES

ⁱ "Take as Directed: A Prescription Not Followed," Research conducted by The Polling Company. National Community Pharmacists Association Dec. 16, 2006.

ⁱⁱ F.H. Gwady-Sridhar et al. "A Framework for Planning and Critiquing Medication Compliance and Persistence Using Prospective Study Designs." *Clinical Therapeutics*, February 2009

ⁱⁱⁱ D.T. Lau and D.P. Nau. "Oral Antihyperglycemic Medication Nonadherence and Subsequent Hospitalization among Individuals with Type 2 Diabetes," *Diabetes Care*, September 2004.

^{iv} Medication Compliance-Adherence-Persistence Digest, American Pharmacists Association 2003.

^v *Ibid.*

^{vi} L. Osterberg and T. Blaschke. "Adherence to Medication," *New England Journal of Medicine*, August 2005 and M.R. DeMatteo, "Variation in Patients' Adherence to

Medical Recommendations: A Quantitative Review of 50 Years of Research," *Medical Care*, March 2004.

^{vii} D.P. Goldman. "Pharmacy Benefits and the Use of Drugs by the Chronically Ill," *JAMA*, May 2004.

^{viii} D.P. Goldman et al. "Prescription Drug Cost Sharing: Associations with Medication and Medical Utilization and Spending and Health," *JAMA*, 2007.

^{ix} J. Hsu et al. "Unintended Consequences of Caps on Medicare Drug Benefit," *New England Journal of Medicine*, June 2006.

^x D.P. Goldman et al. "Varying Pharmacy Benefits with Clinical Studies: The Case of Cholesterol-lowering Therapy," *American Journal of Managed Care*, January 2006.

^{xi} W.H. Shrank et al. "A Blueprint for Pharmacy Benefit Managers to Increase Value." *American Journal of Managed Care*, February 2009.

