

The Cost-Effectiveness of Full Medicare Coverage of Angiotensin-Converting Enzyme Inhibitors for Patients with Diabetes

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The full report is titled “Cost-Effectiveness of Full Medicare Coverage of Angiotensin-Converting Enzyme Inhibitors for Beneficiaries with Diabetes.” It is in the 19 July 2005 issue of *Annals of Internal Medicine* (volume 143, pages 89-99). The authors are A.B. Rosen, M.B. Hamel, M.C. Weinstein, D.M. Cutler, A.M. Fendrick, and S. Vijan.

What is the problem and what is known about it so far?

Kidney failure, heart attacks, and strokes are complications of diabetes. Medicines called angiotensin-converting enzyme (ACE) inhibitors delay kidney failure and prevent heart attacks and strokes in persons with diabetes. However, many patients with diabetes who might benefit from ACE inhibitors do not take them. More diabetic patients might get ACE inhibitors if insurance paid the total costs of these drugs. Currently, Medicare, the U.S. health insurance program for senior citizens, does not pay for the total costs of ACE inhibitors. The average cost for generic ACE inhibitor treatment is about \$233 per year. Currently, only 40% of Medicare beneficiaries take ACE inhibitors. The number of Medicare beneficiaries taking ACE inhibitors may increase when the new Medicare drug coverage policy starts in 2006, but many will still not be taking this drug because the costs are too high.

Why did the researchers do this particular study?

To estimate what would happen to patient outcomes and the costs of care for society if the Medicare program paid in full for ACE inhibitors for patients with diabetes.

Who was studied?

Rather than studying actual patients, the researchers used computers to simulate what would happen to a group of patients 65 years of age or older with diabetes and health insurance through the Medicare program.

How was the study done?

The researchers used computers to simulate the benefits and costs of 3 strategies of insurance coverage for ACE inhibitors: 1) the current Medicare drug coverage policy, 2) the new Medicare drug coverage policy, and 3) a policy under which Medicare would pay the entire costs of ACE inhibitors for patients with diabetes. Information for the computer model came from published studies about the benefits of ACE inhibitors and the costs of care for diabetes and its complications. The authors looked to see what would happen to patients over time with each of the 3 approaches.

What did the researchers find?

Compared with the current Medicare drug coverage policy and the new policy that will start in 2006, a policy that fully covered all the costs of ACE inhibitors for patients with diabetes would both improve patient outcomes and save money. This was the case even if the authors assumed only a small increase from about 40% to 47% in the use of ACE inhibitors under a full coverage policy.

What were the limitations of the study?

This study was a computer simulation and cannot tell us for sure that this is what would happen with actual patients.

What are the implications of the study?

If the Medicare program paid in full for ACE inhibitors for patients with diabetes, the program likely could both improve patient outcomes and save money.

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