

scintigraphy. *J Thromb Haemost* 2005;3:17-25. [Erratum, *J Thromb Haemost* 2005;3:622.]

6. Quiroz R, Kucher N, Schoepf UJ, et al. Right ventricular enlargement on chest computed tomography: prognostic role in acute pulmonary embolism. *Circulation* 2004;109:2401-4.

7. Perrier A, Roy P-M, Sanchez O, et al. Multidetector-row computed tomography in suspected pulmonary embolism. *N Engl J Med* 2005;352:1760-8.

8. van Belle A, Buller HR, Huisman MV, et al. Effectiveness of managing suspected pulmonary embolism using an algorithm combining clinical probability, D-dimer testing, and computed tomography. *JAMA* 2006;295:172-9.

9. Righini M, Bounameaux H, Perrier A. Effect of age on the

performance of single detector helical computed tomography in suspected pulmonary embolism. *Thromb Haemost* 2004;91:296-9.

10. Le Gal G, Righini M, Parent F, van Strijen M, Couturaud F. Diagnosis and management of subsegmental pulmonary embolism. *J Thromb Haemost* 2006;4:724-31.

11. Sackett DL, Haynes RB, Guyatt GH, Tugwell P. *Clinical epidemiology: a basic science for clinical medicine*. 2nd ed. Boston: Little, Brown, 1991.

12. Kearon C, Ginsberg JS, Hirsh J. The role of venous ultrasonography in the diagnosis of suspected deep venous thrombosis and pulmonary embolism. *Ann Intern Med* 1998;129:1044-9.

Copyright © 2006 Massachusetts Medical Society.

Cost Sharing, Caps on Benefits, and the Chronically Ill — A Policy Mismatch

Kenneth E. Thorpe, Ph.D.

Crafting effective policy solutions to the high and rising costs of health care requires a clear understanding of the underlying problem. First, more than 75 percent of health care spending is traced back to patients with a chronic illness.¹ Patients who are chronically ill have long-lasting conditions that, in general, require predictable medical interventions. Although these medical interventions are well established, chronically ill patients receive only 56 percent of the recommended care each year.² Second, most of the increase in health care spending is associated with a rise in the prevalence of treated disease, much of which is in turn associated with the rise in obesity and changes in clinical thresholds for treating cardiovascular disease in asymptomatic patients.³

Despite the central role of chronically ill patients, the solution offered by health plans to control the growth in spending continues to focus on increasing deductibles, limiting benefits, and imposing caps on spending and office visits. Yet, the value of health insurance for patients rises when there is uncertainty about an outcome and the magnitude of the potential loss. Indeed, in Kenneth Arrow's seminal work on uncertainty and medical care, he noted that insurance in a strict sense is probably useless for patients who already have a chronic disease.⁴ If more than 75 percent of health care spending is associated with treating chronic disease, why would health plans increase deductibles and limit spending through caps on benefits? Improvement in the treatment of chronic disease hinges on reforming how we pay physicians to care for chronically ill patients. One change could be the use of a primary care

case-management model of payment, which would be likely to increase the number of clinically recommended services delivered to chronically ill patients.

In this issue of the *Journal*, Hsu et al. provide additional evidence that attempts to save money through the redesign of insurance plans — involving caps on benefits and increases in out-of-pocket spending for prescription drugs — result in the delivery of poor care to chronically ill patients.⁵ Moreover, caps on prescription-drug benefits apparently do not even save much money; although the caps lower spending on drugs, the design of the benefit results in increased rates of visits to the emergency department and nonelective hospitalizations. These changes affect the sickest patients the most, since they reach their caps on benefits earlier in the year than other patients. Hsu et al. found that patients who exceeded their caps on drug benefits had lower levels of drug consumption; poorer control of blood pressure, lipid, and glucose levels; and greater levels of nonadherence than did patients whose insurance had no cap and patients whose insurance had a cap but who did not exceed it. In short, caps on drug benefits, such as those used in Medicare, for a population of patients with chronic illnesses result in worse outcomes and do not reduce spending considerably.

The use of increased copayments or limitations on benefits in an attempt to control spending represents a misdiagnosis of what accounts for, and what is needed to address, the high and rising costs of health care. Any approach to creating better outcomes in health care must address

the appropriate clinical treatment of chronically ill patients. Interventions to contain costs also need to address the rise in the prevalence of treated disease. A large component of the rise in health care spending is the increase in the rates of diabetes, back problems, and mental disorders associated with the persistent rise in obesity across virtually all age groups. Thus, controlling health care spending will require a strategy for the more effective treatment of chronically ill patients and for the slowing or halting of the increase in the prevalence of diseases such as diabetes.

Instead of an approach driven by the redesign of insurance and benefits, control of spending will require the early identification of patients at risk and the appropriate payment of physicians to manage a patient's multiple chronic diseases according to evidence-based protocols. Providing better care for chronically ill patients under the Medicare program will require changes in policy. One approach would accelerate the use of the models of payment and delivery of care for chronic diseases that are under way in Medicare. A key unresolved issue concerning such an approach is how to get physicians to apply integrated models of chronic-disease care and how to get their patients to participate actively.

The results of the study by Hsu et al. should encourage movement toward other approaches to the management of spending in Medicare and other health insurance programs. One such approach would involve a monthly payment to physicians so that they would take the time needed to work with patients and manage their multiple chronic illnesses. Simultaneously, cost sharing for clinically recommended care (e.g., annual eye examinations or measurement of glycated hemoglobin for patients with diabetes) should be waived to ensure higher rates of compliance. Indeed, a condition-specific cost-sharing structure should be in place for clinically recommended services for chronically ill patients. We should be reducing the barriers to treatment and encouraging patients to take appropriate medications for the recommended duration, rather than increasing these barriers by limiting benefits. As the findings of Hsu et al. highlight, the use of

cost sharing and limits on prescription-drug benefits to control spending is counterproductive both medically and in the immediate attempt to limit spending.

Effective strategies for reducing the level and growth of spending will need to rely on tools other than high-deductible plans and limits on benefits. With respect to the rise in spending, we need to address the rise in obesity head-on. Doing so will be neither easy nor likely to produce immediate results. However, the failure to include primary prevention and population-based approaches in the cost-containment tool kit will come at a price: a continued increase in obesity and in the prevalence of associated disease.

In the near term, we can do a better job of treating chronically ill patients. Some major health systems, in particular the Veterans Health Administration, responded to this challenge by substantially improving clinical information systems and the treatment of chronic disease. Today, patients in the Veterans Health Administration receive better preventive care, and more recommended care for chronic disease, than do patients outside the system.⁶ Our attention needs to shift toward the reform of payment and delivery systems and away from the redesign of health insurance benefits.

No potential conflict of interest relevant to this article was reported.

From the Department of Health Policy and Management, Rollins School of Public Health, Emory University, Atlanta.

1. Chronic disease overview. Atlanta: Centers for Disease Control and Prevention, 2005. (Accessed May 11, 2006, at <http://www.cdc.gov/nccdphp/overview.htm#2>.)
2. McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the United States. *N Engl J Med* 2003; 348:2635-45.
3. Thorpe KE, Florence CS, Howard DH, Joski P. The rising prevalence of treated disease: effects on private health insurance spending. *Health Aff (Millwood)* 2005;Suppl Web Exclusives: W5-317-W5-325.
4. Arrow K. Uncertainty and the welfare economics of medical care. *Am Econ Rev* 1963;53:941-73.
5. Hsu J, Price M, Huang J, et al. Unintended consequences of caps on Medicare drug benefits. *N Engl J Med* 2006;354:2349-59.
6. Asch SM, McGlynn EA, Hogan MM, et al. Comparison of quality of care for patients in the Veterans Health Administration and patients in a national sample. *Ann Intern Med* 2004;141: 938-45.

Copyright © 2006 Massachusetts Medical Society.