The Continuing Clinical and Economic Burden of Cardiometabolic Health

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This cardiometabolic health theme issue of American Health & Drug Benefits highlights diabetes as a major contributor to cardiometabolic disease, with enormous clinical and economic burden. In 2012, more than 29 million Americans were diagnosed with diabetes, and in 2010, diabetes was the seventh cause of death in the United States. Heart disease continues to be the leading cause of disease-related mortality in the United States; the role of diabetes as a major risk factor for heart disease is well-documented. Nevertheless, <50% of patients with diabetes achieve the current glycemic goal of glycated hemoglobin (HbA1c) level <7%, suggesting there is much room for improvement.

This issue is focused on the clinical and economic aspects of diabetes, with an update on a new drug approved for heart failure, which is caused by coronary artery disease, diabetes, obesity, and hypertension. Heart failure was a contributing cause of death in 1 of 9 US deaths in 2009.

Fitch and colleagues discuss the prevalence of diabetic retinopathy screening rates among patients with diabetes and the associated costs. They show that although diabetic retinopathy is a common complication of chronic diabetes and the leading cause of blindness in working-age adults in the United States, screening for diabetic retinopathy is underutilized in this patient population, even though such screening is recommended by professional guidelines. Furthermore, Fitch and colleagues that the mean increase in healthcare spending for patients with type 2 diabetes during the 10 years after diagnosis does not increase significantly with screening for diabetic retinopathy.

In 2013, the direct cost of eye disorders in US adults aged ≥40 years was estimated to be $139 billion.

Lopez and colleagues compare the costs of the 3 sodium-glucose cotransporter 2 (SGLT2) inhibitors, dapagliflozin, canagliflozin, and empagliflozin, which reduce renal glucose reabsorption that leads to reductions in HbA1c levels. They cite the American Diabetes Association (ADA) estimates that in 2012 the total cost of diabetes in the United States was $245 billion, a significant increase from the ADA’s estimate of $174 billion in 2007. Lopez and colleagues, therefore, set out to analyze the impact of each of the SGLT2 agents to consider which one may deliver the best response to therapy at the lowest cost.

Bhounsule and Peterson focus on the recent recommendation to use HbA1c testing as a uniform diagnostic measure to diagnose patients with diabetes. The authors investigated whether the use of this test, which is slightly more expensive than older tests, would result in increased healthcare costs for patients with newly diagnosed diabetes. They also analyzed the associated factors related to the total healthcare expenditures among diabetic patients before and after HbA1c was implemented as a standard diagnostic factor. Their results show that the recommendation to use HbA1c testing did not result in increased costs, at least for the short duration since the 2010 recommendation. Surprisingly, the authors also found that the overall healthcare expenditures per person with diabetes decreased slightly in the past few years, but the reason for this is unclear.

The aging of the baby boomers and the growing numbers of patients with diabetes, obesity, and heart disease, further contribute to the dire prognosis for cardiometabolic health in the United States, despite the new pharmacotherapeutic options entering the market. This is a further indication that the unsustainable clinical and economic predicaments of cardiometabolic conditions can be expected to persist, requiring new solutions. The articles presented in this issue highlight some of the major challenges facing the healthcare system and all stakeholders, and the need for continuing innovation for improved patient outcomes while controlling costs.

We welcome your comments, critiques, and letters related to the topics discussed in this issue, which can be submitted at www.AHDBonline.com.

References