

Diabetes Study Puts Focus On Disease's Cost

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By Jan Shuxteau

With the incidence of adult-onset diabetes increasing by some 90 percent over the past 11 years in Virginia, employers and insurers are looking at a new study to help inform them on how to better manage the chronic disease.

The study commissioned by the Virginia Business Coalition on Health pinpoints the diabetes incidence by geographic area and also quantifies how money is spent on treating diabetes.

"Smart businesses will hopefully see this [report] as a wake-up call to analyze health insurance policies not just by the bottom line, but by outcome parameters as well," said Nancy Welch, M.D., director of public health for Chesapeake, Va.

It also identifies opportunities for patient education and support, said Cynthia Romero, M.D., chief medical officer for Chesapeake Regional Medical Center. "This can help improve the overall awareness of diabetes and improve the care of employees that have a chronic disease," she said.

Kenn Penn, immediate past president of the Virginia Association of Health Underwriters, said that employers rarely drill down to actual disease coverage when choosing their health plans, but this could happen in the future.

"Given that 60 percent of the cost of healthcare is from chronic diseases such as diabetes that are related to lifestyle decisions, we have to look at what to do," Penn said. "If studies like this bring about awareness and if control groups can demonstrate products that impact costs and allow people to better control their disease states, these products will be mainstreamed into all health plans."

Quantifying Disease's Impact. Diabetes is widespread across the Commonwealth, just as it is nationwide. An estimated 396,260 adult Virginians were diagnosed with the disease in 2005, and another 200,000 are thought to be undiagnosed, according to the Virginia Diabetes Council. Nationally, the number of people diagnosed with the disease has doubled in the last 15 years, reaching 179 million in 2007, according to a study released by the Centers for Disease Control and Prevention in September. "Virginia has a higher incidence of diabetes than the national average," said Eileen Ciccotelli, VBCH vice president. "Therefore, it has a higher impact on employers, not only on their productivity, but on their purchase of healthcare for employees."

Welch added, "This [VCBH] evaluation shows that almost half of the main corps of the work force [ages 36-64] have a mainly preventable chronic disease, and the percentage of complications is increasing. This is factual data that should make businesses, insurance providers and individuals stand up and take notice."

ESTIMATED COST OF DIABETES IN THE U.S. (2007)

Direct medical	\$116 billion
Indirect costs*	\$58 billion
Total costs	\$174 billion
Cost of care	\$1 out of every \$5 in healthcare

*Indirect costs relate to disability, work loss, premature death

Source: American Diabetes Association

Carriers Are In The Loop. Every major insurer in the state offers some sort of diabetes disease management program. Some have integrated programs for comorbidities, which the report indicates were higher in Virginia than the national average. In 2007, about 67 percent of diabetics in Virginia were diagnosed with at least one comorbidity.

Anthem Blue Cross and Blue Shield, the largest insurer in Virginia, offers a disease management program that looks at the impact of comorbid conditions on the participant by evaluating them during an initial assessment and then reevaluating them while they are in the program.

"For example, if a diabetes participant also has coronary artery disease, we would manage diabetes as the primary condition but would also formally assess and monitor CAD," said Scott Golden, Anthem spokesman. "The primary condition is determined by condition severity—the illness with the highest severity level will be the primary condition."

In the Anthem program, the participant's primary nurse is supported by a staff that includes pharmacists, certified diabetes educators, medical doctors and behavioral health nurses. They collaborate to help members overcome barriers to attaining improved health and to adhere to the treating physician's prescribed plan of care.

Optima Health's diabetes disease management program operates similarly with a staff that is cross-trained to treat not only diabetes but also the comorbidities that accompany it.

"When a patient talks to a case manager, that manager is going to be able to handle not only the disease process the patient came in with, but everything else, including behavioral health because many people with chronic diseases are depressed," said Karen Bray, vice president of Optima Clinical Care Service. "Hardly anybody has just diabetes—that's rare—most people have things such as hypertension, high lipids and

PROFESSIONAL CHARGES IN VIRGINIA FOR TYPE 2 DIABETES PATIENTS

Market	ASC*		ER		Hospital Inpatient		Hospital Outpatient		Office	
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Danville	N/A	N/A	\$398	\$512	\$3,612	\$2,139	\$1,183	N/A	\$795	\$747
Lynchburg	N/A	N/A	\$192	\$196	\$2,237	\$1,995	\$692	\$700	\$1,227	\$1,258
Norfolk	\$5,505	\$5,176	\$222	\$186	\$4,328	\$4,483	\$1,357	\$1,294	\$1,396	\$1,487
Richmond	\$3,912	\$3,402	\$234	\$203	\$4,518	\$4,226	\$1,545	\$1,259	\$912	\$849
Roanoke	\$2,695	\$3,713	\$302	\$348	\$3,518	\$2,949	\$1,230	\$1,109	\$983	\$1,054
Virginia	\$3,930	\$3,793	\$337	\$354	\$4,271	\$4,503	\$1,632	\$1,518	\$1,095	\$1,147
Nation	\$2,791	\$3,055	\$575	\$647	\$5,653	\$6,070	\$1,814	\$1,919	\$2,630	\$2,818

*Ambulatory surgery center

Source: Virginia Business Coalition on Health

other kinds of comorbid conditions.”

Bray noted that between 60 percent to 70 percent of their diabetic members participate in the DM program, which has been in place for 10 years.

VBCH Report. The VBCH study focused on Type 2 diabetes, reporting on 2007 patient demographics, use of services, hospital and physician charges and pharmacotherapy in five Virginia markets—Danville, Lynchburg, Norfolk, Richmond/Petersburg and Roanoke—as compared to the state and the nation. It summarized incidences where rates of diabetes and services are out of the ordinary.

“I actually expected to see prevalence rates increasing; this would be consistent with the literature reviews. But this is not what the data indicate,” said Welch. “Rather they indicate minimal changes in prevalence but more concern with complications and hospital costs.”

The report shows employers that the Richmond/Petersburg MSA had the highest share (61.7 percent) of diabetic patients of working age (ages 18-64) in 2007. Statewide, 57.8 percent of diabetics were of working age. In Roanoke, the number of working age diabetics was the least, but it was still about 54 percent. Nationally, about 53 percent of Type 2 diabetes patients fell into this age category.

The report also shows that between 14 percent and 18 percent of Type 2 patients in all five markets had two or more complications along with their diabetes. These included coronary artery disease, hypoglycemia and other illnesses. In addition, the report provided a market by market breakdown of comorbidity levels, indicating, for example, that 13.9 percent of diabetic patients in Danville had more than two comorbidities. Nationally, diabetes is the leading cause of new cases of adult blindness, kidney failure and non-traumatic lower extremity amputation, according to the CDC.

The Virginia study also reported that in 2006 and 2007 the number of Virginians receiving diabetic services was slightly less than the national average on all but one test.

Romero said that businesses will benefit from this information, which will enable them to recognize tests and screenings essential to diabetic employees. “The obvious challenges that this study revealed include the large number of patients/employees that are not reaching evidence-based goals for glucose management, cholesterol control, annual eye exams, weight management and blood pressure control,” she added.

Where The Money Goes. Although average annual hospital inpatient charges for diabetic care increased substantially between 2006 (\$22,872) and 2007 (\$29,687), they remained much below the national average (\$49,870), according to the study. In addition, the cost of diabetic outpatient services rose sharply from \$2,626 in 2006 to \$3,245 in 2007 but still lagged behind the national cost: \$4,673.

Professional charges for inpatient services also rose by about \$500 from 2006 to 2007, but charges for professional outpatient care fell across the state and in three of the key markets. In Richmond, for example, the charges dropped to \$1,259 in 2007 from \$1,545 in 2006.

“We need to put a ROI on health. This report vividly does just that,” Welch said, adding that the trends for hospital and professional costs must be reversed.

“Greater hospital costs mean less productivity for businesses, as does an increasing trend in complications,” she said. “Businesses need to strengthen coverage that focuses on [professional] care and support primary and secondary prevention strategies for wellness promotion, weight control and medication compliance.”

Outlook. While diabetes disease management has been around for at least a generation, the incidence of diabetes is increasing in Virginia and other states. Employers are beginning to ask hard questions about how much they’re spending on treating diabetes, and rightly so. Virginia employers are wise to first quantify the problem before they devise strategies for dealing with it. ■

