Maximizing the Value of Vision Care Benefits

Employers looking to maximize the value of their benefit offerings should closely evaluate the vision care coverage that they offer their employees. That’s because the eyes are the only part of the body that provide a non-invasive view of the blood vessels, providing valuable information about an individual’s overall health. For example, eye care providers (ECPs) can detect early warning signs of diabetes¹, hypertension², high cholesterol³, and vascular disease³. When chronic diseases are identified and treated early, future complications and resulting costs can be avoided.

Because vision care benefits typically cost one-tenth the cost of medical benefits and are used more often than other coverage⁴, eye care benefits can be a cost-effective, accessible benefit for improving eye health as well as overall health. An integrated, patient-centered approach is the key to realizing these benefits.

This white paper illustrates the value of integrated vision care and how it can reduce medical costs and productivity losses associated with diabetes and hypertension within an employer’s workforce.
The Value of Early Detection of Disease

A dilated comprehensive eye examination facilitates early detection of serious health conditions such as diabetes, hypertension and many other diseases. Dilation is part of a comprehensive eye exam, not a separate service or charge. Diabetic eye diseases, such as retinal vascular changes (neovascularization and hemorrhages) indicate that diabetes is present. An eye exam can also reveal changes in retinal blood vessels that indicate hypertension. The early identification of disease during the comprehensive eye exam, and subsequent referral by the ECP to the primary care provider, allows timely initiation of treatment. Early diagnosis and treatment reduces medical costs and long-term complications of the chronic disease.

The Impact of Diabetes and Hypertension

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<tr>
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<th>Diabetes</th>
<th>Hypertension</th>
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<tr>
<td><strong>Prevalence</strong></td>
<td>About 25.8 million people in the United States, or 8.3 percent of population, have diabetes, and another 79 million people have pre-diabetes.†</td>
<td>About 72 million Americans have hypertension, which is approximately one-third of the U.S. adult population.§</td>
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<tr>
<td><strong>Annual Nationwide Medical Costs</strong></td>
<td>$218 billion, which includes direct and indirect costs for people with diagnosed and undiagnosed diabetes, pre-diabetes, and gestational diabetes¶</td>
<td>$73.4 billion, which includes direct and indirect costs¶</td>
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<tr>
<td><strong>Individual Annual Medical Costs</strong></td>
<td>On average, people with diabetes incur annual medical costs of $11,744, of which $6,649 is attributed directly to diabetes.¶ Those with complications from diabetes incur $20,700² in medical costs, on average.¶</td>
<td>On average, people with hypertension incur annual medical costs of $1,131¹¹ to $1,608,¹² depending upon age, geography and other demographic variables.</td>
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<tr>
<td><strong>Employer Productivity Losses Due to Disease</strong></td>
<td>$58 billion for indirect costs associated with diabetes, including disability, work loss and premature mortality.¶ $1,592 to $3,184 per employee per year, in annual productivity losses,¹³ depending upon diabetes severity.¹⁵</td>
<td>$300 per eligible employee per year, (includes $246 in presenteeism costs and $54 due to absence and short-term disability).¹⁴</td>
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Considering the prevalence of diabetes and hypertension among the U.S. population, ECPs are likely to encounter patients with these conditions, making their role vital in identifying and monitoring chronic disease. Early detection of diseases such as diabetes and hypertension is the first step. Once the disease is diagnosed by the primary care provider or specialist, the ECP monitors eye health, acting as a partner in overall patient health.
Diabetic eye diseases are an indication of uncontrolled blood sugar levels which can be measured by HbA1c tests. Reducing HbA1c levels in diabetic patients can decrease medical care utilization and produce an annual savings of $1,200 to $1,872 per patient.

Similarly, the vascular effects of hypertension can be seen inside the eye as hypertensive retinopathy. According to the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC), the presence of retinopathy may be an indication for starting antihypertensive treatment. Early retinal vascular changes have been noted to predict the risk of hypertension even in persons with normal blood pressure readings. Those with signs of hypertensive retinopathy were up to four times more likely to have a stroke. Early diagnosis of hypertensive retinal changes through a comprehensive eye exam can lead to earlier identification and control of hypertension.

Integrated eye care is an important contributor to improving employee overall health and wellness, reducing health care costs, and maintaining or increasing employee productivity.

### For Every 100 Employees in Your Company...

**Employer Costs Per 100 Employees Resulting from Diabetes and Hypertension**

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<td><strong>Prevalence</strong></td>
<td>8 have diabetes</td>
<td>33 have hypertension</td>
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<tr>
<td></td>
<td>25 have pre-diabetes</td>
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<tr>
<td><strong>Additional Medical Costs per 100 Employees, per Year</strong></td>
<td>$93,952 – $165,600 (Costs vary based upon severity and complications)</td>
<td>$37,323 – $53,064</td>
</tr>
<tr>
<td><strong>Cost of Productivity Loss per 100 Employees, per Year</strong></td>
<td>$12,736 – $25,472</td>
<td>$9,900</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$106,688 – $191,072</td>
<td>$47,223 – $62,964</td>
</tr>
<tr>
<td><strong>Total Combined Costs</strong></td>
<td>$153,911 – $254,036 for every 100 employees</td>
<td>Average costs = $203,974 or $170 per employee, per month</td>
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A Patient-Centered Approach

A patient-centered approach to eye care puts the patient at the center of a coordinated care community (See Figure 1). In addition to the eye care provider, this care community may include the primary care provider, disease management nurses and specialists. Coordination is achieved via cross-referrals between care professionals, along with information sharing about diagnoses and treatment plans. Cross referrals can be supported with bidirectional referral forms, combined with provider education and communication in how to use the forms.

In a patient-centered approach, patients are empowered to make better health care decisions that may lead to better outcomes by providing them with information, resources and support. Information and resources should address how to keep the eyes healthy, how to prevent disease and the relationship between eye health and chronic conditions such as diabetes, hypertension and vascular disease. With education and the support of their coordinated care community, patients can be actively engaged in protecting their eye health, as well as their overall health.

Figure 1: A patient-centered approach to eye care puts the patient at the center of a coordinated care community.
Integration is Key

Patient-centered care works best when it’s integrated with medical care and disease management in a holistic, proactive, data-driven and cost-effective manner. Holistic care takes a whole-person approach to health, educating patients so they can make better lifestyle choices. With proactive eye care, providers not only look for warning signs of eye diseases, but also diabetes, hypertension, high cholesterol, vascular disease and other chronic conditions. A holistic, proactive care model necessitates that the care community be coordinated in providing ongoing monitoring and management of eye diseases and chronic conditions. Data-driven approaches maintain current patient-specific vision, medical and disease management information in a manner that is accessible by the care team to support ongoing, coordinated monitoring and care. Cost-effectiveness is achieved when chronic diseases are identified and treated early, avoiding future complications and resulting costs.

Theory Put to Practice

A real-life example of an integrated, patient-centered approach to eye care is UnitedHealthcare’s Bridge2Health program. In this model, eye care is coordinated with medical care and disease management to provide a comprehensive view of a patient’s health. This is accomplished via UnitedHealth Group’s eSync Platform, which captures hundreds of health care data points and synchronizes the information to provide a holistic view (See Figure 2).

Figure 2: UnitedHealth Group’s eSync Platform

Diverse data points are used to scan the entire population.
- Claims data
- Pharmacy data
- Lab-data (for select)
- Health assessment results
- Vision diagnostic data
- Behavioral and segmentation information

Major health events may be avoided because of opportunities for intervention.
The vast array of data it draws upon includes:

- Vision diagnostic data
- Medical claims data
- Lab results
- Pharmacy information
- Self-reported data as well as behavioral information

To support this data-driven approach, eye care providers code claims with 23 different chronic condition categories representing more than 350 diagnostic codes. eSync turns this valuable data into personalized care and disease management recommendations, empowering providers, patients and other members of the care community to:

- Identify high-risk patients before they make significant medical decisions or experience costly complications
- Deliver personalized health management solutions
- Establish partnerships within the care provider community
- Measure health care value

To help patients stay up-to-date with their annual eye exams, exam records with dates are included in their online medical personal health record. Patients diagnosed with diabetes, diabetic retinopathy, hypertension, hypertensive retinopathy, vascular disease or high cholesterol receive reminder phone calls if they have not had their annual eye exam. Reminder phone calls have been shown to improve exam adherence to 50 percent versus three percent with postcard programs.

**Final Thoughts**

As the statistics in this white paper illustrate, eye care has a substantial impact on the management of chronic diseases such as diabetes and hypertension. Vision care programs help to identify and manage these diseases, but to maximize value they should be patient-centered and integrated with medical care and disease management. The most effective coordinated care programs are integrated in a holistic, proactive, data-driven and cost-effective manner.
About the Author

Linda M. Chous, O.D. – As Chief Eye Care Officer, Dr. Chous brings her provider perspective and clinical expertise to the development of new solutions and services for UnitedHealthcare. Dr. Chous specializes in pediatric optometry and diabetic eye disease. In addition to her duties at UnitedHealthcare, she maintains her private practice in Minneapolis, Minnesota. Dr. Chous is Minnesota’s state liaison to the American Optometric Association (AOA) InfantSEE program and an advocate for eye health education. She is the past president of the Minnesota Optometric Association, serves on the American Optometric Association Evidence-Based Optometry Committee, and is a member of the Optical Women’s Association and Women of Vision. Dr. Chous has served as the MOA chair of the Public Education and Children’s Vision Committees. She provides low vision services to the Minnesota Department of Education and is a consultant to the Minnesota Vision Coalition. Dr. Chous is a graduate of the Southern California College of Optometry and is a Diplomate of the American Board of Optometry.

About UnitedHealthcare

UnitedHealthcare is dedicated to helping people nationwide live healthier lives by simplifying the health care experience, meeting consumer health and wellness needs, and sustaining trusted relationships with care providers. The company offers the full spectrum of health benefit programs for individuals, employers and Medicare and Medicaid beneficiaries, and contracts directly with more than 620,000 physicians and care professionals and 5,500 hospitals nationwide. UnitedHealthcare serves more than 38 million people and is one of the businesses of UnitedHealth Group (NYSE: UNH), a diversified Fortune 50 health and well-being company.
References
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