



Eye and Vision Care in the Patient-Centered Medical Home

The Patient Centered Medical Home (PCMH) is an approach to providing comprehensive primary care to patients from childhood through adulthood ensuring access to basic and preventive health care services, and to deliver appropriate, efficient, continuous and coordinated care between the patient and the health care team. Quality and safety are hallmarks of the PCMH with a focus on patient-centered outcomes and decision-making based on evidence-based medicine and clinical guidelines. Given the need to coordinate care across all aspects of health care, it is important that the medical home include coordination among all primary care providers including doctors of optometry.

While comprehensive and coordinated health care is the goal of the medical home, eye care professionals are best to diagnose and treat vision disorders. Current screening methods generally employed by most medical homes fail to identify many vision or eye problems as they require early detection; otherwise, irreversible health and visual deficits, including blindness, may occur. Making sure that only an examiner that has adequate training to diagnose, treat, and prevent eye disease can help ensure healthier patients. Due to the specialized training and experience of doctors of optometry, optometrists should be recognized as a principal provider of eye and vision care as they are accessible, continuous, comprehensive, family-centered and culturally-effective providers of eye and vision care.

As the PCMH touts the fact that it is a patient-centered approach to provide authentic comprehensive care for patients, it is critical that optometry be recognized as a principal provider of eye and vision care services within the PCMH and as a leader in the eye and vision care management model.

Doctors of Optometry: Providers of Primary Eye and Vision Care

Doctors of optometry are America's providers of primary eye and vision care, treating patients of all ages in nearly 6,500 communities throughout the United States. In more than 3,500 of these communities nationwide, optometrists are the only eye care provider.¹ Optometrists are an integral part of the primary care team and play a significant role in improving the health and well being of the public and should serve as a principal provider of eye and vision care within the PCMH.

Doctors of optometry are independent primary health eye care providers who examine, diagnose, treat and manage diseases and disorders of the visual system, the eye and associated structures. Optometrists are trained to examine the internal and external structure of the eyes to diagnose:

- Eye diseases such as glaucoma, cataracts and retinal disorders;
- Chronic diseases such as hypertension and diabetes; and
- Vision conditions such as nearsightedness, farsightedness, astigmatism and presbyopia.

¹The American Optometric Association "Caring for the Eyes of America", 2006 can be found at <http://www.aoa.org/x4753.xml>

Optometrists also conduct testing to determine a patient's ability to focus and coordinate the eyes, and to judge depth and see colors accurately. They are licensed to prescribe eyeglasses, contact lenses, low vision aids, vision therapy, and medications to treat eye diseases.

As primary providers of eye and vision care, optometrists are an integral part of the health care team and can serve as an entry point into the health care system. As the sole primary eye care provider in many communities across America, optometrists are often a patient's first entry point into the health care system. Doctors of optometry are skilled in the cooperative management of eye and vision care and often refer patients to other health care professionals for further evaluation.

The Importance of Optometry in Patient-Centered Health Care

Early detection and timely treatment can prevent visual impairment and progression of conditions leading to blindness. As primary providers of eye care, doctors of optometry are involved in managing the ocular manifestations of numerous systemic disorders such as diabetes and high blood pressure. The vital role that doctors of optometry play in the mission of providing preventive care is clear as these doctors are often the first to diagnose a systemic disorder based on an ocular examination, and many times are the only contact some patients have with a healthcare professional all year. Furthermore, eye and vision health is an integral component of an approach to comprehensive care, especially for children's overall health and well-being as they learn and grow. The best health care management must include a regular eye examination by a practitioner whose primary focus is vision and eye care.

Eye Care in Pediatric and Youth Populations

Vision disorders are the fourth most common disability in the United States and the most prevalent handicapping condition during childhood. Despite the high prevalence of vision disorders in children, studies show that only about 31 percent of children between ages 6 and 16 years are likely to have had a comprehensive eye and vision examination within the past year, while below the age of 6, only about 14 percent are likely to have had an eye and vision examination. Unfortunately, undue reliance on vision screening by pediatricians or other primary care physicians may result in the late detection of amblyopia and other vision disorders.

The American Public Health Association (APHA) adopted a resolution that recognizes the shortcomings of vision screenings, encourages regular eye examinations at the ages of 6 months, 2 years, and 4 years, and encourages pediatricians to recommend that all children receive eye examinations at these intervals.² Healthy People 2010, a national disease prevention initiative of the U.S. Department of Health and Human Services, also recognized the importance of preventive vision care. One of its goals is to improve the visual health of our Nation through prevention, early detection, treatment, and rehabilitation.³ These national efforts to inform the public about the importance of early eye care and the current limitations of vision screening are issues that all optometrists need to discuss within every community to ensure that children receive professional eye examinations on a regular basis throughout their childhood.

² American Journal of Public Health, Improving Early Childhood Eyecare, Vol. 92, No. 3, March 2002

³ U.S. Department of Health and Human Services. Healthy People 2010, 2nd ed., Understanding and Improving Health and Objectives for Improving Health, Volume 2, [Section 28](#) Washington, D.C., U.S. Government Printing Office, November 2000.

Over the past thirty years, studies have shown the need for earlier eye examination and treatment which has resulted in clinical advances that enable more effective preventive eye care for infants and preschool children. Extensive research has also demonstrated the importance of the first few years of life in the development of vision. Within the first 6 months of life, rapid changes occur in most components of the visual system including visual acuity, accommodation, and binocular vision. Interference with development during this very critical phase may lead to serious lifelong effects on vision. However, successful treatment can be obtained quickly with early diagnosis and intervention.⁴

Highlighting optometry's commitment to the health of children's vision, the American Optometric Association (AOA) and The Vision Care Institute of Johnson & Johnson Vision Care, Inc., have partnered to create InfantSEE®, a no-cost public health program developed to provide professional eye care for infants nationwide. Through InfantSEE®, optometrists provide a one-time, comprehensive eye assessment to infants in their first year of life, offering early detection of potential eye and vision problems at no cost regardless of income.

Eye Care and Chronic Conditions

When a patient has diabetes, the optometrist periodically examines the retina through a dilated pupil to determine if and how the diabetes is affecting the eye. With careful monitoring the optometrist can determine the effect of the disease on the patient's eye and, if deemed necessary, the optometrist will schedule a consultation with a retinal specialist. After treatment, the optometrist will again manage the care of the patient.

If a patient complains of blurred vision, one of the diagnoses that an optometrist may make is that of cataract. The optometrist will monitor the patient's condition until such time that cataract surgery becomes necessary and will then schedule the patient's surgery to have the cataract removed by an eye surgeon. Following the surgery, the optometrist will, in most cases, provide the patient's post-operative care.

Another potential diagnosis an optometrist may make when treating a patient for blurred vision is macular degeneration. As the U.S. population ages, macular degeneration is becoming an increasingly common condition. The vast majority of macular degeneration cases are the "dry" form of the disease and optometrists are trained to independently manage this form of the disease. A small percentage of cases will progress to the "wet" form of this disease. The optometrist will then schedule these patients for treatment with a retinal specialist. After this treatment, the optometrist will again assume the management role for the patient and preventatively counsel patients on the use of UV protective eyewear and the use of various antioxidant agents as recommended by the "Age-Related Eye Disease Study" (AREDS) to reduce the advancement of the disease.

If a patient's intraocular pressure is higher than "normal" (ocular hypertension), but the patient does not yet have signs of optic nerve damage, the optometrist will periodically re-evaluate the patient's condition. During this evaluation, the optometrist will look for changes in the eye, indicative of beginning glaucoma. If a patient progresses to show optic nerve changes characteristic of glaucoma, the optometrist will initiate treatment with topical medications. In the small percentage of patients with glaucoma that do not respond favorably to this medication

⁴Mitchell M. Scheiman, O.D., M.S et al, American Optometric Association, Optometric Practice Clinical Guideline Pediatric Eye and Vision Examinations: Reference Guide for Clinicians, 2nd ed., St. Louis, MO, 2002 can be found at <http://www.aoa.org/documents/CPG-2.pdf>

therapy, the optometrist will schedule the patient for glaucoma surgery with a glaucoma specialist. Following glaucoma surgery, the optometrist will resume the management of the patient.

Headache is one of the most common symptoms that confront physicians. Often, the family physician will refer a patient with headaches to an optometrist to determine if the headaches are ocular in origin before other costly neurological evaluations are done. Optometrists and family physicians often work together to manage patients being that it is more cost effective than using other health care specialists.

Management of eye trauma and acute eye infections is another valuable primary eye care role provided by optometrists. Corneal abrasions, chemical burns, foreign bodies on the surface of the eye or eyelids, thermal burns, conjunctivitis and anterior uveitis are just a few of the conditions that optometrists treat in their offices every day. With access available on evenings, weekends and in rural settings, optometrists are key providers of these trauma services.

The Institute of Medicine's *Primary Care: America's Health in a New Era* recognized optometrists as providing first-contact care for basic health services that are needed by most, if not all, of the population at some point in their lifetime and the focus of primary care should include good vision care as part of the primary care.⁵ Optometrists in their role as primary care providers continue to be well-positioned to play an ever-increasing active part in providing quality, cost-effective, accessible primary eye care services to all Americans.

Doctors of Optometry – Providing Cost Effective Eye Care

Optometrists are a cost effective alternative to emergency rooms for trauma and acute eye care services. For example, comparing the Medicare reimbursement rates for clinical care in an optometrist's office to emergency room hospital care for treatment of eye trauma, cost savings approach 80% if the care is provided in an optometrist's office.

Optometrists perform needed eye examinations for approximately 60 percent of America's population.⁶ Comparing the health plan reimbursement rate difference between a "new" and an "established" patient, one can find a significant cost savings when a patient simply receives their medical eye care from the same provider that has been providing their routine care. In addition, when a patient receives medical eye care from a provider whom they are familiar with, they typically experience more timely treatment and fewer complications. This translates to further cost savings.

According to a recent study entitled, "*The Impact Of Managed Eyecare On Use Of Vision Services, Vision Costs, And Patient Satisfaction*," when primary eye care providers work in tandem with physicians, patients access eye care services more frequently and receive more comprehensive treatment, ultimately resulting in high patient satisfaction and a decrease in medical eye care utilization and total eye care costs.⁷

⁵ Institute of Medicine. *Primary care: America's health in a new era*, Committee on the Future of Primary Care, Washington, DC: National Academy Press, 1996.

⁶ The American Optometric Association "Caring for the Eyes of America", 2006 can be found at <http://www.aoa.org/x4753.xml>

⁷ Shoshana S. Colman, PhD, R. David Jones, OD, Christian L. Serdahl, MD, F. Mason Smith, OD, Stefanie J. Silva, MS, Warren H. Schonfeld, PhD, "The Impact of Managed Eyecare on Use of Vision Services, Vision Costs, and Patient Satisfaction".

Eye-Openers

- In more than 3,500 communities nationwide, optometrists are the only primary eye and vision care providers.⁸
- Nearly 60% of primary eye examinations in America are conducted by optometrists.⁹
- Optometry has historically been and continues to be a provider of first-contact care for basic health services that are needed by most or all of the population. Often, they are the only primary care health care professional many relatively healthy patients see. As such, optometrists continue to play a critical role in the delivery of primary and systemic preventive care.¹⁰
- Acute eye care services delivered in a hospital emergency room can cost as much as 80% more than the same services provided in an optometrist's office.
- Over 98% of optometrists surveyed in America are currently treating eye disease with prescription drugs.
- From 1986 to 2003 the consumer price index rose by 65.6%. During that same time, health care services increased by 150.7% while eye care services rose by only 56.4%.
- More than two-thirds of (responding) optometrists (70.2 percent) provided Medicaid patients with eye examinations in 2003. Most ODs (59.7) reported providing eyeglasses to those covered by Medicaid. Another 65.7 percent provided medical eye care to Medicaid patients.¹¹

As the concept of the medical home envisions a new paradigm of comprehensive and coordinated healthcare, the inclusion of eye and vision care requires the recognition of optometrists as primary providers of patient-centered care.

In order to truly provide comprehensive care from head-to-toe, it is critical that optometry be recognized as a principal provider of eye and vision care services within the PCMH and as a leader in the eye and vision care management model.

Given the need to coordinate care across all aspects of health care, it is important that the PCMH include coordination among all primary care providers including doctors of optometry.

Through their clinical education, training, experience, and broad geographic distribution, doctors of optometry have the means to provide effective primary eye and vision services in the United States. Primary care has been described as those services provided to patients by a healthcare practitioner "who knows them, who is available for first contact and continuing care, and who offers a portal of entry to specialists for those conditions warranting referral." Eye care services are an important point of entry into the health care system as virtually all people need eye care services at some point in their lives. By its very nature, eye care provides for the evaluation, assessment, and coordination of a broad spectrum of health care needs.

Approved by AOA Board of Trustees January 17, 2008.

⁸ The American Optometric Association "Caring for the Eyes of America", 2006 can be found at <http://www.aoa.org/x4753.xml>

⁹ Ibid.

¹⁰ Molla S. Donaldson, Karl D. Yordy et al, Primary Care: America's Health in a New Era, Committee on the Future of Primary Care, pg124-125. Division of Health Care Services, Institute of Medicine, National Academy Press, Washington, D.C., 1996.

¹¹ The American Optometric Association "Caring for the Eyes of America", 2006 can be found at <http://www.aoa.org/x4753.xml>