

## Health Workforce Projections: Vision Occupations

### KEY FINDINGS

Between 2012 and 2025:

- The supply of optometrists is projected to grow by 21 percent.
- The supply of opticians is projected to decrease by 6 percent; however this may be due to the model's inability to account for on-the-job training.
- The demand for both optometrists and opticians is projected to grow by 15 percent.

This fact sheet presents the national supply and demand for optometrists and opticians between 2012 and 2025 using HRSA's Health Workforce Simulation Model (HWSM).<sup>1</sup> While the nuances of modeling supply and demand differ for individual health professions, the basic framework remains the same. The HWSM assumes that demand equals supply in the base year. For supply modeling, the major components (beyond common labor-market factors like unemployment) include characteristics of the existing workforce in a given occupation, new entrants to the workforce (e.g., newly trained workers), and workforce decisions (e.g., retirement and hours worked patterns). For demand modeling, the major components include population demographics, health care use patterns (including the influence of Affordable Care Act insurance coverage), and demand for health care services (translated into requirements for Full-Time Equivalents). Over the period studied, the model assumes that current national patterns of labor supply and service demand remain unchanged within each demographic group.<sup>2</sup> These projections do not account for the geographical distribution of providers which may impact access to care in certain areas/communities.

### BACKGROUND

Optometrists perform eye exams and vision tests, in addition to diagnosing and treating visual problems, diseases, and injuries. They prescribe and dispense corrective lenses and prescribe medications for certain eye diseases. An optometrist receives a doctor of optometry (OD) degree after completing four years of optometry school, preceded by three or more years of college. They must be licensed to practice in a particular state.<sup>3</sup>

Following prescriptions from optometrists and ophthalmologists, dispensing opticians help fit eyeglasses and contact lenses. They also advise consumers regarding eyeglass frame or contact lens purchase options. Opticians typically have a high school diploma or equivalent and some form of on-the-job training. Some opticians enter the occupation with an associate's degree or a certificate from a community college or technical school. Licensure is required in some states.<sup>4</sup>

<sup>1</sup> This model uses a micro-simulation approach where supply is projected based on the simulation of career choices of individual health workers. Demand for health care services is simulated for a representative sample of the current and future U.S. population based on each person's demographic and socioeconomic characteristics, health-related behavior, and health risk factors that affect their health care utilization patterns. For more information on data and methods, please see <http://bhw.hrsa.gov/healthworkforce/supplydemand/simulationmodeldocumentation.pdf>.

<sup>2</sup> Ono T, Lafortune G, Schoenstein M. "Health workforce planning in OECD countries: a review of 26 projection models from 18 countries." *OECD Health Working Papers*, No. 62. France: OECD Publishing; 2013:8-11.

<sup>3</sup> Occupational Outlook Handbook. 2014. U.S Bureau of Labor Statistics, available at <http://www.bls.gov/ooh/healthcare/optometrists.htm>

<sup>4</sup> Occupational Outlook Handbook. 2014. U.S Bureau of Labor Statistics, available at <http://www.bls.gov/ooh/healthcare/opticians-dispensing.htm>

## FINDINGS

Based on the current size of the workforce and the number of individuals training in this field, optometrist supply is projected to grow by 21 percent between 2012 and 2025. For opticians, however, the supply is expected to decrease by 6 percent during the same timeframe. This is likely due to the fact that the number of opticians receiving formal training (e.g., associate’s degree or a college/technical school certificate) is relatively small, approximately 880 per year, and the model cannot account for the fact that many opticians enter the profession by receiving on-the-job training. Therefore, the supply projections here likely underestimate the future total supply of opticians.

Between 2012 and 2025, the demand for both optometrists and opticians is projected to grow by 15 percent. Several factors that influence demand are included in the HWSM. Growth in the elderly population is expected to increase demand for eye care services because the prevalence of vision problems increases with age. Increasing rates of chronic diseases such as diabetes may also increase the demand for optician’s and optometrist’s services. The Affordable Care Act provided some provisions for eye care coverage—with most associated with the vision needs of children. Examples of provisions include waiving costs for children’s eye exams and providing coverage for one pair of eyeglasses per year.

Findings from the HWSM suggest that between 2012 and 2025 projected supply of optometrists will be adequate, whereas approximately 11,200 additional opticians will be needed from on-the-job training unless enrollments were doubled in formal training programs for opticians.

### Exhibit 1. Estimated Supply and Demand for Vision Services in the U.S., 2012-2025

	Optometrists	Opticians
<b>Supply</b>		
Estimated supply, 2012	36,300	54,500
Total supply growth, 2012-2025:	7,500 (21%)	-3,200 (-6%)
New entrants	18,250	11,440
Changing work patterns (e.g. part time to full time hours)	(2,460)	830
Attrition (e.g. retirements, mortality)	(8,290)	(15,470)
Projected supply, 2025	43,800	51,300
<b>Demand</b>		
Estimated demand, 2012	36,300	54,500
Total demand growth, 2012-2025	5,300 (15%)	8,000 (15%)
Changing demographics impact	3,700 (10%)	5,600 (10%)
ACA insurance coverage impact	1,600 (4%)	2,400 (4%)
Projected demand, 2025	41,600	62,500
<b>Adequacy of supply, 2025</b>		
Projected supply (minus) projected demand	2,200	-11,200

### [About the National Center for Health Workforce Analysis](#)

The National Center for Health Workforce Analysis informs public and private-sector decision-making related to the health workforce by expanding and improving health workforce data, disseminating workforce data to the public, improving and updating projections of the supply and demand for health workers. For more information about the National Center for Health Workforce Analysis please visit our website at <http://bhw.hrsa.gov/healthworkforce/index.html>.