

ASCO Guidelines for Public Health and Environmental Vision Core Competencies and Learning Objectives

Introduction

Understanding the context in which public health fits within the profession of optometry is an essential competency for every practicing optometric physician, regardless of practice type.^{i,ii}

In our increasingly complex and evolving health care system,ⁱⁱⁱ optometrists are challenged to ethically and efficiently provide high quality patient care based on understanding core public health and environmental vision concepts and principles such as:

- Interpretation and application of evidence based care, through the conduct of population health research, through understanding the interpretation of research, and through its translational application to practice
- Critical analysis and assessment of our health care system including the delivery of health care, and what key health care system issues and reforms may impact their future practice
- Understanding and compliance with economic and legal standards of practice, regulations and policy
- Health promotion and disease prevention within their practice and within the broader community, state, national and global context
- Recognition of environmental and occupational health hazards, and the principles of prevention, diagnosis, treatment
- Participation within the inter-professional collaborative team-based approach to care

Other key health professions have developed and implemented curriculum frameworks for clinical prevention and population health.^{iv} The language and principles of such public health knowledge cut across all health professions,^v and as such, optometry's capacity to interact with other professions depends on this knowledge, skills and attitudes. Currently, schools and colleges of optometry incorporate aspects of public health education based on each program's unique approach to the optometric profession for the degree of Doctor of Optometry, however, the level of emphasis is as unique as is each school.^{vi,vii} Prior to this present document, there has not existed a clear guidance document defining those current competencies for the profession of optometry.

Background

In keeping with the emergence of ASCO's resource guidelines on Competency Based Learning and Assessment, **Public Health and Environmental Vision Core Competencies and Learning Objectives** further delineates the essential professional competencies as described in the *Attributes of Students Graduating from Schools and Colleges of Optometry*

Report^{viii} and follows the format of the *Entry-Level Competencies and Learning Objectives in Visual Impairment and Low Vision Rehabilitation*^{ix} in accordance with the *Outcomes Assessment Resource Guide for Schools and Colleges of Optometry*^x and international developing competency models for optometry.^{xi}

The ***Public Health and Environmental Vision Core Competencies and Learning Objectives*** consist of 10 broad topic domains, which list 23 thematic overarching competencies and learning sub-objectives. These were developed by the ASCO Public Health Educator Special Interest Group through a detailed process of expert panel review of current curricular components across all schools and college member institutions, distilling, grouping, organizing and testing and validating each section with consensus from the PHE SIG members, the Academic Affairs Committee, and various key informant reviews from members of the American Academy of Optometry Public Health and Environmental Vision Section, the American Public Health Association Vision Care Section and the World Council of Optometry Public Health Committee. The ASCO Board of Directors approved the document in 2017.

Purpose

The purpose of the ***Public Health and Environmental Vision Core Competencies and Learning Objectives*** is to recommend global guidelines, in the broadest sense, to schools and colleges of optometry for program development, curricular review and outcomes assessment. This document is expected to be a living document which shall be updated and renewed periodically to keep current with the evolution of knowledge, skills and attitudes needed for entry-level into the practice of optometry.

References

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Public Health and Environmental Vision Core Competencies and Learning Objectives

I. History of Public Health

Competency 1
(ATTITUDES)

Outline and summarize optometry's involvement in public health.

Objective 1A

Describe the history and current status of optometry's involvement in public health.

Competency 2
(KNOWLEDGE)

Understand the major public health advances and challenges currently and in the past.

Objective 2A

Describe the major public health advances over the past centuries.

Objective 2B

Discuss significant public health controversial issues in the past and present.

II. Research Methods and Design: Epidemiology and Biostatistics

Competency 3
(ATTITUDES)

Explain the importance of continued learning and evidence-based practice.

Objective 3A

Practice life-long learning, integrating knowledge and evidence-based practice in patient care.

Competency 4
(KNOWLEDGE)

Understand the principles of epidemiology and biostatistics.

Objective 4A

Define epidemiology and its applications to both research and clinical based care.

Objective 4B

Summarize quantitative epidemiologic and biostatistical measures.

Competency 5
(SKILLS)

Be able to apply study design evaluation to contribute to evidence based practice decisions.

Objective 5A

Recognizes strengths and weaknesses of study design and is able to interpret the outcomes of a study.

III. Health Care Delivery

Competency 6
(KNOWLEDGE)

Understand the organization of health services and delivery systems in the United States.

Objective 6A	Describe and differentiate the various models of health and eye care delivery.
Objective 6B	Describe the role of government in the health care delivery system.
Objective 6C	Describe and differentiate the stakeholders in the health care delivery system.
<u>Competency 7</u> (KNOWLEDGE)	Understand health care policies and reforms and their effects on the United States health care system.
Objective 7A	Summarize the major health care policy reforms in the United States.
<u>Competency 8</u> (KNOWLEDGE)	Describe the characteristics of the various existing vision care plans.
Objective 8A	Understand how the various options in health care delivery affect the provision of vision care.
Objective 8B	Understand the challenges that exist concerning optometry and health care delivery.

IV. Health Care Finance

<u>Competency 9</u> (KNOWLEDGE)	Understand basic economic principles, financing, and cost control measures regarding health care.
Objective 9A	Describe basic health concepts of healthcare economics.
Objective 9B	Describe the role of health insurance.
<u>Competency 10</u> (KNOWLEDGE)	Understand financing in the US health care system.
Objective 10A	Describe the options for health service financing including: private pay, public funding, and third party coverage.
Objective 10B	Discuss the various payment strategies, quality and cost control measures in the health care system.

V. Health Care Laws and Regulations

<u>Competency 11</u> (KNOWLEDGE)	Understand the laws and legal issues that affect the practice of Optometry.
Objective 11A	Describe the laws pertaining to health care delivery and their significance.
Objective 11B	Understand common legal issues that have impact on optometry's scope of practice.

Objective 11C	Understand laws and regulations regarding scope of practice, practice procedures, billing, including the definition of unprofessional conduct and disciplinary actions.
<u>Competency 12</u> (KNOWLEDGE)	Understand the organization and agencies that determine laws and regulations in the US.
Objective 12A	Describe the roles of Federal, State, Local, and non-governmental agencies in determining health care laws and regulations.
Objective 12B	Understand the concepts, importance, and requirements of credentialing, licensure, Board certification, and maintenance of competency.
<u>Competency 13</u> (KNOWLEDGE)	Understand, comply with and promote the rules and principles that ensure protection of patient rights.
Objective 13A	Describe laws regarding patient privacy and rights, their importance and history with regards to patient care and research.
Objective 13B	Understand, comply with and promote the principles of patient and health care ethics.
<u>Competency 14</u> (ATTITUDES)	Respect and promote the concepts of quality assurance in health care.
Objective 14A	Practice with the patient's best interest foremost.
Objective 14B	Understand the concept of standard of care.
Objective 14C	Support and understand the mechanism of quality assurance measures.
VI.	Health Workforce
<u>Competency 15</u> (KNOWLEDGE)	Understand the demographics, supply, and demand of the eye and health care health workforce.
Objective 15A	Understand the factors that determine the supply and demand of eye and health care practitioners for a given population or community.
Objective 15B	Describe workforce studies regarding eye care practitioners.
VII.	Inter-Professional Relations
<u>Competency 16</u> (KNOWLEDGE)	Understand the role of the optometrist in inter-professional collaborative and team-based practice.

Objective 16A	Describe individual roles and responsibilities in an inter-professional approach to health care.
<u>Competency 17</u> (ATTITUDES)	Appreciate the importance of inter-professional relations in the evolution of health care.
Objective 17A	Acknowledge the training and scope of practice of various health care providers that may participate in inter-professional patient care.
Objective 17B	Recognize the importance of each member of an inter-professional team in delivering patient care and develop positive attitudes towards the value of collaborative teamwork in health care.
Objective 17C	Recognize the importance of communication among team members for the benefit of the patient's health care.
VIII. Health Promotion	
<u>Competency 18</u> (KNOWLEDGE)	Understand the concepts of health promotion and disease prevention and the theories involved in health behavior.
Objective 18A	Describe the concept of health promotion and disease prevention in the field of health care.
Objective 18B	Analyze the social determinants of health, risk factors, barriers to care, health disparities, and access to care.
Objective 18C	Describe the different theories of health behavior.
Objective 18D	Value the cultural dimensions of health care which includes cultural and linguistic competence.
<u>Competency 19</u> (ATTITUDES)	Appreciate and promote the various programs involved in health promotion and disease prevention.
Objective 19A	Appreciate and promote the health promotion and disease prevention such as the Healthy People initiative as well as programs unique to optometry.
IX. International Eye and Vision Care	
<u>Competency 20</u> (KNOWLEDGE)	Understand global initiatives to prevent vision loss and improve eye health in other countries.
Objective 20A	Understand the role of global organizations with impact on eye and vision care, such as the World Health Organization, International Agency to Prevent Blindness, and the World Council of Optometry.
Objective 20B	Understand that disparities, social determinants, sustainable development, and access to care play an important role in eye and visual health worldwide.

X. Environmental Vision

Competency 21
(KNOWLEDGE)

Understand concepts of environmental health and how it affects the eye and vision.

Objective 21A

Understand the physical, chemical, electromagnetic radiation (visible and invisible), infectious, and biological ocular hazards that the public may encounter.

Objective 21B

Understand the leading causes of eye injuries and their prevention.

Objective 21C

Understand the national and international standards for eye and vision care including eye safety, lasers, sports protection, occupational hazards, and ophthalmic eyewear, such as the American National Standards Institute, and the American Standards and Testing Materials, etc.

Objective 21D

Understand common environmental eye diseases and their prevention.

Competency 22
(SKILLS)

Be able to provide the appropriate recommendations to protect patients from occupational and environmental hazards.

Objective 22A

Assess the vision and eye performance needs of patients of all ages in a wide variety of environments (such as home, workplace, industry, health care setting, recreation, transportation, outdoors, underwater and outer space).

Objective 22B

Be able to design the best protection treatments for patients of all ages in a wide variety of environments (home, workplace, industry, health care setting, recreation, transportation, outdoors, underwater and outer space).

Competency 23
(ATTITUDES)

Recognize the importance of providing the best protection for the public from environmental hazards encountered in various situations.

Objective 23A

Promote eye protection from environmental hazards for all patients.