



Complete Summary

GUIDELINE TITLE

Care of the patient with hyperopia.

BIBLIOGRAPHIC SOURCE(S)

American Optometric Association. Care of the patient with hyperopia. St. Louis (MO): American Optometric Association; 1997. 56 p. (Optometric clinical practice guideline; no. 16). [124 references]

GUIDELINE STATUS

This is the current release of the guideline.

According to the guideline developer, this guideline has been reviewed on a biannual basis and is considered to be current. This review process involves updated literature searches of electronic databases and expert panel review of new evidence that has emerged since the original publication date.

COMPLETE SUMMARY CONTENT

SCOPE
METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY
DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

Hyperopia

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management

CLINICAL SPECIALTY

Optometry

INTENDED USERS

Health Plans
Optometrists

GUIDELINE OBJECTIVE(S)

- To accurately diagnose hyperopia
- To document the patient care treatment options for patients with hyperopia
- To identify patients at risk for the adverse effects of hyperopia
- To minimize the adverse effects of hyperopia
- To preserve the gains obtained through the treatment
- To inform and educate parents, patients, and other health care practitioners about the visual complications of hyperopia and the availability of treatment

TARGET POPULATION

Patients of all ages with hyperopia

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Patient history
2. Ocular examination
 - Visual acuity
 - Refraction
 - Ocular motility, binocular vision and accommodation
 - Ocular health assessment and systemic health screening

Treatment

1. Optical correction
2. Vision therapy
3. Medical (pharmaceutical)
4. Modification of the patient's habits and environment
5. Refractive surgery

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline developer performed literature searches using the National Library of Medicine's Medline database and the VisionNet database.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus (Committee)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The Reference Guide for Clinicians was reviewed by the American Optometric Association (AOA) Clinical Guidelines Coordinating Committee and approved by the AOA Board of Trustees.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnosis of Hyperopia:

The evaluation of a patient with hyperopia may include, but is not limited to, the following areas:

- A. Patient history
 - 1. Nature of presenting problem, including chief complaint
 - 2. Ocular and general health history
 - 3. Developmental and family history
 - 4. Use of medications and allergies
- B. Visual acuity
 - 1. Distance visual acuity testing
 - 2. Near visual acuity testing
- C. Refraction
 - 1. Retinoscopy
 - a. Static retinoscopy
 - b. Near-point retinoscopy
 - c. Cycloplegic retinoscopy
 - 2. Subjective refraction
 - 3. Autorefractometry
- D. Ocular motility, binocular vision, and accommodation
 - 1. Versions
 - 2. Monocular and alternating cover test
 - 3. Near point of convergence
 - 4. Accommodative amplitude and facility
 - 5. Stereopsis testing
- E. Ocular health assessment and systemic health screening
 - 1. Assessment of pupillary responses
 - 2. Visual field screening
 - 3. Color vision testing
 - 4. Measurement of intraocular pressure
 - 5. Evaluation of anterior and posterior segments of eye and adnexa

Management of Hyperopia:

The specific elements of treatment should be tailored to individual patient needs. Among the factors to consider when planning treatment and management strategies are the magnitude of the hyperopia, the presence of astigmatism or anisometropia, the patient's age, the status of accommodation and convergence, the demands placed on the visual system, and the patient's symptoms.

Among several available treatments for hyperopia-related symptoms, optical correction of the refractive error with spectacles and contact lenses is the most

commonly used modality. It is the optometrist's responsibility to advise and counsel the patient regarding the options and to guide the patient's selection of the appropriate spectacles or contact lenses. Vision therapy and modification of the patient's habits and environment can be important in achieving definitive long-term remediation of symptoms. The use of pharmaceutical agents or refractive surgery may also be used in treating some patients.

The frequency and composition of evaluation and management visits of patients with hyperopia are summarized in the table, below.

Frequency and Composition of Evaluation and Management Visits of Hyperopia

Type of Patient	Number of Evaluation Visits	Treatment Options	Frequency of Follow-up Visits	Composition of Follow-Up Evaluations				Management Plan
				VA	REF	A/V	OH	
Young child with mild to moderate hyperopia and strabismus or amblyopia	1 to 2	<ul style="list-style-type: none"> Optical correction Modify habits and environment 	3 to 12 mos	Each visit	Each visit	Each visit	p.r.n.	No treatment or provide refractive correction; monitor vision
Young child with high hyperopia and no strabismus or amblyopia	1 to 2	<ul style="list-style-type: none"> Optical correction Vision therapy Modify habits and environment 	2 to 6 mos	Each visit	Each visit	Each visit	p.r.n.	Provide refractive correction; treat any accommodative or binocular vision problems; monitor vision
Young child with mild to high hyperopia and strabismus or amblyopia	2 to 3	<ul style="list-style-type: none"> Optical correction Strabismus and amblyopia therapy Modify habits and environment Pharmaceuticals 	2 wk to 3 mos	Each visit	Each visit	Each visit	p.r.n.	Provide refractive correction; treat any amblyopia or strabismus; monitor vision
Older child with mild to moderate	1 to 2	<ul style="list-style-type: none"> Optical correction Vision therapy Modify habits and 	6 to 12 mos	Each visit	Each visit	Each visit	p.r.n.	No treatment or provide refractive correction;

hyperopia		environment						monitor vision
Older child with high hyperopia	1 to 2	<ul style="list-style-type: none"> Optical correction Vision therapy Modify habits and environment 	6 to 12 mos	Each visit	Each visit	Each visit	p.r.n.	Provide refractive correction; treat any accommodative or binocular vision problems; monitor vision
Pre-presbyopic adult	1	<ul style="list-style-type: none"> Optical correction Vision therapy Modify habits and environment 	1 to 2 yr	Each visit	Each visit	Each visit	Each visit	No treatment or provide refractive correction; treat any accommodative or binocular vision problems; monitor vision
Presbyopic adult	1	<ul style="list-style-type: none"> Optical correction Vision therapy Modify habits and environment 	1 to 2 yr	Each visit	Each visit	Each visit	Each visit	Provide refractive correction; treat any accommodative or binocular vision problems; monitor vision

VA = visual acuity testing
REF = refraction
A/V = accommodative/vergence testing
OH = ocular health assessment
p.r.n. = as needed

CLINICAL ALGORITHM(S)

An algorithm is provided for Optometric Management of the Patient with Hyperopia.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

The early diagnosis and treatment of significant hyperopia and its consequences can prevent a significant amount of visual disability in the general population. Because hyperopia is usually not readily apparent, preventive examination of all young children is essential. Periodic eye and vision examinations are needed thereafter to help ensure the provision of treatment appropriate to the changing visual needs of the hyperopic patient.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

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Clinicians should not rely on this Clinical Guideline alone for patient care and management. Please refer to the references and other sources listed in the original guideline for a more detailed analysis and discussion of research and patient care information.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Clinical Algorithm
Patient Resources

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1997 (reviewed 2006)

GUIDELINE DEVELOPER(S)

American Optometric Association - Professional Association

SOURCE(S) OF FUNDING

Funding was provided by the Vision Service Plan (Rancho Cordova, California) and its subsidiary Altair Eyewear (Rancho Cordova, California)

GUIDELINE COMMITTEE

American Optometric Association Consensus Panel on Care of the Patient with Hyperopia

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Members: Bruce D. Moore, O.D. (Principal Author); Arol R. Augsburger, O.D., M.S.; Elise B. Ciner, O.D.; David A. Cockrell, O.D.; Karen D. Fern, O.D.

AOA Clinical Guidelines Coordinating Committee Members: John F. Amos, O.D., M.S. (Chair); Kerry L. Beebe, O.D.; Jerry Cavallerano, O.D., Ph.D.; John Lahr, O.D.; Richard L. Wallingford, Jr., O.D.

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the [American Optometric Association Web site](#).

Print copies: Available from the American Optometric Association, 243 N. Lindbergh Blvd., St. Louis, MO 63141-7881

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

The following is available:

- Answers to your questions about farsightedness. St. Louis, MO: American Optometric Association. (Patient information pamphlet).

Print copies: Available from the American Optometric Association, 243 N. Lindbergh Blvd., St. Louis, MO 63141-7881; Web site, www.aoanet.org.

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NGC STATUS

This summary was completed by ECRI on December 1, 1999. The information was verified by the guideline developer on January 31, 2000.

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