



Complete Summary

GUIDELINE TITLE

Comprehensive adult medical eye evaluation.

BIBLIOGRAPHIC SOURCE(S)

American Academy of Ophthalmology (AAO). Comprehensive adult medical eye evaluation. San Francisco (CA): American Academy of Ophthalmology (AAO); 2000 Sep. 18 p. [78 references]

COMPLETE SUMMARY CONTENT

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- METHODOLOGY - including Rating Scheme and Cost Analysis
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SCOPE

DISEASE/CONDITION(S)

Ocular abnormalities and disease including blindness, cataract, glaucoma, errors of refraction, diabetic retinopathy, macular degeneration, and peripheral retinal breaks and degeneration.

GUIDELINE CATEGORY

- Diagnosis
- Evaluation
- Prevention
- Screening

CLINICAL SPECIALTY

Ophthalmology

INTENDED USERS

Health Plans
Physicians

GUIDELINE OBJECTIVE(S)

To detect and diagnose vision-, health- or life-threatening disease, and to initiate a plan of treatment (as necessary) by addressing the following goals:

- Detect and diagnose ocular abnormalities and diseases.
- Identify risk factors for ocular disease.
- Identify risk factors for systemic disease based on ocular findings.
- Establish the presence or absence of ocular signs or symptoms of systemic disease.
- Determine the refractive and health status of the eye, visual system and related structures.
- Discuss the results and implications of the examination with the patient.
- Initiate an appropriate management plan (e.g., determine frequency of future visits, further diagnostic tests, referral, or treatment as indicated).

TARGET POPULATION

Asymptomatic adults or adults with symptoms seen for an eye evaluation for the first time or after an extended period of time

INTERVENTIONS AND PRACTICES CONSIDERED

Comprehensive ophthalmologic evaluation, including history and examination

MAJOR OUTCOMES CONSIDERED

- Visual function
- Social and psychological dimensions of quality of life, mobility and physical function

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

In the process of revising the original document, a detailed literature search of MEDLINE for articles in the English language was conducted on the subject of comprehensive adult medical eye evaluation for the years 1996 to May 2000.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Ratings of strength of evidence:

I - Level I includes evidence obtained from at least one properly conducted, well-designed randomized controlled trial. It could include meta-analysis of randomized controlled trials.

II - Level II includes evidence obtained from the following:

- Well-designed controlled trials without randomization
- Well-designed cohort or case-control analytic studies, preferably from more than one center
- Multiple-time series with or without the intervention

III - Level III includes evidence obtained from one of the following:

- Descriptive studies
- Case reports
- Reports of expert committees/organization
- Expert opinion (e.g., Preferred Practice Pattern Panel consensus)

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The results of a literature search on the subject of comprehensive adult medical eye examination were reviewed by the Preferred Practice Patterns Committee and used to prepare the recommendations, which they rated in two ways. The committee first rated each recommendation according to its importance to the care process. This "importance to the care process" rating represents care that the committee thought would improve the quality of the patient's care in a meaningful way. The committee also rated each recommendation on the strength of the evidence in the available literature to support the recommendation made.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Ratings of importance to care process

Level A, most important

Level B, moderately important

Level C, relevant, but not critical

COST ANALYSIS

Regular examination and follow-up of all diabetic patients, with laser surgery for those who require it, have been shown to be extremely cost-effective. Such monitoring and treatment are less expensive than disability payments for those who would otherwise become blind, saving an estimated \$167 million annually in the United States.

METHOD OF GUIDELINE VALIDATION

External Peer Review

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Guideline drafts are sent for review to national medical organizations such as the American Medical Association and the American Academy of Family Practice, to ophthalmic organizations, and to other groups depending on the subject. Comments made by these reviewers are considered by the guideline authors.

These guidelines were reviewed by Council and approved by the Board of Trustees of the American Academy of Ophthalmology (February, 2000). All Preferred Practice Patterns are reviewed by their parent panel annually or earlier if developments warrant.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Ratings of importance (A-C), and ratings of strength of evidence (I-III), are defined at the end of the Major Recommendations field.

History

- Demographic data: includes name, date of birth, gender and race [A:III]
- The identity of the patient's other pertinent health care providers [A:III]
- Chief complaint and history of present illness [A:III]
- Present status of visual function: includes a review of the patient's self-assessment of visual status, visual needs, any recent or current ocular symptoms, and use of eyeglasses or contact lenses (type, wearing habits) [A:III]

- Ocular history: prior eye disease, injuries, surgery, or other treatments and medications [A: III]
- Systemic history: pertinent medical conditions and previous surgery, medication use [A: III]
- Review of systems [B: III]
- Family history: pertinent familial ocular and systemic disease [A: III]
- Allergies or adverse reactions to medications [A: III]
- Medications: ophthalmic and systemic medications currently used, including nutritional supplements [A: III]
- Social history: occupation (e.g., occupation, smoking history, alcohol use) [B: III]

Examination

- Visual acuity with current correction (the power of the present correction recorded) at distance and at near [A: III]
- Measurement of best corrected visual acuity (with refraction when indicated) [A: III]
- External examination: lids, lashes and lacrimal apparatus, orbit and pertinent facial features [A: III]
- Ocular alignment and motility [A: III]
- Pupillary function [A: III]
- Visual fields by confrontation [A: III]
- Slit-lamp examination: eyelid margins and lashes, tear film, palpebral and bulbar conjunctiva, sclera, cornea, anterior chamber and assessment of peripheral anterior chamber depth, iris, lens and anterior vitreous [A: III]
- Intraocular pressure measurement [A: III]
- Examination of the fundus: vitreous, retina (including posterior pole and periphery), vasculature and optic nerve [A: III]
- Assessment of relevant aspects of patient's mental and physical status [B: III]

Evaluation of structures situated posterior to the iris requires a dilated pupil. [A: III] Optimal examination of the peripheral retina requires the use of the indirect ophthalmoscope or slit-lamp fundus biomicroscopy. [A: III] Optimal examination of the macula and optic nerve requires the use of the slit lamp and accessory diagnostic lenses. [A: III]

Management recommendations and intervals for follow-up comprehensive medical eye examinations are described in the original guideline document.

Ratings of importance:

Level A, defined as most important

Level B, defined as moderately important

Level C, defined as relevant, but not critical

Ratings of strength of evidence:

I - Level I includes evidence obtained from at least one properly conducted, well-designed randomized controlled trial. It could include meta-analysis of randomized controlled trials.

II - Level II includes evidence obtained from the following:

- Well-designed controlled trials without randomization
- Well-designed cohort or case-control analytic studies, preferably from more than one center
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CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Early detection and treatment of ocular disease that is prevalent in the adult population resulting in preservation of visual function.
- Preserving eyesight through effective eye care and treatment of ocular disease enhances quality of life and improves physical functioning.

Subgroups Most Likely to Benefit:

- Adult patients with diabetes mellitus: individuals with diabetes are 25 times more likely than the general population to become blind
- Individuals of African descent: the prevalence of primary open-angle glaucoma is four to five times greater among African Americans than among individuals of other races
- Individuals with family history of glaucoma
- Individuals age 65 or older: approximately 10% of patients 66 to 74 years old will have findings of age-related macular degeneration, and the prevalence increases to approximately 30% in patients 75 to 85 years of age.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

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Preferred Practice Patterns provide guidance for the pattern of practice, not for the care of a particular individual. While they should generally meet the needs of most patients, they cannot possibly best meet the needs of all patients. Depending on a host of medical and social variables, it is anticipated that it will be necessary to approach some patients needs in different ways. The ultimate judgment regarding the propriety of the care of a particular patient must be made by the physician in light of all the circumstances presented by the patient. Adherence to these Preferred Practice Patterns will certainly not ensure a successful outcome in every situation. These guidelines should not be deemed inclusive of all proper methods of care or exclusive of other methods of care reasonably directed at obtaining the best results.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness
Staying Healthy

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

2000 Sep

GUIDELINE DEVELOPER(S)

American Academy of Ophthalmology - Medical Specialty Society

SOURCE(S) OF FUNDING

American Academy of Ophthalmology (AAO)

GUIDELINE COMMITTEE

Preferred Practice Patterns Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

This document is valid for 5 years from the date released unless superseded by a revision. All Preferred Practice Patterns are reviewed by their parent panel annually or earlier if developments warrant.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [American Academy of Ophthalmology \(AAO\) Web site](#).

Print copies: Available from American Academy of Ophthalmology, P.O. Box 7424, San Francisco, CA 94120-7424; telephone, (415) 561-8540.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on June 30, 1998. The information was verified by the guideline developer on December 1, 1998. The summary was updated by ECRI on January 29, 2001. The updated information was verified by the guideline developer on March 12, 2001.

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