Complete Summary

GUIDELINE TITLE

Vision rehabilitation for adults.

BIBLIOGRAPHIC SOURCE(S)

American Academy of Ophthalmology (AAO). Vision rehabilitation for adults. San Francisco (CA): American Academy of Ophthalmology (AAO); 2001 Feb. 32 p. [42 references]

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

Moderate to profound visual impairment in one or both eyes

GUIDELINE CATEGORY

Diagnosis
Evaluation
Rehabilitation

CLINICAL SPECIALTY

Ophthalmology
Physical Medicine and Rehabilitation

INTENDED USERS

Allied Health Personnel
Health Plans

Occupational Therapists
Physicians

GUIDELINE OBJECTIVE(S)

To reduce the functional impact of the vision loss on patients' lives so that they can maintain independence, productive activity and life satisfaction by addressing the following goals:

- Identify patients with low vision and quantify their visual loss.
- Assess functional impairments due to low vision.
- Evaluate the potential to use residual vision.
- Maximize the usefulness of residual vision.
- Maximize patients' independent completion of activities of daily living.
- Address the emotional and psychological adjustment to vision loss.
- Provide information to patients about community and national resources.
- Inform patients about the parameters of training and its potential benefit.
- Educate patients about vision loss and rehabilitation options.
- Engage patients in their rehabilitation.

TARGET POPULATION

Adults with low vision

INTERVENTIONS AND PRACTICES CONSIDERED

1. Initial evaluation of functional disability through patient history, and visual performance using a low-vision evaluation.
2. Rehabilitation using the following: revising spectacle prescription, if needed; lighting; contrast enhancement; glare control; magnification; scotoma identification and training in eccentric fixation; nonoptical adaptive devices; training in adaptations for activities of daily living, community tasks, and the living environment; counseling and supports groups; access to local and national resources.

MAJOR OUTCOMES CONSIDERED

- Residual visual function
- Impact of rehabilitation on patient's adaptation for activities of daily living

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

In the process of updating the 1994 guideline, a detailed literature search of MEDLINE for articles in the English language was conducted on the subject of vision rehabilitation for the years 1994 to 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

The committee rated each recommendation on the strength of evidence in the available literature to support the recommendation made. The "ratings of strength of evidence" are divided into three levels.

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

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

Level III includes evidence obtained from one of the following:

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

METHODS USED TO ANALYZE THE EVIDENCE

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 vision rehabilitation were reviewed by the Vision Rehabiliation 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

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

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Each recommendation is rated using a letter and a number to indicate importance to care process (A-C) and strength of evidence (I-III), respectively. The rating scheme is given following the recommendations.

Diagnosis

The rehabilitation professional and staff are facilitators who can provide encouragement and support in addition to training, but the patient must be an active participant and actually do the work.[A:III]

Therapy must be individualized to meet each patient's particular goals, limitations, and resources.[A:III]

Initial Evaluation

The initial evaluation of patients with low vision should include a thorough history of functional disability and an evaluation of visual performance.[A:III]

History

The presence of a family member, friend, or caregiver during the interview process is recommended to confirm information and to serve as coach or helper.[A:III]

To assess functional disabilities, the history should include general questions directed in four specific areas.[A:III]

- Problem areas and their significance to the patient
- Home-based near vision tasks
- Distance vision skills
- Mobility and community skills

Evaluation of Visual Performance

The low-vision evaluation includes the following components:

- Measuring near and distance visual acuity[A:III]
- Measuring visual field and central scotomas[A:III]
- Testing contrast sensitivity[A:III]

Treatment

Rehabilitation therapy follows the initial evaluation, which determines the specific program for an individual with low vision. Components of a rehabilitation program that may be used are as follows:

- Revise spectacle prescription if necessary
- Lighting
- Contrast enhancement
- Glare control
- Magnification
- Scotoma identification and training in eccentric fixation
- Nonoptical adaptive devices
- Training in adaptations for activities of daily living, community tasks, and the living environment
- Counseling and support groups
- Access to local and national resources

A multidisciplinary team approach is recommended because it is most effective in addressing the various functional and psychological problems caused by vision loss.[A:III]

It is important to emphasize that rehabilitation is an ongoing process and involves continuing work and adaptations by the patient.[A:III]

The rehabilitation team must provide the continued training and re-enforcement that is necessary to accomplish a sustained benefit.[A:III]

For additional discussion of treatment, please see main body of the original guideline text.

Provider and Setting

There are numerous providers and settings for rehabilitation services for adults with low vision. Early functional problems can often be managed by the general ophthalmologist. More complex problems require the assistance of a trained multidisciplinary team.

Counseling and Referral

Ophthalmologists should inform internists, family practice physicians, and geriatricians that their patients' vision loss is not reversible and that the patient may therefore be at high risk for depression.[A:III]

All ophthalmologists are responsible for informing patients about vision rehabilitation resources and directing them to appropriate facilities and services.[A:III]

Definitions of rating schemes:

Importance to care process:

Level A, defined as most important
Level B, defined as moderately important
Level C, defined as relevant but not critical

Strength of evidence:

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

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

Level III includes evidence obtained from one of the following:

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- Case reports
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- Expert opinion (e.g., committee consensus)

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

When reviewing the literature for vision rehabilitation, the committee did not identify any Level I or Level II evidence. All recommendations were based on Level III evidence (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Maximization of functional independence
- Maintenance of quality of life
- Help with adapting to the psychosocial aspects of vision loss

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

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

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

1994 Feb (updated 2001 Feb)

GUIDELINE DEVELOPER(S)

American Academy of Ophthalmology - Medical Specialty Society

SOURCE(S) OF FUNDING

American Academy of Ophthalmology

GUIDELINE COMMITTEE

Vision Rehabilitation Committee; Preferred Practice Patterns Committee

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline. It is an update of a previously issued version titled "Rehabilitation: the Management of Adult Patients with Low Vision" (San Francisco [CA]: American Academy of Ophthalmology; 1994 Feb 26. 20 p.).

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 December 1, 1998. The information was verified by the guideline developer on January 11, 1999. The summary was updated by ECRI on September 3, 2001. The updated information was verified by the guideline developer as of October 8, 2001.

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