Recommended Primary Eye-Care Examination

A POLICY STATEMENT BY THE AUSTRALIAN OPTOMETRICAL ASSOCIATION

Based on a Report by John Nathan

This statement is published by National Executive Council of the Australian Optometrical Association as a guide to the procedure appropriate to a consultation and examination by an optometrist providing primary eye care. The purpose of the statement is to establish guidelines for peer and consumer review, and to remind practitioners of the responsibilities they hold to their patients.

It is emphasised that the clinical protocols described in the statement should not be regarded as mandatory for any particular patient, or for every patient, and those protocols must be interpreted in the context of the total statement.

It is also emphasised that this statement does not attempt to standardise clinical attitudes or methods, or to be in any way restrictive to change or to the exercise of clinical judgement.

Basic Principles

Examination of the role, responsibilities and consequent clinical activities of the optometrist requires that a number of professional principles be stated.

A. Concept of Responsibility and Competence

Optometrists, by accepting the role of a professional advisor and accepting a fee for that service, are accountable to their patients (the consumers) and sometimes to government, which often has a third party role in the payment of fees. Optometrists, as members of a profession and as licencees under certain statutes, are also accountable to their peers.

It is incumbent upon practitioners to ensure that the welfare of the patient is their foremost concern, and this requires that the practitioner must maintain:

(i) a satisfactory level of competency, including awareness of current knowledge, techniques and instrumentation,

(ii) a safe regimen of hygiene in the consulting room and laboratory,

(iii) full and accurate records,

(iv) good relations with professional colleagues and with related professional persons, for purposes of patient referral, and

(v) responsibility for any ophthalmic prescriptions written and, whenever possible, control over the quality of their dispensing.

B. Concept of Change

The frontiers of knowledge are continuously shifting forward and, in response, the expectations of optometrists and their patients are also subject to continuous change. Many clinical procedures which are today performed routinely or regularly were not considered part of the responsibility or scope of interest of optometrists only several years ago, and many other non-conventional procedures did not exist longer ago. Procedures as yet undiscovered, or procedures presently considered experimental or exotic may come to be regarded as indispensable in years hence. Scope of practice, and frontiers of knowledge and responsibility are being changed by research and technological development. In addition, societal needs are influencing evolving professional identity and role by changing community demands, and increasing government involvement in the organisation and delivery of health care has added extra pressure for professional change.

The concept of change applies also to the statutory control of the practice of optometry. The eight State and Territory legislations which govern the practice of optometry in Australia are all different, and all are amended from time to time. In particular, the laws governing the use of facilitative drugs by optometrists vary widely, as they do between Australia and other parts of the world where optometry exists as an autonomous, clinical discipline. This particular aspect of professional practice is undergoing obvious change, and the recommendations within this statement relating to the use of facilitative drugs must be interpreted in the context of existing and potential statutes. Nonetheless, any recommendations relating to use of facilitative drugs do define the possible extent of professional responsibility.

The importance of recognising change is the understanding that recommended clinical standards must, if they are to remain relevant, be reviewed and updated at regular intervals.

C. Concept of Clinical Judgement

A practitioner commences a consultation by taking a

history which should normally question for the presenting complaint, past ocular history, general health status, family ocular history and a definition of the patient's vision requirements. As a result of the information solicited, the practitioner will determine the direction of examination and the choice of examination procedures. The findings from any of these objective and subjective tests will in turn influence the choice of subsequent tests. After an appraisal of all of the information acquired during this examination the optometrist must decide upon a certain course of action in relation to the patient.

The ability to assemble the relevant information about a patient and the quality of the conclusions reached depends not only upon the technical competence of the optometrist but also upon a less easily definable characteristic known as clinical judgement. Good clinical judgement requires competence, intuition, understanding, clinical experience and aptitude. Within the limitations of reasonable competency and responsibility the exercise of clinical judgement is the indisputable right of an optometrist, as it is of any other professional person.

D. Concept of Expediency

A practitioner will normally set aside a certain interval of time to conduct a consultation and examination. This interval will and does vary between practitioners, normally from between twenty to sixty minutes. The factors which influence the choice of scheduled duration of a primary eye-care examination include:

(i) the experience of the practitioner,
(ii) the number of procedures routinely employed,
(iii) the degree of automation or non-professional assistance employed, and the ergonomic efficiency of the consulting room layout,
(iv) the emphasis placed on special areas of clinical practice e.g. contact lenses, low vision etc.,
(v) the pressure of patient demand for appointments.

The time given to each patient, the number of procedures employed and the sophistication of instrumentation are only a partial index of the quality of the patient care given in the consultation and examination. They indicate the degree of conscientiousness and perhaps training, but are not necessarily wholly reflective of clinical expertise.

What can be achieved with one patient in one standard consultation and examination time period will vary widely. For instance history taking, which is an invariable component of any first visit attendance, may consume just a few minutes or the entire appointment duration. Similar patient to patient differences occur in procedures associated with refraction, external and internal eye examination, assessment of binocular vision integrity and other identifiable segments of the examination protocol. Usually, what is not completed or accomplished at a first attendance is carried over to a second or subsequent visit by the patient.

However, there are recognised circumstances which may necessitate the practitioner spending less time in attendance upon a patient than is customary in his practice. In such circumstances, the minimum set of procedures may not be possible or even sensible, nor may the arrangement of a return appointment, the normal procedure when all has not been achieved at the first attendance, be practical or sensible. Urgency of presentation, severity of symptoms or frank signs of a disorder requiring other forms of professional care, are examples of the necessity for expediency as a recognised clinical option.

Expediency is also appropriate for the class of patients whose attendances have the purpose of regulation of a known disorder, or who attend to consult on a specific vision problem. Those clinical procedures which have basically a screening function, and which form part of the first attendance examination protocol for that purpose, may not require repeating at recurrent attendances, or at special purpose consultations.

Thus, the clinical protocol of procedures which is recommended as a routine for a first attendance consultation and examination is not always expedient, and this concept of expediency must always be applied when any particular patient care episode is evaluated.

Recommended Routine Clinical Protocol

The recommended standard protocol for a primary eye-care consultation and examination is tabulated below. The table lists the essential elements of each procedure, and the essential equipment required to accomplish the procedure. The list order of the various procedures and their components is arbitrary. The minimum equipment is described because it is meaningless to list procedures without indicating the minimum method of their execution. Only basic equipment is described, and no attempt is made to specify ideal instrumentation in respect of either range or manufacturer.

Disinfection procedures are not listed but they do apply. Optometrists have the same obligations and responsibilities to maintain asepsis as do other practitioners who have physical contact with their patients. It is assumed that optometrists have immediate access to a hand basin, and that every care is taken not to transmit infection through hands or instruments, and that appropriate precautions are taken to prevent contamination of, and by, drops, staining agents and trial contact lenses.

Clinical recording procedures are also not listed but, again, optometrists have a responsibility to maintain adequate clinical records. Proper records enable clinical continuity, and represent the only means by which the practitioner or another person can audit the standard of patient care given.

*From the Australian Journal of Optometry, Nov./Dec., 1979.*
## RECOMMENDED PRIMARY EYE-CARE EXAMINATION

<table>
<thead>
<tr>
<th>Standard Procedures</th>
<th>Components</th>
<th>Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Taking</td>
<td>Presenting complaint, personal details, past ocular history, family ocular history, general health, definition of requirements on vision.</td>
<td>Vertometer (lensometer)</td>
</tr>
<tr>
<td>Measurement of vision</td>
<td>Unaided and aided vision, Visual fields, Colour vision ¹</td>
<td>Distance and near acuity charts, Tangent screen or field screener ², White and red targets, Pseudoisochromatic plates, Confrontation targets.</td>
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<tr>
<td>Refraction</td>
<td>Objective, Subjective, distance and near Visual acuity</td>
<td>Retinoscope, Placido disc or keratometer, Trial lens case and frame, Distance and near acuity charts, Range of distance and near low vision aids.</td>
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<tr>
<td>Oculo-motor examination</td>
<td>Excursions, Cover test, distance and near Convergence, Accommodation, Pupil reactions, Binocular vision assessment</td>
<td>Fixation light, Near point chart, Fusion/stereopsis chart, Fixation disparity device, Trial prisms</td>
</tr>
<tr>
<td>External and anterior eye examination</td>
<td>General inspection, Examination of lids and adnexae, conjunctiva and sclera, tears and tear drainage, cornea, anterior chamber assessment, iris, lens.</td>
<td>Overhead adjustable light, Magnifying loupe, Focal illuminator, Slit biomicroscope ³, Staining agents, U. V. light source</td>
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<tr>
<td>Internal eye examination (posterior)</td>
<td>Vitreous, Ocular fundus</td>
<td>Direct ophthalmoscope, Indirect ophthalmoscope ⁴, Mydriatic ⁵, Indentation or applanation tonometer, Topical anaesthetic</td>
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<tr>
<td>Intraocular pressure measurement ⁶</td>
<td>Instrument tonometry</td>
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<tr>
<td>Case assessment</td>
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<tr>
<td>Discussion</td>
<td>Explanation – diagnosis, Counselling – prognosis, Treatment plan</td>
<td></td>
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<tr>
<td>Disposal</td>
<td>Further consultation, Prescription writing, Referral</td>
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¹ Colour vision

² Tangent screen or field screener

³ Slit biomicroscope

⁴ Indirect ophthalmoscope

⁵ Mydriatic

⁶ Indentation or applanation tonometer

Explanatory Notes:
1. Colour vision: Although screening for colour vision defects may be regarded as a standard test of a basic vision function, it may not be necessary to carry this out in adult patients whose vocations do not call upon colour vision.

2. Tangent screen or field screeners: Although measurement of visual fields is a basic test, it is unrealistic to consider that full assessment of the complete visual fields should be a routine procedure. The presence of most significant field defects can be demonstrated if the central 30° of field is explored with a sufficiently sensitive stimulus. If a tangent screen examination is not carried out then a reliable sensitive tachistoscopic screening instrument should be used. In some cases careful confrontation may be regarded as sufficient.

3. Slit biomicroscope: This instrument is essential for viewing detailed and anterior eye and is essential equipment for any practitioner working with contact lenses. A number of optometrists who received their basic training prior to the wide acceptance of slit biomicroscopy in general clinical practice may still continue to work without this instrument. Such practitioners are placing heavy reliance on symptoms and gross appearances in assessing an anterior eye condition.

4. Indirect ophthalmoscope: These instruments give a wider angle of view than direct ophthalmoscopes and permit a better view of the fundus through unclear media. Their use by optometrists has been hampered by legal or self-imposed restrictions on the use of mydriatics. There are now available indirect monocular instruments that, without the use of mydriatics, give added information about the ocular fundus in certain conditions. It should be expected that such instruments will be regarded as essential equipment in the near future.

5. Mydriatics: Mydriatics are essential for the viewing of the peripheral fundus, and in some cases, their use considerably aids the inspection of the central and mid peripheral areas; the crystalline lens and vitreous can also be better examined through a dilated pupil. In some States the use of mydriatics is prohibited, in one State a special licensing system has been introduced, and, in other States, the relevant sections of the Optometry Acts are open to interpretation.

In those States in which use of mydriatics is legally permissible, and the optometrist is confident of his training in this area of work, mydriasis should be employed when clinically indicated.

6. Intra-ocular pressure: Intra-ocular pressure measurement is a guide to the diagnosis of glaucoma and may provide the first indication of its presence or possible development. For some years it has been measured as a matter of routine in all or most patients over the age of forty. This is obviously an arbitrary age limit and glaucoma is not restricted to patients in the upper age group. Routine examination of younger patients yields few positive diagnoses in the absence of other indications such as a suspect anterior angle or optic nerve head, family history or symptoms. Tonometry should be regarded as a routine measurement in patients over forty years of age, and should be used in younger patients as clinically indicated.

Contact Lens Consultation
The prescription and fitting of contact lenses involves additional responsibilities and clinical procedures. Generally, the additional procedures consume the equivalent of one standard consultation time, either immediately following the initial attendance or at a further visit.

Although a patient may present for the express purpose of being fitted with contact lenses, the attending optometrist continues to have responsibility for all other aspects of vision and eye-care. Thus, an optometrist must remain vigilant for signs of disorder unrelated to contact lens wear, and must be ready to consider general causes for symptoms or signs apparently attributable to contact lens wear.

Because most patients for whom contact lenses are the indicated or desired optical therapy are either myopic or aphakic, and because these two categories of patient are statistically more prone to ocular complications, more rather than less care must be devoted to history taking and to examination of the internal and external eye.

Additional Clinical Protocol for Contact Lens Practice

Standard Procedure
Specific history in relation to motivation, allergies and lifestyle
Detailed assessment of cornea, conjunctiva and tears
Assessment of lens fitting and patient suitability

Equipment
Slit biomicroscope
Keratometer
Schirmer strips
Adequate range of trial contact lenses

This statement is based on a commissioned report in September 1978 to National Executive Council of the Australian Optometrical Association by John Nathan BSc, MA(MSc) LoSc, Senior Academic Associate, Department of Optometry, University of Melbourne, and immediate Past-President of the Victorian College of Optometry.