September 2017

### **IAPB Position Statement**

# IAPB Position Statement on Presbyopia



The purpose of IAPB position statement documents is to advise IAPB member organisations and other stakeholders of positions adopted by IAPB, in consideration of advice from leading experts, in issues affecting universal eye health.

#### By IAPB Refractive Error Work Group

#### **Position statement:**

Given the critical need for good near vision in performing daily tasks<sup>4</sup> and the scale of presbyopia as a form of visual impairment, IAPB recommends that presbyopia be prioritized and addressed. The principles that IAPB endorses are related to the method of correction, human resources, and health system fit, utilizing best practice or minimum standards depending on the specific context.

Uncorrected presbyopia is the most common cause of visual impairment. There are approximately 1.04 billion people with presbyopia globally, of which 517 million have visual impairment due to a lack of appropriate near vision correction<sup>1</sup>. Presbyopia is characterised by the inability to focus on near objects and is due to age related changes in the lens of the eye. Uncorrected presbyopia has a profound impact on individuals' ability to perform near vision tasks. The cost of the burden of uncorrected presbyopia due to lost productivity has been estimated to be approximately USD14 billion annually<sup>2</sup>, and has a negative effect on quality of life<sup>3</sup>. Presbyopia can be corrected with plus powered spectacles.

#### **Method of correction**

Best practice for correcting presbyopia is with custom-made spectacles. Custom-made spectacles take into account the individual's exact prescription, including distance refractive error, astigmatism, their close work needs and the pupillary distance (distance between the two eyes). Custom-made spectacles require an edging and fitting facility, and are more

expensive than readymade spectacles.

While custom made spectacles remain the ideal solution to correct presbyopia, ready made spectacles represent a reasonable alternative. As described in the IAPB position paper on ready made spectacles (2015), ready made spectacles are suitable for powers up to +3.50 diopters, when there is less than 1.0 diopter difference between each eye, or less than or equal to 0.75 diopters of cylinder in one or both eyes. It is recognised that ready made spectacles are generally available for purchase without a prescription. However, it is highly recommended that purchasers be strongly advised at the point of sale/supply, through appropriate promotional material, to have a full eye examination to screen for any other ocular conditions, unless the purchaser has had a recent eye examination and only needs correction for near. All ready-made spectacles should reach quality assurance levels as required by the international standard ISO 16034:2002.

#### **Human resources and health system fit**

Where available, best practice for assessing presbyopia and other ocular conditions requires the individual to undergo a full eye examination by an optometrist, ophthalmologist, or trained Allied Ophthalmic Personnel (AOP) integrated within the existing health care system.

However, given the challenges of inadequate numbers of optometrists and ophthalmologists in low resource settings, IAPB advocates that as a minimum, presbyopia should be assessed by an AOP who is trained to measure visual acuity, assess the appropriate presbyopic correction, and screen and refer any ocular pathology. Therefore, a referral pathway must exist.

## In summary the principles, best practice, and minimum standards as endorsed by IAPB are summarized in table 1.

Table 1.

Principle	Preferred Practice	Minimum Standard
Method of	Custom made spectacles	Ready made spectacles up to
Correction		+3.50 meeting ISO Standards
Human	Optometrist/Ophthalmologist	AOP undertaking a visual
Resources	undertaking full eye	acuity test and screening for
	examination	ocular pathology
Health	Integration within existing	Referral pathway exists
System Fit	health care system	

# **Suggested Minimum Competencies Required for the Supply of Ready Made Readers**

- 1. The ability to understand the distance and close work problems of an individual
- 2. The ability to undertake an assessment of distance visual acuity and near vision
- 3. The ability to interpret visual acuity measurements in accordance with local protocols and to make referrals for refraction where appropriate
- 4. The ability to select the appropriate power in ready made reading spectacles for the visual needs of the individual taking into account their working distance
- 5. The ability to undertake screening for ocular pathology and to make referrals according to local protocols

#### References

- 1. Holden, B.A., et al., *Global vision impairment due to uncorrected presbyopia.* Arch Ophthalmol, 2008. **126**(12): p. 1731-9.
- 2. Frick KD, et al., *The global burden of potential productivity loss from presbyopia.* Unpublished Data, 2014.
- 3. Patel, I., et al., *Impact of Presbyopia on Quality of Life in a Rural African Setting*. Ophthalmology, 2006. **113**(5): p. 728-734.
- 4. Laviers, H.R., et al., *Presbyopic spectacle coverage, willingness to pay for near correction, and the impact of correcting uncorrected presbyopia in adults in Zanzibar, East Africa.* Investigative ophthalmology & visual science, 2010. **51**(2): p. 1234-1241.