The Better Vision, Healthy Ageing Program Toolkit

March 2016

GUIDE TO COMMUNITY-BASED GLASSES PROVISION

The Fred Hollows Foundation
www.hollows.org

Burnet Institute
Medical Research. Practical Action.

This Guide was written and edited by Dr Wendy Holmes (Better Vision, Healthy Ageing Program) with Dr Raheema Ruhulla (Vision 2020 Programme), Kelly Durrant (Burnet Institute) and Rachel Coghlan (The Fred Hollows Foundation).

It draws on the experience of implementing the Better Vision Healthy Ageing Program in Sri Lanka in partnership with PALM Foundation, Berendina Development Services, the Plantation Human Development Trust, Sarvodaya Shramadana Movement, the Ministry of Health national Vision 2020 programme, the Kandy Centre for Sight, and the District Department of Social Services.

Significant contributions were made by members of the Program team in Sri Lanka, especially Dr Saman Senanayake, Dr Kapila Edussuriya, Dr Raheema Ruhulla, and Mr Roshan Shajehan.

We are grateful to the elders of Nuwara Eliya district for their time and participation. We are especially grateful to the leaders of the Elders' Clubs and to the elders who volunteered their time to become Eye Health Promoters.

We are grateful for comments and input from staff across Burnet and The Fred Hollows Foundation.

Copyediting, Design and Interior Layout: Jane Hawtin.

Cover photo: Andy Nilson (The Fred Hollows Foundation)

Inside photos:

Page 1-4: Kelly Durrant (Burnet Institute)

Page 5: Sajid Haleem (Better Vision Healthy Ageing Program)

'Because I got spectacles, an identity card, and since I can talk to my friends, I am very happy.'
(Older man)

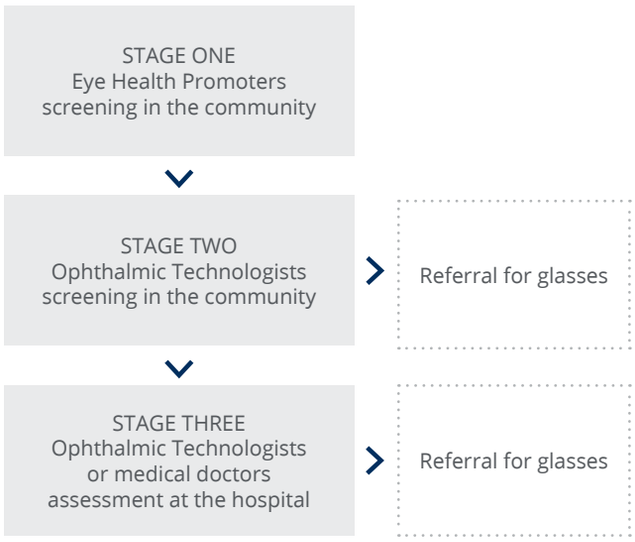
INTRODUCTION

In Sri Lanka there is considerable unmet need for cataract surgery and correction of refractive error with glasses. Sri Lanka, like many other low- and middle-income countries, has a significant shortage of ophthalmologists and optometrists or ophthalmic technologists (OT) to meet the growing need for care.[1]

Currently, most poor elders have to purchase their glasses from commercial opticians. Many cannot afford to do so. Some free glasses are provided through charitable eye care 'camps' and the Vision 2020[2] Programme has developed a list of government-approved suppliers of glasses, which helps to reduce costs.

The Better Vision, Healthy Ageing Program identified the need to bring eye health services closer to communities by screening elders for vision impairment at the community level. Community-level Elders' Clubs provide opportunities to reach elders with screening and referral for cataract surgery, glasses, or other eye care and eye health promotion messages. Elders' Clubs are a convenient and cost-effective setting to screen groups of elders in their community, rather than elders travelling individually to the eye clinic.

Glasses can also be distributed through the Elders' Clubs to poor elders, though assessment for refractive error needs to be undertaken by appropriate eye health specialists. This document provides details about the process of procuring and distributing glasses. It should be read in conjunction with the *Guide to community-based vision screening: the Eye Health Promoters model.*



1. WHO (2013) Universal Eye Health: A Global Action Plan 2014 - 2019. World Health Organization; Available at: http://www.who.int/blindness/actionplan/en/
2. Vision 2020: The Right to Sight is the global initiative for the elimination of avoidable blindness, a joint program of the World Health Organization (WHO) and the International Agency for the Prevention of Blindness (IAPB). Many countries have implemented national Vision 2020 programs.

STEP 1 - PRESCRIBING AND DOCUMENTING THE NEED FOR GLASSES

If screening is undertaken by Eye Health Promoters, then referral for glasses can occur at stage two or stage three, either by an OT in the field, or after the elder has been referred to and attended an appointment at the local hospital Eye Unit.

GLASSES PRESCRIPTION BY OPHTHALMIC TECHNOLOGISTS IN THE COMMUNITY AT THE STAGE TWO SCREENING

The full process for stage two screening is outlined in the *Guide to community-based vision screening: the Eye Health Promoters model*.

In the Better Vision, Healthy Ageing Program specific forms have been developed for OTs to use when prescribing glasses.

The OT screens the elder and, if necessary, issues a prescription for elders with refractive error who need glasses for distance vision (Appendix 1).

At the end of an OT screening session, the organisers list all the elders and their screening outcomes (Appendix 2).

There is a triple carbon copy book for elders who require glasses, which is used to record their name, age, sex, and prescription.

Elders are given a copy of the prescription to bring when they receive the glasses. They are told that they can expect that this will take two to three weeks.

The other carbon copies are used to request the glasses from the supplier and keep track of the pending orders.

After the OT screening and assessments, the Vision 2020 Program Officer collects the record of outcomes and a copy of the prescriptions.

GLASSES PRESCRIPTION BY HOSPITAL STAFF AT STAGE THREE ASSESSMENT AT THE HOSPITAL

The full process for stage three assessment is outlined in the *Guide to community-based vision screening: the Eye Health Promoters model*.

Program staff keep records of who has been recommended for glasses by taking photocopies of the clinic or exercise books provided to elders at the end of a hospital screening session.

They use this information to list all the elders and their screening outcomes (Appendix 3).

After the hospital screening the record of outcomes and a copy of the prescriptions are given to the Vision 2020 Program Officer.

STEP 2 – COLLATING GLASSES PRESCRIPTIONS AND PLACING ORDERS

A staff member should attach the prescriptions (Appendix 1) with the relevant screening outcome record with the elders' names (Appendix 2 or 3). The screening outcome records have 'order numbers' and the prescriptions are numbered correspondingly. In the Better Vision, Healthy Ageing Program, this was done by the Vision 2020 Programme Officer.

Each week the prescriptions should be attached to the screening outcome records and sent to the relevant glasses supplier by the Vision 2020 Programme Officer. In Sri Lanka, this is done through a central Ministry of Health system, using an approved supplier.

STEP 3 – CHECKING AND FOLLOWING UP ORDERS

Orders must be carefully tracked and followed up to ensure timely delivery.

In the Better Vision, Healthy Ageing Program, the supplier sends the glasses by courier to the Vision 2020 Programme Officer in Nuwara Eliya within three weeks of receiving the order.

The supplier put the prescription with the relevant glasses case in a small transparent bag through which the name can be read. They put all the glasses for one club in a bag together with the screening outcome form/list of order numbers. These bags are then all packed into a box and dispatched.

When the glasses arrive back in Nuwara Eliya, they are received by the Vision 2020 Programme Officer and are checked to ensure that they are correctly labelled.

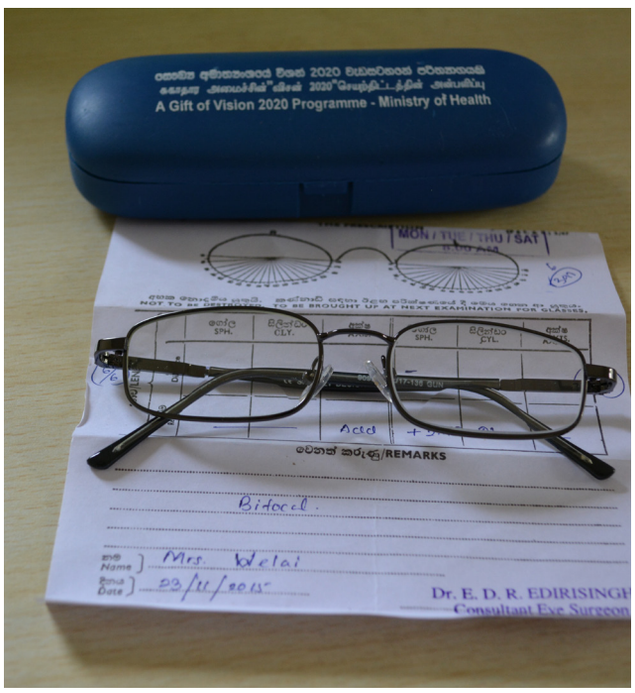
STEP 4 – DISTRIBUTING THE GLASSES

The glasses are sorted depending on where they need to be distributed.

The glasses are then collected from the Vision 2020 Programme Officer, by the Program Officer who is supporting the Elders' Clubs and given to the relevant club leader.

The club leader arranges to distribute the glasses to the elders. Glasses could be distributed at a club meeting or another time. When collecting their glasses, elders are required to provide their original prescription and sign a list to confirm receipt. The club leader returns the signed list to the Program Officer.

The Program Officer is also responsible for checking that the elders are satisfied with their glasses. If there are any problems these are conveyed to the Vision 2020 Programme Officer. If this occurs the Program Officer collects the glasses and gives them back to the Vision 2020 Programme Officer to send back to the supplier.



CHALLENGES AND LESSONS FROM SRI LANKA

BIFOCALS

There has been little research on the experience of wearing bifocals by elders. The Better Vision Healthy, Ageing Program chose to provide two separate pairs of glasses – one for distance and one for near vision – for the following reasons:

- Bifocal glasses may be more difficult for elders to get used to. Adjusting to the small field of view offered by the near segment of bifocals can take some time as the user learns to move either the head or the reading material rather than the eyes
- The plus segment magnifies objects, making things appear closer to the wearer than they really are. Walking downstairs may be difficult until the person learns to hold their head in a different position. As their eyes cross the junction of the distance and near segments, the image jumps up for a split second. Because of these effects elders might be at greater risk of falling. This is particularly difficult where elders reside in hilly country with steps and steep paths
- Bifocals are reported to cause headaches and even dizziness in some users
- Many elders need to change the power of their reading glasses quite often, while their need for distance correction remains the same. Reading glasses are less expensive than bifocals; in the longer-term it is cheaper to replace reading glasses than to replace bifocals
- Elders prescribed bifocal glasses in the hospital are not always provided with the appropriate information to know how to use them and to understand the differences in the lenses

DELAYS OR ERRORS IN SUPPLY AND DISTRIBUTION

Occasionally an order or batch of orders is misplaced by the glasses supplier, causing delays in receipt of these glasses. Sometimes glasses with the wrong prescriptions are sent. It is recommended to follow up and track the orders carefully and to check all the orders on receipt of the glasses.

LONG LAG TIME IN INVOICING - CENTRAL SUPPLIER

Central government approved glasses suppliers often have a long credit line and therefore don't always invoice for their costs on a regular basis. This creates difficulties in managing the budget and finances and should be considered when planning activities.

PROCUREMENT AND DISTRIBUTION OF READING GLASSES

Uncorrected presbyopia is the most common cause of visual impairment, and will increase with population ageing. Lack of reading glasses greatly impairs quality of life. Impaired near vision is often considered to cause fewer problems than impaired distance vision. Reduced literacy does not reduce the need for glasses for presbyopia, as is sometimes thought.[3] Studies in low-income settings have shown that near vision impairment greatly affects quality of life despite low literacy levels. In these settings, glasses have been found to be essential for a range of activities including sorting rice, weeding, cooking, sewing, fixing machinery, and caring for children. Impairment of near vision is at least as detrimental to quality of life as impairment of distance vision, regardless of setting, sociodemographics or lifestyle.

Initially one peer educator (elder volunteers trained in health promotion messages and peer education) from each Elders' Club was identified and trained to screen the club members to see if they needed reading glasses. The training was given by qualified OTs.

Each peer educator was given:

- A set of sample reading glasses (to be returned after screening)
- A reading chart, with letters, numbers and figures (for those who cannot read)
- A form to fill and send to the Vision 2020 Program Officer
- A notebook to give the elders their information and to bring when collecting the reading glasses

'Since I got glasses I was able to find an income source, and am able to work with dexterity.' (Older man)

3. Holden BA, Tahhan N, Jong M, Wilson DA, Fricke TR, Bourne R, Resnikoff S (2015) Towards better estimates of uncorrected presbyopia. Bull World Health Organ;93:667.

The Vision 2020 Programme Officer or the Senior Program Coordinator visited the field to observe the screening process. They found that the peer educators were not capable of undertaking this task adequately. They had difficulty in selecting the correct power lenses for each elder, in recording the power correctly, and did not give correct guidance to the elders. Sometimes they marked the name of a different elder.

It was therefore decided to train Child Development Officers from estates and young volunteers from villages to support the peer educators. This has worked well. After the screening they order the number of reading glasses for each power needed.

In the Better Vision, Healthy Ageing Program we have found that the elders are very grateful to receive near vision glasses, and would recommend that provision of these be included in all eye care 'camps'.

CONCLUSION

With the rapid increase in proportion of elders in low- and middle-income countries, there will be an increasing need for the provision of free or low-cost glasses. While the shortage of eye health care specialists remains a problem in many countries, community-based distribution of glasses could help to overcome some of the barriers faced by elders.

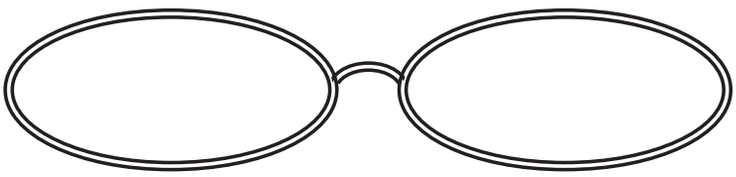
'Even to go to the temple we need glasses, and to do everything we need glasses.' (Female)

APPENDIX 1. GLASSES PRESCRIPTION

THE BETTER VISION, HEALTHY AGEING PROGRAM

Glasses Prescription

No :..... Date : .....



To be brought up at next examination for glasses

Lenses	SPH	CLY	AXIS	SPH	CYL	AXIS

Name : .....

Age : .....

GND / Club : .....

.....

Name / Signature

==========

APPENDIX 2. STAGE TWO – OPTHALMIC TECHNOLOGIST SCREENING OUTCOME RECORD

THE BETTER VISION, HEALTHY AGEING PROGRAM

Stage two: Vision screening by OT

Date of screening:

Partner:

GND:

Village:

Club names	Number of members in club			Number of members screened during stage one			Number of members screened by OT			Glasses beneficiaries			Number of members referred to hospital		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total

Name	Age	Sex		Screening outcome			Club name
		Male	Female	Glasses	Hospital referral	None	
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

THE BETTER VISION, HEALTHY AGEING PROGRAM

Elders Referred to Hospital

Partner: GND: Village: Club Name:

Club established date: Date of screening:

	No. of members in club	No. of members screened during stage one	No. of members screened by OT	No. of members referred to hospital
Male				
Female				
Total				

Name	Age	Sex		Screening outcome (Recommendation)-Please "√" the relevant outcome				
		Male	Female	None	Glasses	Cataract surgery	Investigations	Treatments
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								