



PROJECT SA'BAI VISION

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PROJECT SA'BAI VISION 2018 INFORMATION SHEET

1. INTRODUCTION

Project Sa'Bai Vision is an overseas community service project helmed by a team of Year 2 – 4 medical students from Yong Loo Lin School of Medicine, National University of Singapore (NUS). We work with both local and foreign optometrists and ophthalmologists to conduct annual eye vision screenings in and around Phnom Penh, Cambodia.

Sa'Bai Vision functions as a wing of Project Sa'Bai, a medical overseas community involvement project. The inaugural Sa'Bai Vision trip was held in December 2012, conducting vision clinics at schools and villages, such as Teuk Thla School (TT) and Phua Chreh Village (PCV). Over the years, the team has evolved to consist of volunteer optometrists from AMIGOS Eye Care and ophthalmologists from Singapore National Eye Centre (SNEC) and private clinics. We have also extended our outreach to Kampong Speu Village (KSV).

2. COMMUNITY NEEDS

An estimated 30,000 Cambodians become blind each year, with more than half of blindness attributable to cataract. Besides cataract, other main causes of blindness are pterygium, uncorrected refractive errors, corneal scars and glaucoma. Of these causes, 80-90% are preventable or curable. However, limiting factors include the lack of healthcare manpower, infrastructure, resources to screen for and manage these conditions and education on eye care.

We have analysed the needs of the villagers we serve, many of whom are frequently exposed to irritants like sand due to occupational and environmental factors. Furthermore, they have a poor understanding of good eye habits and lack protective equipment such as sunglasses or lubricant eyedrops. All these result in treatable conditions being unaddressed, thus developing into chronic irritation, dry eyes, and infections, hence eventually ending in scarring, blindness and morbidity.

Due to their circumstances, the Cambodians we reach out to inevitably place greater focus on their jobs and livelihood than on their own health. However, health is a necessary pre-requisite to perform one's daily activities. We hope that this project increases the quality of lives of the villagers through improving or restoring their vision, thereby allowing them to better perform their daily activities. In addition, we wish to highlight to them that ultimately, they are the main stakeholders of their own health. Through inspiring trust in their own local healthcare provider and establishing links to local sources of help available, we hope that the villagers understand the importance of and take charge of their own health in the long run.





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3. OBJECTIVES

Sa'Bai Vision hopes to contribute to the goal of lowering the prevalence of preventable blindness in Cambodia through 3 main aims as follows:

- (i) Provide optometry assessment and corrective glasses for rural villagers
- (ii) Identify and refer villagers with severe correctable eye conditions for surgical intervention provided by non-governmental organisations in Cambodia
- (iii) Conduct basic eye care education including preventive eye care, specifically in the local context of high sunlight and dust exposure
- (iv) Conduct basic eye care education including preventive eye care, specifically in the local context of high sunlight and dust exposure and on warning signs of potentially serious ophthalmological conditions

4. SCREENING DETAILS

Sa'Bai Vision conducts annual eye screenings in the aforementioned rural villages and schools, working together with local and foreign optometrists to provide vision assessment and glasses, as well as with local or foreign ophthalmologists to provide consultations, medications and surgeries to villagers in need.

Our trip schedule and target audiences in 2018 are as follows:

Date/ Day	Location	Target audience(s)
15 Dec 2018 (Saturday)	Phum Chreh Village (PCV)	Villagers
16 Dec 2018 (Sunday)	Syndicate 5 Schoolhouse (S5S)	Students & Villagers
17 Dec 2018 (Monday)	Kampong Speu Village (KSV)	Villagers
18-19 Dec 2018 (Tues, Wed)	Teuk Thla School	Students & Villagers
20-21 Dec 2018 (Thurs, Fri)	Surgical referrals (to Rose Eye Clinic/ Children's Surgical Centre)	Selected referred students/ villagers
22 Dec 2018 (Saturday)	SMILE Village	Recce trip for potential collaboration with Solutions to End Poverty (STEP)

In further detail, we delegate roles based on respective skills:

1. Medical students: History taking; direct and consensual light reflex, 'swinging torch' test; Hirschberg test and extraocular eye movements; intraocular pressure measurement; visual acuity (near and far); health education
2. Optometrists: Refraction for myopia, hyperopia, presbyopia and astigmatism
3. Ophthalmologists: Anterior and posterior segment examination with slit-lamp and fundoscope, cost-free surgery referrals for cataract, pterygium and other conditions

At the end of each individual-tailored consultation, relevant prescription (medicine, glasses, surgical referral) will be given, all at no cost to the villagers.



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Our clinic flow is as follows:

Service	Conducted/ Provided by
1. History taking	Medical students
2. Visual acuity assessment (near & far vision)	
3. Tonometry (measure intraocular pressure)	
4. Autorefraction	Medical students or optometrists
5. Refraction	Optometrists
6. Spectacles prescription	
7. Ophthalmological assessment	Ophthalmologists
8. Pharmacy (dispense glasses & medication)	Medical students
9. Surgical referral (severe correctable eye conditions eg. cataracts)	Rose Eye Clinic/ Children's Surgical Centre
10. Basic eye care education (in local context)	Medical students

The work we do will be relevant and sustainable as we, while carrying out our services, work towards the long-term aim of transferring ownership to the local community through measures such as training and involving Cambodian medical students in our screening and collaboration with local optometrists and eye surgical centres. Throughout the entire screening, the Cambodian youths will be engaged not just for translations, but with the goal of training them to become fully equipped and capable of carrying out similar screenings in future.

Where possible, we aim to tap on local resources. For example, we source for available drugs in Cambodian pharmacies, only purchasing drugs in Singapore when necessary.

5. BUDGET

Item	Estimated Cost
Medications (medicated & normal saline eyedrops)	\$1,000
Surgical referrals & Prescription glasses	\$500
Logistics (printing, stationery, non-flight transport, food, water, tables, chairs etc)	\$2,500
Flights (baggage fees for logistics)	\$750
Accommodation	\$2,000
Total	\$6,750



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6. SA'BAI VISION 2017 STATISTICS

Number of patients seen

TT School Day 1: 276 patients
TT School Day 2: 236 patients
Kampong Speu Village (KSV): 255 patients
Phum Chreh Village (PCV): 207 patients

TOTAL of **974 patients** seen over 4 days

Number of glasses dispensed

Donated glasses: 160
Prescription lenses: 7
Reading glasses: 177
Sunglasses: 307

TOTAL of **344 pairs of corrective glasses dispensed**

TOTAL of **651 pairs of glasses dispensed**,
including sunglasses

2 in 3 patients required glasses
1 in 3 patients required corrective glasses

Medications

202 patients required medications
In the villages,
2 in 5 patients required medications

Surgical Referrals

87 patients were offered sight-restoring surgery

Most commonly offered surgeries:

1. Cataract (3 in 5 surgeries)
2. Pterygium (2 in 5 surgeries)

Other surgeries offered: Capsulotomy, Dacryocystorhinostomy (DCR)

25 patients underwent surgery

15 patients received cataract surgery
9 patients received pterygium surgery
3 patients received entropion surgery
1 patient received DCR surgery

In the villages, **1 in 5** patients were offered surgery
For every 10 patients who were offered surgery,
3 eventually received surgery,
while 7 declined surgery/did not show up.





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Conditions Seen

4 cases of acute angle-closure glaucoma diagnosed

Most commonly seen conditions:

	KSV (n=255)	PCV (n=207)	Overall (n=462)
1	Cataract (136)	Refractive error (114)	Refractive error (233)
2	Refractive error (119)	Cataract (89)	Cataract (225)
3	Pterygium (116)	Pterygium (76)	Pterygium (192)
4	Meibomian gland disease (30)	Dry eyes (65)	Meibomian gland disease (88)
5	Dry eyes (7) Glaucoma (7) Corneal scar (7) Posterior capsular opacification (7)	Meibomian gland disease (58)	Dry eyes (72)
6		Allergic conjunctivitis (20)	Allergic conjunctivitis (24)

1 in 2 patients had refractive errors
 1 in 2 patients had cataract
 2 in 5 patients had pterygium
 1 in 5 patients had meibomian gland disease
 1 in 6 patients had dry eyes
 1 in 20 patients had allergic conjunctivitis

