



# Community Outreach Initiatives

for High Quality, Large Volume,  
Sustainable Cataract Surgery  
Programmes

Aravind Eye Hospitals  
& Postgraduate Institute of Ophthalmology  
Lions Aravind Institute of Community Ophthalmology  
and  
Seva Foundation



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Sustainable Cataract Surgery  
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The Quality Cataract Surgery Series is a set of modules explaining principles and techniques for developing high quality, large volume, sustainable cataract surgery programmes, especially in settings where cataract causes much needless blindness. Each module is based on the practices of Aravind Eye Hospitals in South India, with input from other successful programmes.

The set includes the following modules:

- Introduction
- Clinical Strategies
- Paramedical Contributions
- Management Principles and Practices
- Community Outreach Initiatives
- Financial Sustainability
- Architectural Design

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## About the Author

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- *R. Meenakshi Sundaram*





# Introduction

**One of the main institutional objectives of Aravind Eye Hospital is to take quality eye care to the doorsteps of millions of rural people. These people are deprived of good vision by easily curable causes like cataract. Aravind provides them one of the biggest gifts humanity can give — eye sight, which helps them lead socially and economically productive lives.**

**- R. Meenakshi Sundaram, Outreach Department Manager, Aravind Eye Hospital, India**

## Rationale

In order to develop and maintain a high quality, large volume, sustainable cataract surgery programme, it is essential to be proactive about attracting patients instead of simply waiting for patients to arrive on their own. Despite the magnitude of the problem of cataract blindness in developing countries, studies have shown that only a small percentage of the people needing cataract surgery actually seek treatment. In other words, it is necessary to generate demand for the services of your institution (whether a hospital, eye clinic, or private ophthalmology practice) through community outreach. Outreach activities can increase productivity, quality of care, and cost effectiveness in cataract surgery programmes.

### Aravind as a model for community outreach

Aravind is an organisation committed to its goal of eliminating needless blindness through its network of hospitals, extensive outreach work, and the willingness to provide services to all, regardless of their capacity to pay.

About 65% of Aravind's services are nonpaying, yet the hospital is self-supporting. This is made possible through hard work, efficient management, cost effective pricing, a large volume of paying patients, and the continued support of well wishers and voluntary organisations.

But Aravind does not wait for the poor blind to show up on their own. Virtually every day of the year, it sends teams to rural villages to seek them out.

## Objectives of the Community Outreach Module

- To record lessons learned in the implementation of a variety of ophthalmic outreach activities through an eye care institution
- To show ways that community outreach activities can benefit high quality, large volume, sustainable cataract surgery programmes
- To describe the purposes, activities and challenges to consider when designing an outreach programme for eye care

## Examples and models

Community outreach considerations suggested in this module are drawn from a variety of sources. The most often cited programme is Aravind Eye Hospital in Tamil Nadu, India, with additional examples from Lumbini Eye Hospital in Nepal, and L.V. Prasad Eye Institute in Hyderabad, India.

# Purposes of Community Outreach

The purposes of community outreach in eye care include:

1. Contributing to society (by reducing the amount of needless blindness)
2. Community involvement and health education
3. Social marketing and demand generation through public relations and publicity
4. Staff training and development

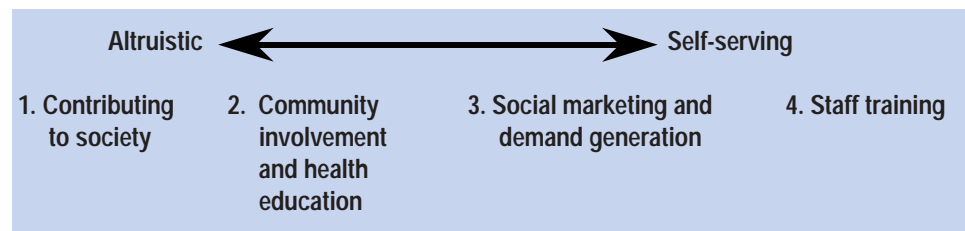
Community outreach activities serve several purposes at once, along a broad spectrum ranging from altruistic (filling a great need in the community) to self-serving (benefiting the eye care institution).

Altruistic  Self-serving

**Be just before you are generous.**

**- Richard Brinsley Sheridan**

Acknowledging this range is vital. Concentrating purely on altruistic outreach will ignore the needs of the institution's staff and management, leading perhaps to financial problems or employee burnout. Purely self-serving outreach will not consider the interests and needs of the community, leading to lack of goodwill and, eventually, to lack of patients.



## The specific objectives of community outreach include:

- To identify people with cataract and provide surgery
- To detect other eye problems and provide appropriate treatment or referral
- To develop and maintain a relationship with the local community and outlying villages
- To educate patients and communities about eye care
- To create awareness of the institution's facilities and services available
- To generate demand for the institution's facilities and services
- To provide an opportunity for medical staff to develop their interpersonal and leadership skills

**To see is the right of a human being and no one should remain blind for lack of simple delivery of eye care.**

**- Government of India, National Programme for Control of Blindness**

## 1. Contributing to society

The magnitude of the problem of blindness in the developing world is staggering. Most developing countries are now challenged with a huge backlog of blinded citizens. India has perhaps the largest blind and potentially blind population in the world. According to surveys of 1971-73 and

**It is estimated that the average life of an aged blind person [in India] may be only two or three years after becoming blind. Such unfortunate people, who should be in the prime of their old age, fulfilling the tasks of village counsellors, advisors, organisers and the like, come to be gradually disregarded and cast on one side as useless burdens to the community.**

**- R. W. B. Holland, CBE, FRCS**

1986-88, the prevalence of blindness (visual acuity <6/60) increased during that period from 1.4% to 1.49% of the population. About 80% of this blindness is due to cataract, which can be cured by a relatively simple surgical procedure.

In the rural areas of India where health care facilities are primitive or non-existent, blindness is more pronounced (1.62%) than in urban areas (1.03%). Because of their poverty and lack of awareness, these people remain needlessly blind. The social and financial hardships created by blindness gravely affect individuals and families, in particular, and the nation at large.

Outreach programmes for eye care should aim at reaching the unreached. Many health care institutions organise outreach activities to create awareness in the community, to educate the community on health, and to provide possible medical intervention. There is a need to extend health care facilities to rural masses in order to cover the vast majority of the population. In India, health care facilities are distributed in such a way that 80% of facilities are available in urban areas and 20% in rural areas, whereas the population distribution is vice versa: approximately 20% of the people are urban and 80% are rural. Reaching the underserved can be done effectively by organising outreach programmes in rural areas and following a base hospital approach. Once the quality of care reaches a high standard, the community will be more aware and open, making the task of the eye care providers much easier.

The community outreach programme at Aravind performs an anchor role in tackling curable blindness in the community. Aravind teams work closely with the community leaders and service groups in setting up the eye camps. In 2000, Aravind conducted 1,548 diagnostic eye camps and 426,350 people were screened; of these, 93,519 underwent surgery.

- Aravind 2000 Annual Report

## 2. Community involvement and health education

Poverty, ignorance, superstition and socioeconomic factors play key roles in keeping poor blind people from accessing the eye care services of urban areas. In order to clear the backlog of cataract, eye hospitals situated in urban areas have to reach out to the rural masses. Active community involvement and health education contribute to the success of any outreach programme. The urban hospitals have to identify certain influential people in the rural villages and convince them of the need to extend eye care services. They must also explain the benefits the community will reap. It is the responsibility of the hospitals to ensure effective coordination and harmonious working relationships with these leaders in order to provide eye care services to their communities.

Our model stresses community involvement at every step of patient care. We begin with coordination of our outreach programmes with local service groups. We use their volunteers to help bring patients — who might otherwise not come — to our screening eye camps. This involvement helps ensure that most patients return to the base hospital for any needed ophthalmic care. Finally, the satisfied patient returns to the community and markets ophthalmic education and the base hospital.

- Dr. G. Natchiar, Joint Director, Aravind Eye Hospitals

#### Health education is:

- A process of bringing about a social change, which in this instance relates to changing attitudes towards eye health and eye health behaviour patterns
- A process of generating awareness of and demand for health care services in the community by those who need health intervention but are not seeking it
- A process that enables families and communities to improve their health and, in this case, their eye sight by improving or increasing their knowledge, attitudes and skills. This is one of the fundamental principles of primary health care as spelled out by the World Health Organization.

A good health education programme will respond to the following questions about cataract and about the provision of eye care services:

- What is cataract and how is it caused?
- Is it curable, and if yes, how?
- At what stage should it be operated on?
- At what time of the year should it be operated on?
- Where can I get the surgery and how much will it cost me?
- Are the services reliable and available, as promised?
- Do most people get good vision (as perceived by the community) following surgery?
- Are the services expensive?
- Is the surgery painful or frightening?

The above responses should lead to the design of an information, education and communication (IEC) campaign that addresses the current perceptions and creates better awareness.

**...An additional benefit of an eye camp is that it increases the awareness of eye diseases, their treatment, and their avoidance. It also enhances the concept of Aravind's caring attitude and efficiency. This sense of awareness not only promotes the eye camp per se, but it also promotes better general eye care.**

- Dr. G. Natchiar

### 3. Social marketing and demand generation

The use of the word “marketing” is still frowned upon by health providers, especially those in the voluntary sector and those involved in the delivery of eye care to the community. Yet good marketing is the cornerstone of effective distribution in business operations. It is useful to dispel some of the misconceptions about this process and get a better understanding of what it is all about.

#### Social marketing is:

- an awareness campaign to promote eye care services and create a demand
- a process of understanding the barriers to access and designing an eye care delivery system that addresses these barriers, in order to “sell” eye care services

- a process that helps in the design of the eye care services to make them easily accessible, affordable and acceptable

#### Social marketing is not:

- competing for the same patient through unfair means
- attracting patients by discrediting other services
- health education, although it might use elements of health education, especially community participation, at times

Why is social marketing necessary? It is estimated that only about 5-7% of the total cataract blind in India get operated on in a given year. The statistics are probably similar in other developing countries. In some places, this is not entirely due to want of resources. In fact, a macro analysis of resource utilisation in India shows:

National average surgeries per ophthalmologist per year	=	350
National average surgeries per hospital eye bed per year	=	13
Government of India suggested norms:		
Surgeries per ophthalmologist per year	=	150-1000
Surgeries per hospital eye bed per year	=	35-50
Aravind surgeries per ophthalmologist per year	=	1800
Aravind surgeries per hospital eye bed per year	=	90

One of the reasons has to do with accessibility of eye care services. The issues relating to accessibility start with the process of creating awareness, motivation, and finally delivery of eye care services with necessary follow-up. Similarly, in delivery of eye care services, while it is necessary to know about the clinical nature of eye diseases in the community, it is even more important to know about the barriers to access. Often, these barriers to access arise out of urban concentration of facilities, difficulties in travel logistics, lack of information, socioeconomic constraints, and health behaviour.

It appears that a significant portion of cataract blind are not even aware that their blinding condition is caused by cataract, and that it is surgically curable. This indicates the need for effective health education input. Among the remaining who are aware of cataract and its surgical intervention, a proportion are not willing to undergo surgery due to reasons such as fear, family's attitude, religious practice, etc. Even among those who are willing to undergo surgery, only a small percentage are actually operated on, while the rest are unable to have access for want of an escort, not knowing where to go, not having enough money, or thinking they must wait for the cataract to mature.

An operations research study to assess the magnitude of the barriers, done in 1986 on a sample of 19,260 households from a population of 5 million in Madurai and Ramnad districts of South India, showed the following:

Reason for not undertaking cataract surgery	Bilateral Blind (n=466) %	Unilateral Blind (n=786) %
No one to bring me to surgery	25.1	17.3
No need or desire for surgery	20.7	24.3
Unable to afford surgery	16.5	13.0
Afraid of surgery	16.5	13.2
No time to undergo surgery	13.7	17.9
Do not know where to go	5.2	5.0
Able to see adequately	3.4	12.0
Cataract not mature enough	1.7	1.0

An effective awareness campaign making relevant information accessible to the right people hinges on a good understanding of the patient population in terms of health behaviour, literacy levels, economic status, barriers to access and logistics of information transmission. This understanding helps not only in the content, but also in the delivery of the message.

The most direct benefit of social marketing is the ability to reach more people who are blind and provide them with necessary services and restored vision. Apart from this, it also reduces the cost per cataract surgery, through increased resource utilisation, thereby making it more cost effective and affordable to whomever is paying for the services, whether government, donor or patient.

With this understanding of social marketing and its critical contribution to reducing blindness, it is useful to develop some steps and strategies for designing and implementing an effective social marketing system.

#### A Social marketing campaign

*a. Define priority eye conditions or programmes* (cataract, xerophthalmia, trachoma, school eye screening, etc.)

When dealing with limited resources, there is a need to decide on the priority, that is, to focus efforts on diseases that are more important to your district. Depending on the prevalence of various eye ailments and resources available, decide on the diseases that will be actively addressed. Do not come up with a long list. Be realistic in deciding on the priorities.

*b. Define priority populations* (rural, poor, children or elderly)

Having defined the priority diseases, the next step is to define the priority population groups. Sometimes this is influenced by the population afflicted by the disease (e.g., vitamin A deficiency occurs in children, cataract usually occurs in the elderly), and at other times by accessibility of services as provided now (e.g., rural populations have poor access to cataract surgery services and in some areas, women have less access than men.)

**An institution must be capable of marketing its surgical product, knowing the target population, and motivating the community. Community awareness and involvement are vital to the success of any programme dealing with large volumes of patients. Aravind receives most of its marketing [and does most of its demand generation] through screening eye camps. The population serviced through screening eye camps ranges between 17 and 20 million people. All are within a 240-km radius of the hospital.**

**- Dr. G. Natchiar**



### *c. Ensure community involvement*

A key to successful social marketing is active community involvement leading to community participation. This increases patient attendance, promotes credibility of the programme, and reduces the cost considerably since the community members volunteer their services and quite often provide “in-kind” support (donations other than financial, for example, time, furniture, supplies). Community involvement also ensures that a right balance is maintained between altruism and self-interest.

### *d. Design and implement case finding strategies that reflect the priorities and that take into account the barriers*

Strategies include:

- Case finding services at the community level through eye camps and village volunteers
- Partnership with the community for all outreach activities
- Active use of aphakics or pseudophakics (past patients who are “satisfied customers”)
- Patient education through patient counsellors, posters and banners
- Free food and transportation to hospital and back for eye camp patients
- Free surgery and accommodation in hospital
- Keeping track and following up on “non-acceptors” of cataract surgery

### *e. Monitor patient satisfaction and visual outcomes*

Strategies include:

- Monitoring accessibility and distribution of eye care services
- Periodically checking visual outcome and sight restoration rates
- Periodically reviewing quality and clinical procedures
- Assessing patient satisfaction

These strategies will help in providing a large volume of services in an economical way. Strategies that pay attention to the access problems of potential patients can result in effective demand generation. When this is matched by cost effective service delivery systems, one can hope to make a major impact on the prevalence of needless blindness.

Although it may seem evident, a large volume cataract surgery programme is impossible without lots of patients. Developing lots of different ways to motivate and enable patients to come for treatment is called “demand generation.” Public relations strategies for demand generation can include:

- Word-of-mouth “propaganda” and advocacy by satisfied patients
- Creating goodwill in the community by offering health education, and by recognising the contributions of community members
- Reputation building by providing high quality service, and by ensuring media coverage of achievements and special events
- Information, education and communication (IEC) campaigns to spread the word about the eye care facilities and services offered by the eye hospital
- Outreach activities (see Community Outreach Activities below) that deal with the known barriers of the target population



One of the major challenges facing health care providers in general, and eye care providers in particular, is the inequity in the provision and utilisation of care. This is often the result of mal-distribution of the infrastructure necessary for the provision of care. However, it is well recognised that universal coverage in itself will not guarantee access to and uptake of care. Even when eye care services are available and affordable, utilisation and quality vary across population groups based on socioeconomic status, literacy, and other culturally based factors. The analysis of the reasons for poor uptake, and the enumeration of the measures necessary to be taken to enhance the utilisation of services, are of critical importance if increased coverage is to be equated with enhanced utilisation.

- Dr. Pararajasegaram, Past President, International Agency for the Prevention of Blindness

## Barriers to consider

### Barriers to access - Distribution of service facilities and logistics

Most of India's population lives in rural areas, while the eye care facilities are predominantly concentrated in the urban areas. It is usually the young who migrate to earn a living, leaving the elderly in the village. Hence it is not uncommon to see villages with a higher proportion of elderly than young, resulting in a higher prevalence of blindness in the rural areas. This same population shift is occurring in many developing nations. A higher concentration of blind in the rural areas further compounds the problem of maldistribution of services.

This presents problems in logistics with economic implications. Poor road infrastructure and public transport facilities make travel difficult even for sighted persons, so for the blind this presents a major problem. This is especially true in the mountainous areas of some countries where several days of trekking is involved in reaching the nearest road.

### Barriers to access - Information

One study in South India showed that in the control population, awareness about cataract and surgical intervention was less than 8%. While awareness is increasing with the advent of cable and satellite television as well as national programmes to control blindness throughout the developing world, there is likely to be a significant portion of the population still unaware of the nature of cataract and its treatment. This will need to be addressed in a very effective way through mass communication and effective intervention strategies.

Among those who know about the condition there are misconceptions that they have to wait until the cataract is "ripe" or refrain from surgery in the summer or monsoon seasons. Some of them don't know where to go for cataract services or how much it will cost them. These misconceptions and lack of required information lead to delay in accessing surgery or, often, not getting any intervention at all.

### Barriers to access - Socioeconomic

Although providers often might offer their eye care services free or at a nominal charge, the patient sometimes has to incur substantial expenses to

**Poor communication between providers and users may also lead to misperceptions about treatment. Time constraints restrict opportunities for discussion with patients concerning their diagnosis, treatment recommendations, and expected treatment outcomes. Surgical or medical procedures may be inadequately explained. Anxiety and apprehensions about treatment may lead to treatment refusal, or unrealistic expectations about treatment outcomes, which in turn result in patient dissatisfaction.**

**- Barriers to Using Eye Services and Recommendations to Improve Service Uptake**

access the free eye care. There is the patient's cost for travel to the hospital. Quite often the patient requires someone to accompany them because of their visual handicap, and for this attender, in addition to travel costs, there is the issue of lost wages for the time away from work. In many situations, food is an additional expense. The patient will have to pay for some of the medications, and perhaps the IOL or eyeglasses. The sum total of these costs can be massive for the people in this socioeconomic sector, often inhibiting the number of patients who can come for cataract surgery.

**As can be expected, financial barriers loom large in communities and families are often forced to make financial choices based on survival — food, clothing, shelter — rather than health needs. However [there are also] many non-financial barriers [personal and sociocultural deterrents] that play a critical role in people accessing and utilising care. Studies...need to be carried out in different geographical areas, given the often culture-specific basis of sociocultural barriers.**

**- Dr. Pararajasegaram, IAPB**

In the formative years of Aravind, patients attending the screening camps were examined and those needing surgery were appropriately advised. Even though surgery was free, the patients had to come to Aravind at their own expense. The response rate was less than 15%. Concerned by the low turnout, a research team from Aravind conducted in-depth home interviews with a randomly selected group of 65 patients for whom surgery had been recommended but who had not responded for over six months. The study revealed the following constraints:

Still have vision, however diminished	26%
Cannot afford food and transportation	25
Cannot leave family	13
Fear of surgery	11
No one to accompany	10
Family opposition	5
Other reasons	10

As a consequence, Aravind made a request and the camp sponsors readily agreed to bear the costs of food and transportation.... In order to reduce the fear of surgery, as well as to encourage a support group, patients were transported to Aravind as a group by buses.  
- Professor V. Kasturi Rangan, Harvard Business School

### Barriers to acceptance - Health behaviour

Traditional practices, beliefs, fatalistic attitudes towards blindness, fear of treatment, lack of faith in the intervention, and fear about the surgical procedures influence the behaviour of patients, leading to low acceptance levels. Health education, individual counselling, and using operated patients as motivators can help overcome this problem. One of the studies in India, showed that the aphakics had the greatest motivational impact, influencing over 33% of the cataract blind to accept surgery.

A recent study report entitled Barriers to Using Eye Services and Recommendations to Improve Service Uptake: Research Findings and International Workshop Recommendations\* lists the following several specific recommendations for generating greater demand for cataract surgery services, in several different categories of barriers.

\*This study was conducted by the London School of Hygiene and Tropical Medicine (Dr. Astrid Fletcher, Ms. Martine Donoghue) in collaboration with Aravind Eye Hospital (Dr. G. Venkataswamy, Mr. R.D. Thulasiraj, Dr. C.A.K. Shanmugham) and the NGO SPEECH (Mr. John Devavaram). The study objectives were to explore the levels of eye camp attendance and factors associated with non-attendance in randomly selected villages in rural Tamil Nadu. For more information, contact London School of Hygiene and Tropical Medicine, Department of Epidemiology and Population Sciences Keppel Street, London, WC1E 7HT, United Kingdom

**“All people told me that if I go to the hospital then they’ll peel off the eyes.”**

**“I am afraid they’ll spoil my eyes. So I did not go. According to my son’s horoscope I will die if I go to the hospital.”**

**“I have this eye problem. I find it very difficult. What to do? God has desired me to be this way.”**

**“All of those who undergo the operation are not cured — some are cured and some even lose the sight they had.”**

## Recommendations for dealing with barriers

### Negative attitudes to treatment

Negative attitudes about the treatment of eye problems, which are held by the community, potential users and their families, act as barriers to the utilisation and uptake of eye care services. These attitudes include:

- Fear, especially of damage to the eyes
- Fear of death as a result of surgery
- Perceptions that treatment is not necessary
- Fatalistic attitudes such as blindness is due to God’s will.

### Recommendations

- Heightening awareness amongst eye care providers, including donors and sponsors, about the impact of negative attitudes upon service utilisation.
- Respecting user views, and including user perspectives as a feature of programme evaluation.
- Seeking to involve and integrate community leaders, local organisations and traditional healers (where applicable) in the promotion of eye care.
- Ensuring that community health workers and personnel at the primary health care level are well informed and motivated to participate in the promotion of cataract surgery and other eye services.
- Identifying and implementing appropriate counselling strategies, to ensure that patients are involved in decision making and fully informed of treatment procedures and outcomes.

### Poor quality visual outcomes

Every operated patient is a testimony to the merits or pitfalls of a sight restoration programme. Traditionally, success has been measured in terms of output rather than outcome. From the patient’s point of view, successful surgery is one without postoperative complications and resulting in a good quality visual outcome. This could positively influence the decision to go for a second eye operation (if required). Such satisfied patients may also act as motivators within their families, as well as within their communities.

### Recommendations

- Giving quality of eye care services the highest priority. Urgent attention is required to investigate and determine the extent and reasons for poor postoperative cataract outcomes.
- Developing and maintaining systems for quality control purposes. These systems need to be able to monitor and evaluate screening, surgical process, outcome and follow-up.
- Using trained personnel, to conduct screening and preoperative activities in accordance with good clinical practice guidelines. The identification of pre-existing ocular pathology that might affect outcomes needs to be recorded.

**Fear of surgery is a major barrier to utilisation of services. Poor visual outcomes following the use of eye care services or surgery may be a contributing factor, and could have a negative impact upon the uptake of eye care services. In some settings, aphakic/pseudo-aphakic patients have been trained to promote eye care in their local community, and to motivate people to seek treatment. The success of such strategies may be outweighed by the negative impact of people in the community with poor post surgery outcomes.**

**- Barriers to Using Eye Services and Recommendations to Improve Service Uptake**

**“If I do the operation and don’t go for work, all of us will starve.”**

**“I don’t have enough money to even run the family....If we have to spend Rs.500 to go to hospital, our family will be drowned in debt.”**

**“How can I go to the hospital? I don’t have money. I cannot go. It is God’s wish.”**

**“Only two cows can draw a cart. If one of the cows gets hurt, how will the other draw the cart single-handedly? It is the same way with us if she or I have a problem.”**

**“I don’t have money. There is nobody to help also. So I cannot take treatment for her.”**

- Encouraging ophthalmic practitioners (including professionals and paramedical personnel) to take a positive attitude to audit and record keeping.

### Costs relating to utilisation and uptake of eye services

Both direct and indirect costs influence the “cost perception” of eye care, as well as the decision to seek and take up services. Direct eye care costs include fee-for-service, and costs for transportation, accommodation and food for both patients and their attenders. Indirect costs include lost wages (of the patient and the attender), costs of covering work absence including domestic and family duties, and the less tangible costs such as pain, disruption of daily routine and uncertainties.

### Recommendations

- That providers attempt to reduce direct and indirect costs through better utilisation of manpower and resources, and refinement of policies and procedures.
- That providers be given greater flexibility in resource management, in particular with regards to the allocation and redistribution of resources, and the introduction of more efficient cost management measures.
- Because some communities may have misperceptions about the direct and indirect costs of eye services, that providers conduct appropriate IEC (Information, Education and Communication) activities, and become aware of community views about what constitutes affordable eye care.
- That providers lower indirect costs by
  - Reducing the number of patient visits for receiving services (i.e. initial consultation, treatment/surgery and follow-up),
  - Shortening the length of hospital stay, and
  - Locating selected services within an accessible distance of their catchment population.
  - It is critically important that such reductions not result in deterioration in the quality of service and delivery.

### Community view of elderly people

Demographic trends indicate that the planet’s population is aging. The proportion of the population 60 years of age and older is growing rapidly. Within the developing world, the proportion of people aged 60 plus will rise from 7% in 1990 to 13% by 2030. Within the elderly age group, there will also be increases in the proportion of those aged 80 years plus.... This demographic forecast is important because of its implications for prevention of blindness programmes. The prevalence of blindness and low vision due to cataract, glaucoma, macular degeneration and presbyopia is more common in elderly people. It has been estimated that 22 million blind people are aged over 60 years, with the overwhelming majority of these (20 million) in developing countries. The forecast for 2020 is that there

will be 54 million blind people aged over 60 years in the world, of whom 50 million will be in developing countries.

Negative perceptions of old age held by both elderly people and their family members adversely affect uptake of eye care services.

**“As I am old I don’t care if I remain this way.”**

**“I will just die with my present eyesight, it will be enough. The people at home don’t care about me...”**

**“He has become very old and so I thought that it would be of no use if I take him for treatment...he has become a burden at this old age. We think it would be better if he dies soon.”**

### Recommendations

- Take radical action to create awareness, develop policies, and establish integrated programmes to ensure that the needs of elderly people are met. Currently there is inadequate information to fully assess whether the eye care needs of elderly people, especially women, are being met.
- Provide integrated services, including eye care for elderly people. Commitment from all governments to develop these services is important, and should be viewed as an essential component of national development.
- Address perspectives and needs of different groups in order to improve the uptake of eye care services and other programmes. These groups are: professional groups (governments, donors and service providers); the lay group (which includes the family and neighbourhood); and aged people themselves.
- Give greater recognition to the positive aspects of old age. The resource this age group represents is not sufficiently mobilised. Elderly people are able to make a continuing contribution to society given their immense work and life experiences.

### An approach to effective promotion and marketing

#### The AIEM model

In order to be effective in your efforts to promote your outreach programme, you need to be able to:

**Analyse the major obstacles and barriers faced in your work.**

Identify the source of these barriers, what the elements of the issues at stake are, who the players in the issues are, where they are. Whom do you need to address, and what do you need to know in order to do that? Know your purpose.

Implement a message to address those issues. Use the appropriate means to convey the right message, at the right time and in the right place.

**Involve people in the issues.** One of the best ways to create buy-in and support for your programme is to include all stakeholders, when and wherever possible:

- Know your audience, their issues, needs and interests (interests define concerns, hopes, expectations, assumptions, priorities, beliefs, fears and values).
- Address those needs when and where possible so that everyone wins.
- Tell them what the benefits are for them.

**Evaluate, where and whenever possible, gather and evaluate the information that will lend your case credibility.** If you know how things were going before your organisation implemented this programme, it will lend your efforts tremendous credibility if you can demonstrate quantitative as well as qualitative results.



**Monitor your programme on an ongoing basis; things change. This means ongoing follow-up so that people and information don't fall through the cracks.**

- Fine tune, adjust and adapt your programme and your efforts as you go.
- Enlist the input of those whose support you need.
- Remember, the more people know about the difference your programme is making, the more difference it makes.

(Adapted from NIDMAR's Disability Management Coordinator Training Programme, Canada, 1997)

## 4. Staff training

Community outreach activities benefit the eye care institution by providing training opportunities for staff. It is important for eye doctors to become aware of community ophthalmology, health education and social marketing for patients. Those who want to increase the volume of their practice and improve the quality of their clinical skills must be able to work in the community, contacting the people who need their services and convincing them to undergo cataract surgery. Eye surgeons can learn about social marketing techniques by working at screening eye camps, operating on the patients they have brought from their camps, and seeing those patients through to discharge. Involvement in community work and outreach activities can teach eye doctors several important aspects of eye care.

### Clinical skills

As a training ground for clinical staff, eye camps offer a large number and variety of eye diseases that might not be seen in hospital settings. At times, senior ophthalmologists point out and discuss different cases with junior doctors and fellows helping at the camps. At other times, because they are seeing a variety of serious cases where senior doctors are not available, junior doctors are forced to put all their knowledge to use. This builds their experience, confidence, and diagnostic problem-solving skills. Furthermore, ophthalmology students can develop the capacity to screen large numbers of patients — around 200 patients during an average camp, i.e., from 8:00 am to 2:00 pm.

### Interpersonal communication skills

Whether in private practice or on staff in a medical clinic or eye hospital, doctors must learn to develop effective interpersonal communication skills. Some villagers and rural people feel intimidated by doctors, and many have never been to a hospital. When working in eye camps, as representatives of their profession and their position, doctors must put “customer satisfaction” first, no matter what the patient's background is. The local sponsor contributes time, money and energy into publicity efforts, selecting a camp site (preferably school building), and making arrangements for accommodation and hospitality. Medical staff posted at the camp should try to get to know the sponsor and to cultivate a friendly

relationship with him or her. This will serve to enhance the relationship between the sponsor, the community and the practice, clinic or hospital.

Recommended interpersonal communication skills include:

- being aware of and mitigating potential barriers to communicate
  - personal (fear, lack of self-confidence)
  - social (level of education)
  - cultural (language spoken)
  - physical (pain, hearing impairment)
- empathy
  - putting oneself in the patient's situation
  - trying to understand his or her feelings and point of view
- active listening techniques
  - concentrating, giving full attention
  - clarifying what was said
  - paraphrasing what one understood to ensure the message was received
  - summarising/restating the main points
  - seeking further information
  - acknowledging and responding to what was said
- gearing language to the listener
  - speaking simply and clearly, not too technically
  - speaking respectfully, not in a condescending way
  - respecting learning styles when asking patients to remember something (for example, repeating instructions, demonstrating, using illustrations)

### Leadership skills

Eye camps can help doctors develop their leadership and management skills. The senior doctor at each eye camp as the team leader must create a sense of teamwork and team spirit amongst the staff and volunteers in order to screen a large number of patients in a smooth and efficient way. From camp sponsors and organisers, the doctors can learn strategies for patient generation as well as leadership and management aspects of large volume surgery. This gives them the confidence to open their own clinics, run their own camps, and do their own marketing for their eye care services.

An Aravind IOL Alumni from the R. P. Centre in Delhi had stated that their main problem was getting adequate patients to attend their private practices or institutions. As a remedy, they recently started training their postgraduates in community medicine, and posting them in eye camps.

At Aravind Eye Hospital, the system is designed to include all medical officers, post-graduates, fellows, and IOL fellows as trainees or observers in community outreach by posting them to camps and including them in camp organisation.

# Community Outreach Activities

## Lumbini Rana-Ambika Eye Hospital's outreach programme

- Surgical eye camps
- Screening camps
- House to house visit programme
- School screening programme
- Health post staff training
- Xerophthalmia/vitamin A surveillance programme

"All of our outreach services aim to locate as many blindness cases as possible throughout the western region of Nepal. The estimated rate of clinical malnutrition is up to 15%, especially in the population of children below 5 years. So eye health education is a big part of our outreach programme.

Within each of Lumbini zone's six districts, our hospital has set up a primary eye care centre. In each, facilities and qualified ophthalmic assistants or OA supervisors allow diagnosis, primary eye treatment and minor surgery. Difficult cases and major surgeries are referred to the base hospital, which is also responsible for providing medications, supplies, and continuing education for centre staff. The main objective of these eye care centres is to educate the rural communities to encourage better nourishment and healthier living conditions.

We offer both screening eye camps and surgical eye camps in order to provide eye care services within the rural and remote hillside areas of our zone. Seven times a year our hospital organises five to seven days for surgical eye camps within different mountain districts throughout our zone. DST (diagnostic, screening and treatment) camps provide primary diagnosis and treatment, screening and health awareness of possible causes of blindness (provided to those who, due to lack of education, cultural barriers and economic difficulties, do not step forward to receive treatment).

House to house visits by eye care field workers in each of the six districts allow eye examinations, health education and nutritional information (including free vitamin A capsules) for those who lack awareness of our eye care facilities. Special attention is paid to children under 15 years of age. These field workers refer all patients with low vision to the hospital. In 1997/1998, this programme helped us examine approximately 210,000 children in over 72,000 home visits, and 3,358 children received appropriate treatment.

Our eye care field workers also visit local schools to detect preventable cases of childhood blindness, especially from vitamin A deficiency xerophthalmia. This cooperation with schools has made a significant impact on our outreach programmes.

Our hospital provides primary eye care training to the health post/sub health post staff, so that communities can receive primary eye care service and first aid treatment from trained health post staff.

Primary eye care centres, DST camps and surgery camps, house to house visits, school screening programmes, and training for health post staff have enabled our hospital staff to capture large numbers of preventable or curable blindness cases."

## L. V. Prasad Eye Institute's outreach programme

The outreach programme of L.V. Prasad Eye Institute covers both rural and urban segments of the community. This programme endeavours to create permanent facilities in these remote rural areas, extending preventive, curative and rehabilitative services and also promoting the concept of eye donation.

These facilities are set up by associating with local industry, philanthropists or voluntary organisations. Each such eye centre is designed to see 20,000 outpatients and perform



**...Screening eye camps are an integral part of our 'marketing' strategy for increasing patient awareness of our hospital. These are regularly conducted at the community level. We conduct approximately 25-30 camps weekly between our four hospitals. Patients who are screened and are found to have surgically treatable eye abnormalities are transported on the same day that they are screened, free of charge, back to Aravind Eye Hospital.**

**- Dr. G. Natchiar**

**In the past, Aravind had also conducted several surgical camps. That is, patients identified as needing surgery would be provided the requisite treatment on site. However, there has been a conscious effort to move away from surgery camps because of the higher cost as well as lower quality of service they provided. For example, the makeshift operating theatres were not air-conditioned, cleanliness and hygiene were often not up to hospital standards, patient amenities were inferior, and postoperative complications were difficult to monitor.**

**- Professor V. Kasturi Rangan**

2,000 surgeries annually, and 50% of the services are reserved for the economically disadvantaged sections of the community.

Aravind Eye Hospital's outreach activities

- Screening eye camps
- Surgical eye camps
- School eye health screening programmes
- Village awareness programmes
- Community based rehabilitation

## Eye camps (See Appendix - Guidelines for Successful Screening Eye Camps)

An eye camp is an activity in which a medical team from the base hospital visits the village and examines people's eyes to detect any problems. Those with eye problems are offered the necessary treatment, either at the camp itself or at the hospital, depending on the nature of the problem. Free eye camps are a major step in the campaign against 'needless blindness' in developing countries. They provide a link to the rural masses by reaching out, seeking the needy patients and restoring their vision — at no or low cost to the patient.

There are two types of eye camps:

### 1. Screening (diagnostic) camp

The medical team examines the patients for eye problems and treats minor problems on the spot with medication. People who need surgery or speciality care are advised to come to the base hospital. No surgery is performed at the screening camp.

### 2. Outreach (mobile) surgery camp

Patients are examined for eye problems and the necessary surgery is then performed at the camp itself. These camps are difficult as well as highly expensive to conduct in rural and backward areas due to the lack of proper facilities. However, in some situations, they are the only way to reach the needlessly blind in remote areas.

## School eye health screening programmes

It is essential for school children to have not only good health but also good eyesight in order to be successful in their studies. Children with poor eyesight will be poor performers at school. It is necessary for such children to be identified and have their refractive errors corrected to restore good eyesight. Other common causes of blindness in children include vitamin A deficiency, and amblyopia. School eye health screening programmes can catch eye defects before they cause irreparable harm.

School eye health scheme

At Aravind, in our school eye health scheme, it was decided to invite the active involvement of teachers, with whom children spend a big part of their day. A major challenge for this screening programme is scheduling. Timing it so as not to conflict with registration, holidays and examinations is crucial for full participation. Our scheme involves the following steps:

**Unfortunately, squint is considered to be a sign of good luck by parents in Tamil Nadu, south India. They do not realise that besides being teased by schoolmates, their child runs the risk of developing amblyopia unless treated as early as possible in life. Blindness due to amblyopia is irreversible.**

**- Dr. C. A. K. Shanmugham, Project Director, Aravind Eye Hospital**

1. Obtain the consent of school administrators.
2. Train the teachers (at least one teacher for every 100 children in the school) to measure vision, identify common eye defects such as refractive errors, squint, vitamin A deficiency (as exhibited by history of night blindness and Bitot spots). Aravind Eye Hospital has found that if the teachers visit the hospital for their training, they receive exposure to the eye defects and treatments they are learning about. If this is not feasible, an ophthalmic assistant can be sent to the school with educational materials.
3. Teachers screen the children, identify and list those with visual defects. (Teachers use the DANPCB Eye Test Card - visual acuity 6/9.)
4. Children identified by the teachers as having visual defects are screened by the school eye health assistants (Ophthalmic assistants) hired by the eye hospital to confirm the teachers' findings.
5. Children confirmed to have visual defects are examined by an ophthalmologist and given the necessary prescription for treatment.
6. One month later, the school eye health assistants visit the school to verify whether parents have taken action to rectify their child's visual defects, as advised by the ophthalmologist. (Aravind Eye Hospital has tracked the follow-up rate at 85%.)
7. A list of children whose parents have not followed the ophthalmologist's advice is sent to the school authorities with a request to impress on the parents the urgent need to take remedial action. It might be advisable to contact parents directly after obtaining their addresses from the school.

Academic year 2000 - 2001	
Schools	82
Teachers trained	341
Children screened	75,862
Children with eye defect	6,253
Children with refractive errors	2,893

## Community-based referral systems

In India, over two-thirds of the population live in small villages, where there are no voluntary organisations to organise eye camps, hence it is neither cost effective nor feasible to cover all villages. In addition, people in the rural areas have their own socioeconomic problems, due to illiteracy and ignorance, that keep them from accessing the facilities and services in eye hospitals. Many developing countries face similar challenging problems. As an alternative strategy, methods can be adopted to train health care volunteers in villages to screen people for operable cataract and to motivate them to accept surgery.

Aravind-Theni conducted a one-week training programme in primary eye care for the field staff of a nongovernmental organisation (NGO) providing services to patients with leprosy and tuberculosis. The strategy was to enhance eye care services to the community by partnering with this NGO. After the training, the field staff identified people with eye problems in their communities, and Aravind-Theni then provided necessary eye care services.

## Village awareness programme, Aravind Eye Hospital

This approach to community-based referral is based on our experience gained through a research project done by Aravind Eye Hospital and the University of Michigan, USA, to find out effective ways to reduce the barriers in acceptance of cataract surgery. This study revealed that for acceptance of cataract surgery, a personal "one-to-one" interaction was better than mass media and the best form was motivation by an aphakic motivator from the same village.

Mode of approach	Acceptance of surgery (%)
1. market advertisement	46.2
2. eye camp	48.9
3. house to house visit by ophthalmic assistant	55.2
4. house to house visit by aphakic patient	67.7

(These were the results when the identified cataract patients were offered free food and transportation to the hospital.)

However, due to their age and other reasons it was not possible to find willing aphakics in every village to work as motivators. As older persons, the aphakic motivators have limitations; their activity is usually limited to their own village and their acceptance in other villages is limited anyway.

Aravind therefore decided to utilise volunteers who belong to service organisations doing social work in villages. Such volunteers, who are already familiar to and respected by the villagers, are trained for patient counselling and detection of cataract.

The training is done in batches of up to 15 volunteers for a period of 2 days. Lectures are on ocular anatomy, measuring visual acuity, cataract formation, disability caused by it, the reasons for reluctance of patients to accept surgery, and health education techniques. The volunteers are given clinical training for examining cataract patients and assessing their suitability for surgery. During training, the clinical examinations are done under the supervision of ophthalmologists and assisted by ophthalmic assistants. Recognising blindness due to cataract is made quite simple based on three criteria:

1. Visual acuity 3/60
2. White pupil
3. Pupillary reaction to light

On completion of training, the volunteers examine individuals with defective vision when they visit the homes of the villagers for their usual social and cultural activities. It is expected that during one month the volunteer will have visited 100 houses, contacted approximately 100 persons in the over-40 age group and identified 8-12 persons with operable cataract. According to a prepared schedule, an ophthalmic assistant from Aravind will visit the village once a month to examine the persons identified by the volunteer and verify the diagnosis. Those with cataract and willing to undergo surgery are transported to the base hospital. Those who are identified with operable cataract but who are unwilling to undergo

**Through our Village awareness programme, the remotest villages with population less than 100 can be easily covered in a cost-effective way. This programme provides the opportunity for better postoperative follow-up as the patient has a link at the community level to the doctor. If the volunteer force remains permanent, they can be used to evaluate the prevalence of blindness and the impact of the programme.**

**- Aravind Community Outreach**

**The traditional method of eye care delivery in [underdeveloped rural areas in India] is through the concept of eye camps, makeshift eye hospitals. This system has inherent limitations and has not produced any impact. It is optimal to have permanent facilities that provide high quality eye care encompassing primary eye care, public education programmes and community-based rehabilitation (CBR) programmes.**

**- L.V. Prasad Eye Institute Outreach Programme**

surgery are followed up routinely by the village volunteer as well as the ophthalmic assistants when they visit the village. Similarly the patients with early cataract are also watched and followed regularly.

In a ten month period, a population of 12,700 was covered by these volunteers and 2,439 patients were identified as having operable cataracts. Of these 1,095 were confirmed as operable by the qualified ophthalmic assistants. This works out to a diagnostic accuracy of 45% in identifying people. Of the 1095 operable cataracts, 651 responded and accepted surgery, which gives an acceptance rate of about 60%.

The volunteer who serves as a source of proper guidance and referral for people with eye problems at the village level can also be trained in primary eye care, enabling them to take care of minor eye problems. However there are some drawbacks to community-based referral systems:

- People are usually accustomed to being examined by a doctor and hence are not happy or confident when the ophthalmic assistant examines them.
- People with glaucoma or posterior segment pathology go undetected, which may result in incurable blindness.
- The eye care volunteers may show a lack of sustained interest as it is purely voluntary work without any monetary benefit, hence requiring continual training of fresh volunteers. A process for selecting volunteers, standardisation of the training programme, and an effective monitoring and motivational programme might solve this problem.

#### L.V. Prasad Eye Institute urban outreach programme

Preventable and curable blindness is a common health problem in urban slums. LVPEI collaborates with local organisations to make high quality eye care available to the residents of given areas.

Establishing vision screening centres is a major step in this direction. Eye screening is carried out free of charge, to identify blinding diseases and other ocular problems. The LVPEI team visits the urban slums of a designated area, and conducts door-to-door surveys with the assistance of community level volunteers. Individuals with visual problems are referred to the screening centre and out of these, those who require detailed evaluation are referred to the base hospital for further management.

#### LVPEI comprehensive rural eye care model

Level 1 Screening, health education, and community-based rehabilitation take place in villages with volunteers and field workers.

Level 2 Along with an optometrist, field workers work out of screening centres (covering 50,000 population) doing clinical evaluation, health education, epidemiological studies, and rehabilitation.

Level 3 Rural eye care centres (500,000 population) connect the optometrist with ophthalmologists doing primary and secondary care, eye donation services, epidemiological studies, and rehabilitation.

Level 4 Rural ophthalmologists can refer patients to the complete medical and allied health team working out of the L.V. Prasad Eye Institute, for tertiary care. This Centre for Advancement of Rural Eye Care also offers training, research, planning of rural eye care, and rehabilitation.

## Community-based rehabilitation programmes

At Aravind's satellite eye hospital in Theni, a coordinator works with trained volunteers to conduct surveys recording curable and incurable blind people. The curable blind are advised to attend a screening eye camp or home to the base hospital. The permanently blind are provided a certificate of blindness, individual assessment, individual and family counselling, and are then given CBR training that includes:

- Orientation and mobility
- Manual dexterity
- Daily living skills
- Social integration
- Economic rehabilitation (introduction to crafts, trades, and agricultural work)
- Support services (information on government aid, concessions, pensions, loans and subsidies)
- Integrated education for children below 10 years of age
- Follow-up

The objectives of CBR programmes are to promote the use of low vision aids to the partially blind, and to provide effective and appropriate rehabilitation services (social, educational, vocational and economical) to the incurably blind. Often provided in collaboration with an NGO or charitable organisation and its volunteers, community-based rehabilitation for the blind is a very effective way to raise awareness of the local eye care facilities and services.

## Xerophthalmia / Vitamin A surveillance programme

This programme is based on the “tip of the iceberg” concept. Xerophthalmia cases that present to an eye hospital are the “tip of the iceberg” with a large number of cases assumed to be hidden within the community.

At Lumbini Rana-Ambika Eye Hospital, the objectives of this programme are:

- To find new cases of xerophthalmia and to treat them immediately on the spot
- To make local people aware of vitamin A deficiency and its effects
- To provide eye health education

The programme procedure is:

- Notice case of xerophthalmia at the hospital's OPD
- Get details of patient's address
- Make a tentative programme date to visit the area
- Inform the patient's family of the date of visit, explain the programme and request the opportunity to inform other people in the community
- Visit the patient's home on the given date
- Select around 100 houses surrounding the house
- Examine all the children below 15 years of age
- Observe, calculate and report the results

When Lumbini conducted this surveillance programme in 1996/97, ten patients were selected for the purpose. Within ten sites, 1822 children below 15 years of age were examined and 4.17% children found to have vitamin A deficiency. Of this percentage, 59% were male and 41% were female. According to the report 35% were below 6 years of age and 65% were 6 to 15 years of age.



# Challenges in Community Outreach

**Until recently, it was impossible for Aravind to know exactly how many camp patients were receiving follow-up care because we couldn't track their visits to other doctors or other eye camps. We have solved this problem by implementing follow-up team visits to the camp sites 40 days after surgery.**

**- R. Meenakshi Sundaram**

**Although Aravind Eye Hospital has a full separate department for its outreach work now, initially it was manned by one coordinator, one camp organiser and one typist. The community rapport created by the organiser has helped the department to grow and develop. At present, the Aravind outreach team includes almost two dozen employees at four hospitals, covering most of Tamil Nadu State and bordering Kerala State.**

**- Aravind Community Outreach**

## How to ensure follow-up?

The main challenge of the base hospital approach to community outreach is ensuring that patients are seen for follow-up. Camp patients might come back to the base hospital for follow-up, or visit a local eye doctor, or attend a nearby screening camp, or not worry about the follow-up at all.

Aravind has found that their rate of follow-up increases (to 95%) when follow-up teams are sent to the camp sites 40 days after surgery. Camp patients are informed of their follow-up date upon discharge. One ophthalmologist plus one or two ophthalmic assistants (refractionists) make the follow-up visit, after the simple logistics of hospitality and unlocking the facility have been arranged by the original camp sponsor.

## How to explain poor visual outcomes to patients?

Often the question is posed whether all cataract patients will have good eyesight after surgery. Most cataract patients will have their sight restored, and should be able to lead normal lives. However, there will be some cases in which cataract surgery cannot restore vision. The reasons for this are:

- Because the surgery for cataract has been delayed a long time, other complications like glaucoma have set in, which have irreparably damaged the eye. Therefore, even if the defective lens were removed the patient would still be unable to see properly. Although in most cases the eye doctors will be able to determine whether or not surgery will restore vision, it is not always possible to tell in advance whether the patient will regain eyesight.
- Some patients complain that they have not got back their eyesight even after undergoing surgery for cataract. This is usually because they had other problems with their eyes, such as retinal detachment in addition to cataract, that affected their vision. In such cases, they cannot and will not have their eyesight restored by surgery.

One strategy for dealing with unconvinced patients is to ask a colleague to confirm the diagnosis/prognosis. Another strategy is to train patient counsellors to deal compassionately with patients disappointed with their visual outcome.

## Are full-time camp organisers necessary?

Community awareness and involvement are vital to the success of any programme dealing with large volumes of patients. The camp organiser is the link between the hospital and the community. Because the eye care institution must identify and persuade potential camp sponsors to conduct camps (rather than waiting for sponsors to volunteer their services), full-time personnel are needed to meet these sponsors, fix camp dates and arrangements, prepare schedules, generate reports, and so on.

Eye hospitals, depending on their size and the extent of the population they are serving in the region, might have one or more camp organisers. Each camp organiser can be assigned a separate territory and made responsible for community outreach in that territory. He or she should be well informed about eye diseases, cataract, and the number of cataract patients in a given population. He or she should also be capable of selecting the right community group to work with who will publicise the event so that the maximum possible number of people learn about the camp and attend it.

## Conclusion

High quality, large volume, sustainable cataract surgery programmes depend on large numbers of patients, yet studies show that only a small percentage of the people needing cataract surgery actually seek the treatment. Those eye care professionals working in eye hospitals, clinics, or private practices can generate demand for their eye care facilities and services through community outreach. Outreach activities such as eye camps, school screenings, community-based referral systems and rehabilitation can increase productivity, quality of care, and cost effectiveness in cataract surgery programmes.







## Appendix

### Guidelines for Successful Screening Eye Camps

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## Appendix

# Guidelines for Successful Screening Eye Camps

### Objectives of screening eye camps

The major goal of screening is the identification of individuals with cataract blindness, since cataract is the leading cause of reversible blindness and has vast economic and social implications. We also attempt to see all school-aged children so that we can detect refractive errors, strabismus, amblyopia, and nutritional deficiencies. We commonly find many with uncorrected refractive errors. Presbyopia also may present as a disabling problem. The prescription of glasses for refractive errors becomes an integral part of the eye camp. We strive to detect glaucoma using tonometry and ophthalmoscopy. We evaluate other eye diseases that may require additional diagnostic or therapeutic management (i.e., diabetic retinopathy, pterygium, dacryocystitis, corneal ulcers, and retinal detachments). These patients are referred back to Aravind's base hospital.

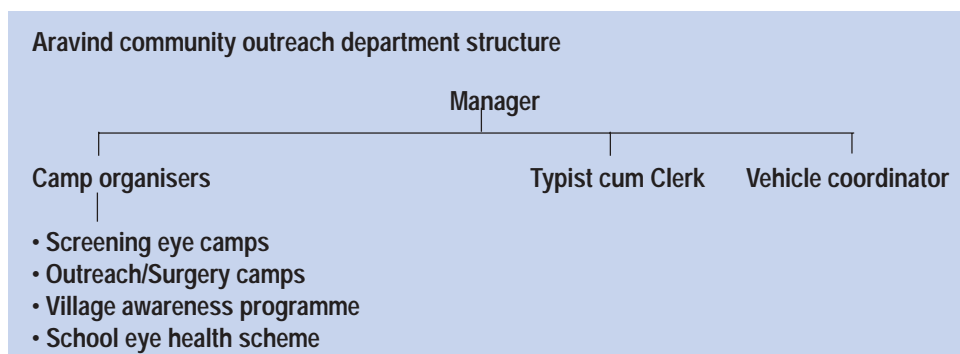
- Dr. G. Natchiar

- To identify people with cataract and offer surgery restore their sight
- To create awareness among the blind and to motivate them to utilise the existing facilities
- To detect other eye problems and advise / provide appropriate treatment
- To prescribe and provide glasses for refractive errors (at affordable rates)
- To detect and treat (referring for surgery when required) cases of diseases such as pterygium, chronic dacryocystitis and other infections
- To identify and treat/refer school children in the villages with refractive errors, squint, amblyopia, nutritional deficiencies
- To undertake health education in the community on proper eye care
- To develop and maintain relationship between the institution and the community
- To market the eye care facilities and services offered
- To provide a training ground for medical staff in order to develop their capacity

**The secret behind the success of Aravind's community outreach activities is the good organisational set-up and a team of dedicated and experienced staff with good support from a number of voluntary and social organisations, both local and international.**

**- R. Meenakshi Sundaram**

## Staffing and equipment considerations



**Camp manager** (in a small institution, can also serve as camp organiser)

- Help organisers to develop an annual plan of eye camps and targets
- Coordinate the activities of the camp organisers
- Plan and coordinate all outreach activities in cooperation with clinical and non-clinical staff
- Keeps track of hospital-based activities related to camps to ensure smooth running of the camps
- Meets regularly with department staff to coordinate logistics and to make arrangements with the hospital coordinator for accommodation, food, transport, supplies for all the camps to be held that week
- Conduct needs assessments
- Give weekly camp list to the vehicle coordinator for staff transportation arrangements
- Ensures that camp postings are communicated to all posted staff
- Ensures proper indenting of necessary items from the hospital stores; a checklist is maintained by the store keeper to ensure everything is supplied and returned after the camp
- Collect all reports (from camp organisers) and prepare statements to conduct performance analysis
- Ensures that all the required reports are submitted to internal departments and external agencies
- Takes care of outreach training and mentoring programme
- Helps to conduct various eye care awareness programmes, studies, etc.
- Forecasts the achievement of each camp organiser by month, area, sponsor, and camp. Forecasting is important for motivating the camp organisers to reach more and more patients, and also for predicting manpower needs and for ensuring ample space and staff at the base hospital to handle the patients admitted from screening camps.

### Typist(s) cum clerk(s)

- Clerical work
- Communication
- Report generation
- Maintenance of statistics

### Vehicle coordinator

- Arranges transportation for the team and patients both for bringing them into the hospital from the campsites and sending them back on discharge
- Manintain all accounts relating to this activity
- Managing the vehicle movements
- Vehicle maintenance

### Camp organiser(s)

- Making an annual plan for the given area
- Chooses camp locations
- Contact sponsors and fixes camp dates
- Guide the sponsors
- Organises the camp, planning for necessary equipment, supplies and manpower and making food and transportation arrangements for inpatients
- Transport the patients to base hospital for treatment and home
- Writes necessary reports
- Takes care of other details to ensure the eye camps run smoothly

**To increase the camp's efficiency, we extensively use paramedical personnel who are part of the medical team from Aravind Eye Hospital. These ophthalmic assistants receive training in basic nursing, followed by intensive training from us in a specific area of ophthalmic care. At the camp, they perform preliminary screening and diagnostic tests. Their strategic use reduces the need for ophthalmologists.**

**- Dr. G. Natchiar**

### Staffing requirements for screening eye camps

	Small	Medium	Large	Very Large
Number of expected patients	<200	200-400	400-600	>600
Expected cataract operations	10-40	40-80	80-120	>120
Ophthalmologists	1	2	3	5-7
Ophthalmic assistants	(3)	(6)	(9)	(11-12)
- Preliminary vision testing	1	2	3	3-4
- IOP & duct	1	2	3	4
- Refraction	1	2	3	4
Optician	1	1	1	1
Camp organiser	1	1	1	2
Patient counsellor	1	1	1	1

### Equipment needed

	Small	Medium	Large	Very Large
Number of expected patients	<200	200-400	400-600	>600
Expected cataract operations	10-40	40-80	80-120	>120
Snellen's chart	4	6	7	8
Tonometer	1	2	2	2
Ophthalmoscope	1	1	2	3
Flashlight (battery/electric)	2	2	4	4
Medicine tray	1	2	2	3
Basin	1	2	2	2
Cubicle set and cloth	1	2	3	4
Trial lens set	1	2	3	4

Retinoscopy mirror	1	2	3	4
Wire set with bulb & bulb holder	3	4	5	6
Extension switch board	1	1	1	2
Bulb	3	4	5	6
Jar / Bin	1	1	1	1
Needle	2	4	6	10
Syringe	1	2	3	5
Kidney tray	1	1	1	1

### Furniture needed

To implement a large screening eye camp (400-600 Patients)			
Area	Tables	Benches	Chairs
Registration	2	8	4
Preliminary vision	3	4	6
First examination by physicians	4	4	4
Tension and duct examination	2	7	3
Refraction	4	12	6
Final examination by physician	2	4	4

## Steps in organising screening eye camps

### Rapid needs assessment for starting screening eye camps

- Staff available? (outreach/camp organiser, medical/paramedical, transportation, secretarial)
- Resources available? (financial, office, communication, transportation, equipment)
- Geographic areas to cover? (reaching the unreached without overlapping other programmes?)
- Sponsors available (for financial support, publicity, volunteers, furniture set-up, hospitality)
- Screening for all eye problems or only cataract?
- Population and epidemiological statistics available?
- Any preferred day(s)/season(s) for camps? If yes, specify the day(s) or season(s) and reason(s).
- Organisational steps/strategies for planning the camps successfully?
- Implementation steps/strategies for conducting the camps successfully?
- Cooperative planning with base hospital staff?
- Cost recovery from the camp patients or sponsors?
- Guidelines for sponsors?
- Data collection and storage system in place?
- Other considerations?

The activities of screening eye camps can be classified as follows:

1. Pre-camp activities
2. Camp day activities
3. Post-camp activities
4. Follow-up

### 1. Pre-camp activities

- Identify target locations
- Prepare a list of potential sponsors for the target locations
- Contact the potential sponsors to show them the need for camps
- Judge the chosen sponsor's financial viability and manpower capability
- Help the sponsor understand the commitment involved (volunteer manpower, furniture arrangement, site cleaning and set up, financial implications for publicity, hospitality, inpatient food and transport)
- Explain camp procedures to the sponsor
- Suggest a suitable date that does not coincide with local festivals, harvests or holidays
- Select a camp site together, and finalise camp date and time
- Assist the sponsor in planning the work to be done and the publicity to be prepared
- Update the sponsor on hospital-based activities related to the camp
- Attend regular meetings (weekly/monthly) at the base hospital to discuss the number of doctors, paramedical staff, drivers and vehicles needed per camp
- Help organise the surgery, discharge and follow-up schedule
- Finalise the camp medical team posting and inform all people concerned
- Facilitate accommodation and food for the expected number of inpatients on camp day



- Arrange for necessary items (medicines, instruments) to be received from stores
- Arrange for transportation of the camp medical team
- Ensure transportation costs are provided for patients from camp site to hospital and back to their community
- Collect all data necessary to generate reports

#### Scheduling pre-camp activities

- 1-2 months before the camp: select the location, find a sponsor, fix the date
- Several weeks before the camp: select the venue and the time, start planning publicity
- 2-3 weeks before the camp: coordination meeting at the base hospital (see box below)
- 1-2 weeks before the camp: camp organiser visits the site of the camp, and meets the sponsor(s) to review publicity and camp arrangements
- 1 week before the camp: samples of the publicity are sent to base hospital
- 3-7 days before the camp: posters are displayed and handbills distributed
- 1-3 days before the camp: audio publicity is done

For hospitals or eye care programmes just starting eye camps, it is helpful to hold a meeting at the hospital approximately 2-3 weeks before the camp date, involving the doctor posted to that camp, camp organiser, representative of the sponsoring agency, and hospital staff as necessary. The following issues and actions should be dealt with.

#### Pre-camp meeting agenda

1. Determine suitability of the camp site and the need for any special arrangements regarding transportation, catering, etc.
2. Based on the camp location and site, identify the villages to be targeted and their populations.
3. Based on demographics and epidemiological statistics, estimate eye problems in the target area
  - number of people with refractive errors
  - number of people with eye disease
  - number of people with cataracts.
4. Establish targets for the number of outpatient cases in the camp and the number of cataracts for surgery based on (a) prevalence and incidence (b) available resources (c) overlap with other eye camps (d) capacity of the camp sponsor
5. Decide on the needed personnel (number of doctors, ophthalmic assistants, other paramedical staff, camp organiser(s) to be involved in the camp) based on expected number of outpatients, language facility needed, and any other issues that come up.
6. Decide on publicity campaign
  - pamphlets to be printed
  - number of posters and banners to be put up
  - audio publicity (microphone and speaker, or tom tom)
  - newspaper advertisements and radio announcements.
7. List the local health, education and social services personnel in the target area to be contacted.

## 2. Camp day activities

- Transport medical team to the camp site, along with outpatient and inpatient registers, other necessary documents, medicines, and all necessary equipment, and back to the hospital
- Ensure food has been arranged for medical team as well as patients selected for surgery
- Help sponsor to arrange furniture facilities at the camp site for various stages in the screening process
- Instruct volunteers on how to correctly enter information (name, age, sex, address, date and place of camp) on outpatient cards, identity cards, patient registers, and on how to control the patient flow or how to help with screening
- Assist patient counsellors in collecting and counselling patients advised for surgery
- Enter inpatients' data into inpatient register
- Organise the transportation to take patients, with the help of volunteers, to the base hospital

## 3. Post-camp activities

- Admit patients brought from camp
- Inform doctors and paramedical staff of preoperative needs of these patients
- Make food arrangements for these patients
- Monitor that all patients receive surgery/treatment without undue delay
- Counselling on different stages of treatment/surgery
- Discharge counselling on applying drops, precautions, hygiene
- Communicate the data of review examination at campsite

## 4. Follow-up

- Formally thank the sponsor, and include camp results after patient discharge (It is important to send a quick note of thanks with a receipt for the sponsor's contribution amount to the key person in the sponsoring organisation on the Monday or Tuesday immediately following the camp)
- Fix a date for the follow-up review of all operated patients after 5-6 weeks and communicate the same to the sponsor
- Maintain a good rapport and continuing relationship with the sponsor
- Generate reports with the camp statistics
- Send information on upcoming camps and data on camp statistics regularly to local government officials, health officers, and supporting NGOs to encourage their continued support and cooperation
- Evaluate the camp and its results
- Obtain interdepartmental feedback (through regular meetings) to maintain or improve level of satisfaction and growth
- Plan future outreach programmes in that location

**We have set-up an information system so that periodic outreach reports can easily be generated and sent to interested parties, such as government departments and NGOs. Proposed camp plans are sent to district officials every month. All details of proposed camps and their final statistics are sent to supporters and major sponsors.**

**- R. Meenakshi Sundaram**

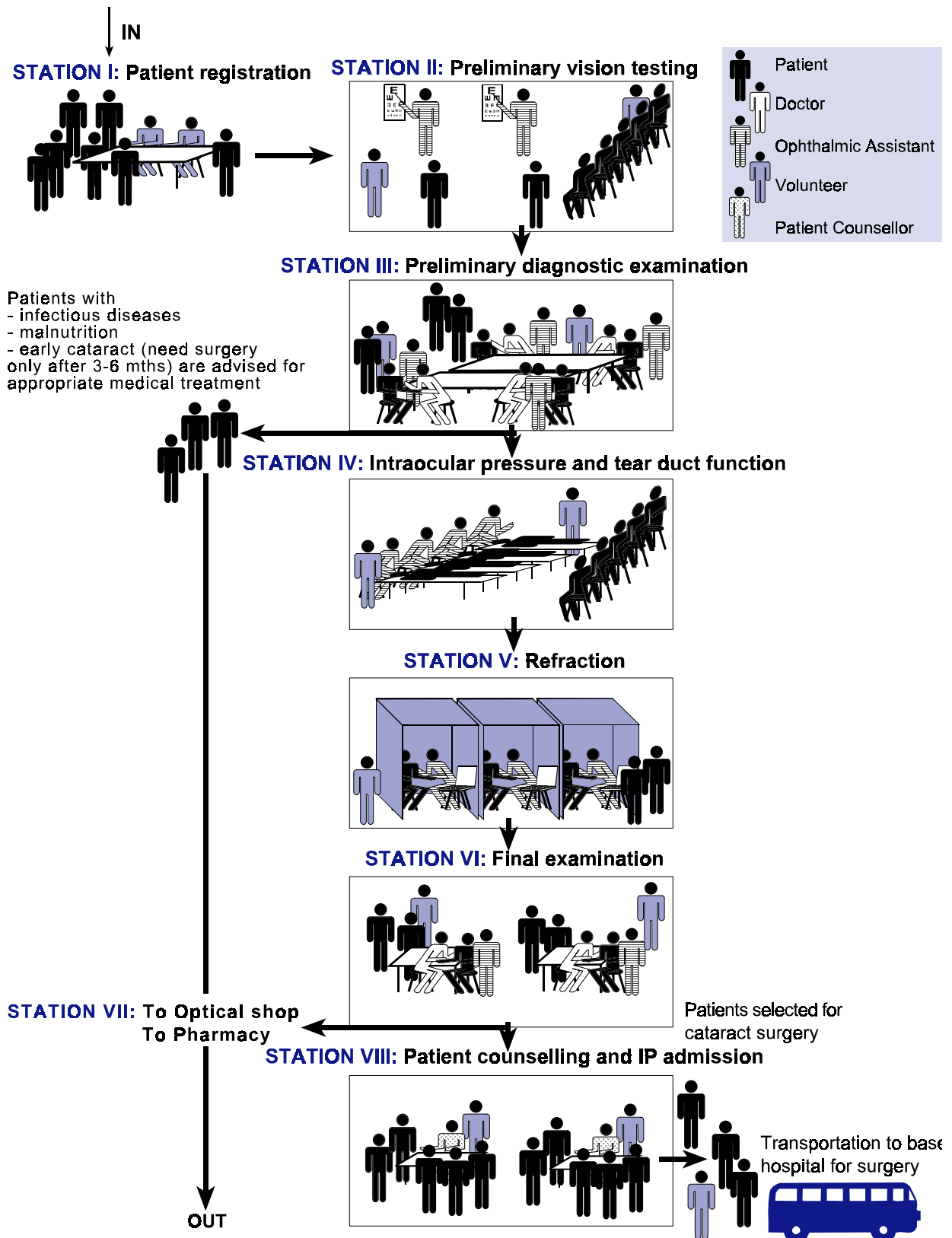
### Secrets for ensuring a successful eye camp

The key to a successful eye camp is proper preplanning by the camp organiser in conjunction with the camp sponsor.

1. Select a location for the camp with a population not less than 3,000 and surrounded by several other villages or hamlets that will participate in the camp.
2. Find an accessible, adequately sized site for the camp, preferably a school building or similar, with water, electricity, and necessary furniture (chairs, benches, tables).
3. Consider all local festivals and harvest periods before finalising the camp date.
4. A high degree of community involvement is the key to achieving set targets and serving the patients of the community. The main strength is local support provided by sponsors and voluntary social service organisations. The sponsor must identify and work with other service-minded people in the community. Village leaders and local politicians can use their influence to persuade people to attend the camp, and might also be able to offer some facilities for conducting the camp. Community doctors should be encouraged to refer patients with known eye problems to the camp. Teachers can persuade their students to identify patients, particularly in their own families. Religious leaders can talk about the importance of the camp when people gather for worship. Involving the community in these ways can help reduce the cost of publicity, and increase the turnout.
5. Publicity for the camp is the main tool for ensuring its success. Community participation in the publicity campaign is vital.
6. It is quite helpful if local people make transportation arrangements to get potential patients from surrounding villages to the camp in case of poor accessibility (due to lack of public transport, lack of money, or individual lack of mobility due to blindness).
7. Be sure to plan ahead at the base hospital for the number of inpatients expected from the camps. For example, immediately after the Aravind outreach department's camp meeting each week, the coordinator of the free hospital meets with the camp organisers to do the admission and discharge planning for the number of camp patients expected that week. They make other arrangements as well, such as operation theatre schedule, accommodation, food, transport and other support services. This is a crucial step since advanced detailed planning is a must for smooth delivery of quality surgical care to the patients brought from eye camps.



## The flow of a screening eye camp



The patient flow through the eye camp is well organised, ensuring an efficient utilisation of manpower and facilities. The flow of patients is streamlined by setting up a series of record-keeping and diagnostic stations; patients travel through these in a unidirectional manner. As all patients may not require testing at all stations, the examination process ensures that patients attend only necessary stations (e.g., it would be wasteful to have a young patient with 6/6 visual acuity attend the refraction station).

### Station 1 - Patient registration

- Volunteers record patient names, ages, and addresses onto case sheets.
- Volunteers must have legible handwriting (usually teachers who are involved in their community).
- Patients are given identity cards, which are retained for any future follow-up.



### Station 2 - Preliminary vision testing

- Vision testing is conducted by ophthalmic assistants, aided by volunteers.
- Vision charts, such as the Snellen chart in the local language and illiterate E type charts, are used with adequate illumination.



### Station 3 - Preliminary diagnostic examination

- Residents and fellows perform the preliminary examination.
- They use flashlights (torches) and ophthalmoscopes to examine the external eye and fundus.
- They need a dimly lit room with desk, chairs, and two functioning electrical outlets.
- If there is no electricity, doctors use battery-operated instruments.





This preliminary examination is the first step in the screening protocol in which each patient is triaged and his or her care streamlined, depending on the examiners judgement. Patients with external eye diseases such as chalazions, blepharitis, malnutrition, and corneal ulcers are promptly advised about therapeutic modalities, and necessary medications are prescribed. Patients with incurable blindness are advised of it at this time. The remainder go beyond this step to the other diagnostic stations as indicated and then to the final examination.

#### Station 4 - Intraocular pressure and tear duct function

- Conducted by trained ophthalmic assistants, with the help of community volunteers.
- Ophthalmic assistants measure the intraocular pressure of each eye with Schiotz tonometer.
- Volunteers administer topical anaesthetic drops and explain procedures.
- Volunteers help patients lie down on the benches and instruct them to extend one of their arms and focus on their thumb during Schiotz tonometry.
- Tonometry is performed on all candidates for cataract surgery, on patients with suspected or identified glaucoma, and on patients over the age of 40 years as glaucoma screening.
- The tonometer are sterilised with an alcohol lamp after each patient.
- Patients with history of watering eyes or discharge, patients with suspected lacrimal sac infection, and candidates for cataract surgery have the patency of their nasolacrimal ducts tested.
- Distilled water is gently irrigated through the lower punctum and canaliculus.
- Requires two benches for patients to lie down on and adequate additional benches for waiting patients. Adequate lighting by a window is necessary.
- Cannulas are sterilised between tests.



**In this system, the ophthalmologist is relieved of the mundane chores of performing all the necessary steps in patient examination by well-trained volunteers, ophthalmic assistants and residents. Thus, the care of patients is streamlined into an orderly, efficient flow that allows one senior ophthalmologist to treat hundreds of patients at a given camp.**

**- Dr. G. Natchiar**

#### Station 5 - Refraction

- Patients with complaints of defective vision due to refractive errors, myopia, presbyopia, out dated glasses, or aphakia are examined.
- Well-trained ophthalmic technicians refract while volunteers help control the patient flow.
- Most refractions are accomplished without dilation, but young children and some adults receive cycloplegia. There are adjoining waiting rooms for dilation.



- Room is equipped with one or more foldaway partitions (to create refraction cubicles), trial lens sets, and mirrors.

### Station 6 - Final examination

- Senior doctors evaluate the test findings and give the final examination, review the patient records, make the final diagnoses and prescribe treatment. (In a small camp, the same one doctor will do both the preliminary exam and the final exam.)
- Senior doctors can prescribe glasses or medicine, or advise the patient to undergo surgery.



### Station 7 - Optical shop

- An optician also attends the screening camp.
- If the patient is advised for glasses he or she can purchase readymade spectacles, if available.
- Otherwise the optician takes the order and distributes the glasses a week later at the same camp site.



### Station 8 - Patient counselling and IP admission

- Those patients scheduled for surgery are registered, counselled, and transported at the termination of the eye camp to Aravind Eye Hospital.
- These patients receive surgery, postoperative care, meals, and round-trip transportation.



**The important qualities that characterise productive sponsors are financial resources sufficient to provide adequate publicity, a desire to provide social service, and access to enough volunteers to conduct publicity and assist in the eye camps. Because past performance as a camp sponsor is an important indicator of future success, relationships with past sponsors should be maintained and nurtured.**

**- R. Meenakshi Sundaram**

**The prestige and goodwill that our sponsors earn in their communities far outweigh the financial burden. What they really need help in is how to organise the camp, how to create propaganda/advertising, and how to organise the logistics.**

**- R. Meenakshi Sundaram**

## Working with camp sponsors

Inviting sponsors to work with the eye care institution at a local level (in making local arrangements and covering local expenses) is an effective way to reach large numbers of rural patients while keeping the institution's costs as low as possible. The camp organiser selects underserved locations, contacts potential sponsors, helps them to see the need for an eye camp in their area and persuades them to conduct a camp. The camp organiser then has to help the sponsor to understand and handle camp-related activities like publicity, hospitality, camp site preparations. It is best to meet and conduct a discussion with the sponsor in person to explain all the details, especially the commitments, expectations and responsibilities of both parties.

### Guidelines for selecting a sponsor

The camp organiser has to find a suitable local sponsor in that specific region who is interested in providing service. The organiser will have to gauge both the commitment and the financial strength of the sponsor and the capacity to follow through.

**Gauge the commitment of the sponsor:** The sponsor/sponsoring organisation should be respected and have good rapport with the local community. The sponsor should have background of community involvement and participation in the community.

**Gauge the financial strength of the sponsor:** The capacity of sponsors to share the responsibility for an eye camp will vary depending upon their financial strength. However, the sponsor should be financially strong enough to meet certain expenses incurred by the screening eye camp (see Cost Considerations). While some sponsors will have the capacity to bear the expenses of free medicine, IOLs and spectacles, such sponsors are few in number and may not be sustainable over the years. In other exceptional cases, the sponsor is really committed and enthusiastic to render service to the community and is ready to extend all possible support and cooperation for the camp, but is not financially strong enough to cover the costs. In these cases, it might be best to give them a chance, perhaps by linking them with a financially strong sponsor who does not wish to get involved in the detailed work. The sponsor who is financially sound but has no commitment or involvement will not be a suitable partner in the organisation of a camp, unless they are willing to be linked with another organisation as described above.

### Convincing potential sponsors to hold an eye camp

The camp organiser should emphasise to the sponsor the extent of benefits of screening eye camps to society, to the community, to the eye care institution, and to individuals afflicted by eye problems. To help thoroughly convince a potential sponsor to host an eye camp, remember:



- The reputation of the base hospital or ophthalmologist is very important.
- Outlining the backlog and incidence of cataract is helpful, as is explaining that cataract surgery is a simple solution.
- It is vital to point out the benefits to the sponsor in terms of publicity, exposure in the region, and boosted reputation.

### Hospital assistance to the sponsor

It is preferable for eye hospitals to develop, follow and encourage a protocol or policy for working with eye camp sponsors. This will eliminate any discrepancy in the way camps are organised because all sponsors will receive the same guidelines, outlining their role and responsibilities. A standard package of information should be available to all sponsors.

The sponsor must be informed ahead of time of the furniture set-up needed for screening the patients. The different stations (registration of patients, initial testing areas, refraction area, doctors' examination areas) and their exact space requirements, plus other necessary specifications, should be clearly mapped out. An effective way to assist the sponsor is to send a camp handbook or set of display sheets containing photographs, or diagrams and all the organisational details.

### The division of roles and responsibilities

**The sponsor should be given responsibility and authority to make certain decisions so that he or she may feel more accountable and committed to the community.**

**- R.Meenakshi Sundaram**

Commitments made by Hospital	Sponsor
1. To guide the sponsor until the camp is over	1. Publicity
2. To conduct screening and to send patients needing surgery to base hospital	2. Campsite arrangements
3. To operate on patients and transport them home	3. Hospitality for medical team
4. To ensure team planning	4. Volunteers
5. To provide medical team with transportation (and food, where necessary)	5. Inpatients' expenses
	6. Motivation of selected cases to attend the hospital for surgery

### The camp organiser must:

- contact the sponsor to discuss procedures and cost management, and to finalise the camp site, date and time
- report to camp office, to include this camp in camp schedule
- confirm the details and mail these to sponsor
- visit the site to see pre-camp arrangements and to guide the sponsor
- coordinate between the hospital / camp office and sponsor
- provide transportation, and food if necessary, for the medical team

### The sponsor must:

- give wide publicity for the camp to attract as many patients as possible
- arrange access to a facility with suitable amenities (water, electricity, furniture, toilets)
- provide food, and accommodation if necessary, for the medical team
- arrange manpower to help clean the site, arrange furniture, set up equipment when it arrives, and assist medical team as volunteers
- cover the cost of inpatients' transport and food expenses
- arrange to provide pre and postoperative medications (if possible)

### Hospital recognition of sponsors

Eye hospitals should encourage sponsors to repeat their sponsorship each year or two. In order to motivate them and to sustain the sponsors' interest in organising camps, the hospitals must acknowledge their contributions. This can be done by honouring and congratulating them for their good work, by sending letters of thanks, by arranging media coverage of their eye camp, or by holding a special recognition event for them at the hospital.

Aravind conducts "Sponsor Day" every September, inviting all the sponsors who have conducted camps in the year as well as regular supporters to attend the function. Appreciation is shown for their contribution to community eye care.



Sponsors are requested to share their experiences and are then given the opportunity to interact with each other.

**There are mainly two types of volunteers, dedicated persons from a certain organisation and youth groups engaged for the camp. The first type of volunteer is usually capable and dependable. The second type is usually more in number and very enthusiastic but needs considerable guidance.**

**- R. W. B. Holland**

### Types of sponsors

There is a wide range of sponsors available in different areas. The sponsors can be individuals, governments, businesses, institutions, agencies, or organisations interested in extending eye care to their community.

- service clubs like Lions, Rotary, Jaycees
- prominent factories, industries or businesses, corporate offices
- cooperative societies or banks
- religious and youth organisations
- charitable groups, trust associations
- schools, colleges or other educational institutions
- voluntary agencies such as merchants' associations, farmers' associations
- local hospitals or health care centres
- recreational clubs, fan clubs
- local municipalities, political parties
- village leaders, politicians or philanthropists

In some cases, two agencies will join hands to organise the camp, sharing the responsibilities. One will ensure the financial support and the other will provide manpower support. Rich and well known individuals in the community might be interested in sponsoring a camp to honour a

**Sponsors recruit other local community volunteers. The number of volunteers needed is dependent on the projected number of patients to be screened. The use of local volunteers is an efficient utilisation of appropriate manpower. They accomplish many nontechnical but extremely necessary jobs that are crucial to the treatment of a large volume of patients. Volunteers clean the camp site, set up the camp furniture, help with publicity, manage the crowds, and register patients. They can also be trained to assist in various diagnostic procedures and help by escorting patients to different examination rooms. The number of volunteer personnel needed is a function of the volume of patients anticipated.**

**- Dr. G. Natchiar**

special event, such as a birthday or wedding anniversary, or in memoriam of someone in their family, while service clubs can supply the manpower. Some of the smaller hospitals without eye care facilities might be interested in extending their service by hosting eye camps. Merchants' associations, industrialists and financial institutions can profit from the publicity and public relations inherent in their sponsorship.

### The importance of volunteers

Volunteers, provided by the sponsor, are essential for various activities.

- Before the camp - 10 volunteers
  - preparing and putting up posters and banners
  - distributing handbills
  - arranging other publicity campaigns
- On the day before the camp - 7 volunteers
  - arranging the furniture (5)
  - cleaning the camp site (2)
- On the day of the camp - 20 to 25 volunteers
  - managing the crowd (5)
  - making entries in the registers and records (5 with good handwriting)
  - registering patients selected for surgery (2 with good handwriting)
  - assisting the medical team at all stages (10)
- After the camp - 5 volunteers
  - cleaning up the camp site
  - assisting in transport of selected patients to hospital
  - accompanying patients home after their discharge

It is wise to suggest to the sponsor(s) that they invite local doctors, ophthalmic assistants and other health care workers to refer their patients with eye problems to the screening eye camp. Sponsors can also contact local schools or youth organisations to get the help of young people in distributing handbills to their families and neighbours.

My students simply worked flat out in the last one week. Soundararaja Mills [the camp sponsor] provided us transportation to cover over 1,000 driving miles. Our "propaganda" was effected through handbills, wall posters, and travelling megaphone announcements. Last Thursday night they were mounting publicity posters on every public bus. We couldn't do it earlier because buses in this town are all scrubbed and cleaned every Wednesday night.

- A school teacher who organised marketing for a screening camp in Dindigul, India

**In the rural areas of India, the most effective type of publicity is through audio media. Sponsors use techniques such as microphones and loudspeakers on the street and the radio to announce an upcoming camp. These aural techniques attract the attention of visually disabled and illiterate patients, who might otherwise not attend. This crucial factor helps determine the turnout and the ultimate success of the camp.**

**- Dr. G. Natchiar**

#### **Cinema in real life**

**Teams from six hospitals converged at LAICO to improve their eye care service capacity by sharing their experiences in techniques used for spreading awareness about eye care in their regions. While most hospitals used posters, notices, tom toms etc., the hospital from the most backward area among them thought of a novel plan of requesting the cinema house owners to flash the news about free eye care on their screens, to benefit the rural population who visit these houses in large numbers at weekends. The next day there was a large crowd outside the hospital. Happy that his idea had worked, the medical superintendent rushed out to meet the patients, thinking they were the rural poor folks. It was not so. They were mainly the staff of the cinema houses.**

**- Lions Aravind Institute of Community Ophthalmology newsletter**

## **Secrets to effective publicity**

Any marketing campaign requires effective publicity. In this case, the product being marketed is quality eye care. An eye hospital will accomplish most of its marketing through screening eye camps, and will attract most of its rural patients to these eye camps through camp publicity. In other words, these camps form an integral part of the marketing strategy for increasing the number of people who access the hospital's services, leading to high productivity and cost effectiveness.

Sponsors are encouraged to pay special attention to educating their rural communities about the screening camps, since successful publicity will attract a large volume of patients. Effective publicity strategies, planned ahead of time and undertaken 3 to 7 days before the camp, can include:

### **Printed and visual aids**

- letters to village development committees, schools, health posts, etc.
- handbills
- wall posters
- cloth banners
- newspaper advertisements
- publicity boards
- cinema slide (a still picture projected onto the screen before a movie and during intermission as a free public service)

Type of publicity	Size of camp		
	Small	Medium	Large
- wall posters	100	200	300
- notices/flyers	2000	3000	5000
- audio announcements	1 day	2 days	3 days
- thatti (publicity) boards	-	2 boards	5 boards
- banners	-	-	5-10
- letter correspondence	local	regional	sometimes state-wide

### **Audiovisual aids**

- microphone/speaker
- radio advertisements
- through cable television
- tom tom (a message about the eye camp conveyed by beating drums in the traditional manner)

### **Publicity committee**

Publicity for the camp is the main tool for ensuring its success. It should be well planned and delegated to a responsible committee. The chair of the publicity committee should plan the following with his or her group members:

### Area of coverage

- all the villages and hamlets in the radius of 3 to 5 kilometres to cover a population of 8,000 to 25,000

### Preparation of visual publicity materials (handbills/notices/flyers, posters, banners for large camps) and their distribution

- specify the date, place and time very clearly on every piece of publicity; include the name or logo of the sponsor and of your eye care institution. Prominence is given to the sponsor
- print at least 2,000 handbills/notices/flyers to cover the entire population; each house in the catchment area should receive a handbill not more than one week and at least three days before the camp; distribution can be door to door, inside daily newspapers, while doing audio announcements, and at places of worship or other sites where large numbers of people gather

**OM SRI SAIRAM**

17.12.2000, Sunday from 8.00 a.m. to 2.00 p.m.  
Sengunthamudaliar Wedding Hall, Ammapet, Salem

**Free Eye Camp**

**Aravind Eye Hospital**  
**Chief Dr. G.Venkataswamy, M.S., D.O., FAMS,**  
**with his team members**  
**conducts free eye camp to treat all eye diseases. We**  
**welcome you to utilise this golden opportunity.**

**Sri SathyaSai Seva Samithi, Salem &**  
**Aravind Eye Hospital, Madurai.**

- wall posters (usually at least 100 per camp) should be posted at important street corners, village information boards, nearby marketplaces, etc.
- 5-10 banners can be hung over major transportation routes one week to three days before the camp (especially for large camps)
- simple cinema slides can be shown in the host village of the camp as well as neighbouring villages, starting one week before the camp

### Arrangements for audio publicity (microphone/speaker, tom tom)

- remember that illiterate people and those with poor eyesight will not be able to see or understand written messages; without audio messages, they must rely on someone else to tell them about the camp

- auto rickshaws, cycle rickshaws or other moving vehicles can be used to spread the word one day before the camp; handbills can be distributed at the same time
- use of a prerecorded audio cassette effectively ensures that everyone hears all the necessary information, in an interesting announcement; sound quality should be good so that people can understand the message easily
- local tom tom propaganda can also be done where available
- cover as much of the target population as possible since audio publicity has been found to be a major influencer
- include the date, place and time, as well as the name or slogan of the sponsor and of your eye care institution in every piece of publicity
- announcements about camps coming up in the next week can be sent to the local radio station(s); these can accompany the sponsor's commercial announcement or be broadcast as public service announcements

### **Community participation in publicity campaign**

The camp organiser or sponsor should contact and invite all local political, community and religious leaders, teachers, doctors, youth group coordinators and heads of business to become involved in the camp activities, especially by announcing the camp, referring potential patients, or arranging transportation.

Recently the village of Velliankundram, located five kilometres from a screening camp held outside of Madurai, was surveyed to study the effectiveness of the publicity and social marketing techniques used. The survey showed that in the village population of 1,100 people, there were 102 eyes with cataract (56 persons) with vision less than 6/60. Only 16 people in that population had been operated on for cataract — less than 30% coverage of potential cataract patients. The surprising thing is that no one from Velliankundram had attended the nearby screening camp because they did not know about it. The publicity had not reached their village, a mere five kilometres from the camp location.



**The expenses incurred are nothing if we see what it means to the patients. Getting back one's eyesight would be like getting a new life, and the value of this is much more than the money spent for it. We should therefore regard the cost not as expense but as investment in a better life for the patients.**

**- R. Meenakshi Sundaram**

**Contingencies? Well, Aravind's free hospital, which serves as the base hospital, has a bed capacity of 600, and average length of stay for eye camp patients is 3 to 4 days. In the event that more than 600 patients are expected from the camps, we have made arrangements ahead of time with the Aravind Children's Hospital or a local wedding hall for overflow patients to stay there after surgery. We can do this without compromising the quality of postoperative care by sending over housekeeping staff to ensure cleanliness, and paramedical staff to tend the patients.**

**- R. Meenakshi Sundaram**

## Cost considerations

Conducting a successful camp can mean incurring a sizable expense. Trying to reduce these expenses too much can result in poor turnout of patients, which would defeat the very purpose of the camp.

## Cost analysis of camp organisation

The main costs in conducting a screening eye camp are:

1. Publicity
2. Hospitality (or food allowance) and transportation for the camp team
3. Transport of patients
4. Food for patients admitted for surgery
5. Cost of volunteers
6. Other costs

### 1. Publicity

- number of posters printed x cost per poster + cost of distribution
- number of handbills printed x cost per handbill + cost of distribution
- number of banners made x cost per banner + cost of distribution
- for audio publicity, cost of hiring a vehicle and audio equipment + payment to operators

### 2. Hospitality for camp team

- number of medical personnel (camp organiser to determine) x cost of lunch + tea
- costs of accommodation, if necessary
- travel / daily allowance for camp team, if applicable

### 3. Food for patients during postoperative stay at hospital

- number of patients selected for surgery x food expenses per patient for 3 - 4 days

### 4. Transporting patients to the hospital and back to the village following discharge

- number of patients selected for surgery x return bus fare per patient (must be predicted ahead of time)



### 5. Cost of volunteers

- volunteers work for free, but any expenses they incur should be reimbursed (for example, travel costs if they accompany patients)
- sponsor may wish to thank the volunteers by providing them lunch and/or tea

### 6. Other costs

- the eye hospital and the sponsor should always have money for contingencies (for example, vehicle repairs, emergency care for a patient)
- free medications and spectacles for postoperative cases, if applicable

## Cost management

Sponsors can find others with whom to share their camp costs. For example, they can:

- conduct the camp jointly with other organisations or individuals and share the costs
- get various organisations or individuals to bear some of the costs in return for advertisement space on the poster and/or banner
- involve the community as much as possible to help reduce expenses and still get good turnout.

Sponsors can economise in other ways as well. They can:

- base the elaborateness and fanciness of their posters and announcements on the resources they have available
- conduct their camp on a weekend (Saturday and Sunday); school buildings are usually available on weekends at low or no cost, and medical staff will be relatively free of hospital work on those days.
- The hospital should monitor and advise the sponsors so that no money is spent unnecessarily like on elaborate camp inaugural functions, gifts, etc. Large expense often makes it difficult to get the sponsor to agree for repeat camps.



## Conclusion

The success of screening eye camps depends on both the organiser and the sponsor. The motivation and assistance provided by the camp organiser can affect every aspect of the camp. The commitment and involvement of the sponsor are equally important. The success (or failure) of each camp should be examined and documented. Every experience in the camps leads to new learning and improvement in outreach work. Eye care professionals in the developing world know of the huge backlog of cataract to be operated on. Eye hospitals understand that community outreach is essential for reaching the needlessly blind. Screening eye camps offer an opportunity for eye hospitals to serve the community and enhance the quality, volume and cost effectiveness of their cataract surgery programmes.