

A STUDY OF CONSUMER BEHAVIOR PATTERN FOR SELECT EYE-CARE FACILITIES IN VASHI AND KOPARKHAIRNE, NAVI MUMBAI

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ABSTRACT

The sudden spur of many Eye hospitals in and around Navi Mumbai, especially the nodes of Vashi and Koparkhairne area, has raised the very basic question of whether the facilities being provided are to the satisfaction of these consumers or not. Is there any scope for any expansion or a new eye care facility. The sample market chosen comprised of the various major hospitals and clinics offering eye care services in Vashi and Koparkhairne cities of Navi Mumbai. The management personnel and the doctors/ surgeons of few hospitals were taken as a source of information regarding the market they are employed in and their experience. Another population sample comprising of the clients/ patients visiting the hospital/ clinic were approached for getting information regarding the market dynamics and few other facts essential for the success of the project. Areas like Consumption trends, Competition, Cost structure, Consumer behaviour, intentions, motivations, attitudes, preferences and requirements were tried to cover in the said study.

KEYWORDS: Consumer Behavior, Eye Care, Navi Mumbai

INTRODUCTION

Present Status of Eye Care in India

India, the second most populous country in the world, is home to 23.5% of the world's blind population. In 1976 India became the first country in the world to start a national program for control of blindness. All surveys in the country have shown that cataract is the most common cause of blindness and all prevention of blindness programs have been "cataract-oriented". However, it has recently been recognized that the visual outcome of the cataract surgeries as well as the training of ophthalmologists has been less than ideal. There is now increasing emphasis on high-quality surgery and up-gradation of skills among ophthalmologists. Other important causes of blindness are refractive errors, childhood blindness, corneal blindness, and glaucoma. The definitions, magnitude, and present status of each of these causes of blindness, as well as efforts at control, are discussed.

Current Status of Cataract Blindness and Vision 2020: "The Right To Sight Initiative In India."

India is a signatory to the World Health Organization resolution on Vision 2020: The right to sight. Efforts of all stakeholders have resulted in increased number of cataract surgeries performed in India, but the impact of these efforts on the elimination of avoidable blindness is unknown. Projection of performance of cataract surgery over the next 15 years to determine whether India is likely to eliminate cataract blindness by 2020.

Data from three national level blindness surveys in India over three decades, and projected age-specific population till 2020 from US Census Bureau were used to develop a model to predict the magnitude of cataract blindness and impact of Vision 2020: the right to sight initiatives.

Using age-specific data for those aged 50+ years it was observed that prevalence of blindness at different age cohorts (above 50 years) reduced over three decades with a peak in 1989. Projections show that among those aged 50+ years, the quantum of cataract surgery would double (3.38 million in 2001 to 7.63 million in 2020) and cataract surgical rate would increase from 24025/million 50+ in 2001 to 27817/million 50+ in 2020. Though the prevalence of cataract blindness would decrease, the absolute number of cataract blind would increase from 7.75 million in 2001 to 8.25 million in 2020 due to a substantial increase in the population above 50 years in India over this period. Considering existing prevalence and projected incidence of cataract blindness over the period 2001-2020, visual outcomes after cataract surgery and sight restoration rate, elimination of cataract blindness may not be achieved by 2020 in India.

Current Status of Eye Care Service Delivery in India

About 65% of surgical performance in the country is performed in the private and voluntary sector and only 35% is within the government sector. About 11,000 ophthalmologists and an equal number of trained and recognized mild level personnel (MLP) exist as opposed to the ratio of having at least 4-5 MLP for each ophthalmologist. 50% of the ophthalmologists are surgically inactive within the country.

The ophthalmologist to population ratio in urban India is 1:25,000 but in rural India it is about 1:250,000. Rapid Assessment surveys in 14 districts in the country have pegged the coverage for eye care services at around 70%. Proportion of IOL surgery has gone up to nearly 90% at the end of 2005-06. Population based studies cut a very sorry picture on the results of the outcomes after cataract surgery. Poor outcome is an average of 40% following conventional cataract surgery whereas poor outcome is around 10% after IOL surgeries.

Main Causes of Blindness in this population are as follows

- Cataract 62.6%
- Refractive Error 19.70%
- Corneal Blindness 0.90%
- Glaucoma 5.80%
- Surgical Complication 1.20%
- Posterior Capsular Opacification 0.90%
- Posterior Segment Disorder 4.70%

OBJECTIVES OF THE STUDY

The Study Presented Covers the Following

- To analyze the current market segment of eye care in the selected areas.
- SWOT analysis.
- To analyze the competition in the market
- Future market potential of Eye care in Navi Mumbai.

RESEARCH METHODOLOGY

Research Methodology used was Primary data through interviews and questionnaire. The research tools used were Pie- Charts and tables for estimation. Sample size for research comprised 9 eye hospitals in Navi Mumbai region. A easy to answer, option based survey questionnaire was used to interview the representatives of the hospitals.

Though the questionnaire covered areas of marketing plans, competitors, etc., the major limitation was that these institutions were not willing to divulge detailed Marketing information to management students. Also lack of historic documentation of the sample population was a major constraint to evaluate the potential patient inflow.

Therefore only an estimate of the market scenario was been made from the research sample. Hence assessment of the customer behavior, market completion, major providers, strengths and weaknesses, potentials and threats and a conclusion of thriving in the present market was made in the project.

DATA ANALYSIS & INTERPRETATION

An analysis of the current eye care market in and around Vashi – Koparkhairne area was conducted. The sample area of Vashi - Koparkhairne included the following eye care hospitals, eye-clinics, eye care research institutes:

- Navi Mumbai Eye Clinic, Sector- 17, Vashi.
- Lakshwadeep Hospital, Sector- 9, Vashi.
- Drushti Eye Clinic, Sector-17, Vashi.
- Surya Netralaya, Sec-17, Vashi.
- PKC Hospital, Sector-15 A, Vashi.
- Dr. Pandit Eye Surgery and Laser Hospital, Sector- 10, Vashi.
- Vasan Eye Care Hospital, Sector-12, Vashi.
- Fortis-Hiranandani Hospital, Sector-10, Vashi.
- Lions Hospital – Ophthalmology department, Sector-7, Koparkhairne.

In the process of analyzing the current eye care market basically the clinics and hospitals, they were segregated into institutions providing –

- Refractive vision correction (Myopia, hypermetropia, etc.)
- Major eye diseases (Cataract, glaucoma, etc.)
- Both

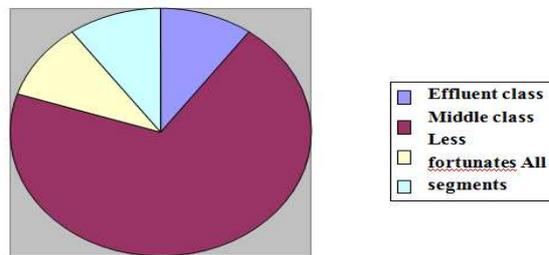
The findings highlight that all of the above visited hospitals/clinics **provide both refractive vision correction as well as surgeries for major eye diseases**. Special cases include provisions for **LASIK** wherein certain clinics listed above do not have the provision for the same.

The analysis of the data acquired through employing the questionnaires highlight upon the following findings:

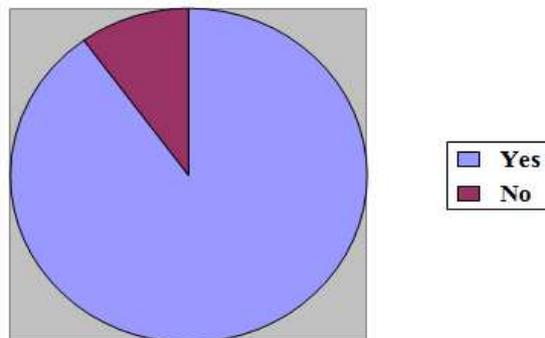
- The market segment target analysis
- Prevalence of separate packages for different segments
- Basis/approach of marketing strategy
- Mostly sought after eye care consultation
- The major surgery done mostly

DIAGRAMMATIC REPRESENTATION

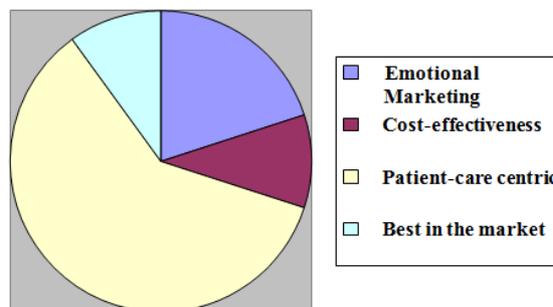
- **The Market Segment Target Analysis**



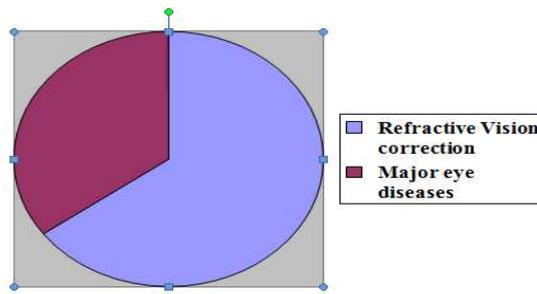
- **Prevalence of Separate Packages for Different Segments**



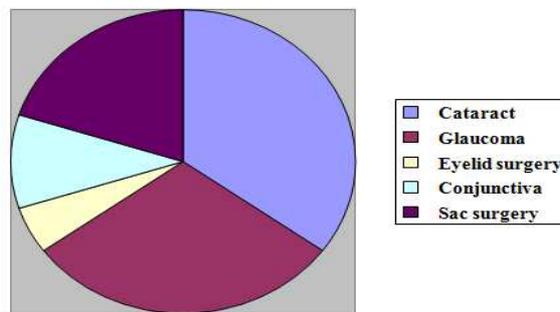
- **Basis/ Approach of Marketing Strategy**



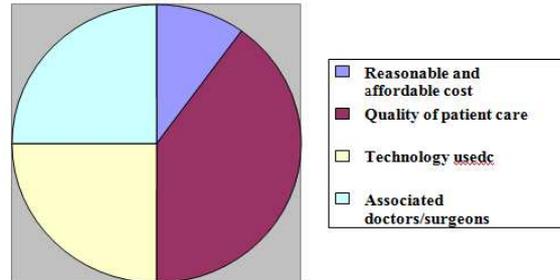
- **Mostly Sought After Eye Care Consultation**



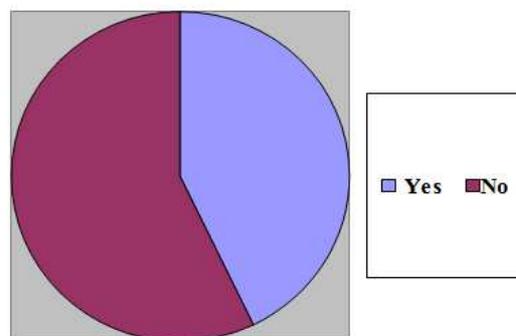
- **The Major Surgery Done Mostly**



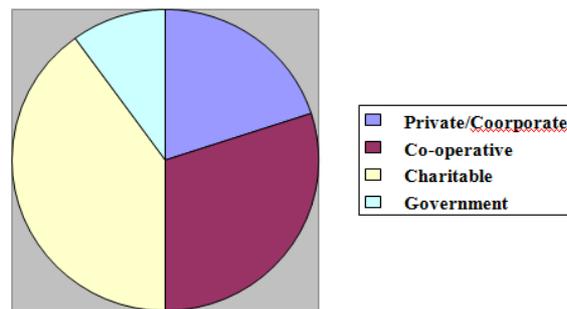
- **Customer Approach While Searching for an Eye Care Hospital**



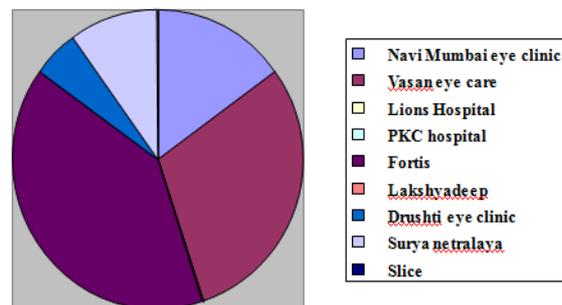
- **Felt Need of Hospital Dedicated Only to Eye Care**



- **Kind of Eye Hospital Desired**



- **Best Eye Care Hospital According to Customers**



SWOT ANALYSIS OF THE PRESENT OPHTHALMOLOGY MARKET

Strengths

- Strong equity in the community.
- Visionary & professional management practices
- Proven ability to achieve both clinical and non-clinical standards in eye care.
- Capacity to develop systems to support quality, sustainable eye care services.
- Association with an international charitable foundation- Lions International Club.

Weaknesses

- Lack of training opportunities for staff.
- Limited number of beds increase waiting time for in patients
- Lack of accommodation for staff
- Limited owned transport for camp patients
- Poor referral system for paying patients

Opportunity in the Next Five Years

- Pediatric eye care services
- Double adult cataract surgeries to make a remarkable dent in the backlog of blindness
- Retina services, especially services for diabetic retinopathy

- In house training / learning facilities – clinical and non-clinical
- Increase paying cases – to achieve sustainability

Threats

- Presence of leading service providers such as Vasan Eye care hospital,
- Fortis hospital, Navi Mumbai Eye hospital.
- Myth of the common public in the vicinity regarding charitable institutions.
- New entrants in the same field in the vicinity.
- Alluring of the medical staff by big players in the vicinity

ANALYSIS OF THE FINDINGS

- The hospitals/ clinics visited as a part of the survey provide both sections of services i.e. refractive vision correction and services for major eye diseases. None of the institutions services are confined to a single area of eye care treatment service.
- More than 70% of the total hospitals visited revealed that their services are targeted mainly for the middle class section of the society. Hospitals like Vasan Eye care and Fortis Hospital target the entire population as whole. Lions hospital and PKC hospital provide services targeting the less fortunate one.
- As far as availability of different packages specially designed for different segments is concerned, all the hospitals said a yes except Vasan Eye care as they employ the same package to all the incoming patients.
- The basis/ approach of marketing policy and strategy of more than 60% hospitals is quality of patient care, 20% revealed it to use emotional marketing concept, 10% market their facilities promising to be cost effective and affordable while 10% market them as being best in the market.
- The percentage of public in and around the sample area of survey mostly reach an eye care hospital/ clinic for correction of refractive vision is more than people coming for major eye diseases such as cataract, glaucoma and other major surgeries.
- Cataract surgeries are done more than the other surgeries which include glaucoma, conjunctiva, sac surgery and eye lid surgeries which cases are the least in numbers.
- More than 40% of the public revealed that they look out for quality of patient care service. 25% of the public search for the best medical technology available, 25% look for the surgeons and doctors associated with the hospital and only 10% look for services available at affordable rates.
- Most of the public opined that there is not a very urgent need of an eye hospital in the sample area. Few said that there is a need owing to the large number of public residing in the sample area.
- According to maximum number of public, the eye care facilities at Fortis hospital is the best in the sample market so far, followed by Vasan eye care, Navi Mumbai eye clinic and Surya Netralaya.

THE COMPETITION EXISTING IN THE CURRENT MARKET OF THE SAMPLE AREA

- The response to the questionnaire and the interview questions to various hospitals visited revealed the respective potential competitors in the present market. It also revealed different sections of competitors which are highlighted as below.
- Fortis hospital and Vasan Eye Care, both have a competitive edge of having a good brand image in the market. For Fortis hospital and Vasan Eye care, both are competitions of each other not forgetting the other major clinics which draw a considerable crowd.
- PKC hospital and Lions Hospital, both being charitable trust institutes, have a competitive edge of offering services at lower and affordable rates as compared to others in the market.
- The Navi Mumbai Eye Hospital in Vashi is best known for LASIK, hence it draws the maximum crowd for LASIK treatments, thus posing as a competitor to the major as well as minor institutions in and around Vashi – Koparkhairne.
- The clinics include Drushti Eye clinic, Surya Netralaya, Dr. Pandit Eye Surgery and Lase Hospital etc., are well known for the doctors and surgeons handling the clinics.
- Apart from the Vashi- Koparkhairne area, there are even major competitors in Navi Mumbai which counts for Laxmi Eye Institute in Panvel.
- The leading competitors participating in this market sector include key manufacturers of products and services used predominantly in the treatment of major eye diseases. While there is a cross-over in the treatment of secondary medical conditions impacting eye disease, it also represents a major share of the eye care market. Competitors' shares for the total market sector and expanded for each of the eye disease are divided among the following categories: cataracts [CAT], glaucoma [GLA], and vitreoretinal [RET].

Except for major ophthalmic pharmaceutical players, most companies compete in selected product/services categories. Updated old technology will dominate sales over the next five years [and further out] until approval of new technology is fully integrated into the main-stream of treatment modalities, primarily wet AMD, dry AMD, and other vitreo-retinal abnormalities.

ANTICIPATED FUTURE MARKET POTENTIAL

There are mixed signals from traditionalists concerning the effects of a rapidly changing environment and its impact on competitive positions, on-going sources of revenues, and their role in the new eye care market. Smaller players are especially vulnerable; yet there is a sense of optimism and enthusiasm of ophthalmology's future. Even as technologies cross competitive boundaries, players cannot ignore the size of the market and its potential business opportunities. There is virtually unlimited demand from people with vision problems in a global population of more than 6 billion. Considering that half of the people born with normal eyesight will need corrective vision [at least glasses] at some stage in their lives, there is an enormous pool of customers. In addition, this huge market continually renews itself with each new born. Fulfilling this demand for both traditional and advanced refractive

corrective treatment protocols will propel the ophthalmology market to become one of the largest sectors in healthcare over the next ten years.

The ophthalmology market is faced with enormous challenges dealing with restoration of impaired vision and impaired vision impacted by disease. While traditional methodologies to restore vision are readily available; treating disease-related vision problems presents a greater challenge, especially for people that depend on traditional methods. But, the most pressing of eye care needs is reaching less-privileged people in the vicinity. It is one of the most difficult socio-economic and healthcare challenges of this 21st Century.

The major sectors in this report, refractive vision correction [RVC] and major eye diseases [MEDs], share similar business challenges with respect to their technologies, market focus, and competitive agendas. Dramatic changes in the economics of healthcare are forcing a move towards more cost-effective treatment protocols and a philosophical change in the practice of medicine. This is apparent in the following initiatives towards improving eye care productivity and medical practices.

- Combining functions, features, and treatment modalities;
- Integrating technologies, pharmaceuticals, and other products/services; • increase in eye care –multi-task practices; and,
- Increased consolidation among eye doctors'; non-MD practitioners; vision care centers; and specialty eye clinics—moving toward –total eye care organizations

Competition in a total ophthalmology market is expected to be mostly friendly partnerships collaborations, licensing arrangements, and consolidations—a normal business practice to thwart weakening market positions and to take advantage of competing yet compatible technologies. These synergies and how they are played out could make a difference in the success of these consolidations, especially for those threatened by a rapidly changing clinical and market environment.

A crucial outcome in the changing dynamics of eye care involves availability of options and treatment protocols and impact on lifestyles of people challenged with vision problems. They finally have the opportunity to get rid of inconvenience of eyeglasses and/or contact lenses and to be relieved from the routines of eye care and its endless costs. But, there are negative consequences as well. Recognizing that eyewear products are very profitable enterprises, as are the ophthalmic pharmaceuticals and solutions business, there will be resistance from the leading manufacturers of eye glasses, contact lenses, eye wear accessories, and larger pharmaceutical suppliers.

There is also a glimmer of hope for thousands of legally blind people to regain some vision from developing technologies and vision aids. However, for the larger population threatened with loss of vision and blindness caused by eye diseases like glaucoma, macular degeneration, and other retinal conditions for which –there is no cure, they can only expect better management in slowing the progression of vision loss and possible blindness. Though the latest cutting-edge technology targeting these specific diseases will significantly improve management and treatment methods; it has also stimulated a plethora of basic research around the world. Finding a cure for any disease [including eye diseases] requires original discovery, but raises the question: will a competitively threatened

ophthalmology industry, like pharmaceuticals, be a willing participant?

Despite the potential problems, it is apparent from the findings that refractive vision correction modalities is a very vibrant and attractive business. Most of the revenue come from products with older technology [eye glasses; contact lenses; laser systems; and other interventional surgical devices], and these products will hold this position for at least the next five years until the full exploitation of lens implant technology.

CONCLUSIONS

From the findings of the project report the following conclusions can be drawn:

- The population in and around the sample area is quality as well as cost sensitive.
- There is no much direct necessity of an eye hospital as the market has got very well established service providers such as Fortis, Vasan Eye care, etc.
- The absence of any Trust hospital totally dedicated to eye care makes it a profitable venture to come up with the project in the present market.
- The already present service providers are very much successful in attracting the highly affluent class of people in Vashi and Koparkhairne. This leaves the middle and the lower middle segment of the economic strata of the population in the area. Taking this as a positive point, a charitable trust hospital will be highly welcomed by the larger population of Vashi and Koparkhairne, provided the marketing strategies are well designed to convey the message promising provisions for facilities at subsidized rates without any compromise in the quality of treatment and with the latest technology.
- The sustenance of the proposed hospital would be highly dependable on the way the marketing strategies and the pricing policies are designed as well as implemented.
- The initial marketing stage must include camps in which provisions for free screenings and attractive price reductions are made. This would result in capturing the customers and making them aware of the medical facilities of the hospital.
- Initial free eye surgeries can be provided by collection of donations and creation of CORPUS FUND from the various Lions in and around Vashi and Koparkhairne.

RECOMMENDATIONS

The business plan is being made with a prior intention and focus of coming up with an eye hospital which would be a charitable trust institution totally dedicated to render eye care facilities. It is highly recommended that the marketing policy of the hospital must not confine itself to communicate availability of its facilities at affordable rates, it is necessary to communicate it to the people that affordable rates is never a synonym to low quality of patient care or use of back dated technology. Subsidized rates coupled with latest technology and provision for the best of the surgeons should be the actual basis of the message to be communicated to the people for effective marketing purposes.

Price is the indicator of service quality'. It is an attraction as well as a repellent variable. Customers use

price as indicator of quality depends on many factors including other information available to him.

When service cues to quality are readily accessible when brand names provide evidence of reputation of hospital, customer may use their cues instead of price. Otherwise they think that the price is the best indicator of quality. It should convey appropriate signal regarding quality. Pricing too low can lead to inaccurate inferences about the quality, pricing too high can set expectations that may be too difficult to match in the delivery. Price is used to judge quality because of the experience and credence properties of services as opposed to goods. Excellent hospitals like Mayo Clinic, Massachusetts General, TMH, and Sloan Kettering are mega brands. They have a great brand reputation and can charge a premium based on sheer perception of quality because of socio-economic issues, poverty levels, government owned hospitals cannot think of profit objectives. It is a social marketing process of enhancing the well-being of individuals.

The price paid by customers depends on how he perceives the quality of service.

E.g. Bombay hospital, Breach Candy and Jaslok hospitals, they have a high reputation for quality services.

Intelligent Selection, Purchase and Installation of Sophisticated Ophthalmology Equipment

According to the current market analysis conducted and the findings acquired the machines or equipment should be purchased and installed keeping in mind the requirement of the sample population. Machines used for treating very rare eye problems should be purchased meticulously in the beginning of setting up of the hospital.

Main focus should be put on facilities that are very much required by the public in the vicinity so as to ensure greater revenue inflow.

Initial Marketing Plans of Any New Eye Hospital

The marketing plan should be meticulously designed and implemented so as to make the population aware of the presence of the hospital and its services in a shorter span of time. In order to achieve this it is very much needed to conduct OUT-REACH MEDICAL CAMPS and EYE- CHECK UP CAMPS.

The best timings for scheduling camps is special occasions. Coupling the medical camps with occasions such as world sight day, women's day, New year, etc., would be the best initial marketing plan as a stepping-stone.

Utilizing and harnessing the brand name of Lions Hospital in the present market by creating awareness among the people about its association with the new hospital is a good option for marketing the new Eye Hospital.

The following future development trends are to be identified for the success of delivery of eye care facilities. It is expected that there would be more complications of HIV together with a normal increase of cataracts and glaucoma for the next ten years.

The Developments Required Encompass

- More funding for cataracts
- Better primary screening system to increase cataract numbers
- More cataract surgery with intraocular lens implant Reduced cataract backlog.

Better Screening should be Achieved for

- Diabetic retinopathy and Hypertensive retinopathy
- Glaucoma screening
- Paediatric screening

Telemedicine and Tele-ophthalmology practice should gain momentum.

Training sessions for cataract surgeon and training for CSO and ophthalmic nurses should be brought into practice

Prioritization

Any advances in cataract, glaucoma, diabetics, childhood blindness and corneal blindness. Refractive blindness has to be covered under primary care

Quality of care

The following shortcoming and limitations should be overcome:

- Lack of qualified Ophthalmic (Eye) surgeon (Ophthalmologist / Ophthalmic CMO)
- Long waiting lists. (Cataract backlog)
- Lack of adequate secondary hospitals.
- Lack of community service rotation post – to strengthen primary and secondary care and nursing staff.
- Dedicated ophthalmic nursing staff.

Supplies

Ophthalmic microsurgery equipments, intraocular lenses, ophthalmic drugs and disposable items must be well stocked with inventory control.

Optimising available IT infrastructure.

Service Delivery Requirements for Effective Education

- Service delivery must permit postoperative follow-up and outcome measurements.
- Appropriate planned and equipped out patient, inpatient and ophthalmic surgical facilities.
- **Optometrist:** With support of hospital eye care centre effective education of optometrists in basic pathology recognition in order to promote appropriate and timely referral should be put into practice.
- **Medical:** One week exposure / rotation through ophthalmology department.
- **Nursing:** Two weeks practical ophthalmic exposure.
- **CME:** Once in a month.
- Cataract surgery training for interested medical officer.

ORGANIZATION OF SERVICES

Primary Eye Care

- Vision Screening; e.g. visual acuity, pinhole, auto refraction etc.
- Cataract, glaucoma, diabetic and hypertensive retinopathy screening.
- Screening for squints and amblyopia.
- Refraction.
- Routine intra ocular pressure check up and Visual field.
- Prosthesis fittings, contact lenses etc.

Secondary Eye Care

- Routine cataract surgery with intraocular lens implant.
- Routine glaucoma surgery.
- Routine trauma surgery.
- Yag capsulotomy.
- Routine horizontal strabismus and amblyopia treatment.
- Diabetic, cataract and glaucoma screening.
- Routine glaucoma surgery.
- Routine cataract surgery.
- Routine horizontal strabismus (Squint) and amblyopia treatment
- Routine trauma. (Lid, cornea, sclera)

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