

# Government ophthalmic assistants training in equipment maintenance - a step towards strengthening health systems in India

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## Background / Rationale:

One of the prime areas of concern in India has been the provision of quality eye care to meet the needs of the poorest of the poor and those who cannot afford the typical high quality-high price service provided by the private practitioners.

In any surgery set up, certain parameters must be maintained to achieve quality, and this is more so where the surgical load is higher. In high volume surgery, quality can be achieved through qualified and technically proficient

the proper way and the availability of properly maintained equipment. If any one out of three components is not working properly, quality is compromised and high volume-high quality cannot be achieved. Quality of surgery has been a problem for many set ups across our country and the government is no different.

In India, eye care service providers are broadly classified into three divisions; namely government, NGO / charity and private practitioners. With 42% of India's population living below the poverty line<sup>1</sup>, the services of private practitioners are beyond the reach of most of the population. Therefore, the majority are serviced by either government or NGO hospitals. It has been observed after several discussions with district programme managers<sup>2</sup> across the country, and with senior ophthalmic surgeons working with the government, that equipment maintenance is a major issue. Red tape bureaucracy within the government set up often hinders prompt action in dealing with minor equipment repair, which in turn creates problems during surgery. It is also a fact that trained human resources are not available to repair ophthalmic equipment at the district level and remote areas often have to depend on maintenance personnel or technicians

travelling at their will to undertake small repairs. Hospitals (especially those in the government set up) are dependent on the manufacturing companies and their annual maintenance contracts. Following a number of discussions and round table conferences with the district and state level officials, it was agreed that the provision of in-house equipment maintenance training would ensure faster repairs to equipment and help to prevent compromises in the quality of surgery. It was thus decided that ophthalmic assistants working within the government system should receive training in equipment maintenance, the first initiative of its kind in India.

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## Process:

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The process for organising an Ophthalmic Assistant's Equipment Maintenance Workshop began in 2008 during a series of meetings of district programme managers working mainly in the states of Maharashtra<sup>3</sup> and Karnataka<sup>4</sup>. It was discussed in these meetings that equipment maintenance is one of the most important issues in the government hospitals. Senior ophthalmologists felt that, while technical knowhow of doctors could be ensured and maintained, the lack of properly trained staff for equipment maintenance was often hindering progress at the grass roots level. Following the discussions, a key action point was the organisation of an equipment maintenance training programme for paramedical ophthalmic assistants (PMOAs). When this issue was brought to the notice of state government authorities, they were not only interested but also asked for the detailed proposal regarding the programme. After the final approval from the government and Sightsavers, the training agency was finalised at Lions Aravind Institute of Community Ophthalmology (LAICO)<sup>5</sup>. After a rigorous selection process at the state level, both state governments selected ophthalmic assistants who were willing to work in equipment maintenance.

Sightsavers played a detailed role in the selection and orientation of the ophthalmic assistants who were selected for the training programme. Sightsavers liaised with the training agency regarding the schedule and facilitated the process so that it ran smoothly. To aid the process of learning, the programme placed emphasis on hands-on training and the PMOAs were asked to bring with them a piece of equipment in disrepair. During the course of

the training programme, the PMOAs were able to repair their piece of equipment and gain practical experience.

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## The training programme:

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The training was conducted over a period of 40 days, during September and October 2009. During the course, the trainees become familiar with basic organisational skills, general maintenance skills, the maintenance of electronic and electrical equipment, the maintenance of optical equipment and skills relating to maintaining the mechanical parts of equipment. In order to make the course more holistic and in line with the job requirements of the PMOAs, they also gained knowledge of the eye and its parts, common refractive errors and their correction, common eye diseases and their treatment, and the working principles of the instruments that they will be handling.

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## Learning:

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This unique training programme was not only the first such programme for government staff aimed at improving quality standards, but it also increased collaboration and joint working between Sightsavers and the state government. The training resulted in several positive outcomes, including improved capacity and increased motivation of the staff involved.

Some important learnings which can be taken from this training are -

1. Innovative ideas, with the proper rationale to solve the existing issues / bottle necks, can help secure support from the government and can strengthen the overall health system in line with the six building blocks of WHO<sup>6</sup>
2. Working with the government might only involve providing technical expertise around eye care issues, but sensitisation also has an important role to play.
3. Selection of appropriate staff for any training programme is crucial. In this case, candidates were selected based on their willingness to take additional responsibility for equipment maintenance.
4. The role of Sightsavers in supporting the control of avoidable blindness has been increased as we move away from a service delivery model to one of replicable and demonstratable approaches. With

some of the other government set ups shall benefit from PMOA training, which in turn shall benefit more needy people in the community.

investment can actually be beneficial in the long run as well as cost effective.

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## Challenges:

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Like all activities conducted, this training programme not only provides positives, but also some challenges; -

- Post training follow-up/ monitoring is a challenge. Once the training is completed and the PMOAs have gone back to their respective work stations, it remains to be seen how far they actually implement their learning at the field level. It may also prove challenging to monitor this. To address this, Sightsavers has designed a monitoring format and the government has been asked to send regular reports from the PMOAs so that not only the efficacy of the training, but also its long term impact, can be assessed and monitored.
- The process of approval from the government authorities can be very lengthy. The time gap between the government buying into the idea and their actual agreement to depute their staff was long and tedious, involving lots of paperwork.
- High turnover of key officials in the government set up, and enrolment and subsequent buy-in of new officials.

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## Outcome of the programme:

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Eight trainees have successfully completed the programme and have started equipment maintenance at district hospitals in Karnataka and Maharashtra. This has reduced the hospitals' dependence on external help for minor repairs and maintenance, which in turn means better productivity and better performance from these hospitals. Ultimately it is the beneficiary at the grass roots level who is now able to access a timely, affordable service, instead of potentially being turned away due to a lack of functioning hospital equipment. The government has realised that a small training

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## Advocacy:

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The success of this initiative was shared by both Sightsavers and the government authorities at state and national level forums. This helped in sensitising government authorities about the significance of this initiative. Based on the learnings from this unique training, the agency for blindness control - National Programme for Control of Blindness (under the Ministry of Health and Family Welfare, Government of India) – have sought more details of the training and have shown a keen interest in replicating this programme for ophthalmic assistants working in their set ups across the country. To start off with they have already proposed that some of the staff based at the various regional ophthalmic institutes in the country be sent for similar training. What started as a one-off training exercise for two state governments has now been successful in advocating the need for such initiatives to the decision makers in the country. This has further strengthened our working with the state government and fits with our organisational objective of strengthening health systems.

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## Future plans:

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A reporting format has been designed by Sightsavers and the trained ophthalmic assistants have been given instructions to complete it on a quarterly basis and submit it to the government authorities at the state level. At the end of the year, a detailed analysis of the reports will be conducted and successes and feedback will be shared with the concerned government authorities. The training institute, LAICO, has also agreed to provide technical support to the ophthalmic assistant during their first year. This will help in sharpening their skills in equipment maintenance. This project is due to be replicated by the national government in different states.

1 Source -- [http://www.unicef.org/infobycountry/india\\_statistics.html](http://www.unicef.org/infobycountry/india_statistics.html)

2 District programme managers are the responsible authority in charge of the national blindness programme at the district level. A district is an administrative division of an Indian state or territory.

3 It is India's third largest state by area and second largest by population (96,752,247 ) comprises 35 districts. 712305 cataract surgeries performed in yr 07-08 Cataract Surgical Rate 6664

4 It is the eighth largest Indian state by area, the ninth largest by population (52,850,562 )and comprises 29 districts. 314989 cataract surgeries performed in Yr 07-08 and Cataract Surgical Rate is 5488

5 Lions Aravind Institute of Community Ophthalmology (LAICO) started in 1992 is a World Health Organization Collaborating centre for prevention of blindness

6 [http://www.who.int/healthsystems/strategy/everybodys\\_business.pdf](http://www.who.int/healthsystems/strategy/everybodys_business.pdf)