

**Time - 3 Hour****MM-70**

The question paper contains 5 printed page.

There are three sections in the paper. All sections are compulsory. There is internal choice within sections

SECTION A : Questions 1-4 are based on the case titled Aravind Eye Care Vision Centre(part case reproduced from pages 2-5. Attempt any three questions.

- Q. 1. Write a detailed job description and specification for the coordinator of VC. (12)
- Q.2. If you were boss of Nagalakshmi, Coordinator, Alanganallur, VC, how would you like to appraise her performance. Explain by making a performance appraisal form with atleast ten indicators and propose scale of measurement. (12)
- Q.3 a) What according to you is the best source of recruitment for field workers and why (2)
b) Propose a three step selection method for field workers. Explain those methods (10)
- Q.4 Design a one week long capacity development programme for field workers incorporating themes required by them to fulfill their duties (12)

SECTION B: Write short notes on any 2

2 x 7 = 14

- a) Human Resource Planning
- b) Types of Career (Linear, Spiral, Transitory, Steady State)
- c) Potential Management
- d) Competency Mapping
- e) Principles of natural Justice

SECTION C : Attempt any two questions

2 x 10=20

(Attempt in a separate supplementary sheet. Write your roll numbers on it)

- 1. What are labour welfare approaches? Describe major labour welfare measures in India.
- 2. Explain 'internal mobility' and 'Separation' in an organization.
- 3. Briefly write about relationship between 'Trade union' and 'Collective bargaining'.



OBJECTIVES AND IMPACT OF VISION CENTERS

The vision centers were set up with the following objectives^{iv} -

- Provide comprehensive care by integrating information technology effectively that would facilitate providing quality care at the doorsteps of the rural population.
- Collaborate with the community and promote eye health education and create awareness proactively.
- Change the health-seeking behavior of the community and thereby slowly move away from eye-camps to a sustainable center-based approach.

Each vision center was designed to serve around 50,000 people across 15 to 20 villages in a 5-7 km radial distance. Each VC had a target of reaching atleast 10%, that is, around 5,000 patients, which served as a benchmark for penetration. The target population for each VC was determined using estimations obtained from geographic information system (GIS) mapping and local surveys. VCs provided consultations and patients could buy medicines as well spectacles at these centers. It provided all arrangements for patients requiring surgeries at the base hospital, including their transport, food and any other reimbursement. The VCs operated for six days in a week from 9:00 am to 5:00 pm.

The presence of this permanent establishment motivated residents of rural areas to seek earlier treatment for vision problems, thus not only eliminating eye care problems but also enabling them to get back to earning their livelihoods. A permanent establishment had changed the healthcare-seeking behavior of the people. Meenakshi Sundaram, Senior Manager - Outreach Program explained:

The vision centers have helped us reach larger numbers of patients and provide them with quality service. The major benefit of the IT-enabled connectivity is that when patients talk to our doctor at the base hospital, it increases their trust. The technician tests the eye, but talking to the doctor increases patients' confidence in the treatment, making it comprehensive and trustworthy. The consultation at the center improves the technician's skills. She gains knowledge and develops her clinical skills. For patients, unnecessary referrals to the hospital, and the associated costs and efforts, are minimized. So these centers help everyone.

STRUCTURE OF VISION CENTRE

Each VC had three key personnel – coordinator, ophthalmic technician, and field worker. The coordinator was responsible for registration, record-keeping, accounts, supply inventories, counseling, statistics, overlooking VC operations and coordinating with base hospital, outreach manager and field workers (Exhibit 3). The ophthalmic technician was trained and skilled to diagnose common eye problems,

dispense spectacles and treat minor injuries after tele-consultation with ophthalmologist at the base hospital. The technician could also perform slit lamp examination, refraction, and Fundus photography (Exhibit 4). The technician would first communicate with the ophthalmologist at the base hospital after which the patient could speak directly with the ophthalmologist through the video conferencing facility at the VC. The patients derived huge comfort when they knew that they are talking to a doctor. The patient's confidence greatly helped in diagnosing and treating his/her ailment. The field worker reached out to people, counseled them, tested them, and referred them to the VC. Each field worker was trained to conduct household level surveys, measure vision, identify extra ocular defects, curable and incurable blindness and record all information at village level. They moved around on a bicycle to provide the last-mile connectivity for Aravind. All the three key personnel at the VC were usually locals, who had been trained at Aravind's base hospitals. This provided twin benefits – people could connect better with the VC and the VC personnel were more dedicated in serving the target population while working at places near their homes.

Each VC was equipped with basic ophthalmic equipment such as slit lamp, streak retinoscope, direct ophthalmoscope, trial sets, applanation tonometer, basic sterilizers, BP apparatus and 90D lens and a computer with a digital camera (in the place of webcam) and internet connectivity. In line with Aravind's philosophy of lean operations, each VC operated out of a rented space of 200-400 square feet (sq. ft.) area. The standard layout for a VC was divided into three sections – registration, examination and optical dispensing unit (Exhibit 5), each having an area of around 100 sq. ft. The layout was designed to provide optimal workflow for each patient (Exhibit 6).

VCs were well-networked with the base hospitals for secondary and tertiary level eye care, leadership needs, conduct of training programs, additional human resources and for an uninterrupted supply chain through an IT-enabled system. The registration area was equipped with a desktop computer and a laser printer. The examination area included a desktop computer with a web camera and an electronic medical records (EMR) software to record medical notes. Broadband connectivity helped connect the VCs with their base hospitals. Ganesh, Senior Manager - IT and Systems at Aravind said:

Only 10 percent of the patients visiting VCs require further examination or treatment at a base hospital. The VCs enable us to offer high quality, low-cost eye care service access for the rural poor at their doorsteps. The majority—90 percent of the patients—receive appropriate care at vision centres, thus saving travel and other costs associated with the patients' and attendants' loss of wages incurred for visiting the base hospital.

VARYING PERFORMANCE OF VISION CENTRES

Thulsi was reviewing the annual reports of all VCs. Most VCs had performed well in attracting the target of around 5,000 patients per annum, while a few VCs were finding it difficult to attract large numbers of potential patients (Exhibit 7). As mentioned, VCs were assessed on the basis of the number of patients



reached, identification of patients with problems and treated, and cost recovery¹ for sustainability, access to eye care in rural areas, awareness creation, and transformation in health-seeking behavior.

The Madurai-based VCs had treated 127,046 patients in 2014 while 52,108 and 66,986 patients were examined at Theni and Tirunelveli based VCs, respectively. At Aravind, providing eye care to patients was the primary driver for sustainable operations. Therefore, each VC had to attract its target patients to enable achieving Aravind's vision of eliminating needless blindness. Aravind's outreach program comprised screening camps, VCs and community eye clinics along with free and paid walk-ins. VCs reached 10% of the population, while screening camps and community eye clinics reached 17% and 4%, respectively; 69% reach was through walk-ins. Also, considering the costs to set up a VC (Exhibit 8), Aravind had to ensure that each VC catered to the maximum number of patients within the served community. The VCs at Alanganallur and Thirupuvanam were set up after conducting a detailed study of the surrounding areas around Madurai (Exhibit 9).

Nagalakshmi, Coordinator – Alanganallur VC and a local resident, had started working with the VC since its inception after a couple of years of experience at the main hospital in Madurai. She had a good rapport with the community which helped her organize several events successfully. A mega camp for diabetic retinopathy (DR) screening, sponsored by the local Member of Parliament, conducted in December 2014 had attracted 350 patients (Exhibit 10). Similarly, another camp organized in November 2014 at the VC for known diabetes patients attracted 70 patients. The locals were attached to the VC staff. Nagalakshmi explained that the VC was seen as a part of the local community.

Patients visit the VC to gift us their farm produce. Some bring mangoes while others bring rice. People are very close to us.

The Alanganallur VC was prompt in executing the plans formulated at Aravind's Head Office (HO). When the HO proposed the idea of family-based screening, Nagalakshmi promptly took this up and conducted 35 additional screenings for existing patients. The VC's team had a good rapport with the base hospital and worked proactively for patients' benefits, without waiting for instructions and ideas from HO. The patient numbers were also watched carefully and any dip in numbers was followed by additional efforts in reaching out to the community. Nagalakshmi also ensured that the monthly doctor's visit to VC was utilized fully. She would try to ensure at least one additional patient attended the consultation compared to the last visit by the doctor. Dhan Foundation, a NGO, had an office at Alanganallur to train self-help groups (SHGs). The VC was connected with all SHGs, thus connecting deeply with the community. The camp organizer also put in special efforts to ensure successful eye camps. Additionally, an event was held every three months at the Alanganallur VC to strengthen the connect with the community.

In comparison, the VC at Thirupuvanam had a locational disadvantage although it was closer to Madurai than Alanganallur. The VC was located on the highway to Rameshwaram and had a vertical coverage as against circular coverage for other VCs. One part of the target population stayed across the river and

