

Outreach Department

Title

To assess the impact of existing vision centres on the population and analyze their potential for future expansion.

Presented by

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Introduction

India is in a period of unprecedented opportunity, challenge, and ambition in its development. While the nation's advancement direction is solid, challenges remain. In terms of health, India is facing “double burden of disease” with communicable as well as non-communicable disease and its related risk. At the same time “out of pocket health expenditure” is also major challenge India is facing now a days which is around 89.21% for private expenditure on health. (2014, World Bank collection of development indicators)

As India is known as “Diabetes capital” but people are not only suffering from it but also its related risk of various eye problems. There are roughly 46 million outwardly impeded individuals all through the world. In India alone, around 19 million individuals are visually impaired or else have visual deformities. Out of this 19 million, 15 million reside in rural areas. India is among the countries which suffers from a shortage of doctors as well. There are just 12,000 ophthalmologists in India, with most moving their training in urban zone. Additionally, the inadequate infrastructure of roads, telecommunication, transport, and financial status of the patients make it even more difficult to provide health care in rural areas.

Blindness has profound human and socioeconomic consequences in all societies. The economic effects of visual impairment can be divided into direct and indirect costs. The direct costs are those of the treatment of eye diseases, including the relevant proportions needed for medical treatment. The indirect costs include costs for visual aids and the pain, suffering and premature death that can result from visual impairment.

Conti..

"Sankara Eye Foundation" began its main goal long back since 1977 to give unmatched eye care through solid administration situated group by giving medical procedures that to a free of expense to 80% of the populace and through paid administrations for 20% which thus sponsorship the absolute expense of treatment. It is contributing its valuable work for VISION 2020 to meet its goals, services which should reach the underserved sectors that exist in all populations, such as needy, disabled persons, and very old people.

"Sankara Eye Foundation" isn't just providing its service to individuals the individuals who can contact them yet in addition setting off to each entryway venture to give essential eye care administrations covering most unfortunate of the poor patient.. To provide services to the ground level, it has started "Vision Centre" which is a permanent eye care facility in the community which acts as the first point of interface of the population with comprehensive eye care services provided by an exclusive skilled eye care worker.

Based on the problem which majority of the population is facing, I decided to choose Vision center as my study area in the Sankara Eye Foundation and to understand the potential of the vision centers for future expansion and challenges coming across them.

Vision Centre

Sankara Eye Hospital, Coimbatore, has 4 vision centres across Coimbatore district. These are located in Krishnagiri (since March 2016), Annur (since Jan 2017), Perur (since June 2017) and Sundarapuram (since Aug 2018).

Responsible for:

1. Provide specialized, technologically advanced and affordable eye care services in remote areas, where specialist doctors may not be easily accessible.
2. Create awareness and sensitization about Eye Care among the rural citizens.

Manpower:

Team of 2 members each

- i. Trained Vision Technician
- ii. Trained Counselor.

Equipment's:

- i. Remidio (a portable non-invasive & non mydriatic device) that detects anterior and posterior segment conditions.
- ii. A smart phone is attached to the device for taking high resolution photo, sending it through 3Gconnection to be finally received by the base hospital's Ophthalmologist.
- iii. Sphygmomanometer
- iv. Glucometer for checking blood sugar for surgery selected patients.
- v. Vision Chart for basic visual acuity.

Process

Every day the patients are screened by the vision technician with secondary/tertiary consultation done with the base hospital through tele-ophthalmology. Patients identified with refractive errors are dispensed spectacles and those who require surgical procedures or treatment are referred to the base hospital.

The vision Centre provides the entire circle of eye care (secondary and tertiary) through a link up to base hospital through tele-ophthalmology and referral care.



Objectives

- To analyze the performance of the existing Vision centre
- To find out the enabling factors leading the success of Vision centre
- To find out hinderance factors leading the Vision centre not achieving full success
- To find out status of the Vision centre with regard to self sufficient.

Methodology



a) Source of data: Primary data was collected through structured questionnaire by face to face interview and secondary data of performance analysis (April 2018- March 2019) was taken from the medics.



b) Study type: Observational cross sectional analytical



c) Study Duration: Feb 2019- April 2019



d) Study Area: Sankara Eye Hospital, four Vision centers



e) Sample size: 100 patients from Annur VC and 8 respondents (refractionist and counselor) from all four VCs.



f) **Sampling method:** Purposive sampling



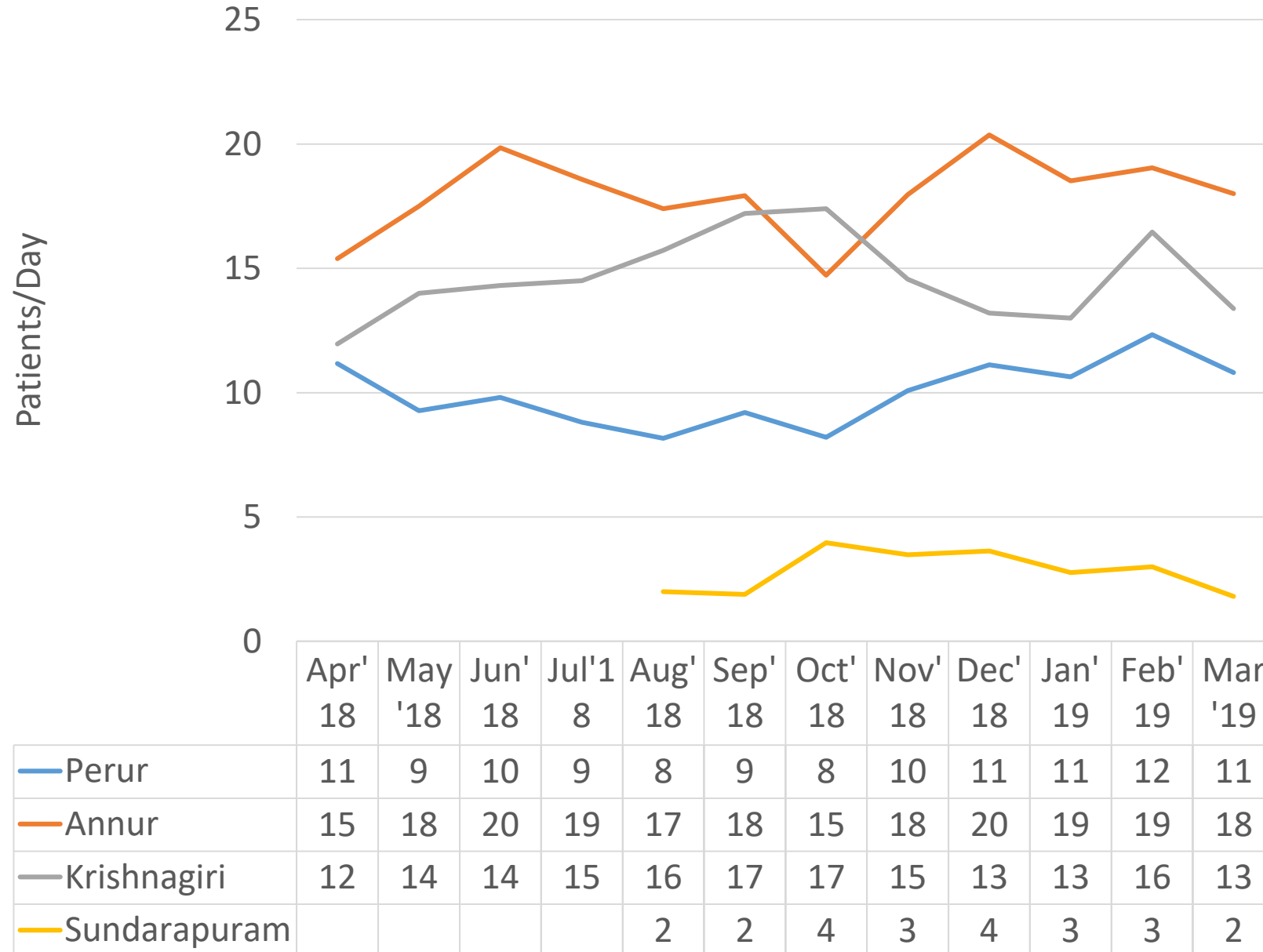
g) **Analysis plan:** Statistical analysis with graphical representation

Performance Analysis of VCs

(Source of data: April 2018- March 2019)

Performance analysis of the existing Vision centre
and enabling factors leading the success of Vision
centre

Patients/day comparison of VCs

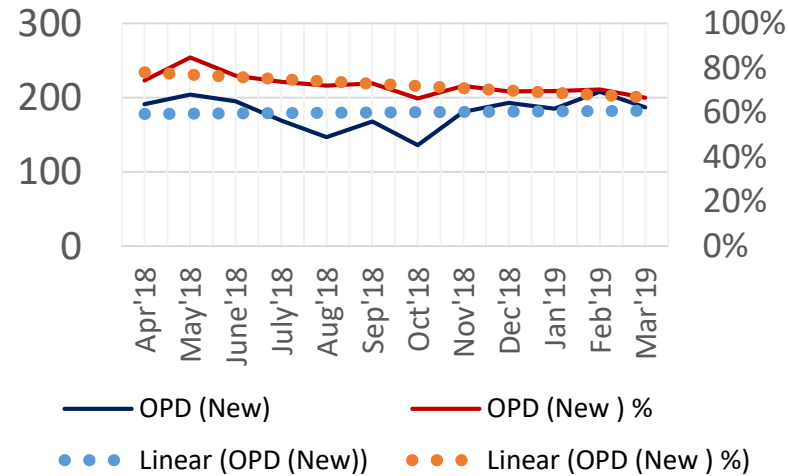


Observations

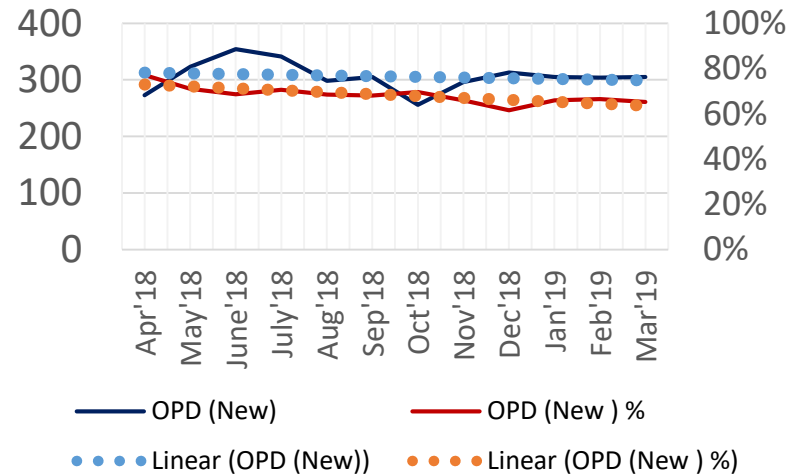
- Annur is performing the best in terms of attracting the patients and it shows a slight upward trend over the year
- Krishnagiri's patient count increased sharply till October. However, it is showing downward trend since then
- Perur is showing very consistent trend but not performing as good as Annur or Krishnagiri
- Sundarapuram has started recently and not able to attract a lot of patients.

Trend Comparison of New (OPD) and New (OPD) %

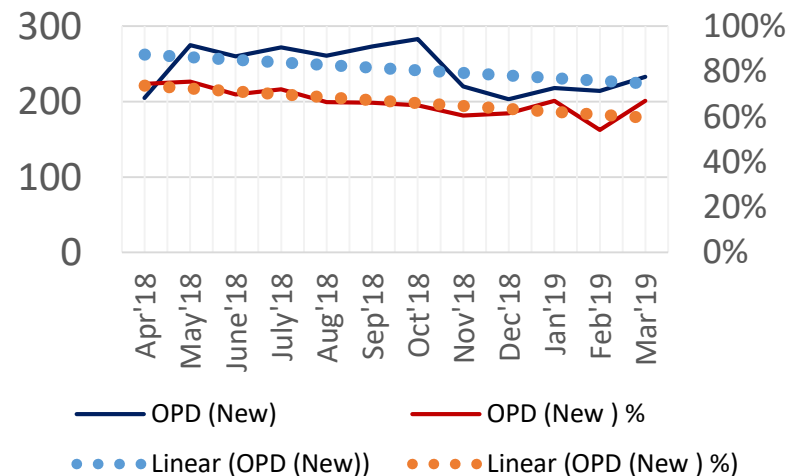
Perur (S-S)



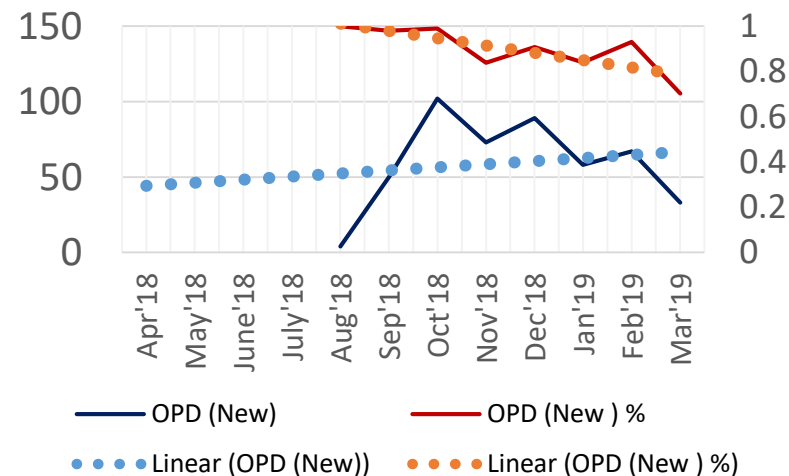
Annur (S-S)



Krishnagiri (L-L)



Sundarapuram (H-L)



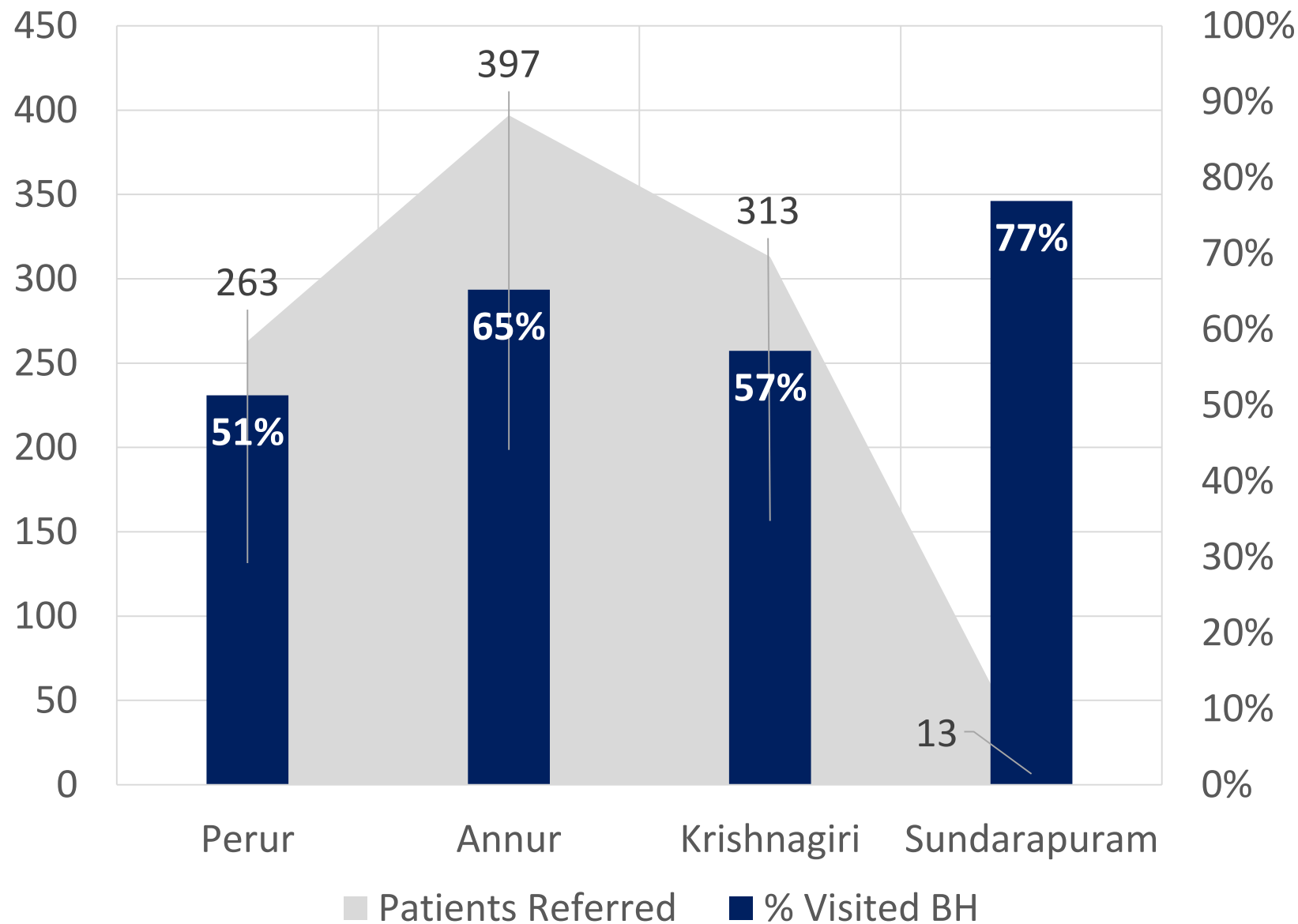
Analysis Point of view (Trend Analysis)

New %	New	Growth Status	Control / Stability
High	High	Steady	No
High	Low	Negative	Yes
Low	High	Retention	Yes
Low	Low	Saturation	Yes
Stable	Stable	Steady	Yes

GROWTH ANALYSIS

Vision Centre	Type of Growth
Perur	Steady Stable Growth
Annur	Steady Stable Growth
Krishnagiri	Saturation Stable Growth
Sundarapuram	Retention Stable Growth

Patients Referred and Acceptance at BH

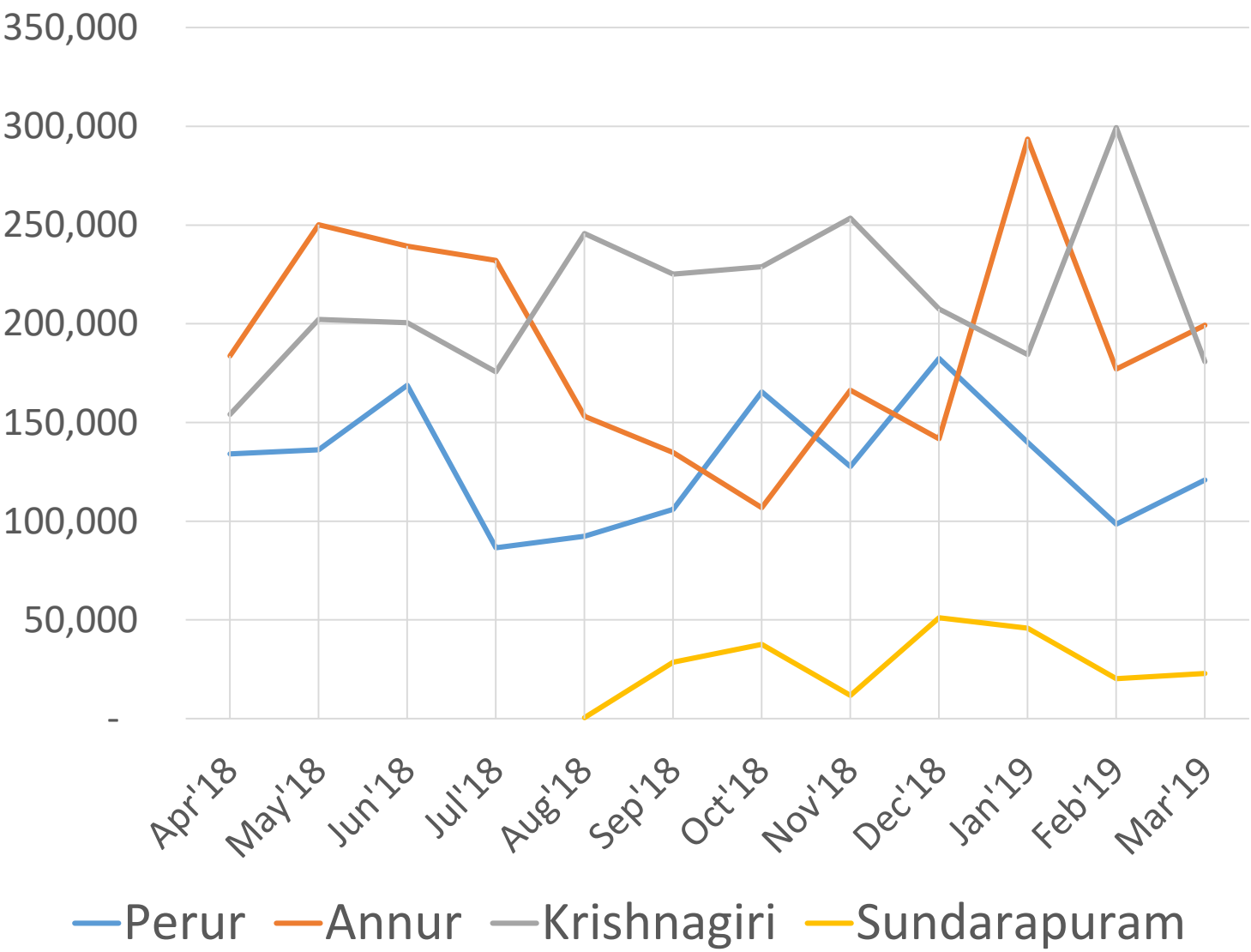


Observations

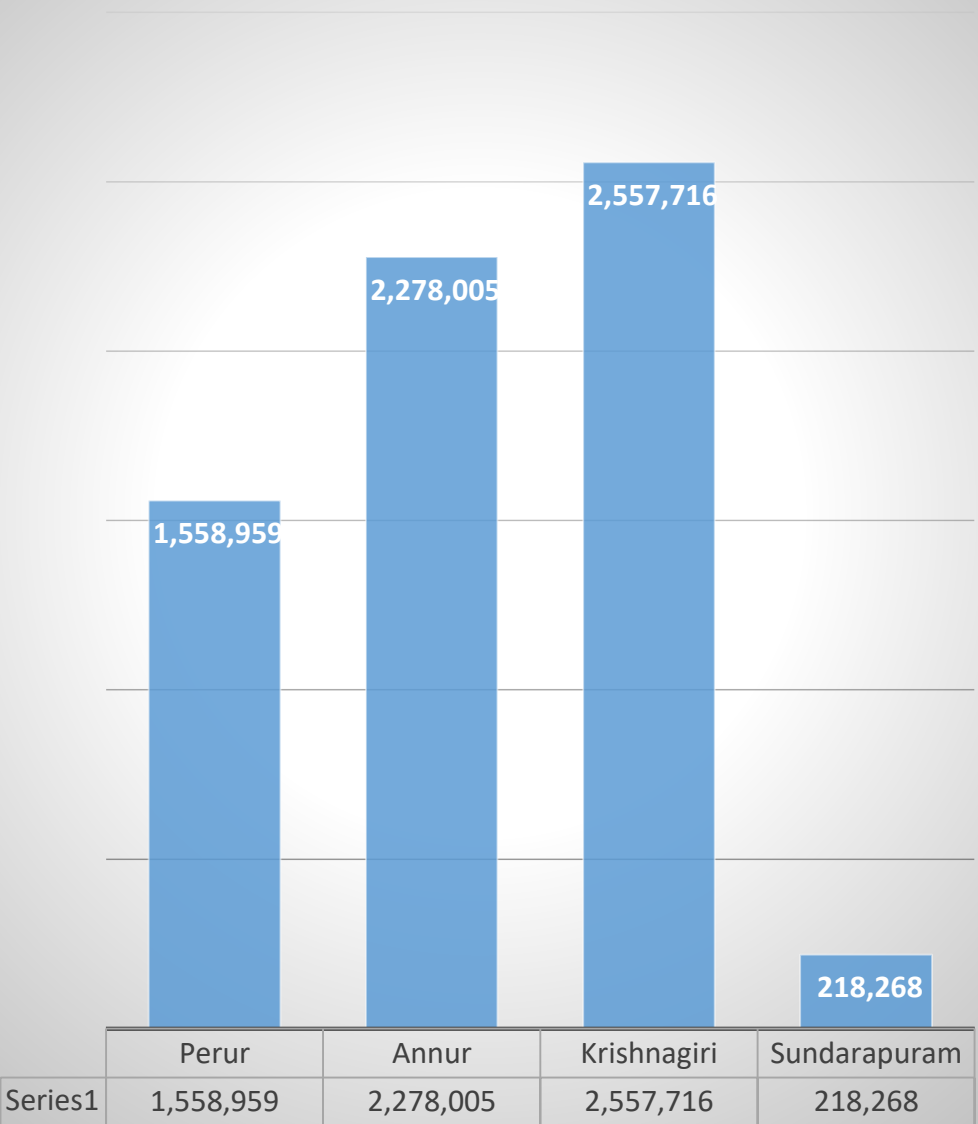
- Irrespective of the no of patients referred at the BH, % of acceptance always remained around 55-60% (average)
- In Sundarapuram more % of patients are prone to visit BH

Collection Comparisons of Vision Centres (Incl. BH Operations)

Collections (VC+BH)/month

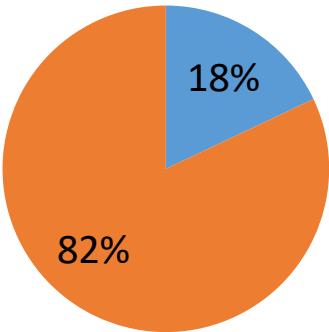


Total FY Collection (VC+BH)



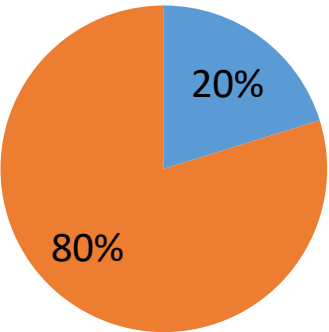
Vision Centre Collection Break-up

Perur



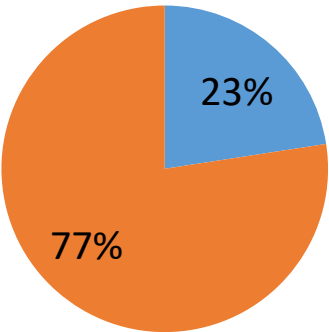
■ OP C ■ Spec

Annur



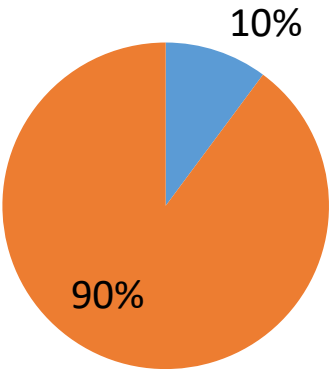
■ OP C ■ Spec

Krishnagiri



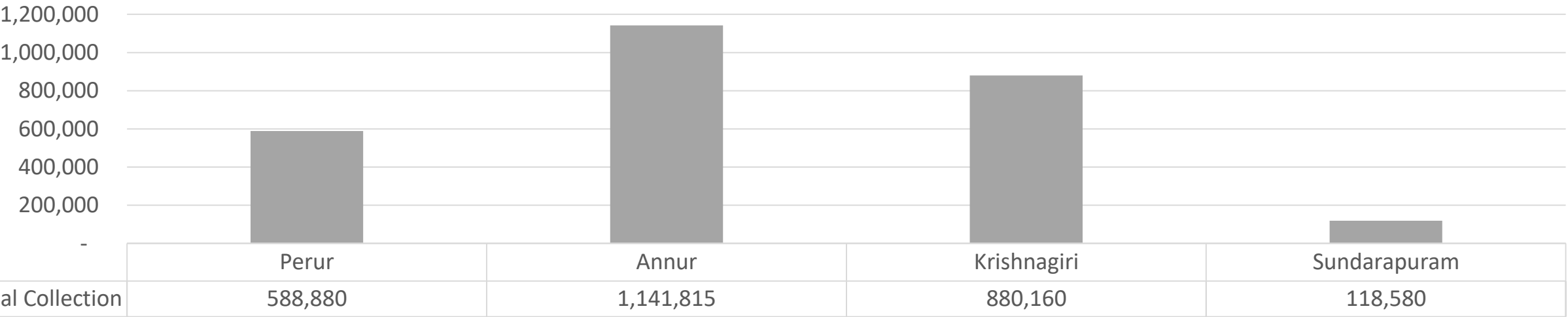
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Sundarapuram



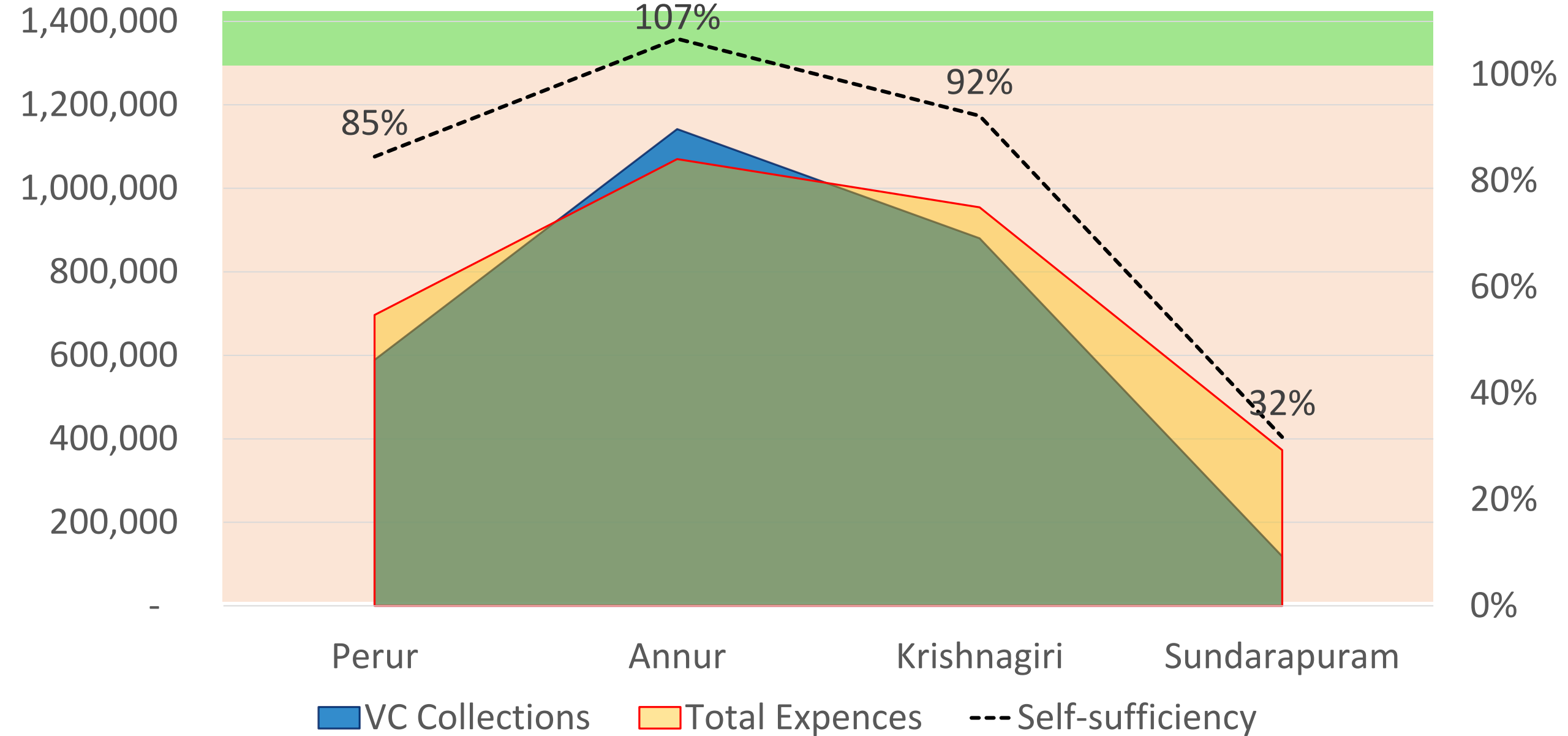
■ OP C ■ Spec

Total VC Collection



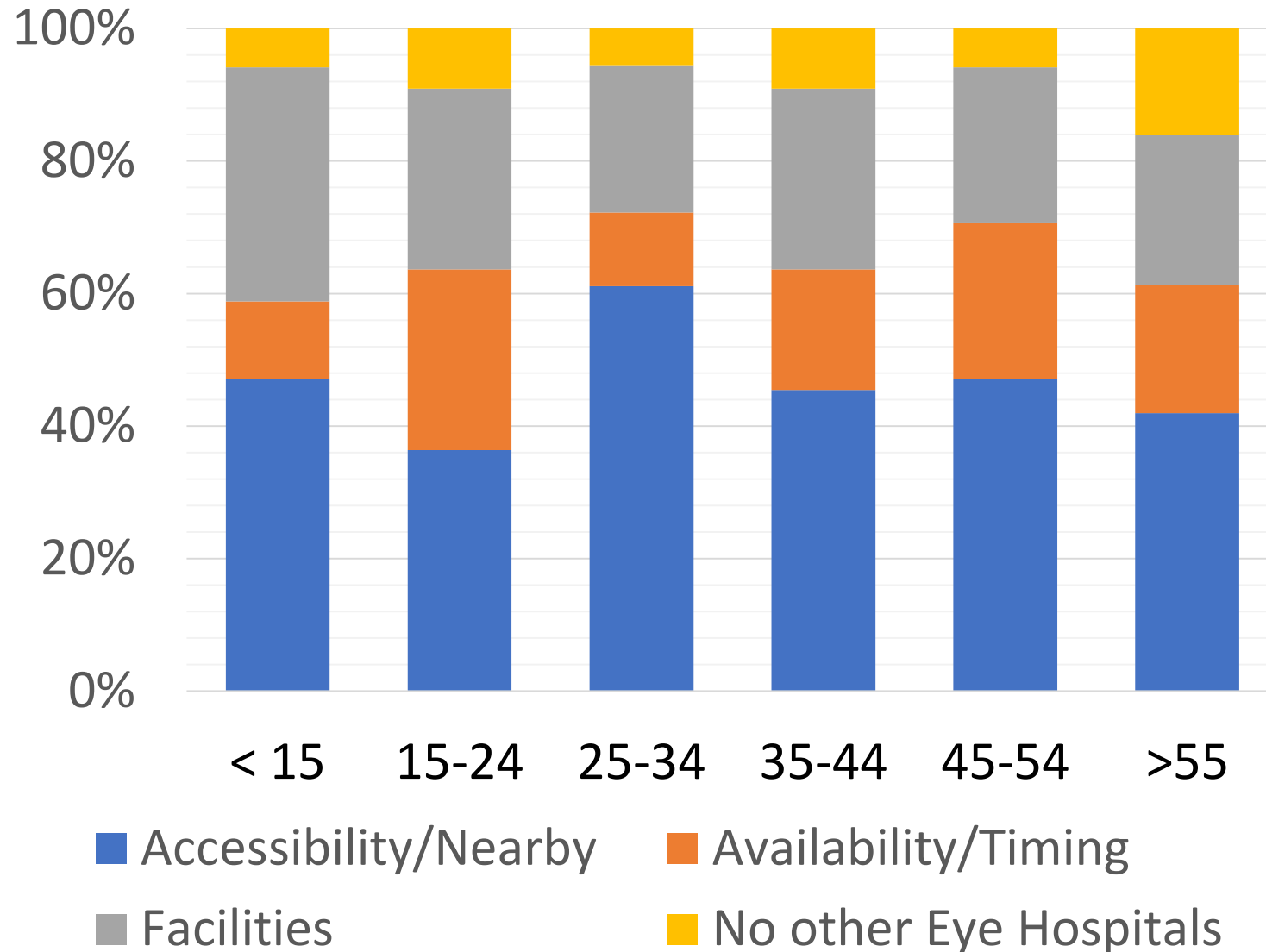
■ Total Collection

Vision Centre Self-sufficiency Analysis



Key factors determining success and hinderance factors coming across
Vision Centers' success

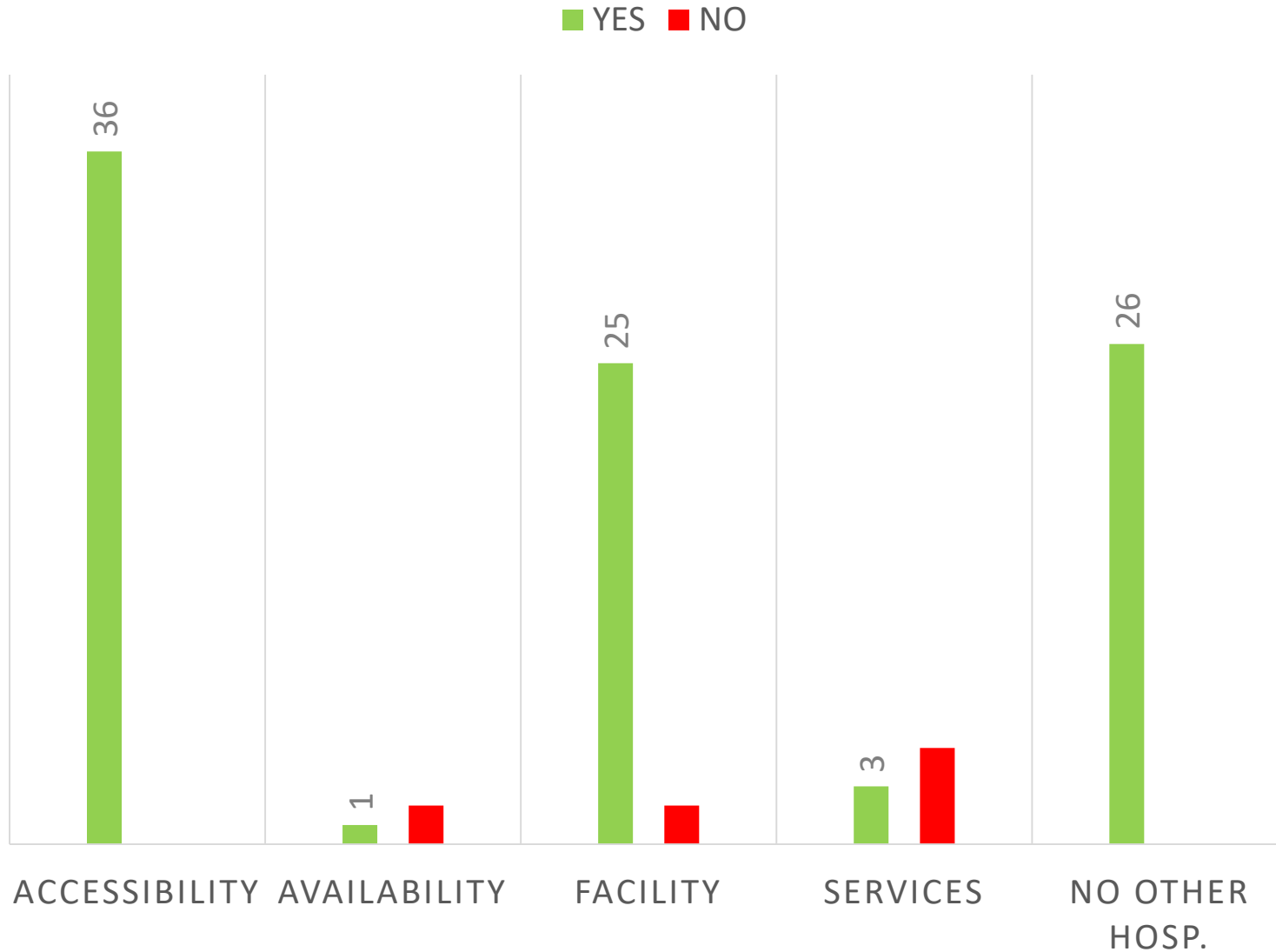
Why VCs are helpful? / How do they take a call to go to VC?



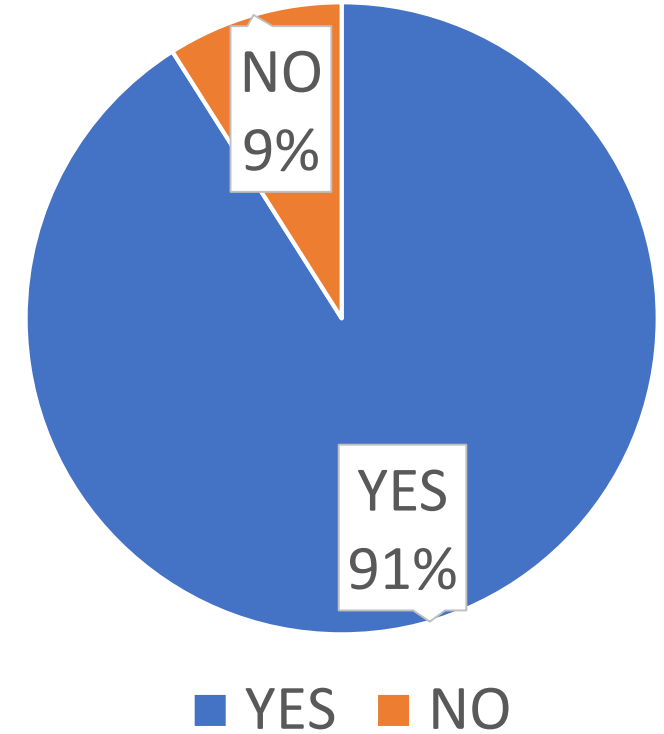
Observations

- Among all age group the most popular VC criteria is **Accessibility (40-60%)** or nearby locations. So they want it to be located near bus stop, main road, etc. so that they can easily access it.
- The 2nd most popular criteria for VC is Facilities **(20-30%)**. So they have a better probability to show up if VC is accessible and have good facilities.

Factors affecting decision to give recommendations

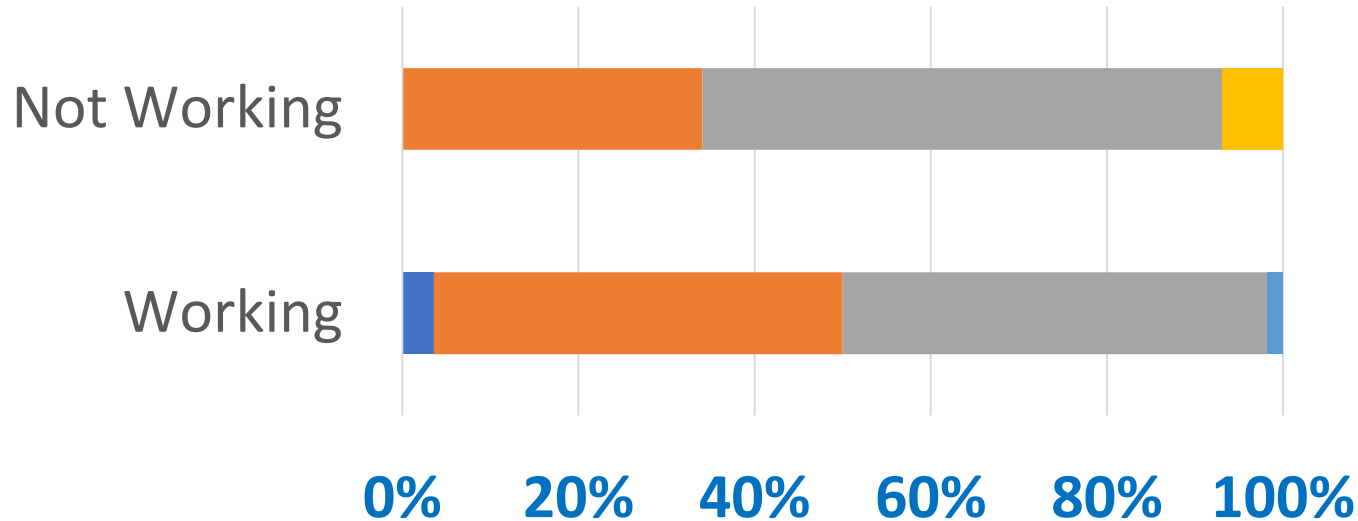


Will you recommend VC to others?



How did you know about VC?

Source of Info vs Occupation Status



■ Already knew

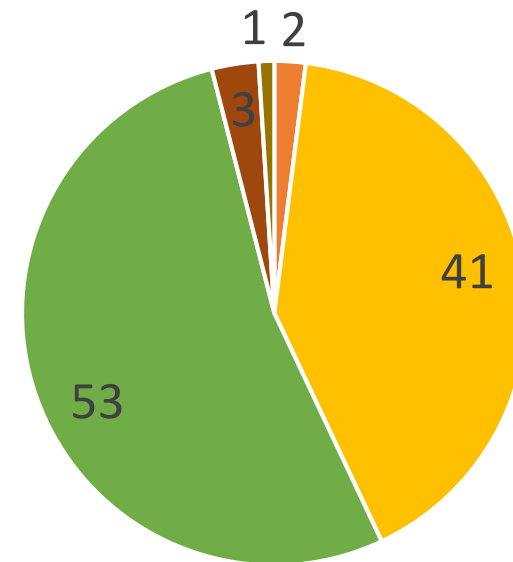
■ Friends & Family

■ Nearby/Visibility

■ Referred by BH/Camp

■ Referred by other Hosp.

Most source of Information



Most Effective Sources

■ Already knew

■ Friends & Family

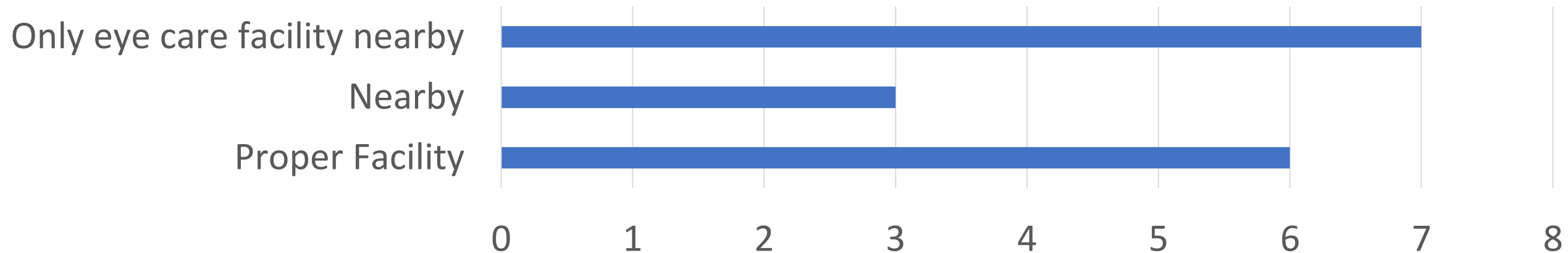
■ Nearby/Visibility

■ Referred by BH/Camp

■ Referred by other Hosp.

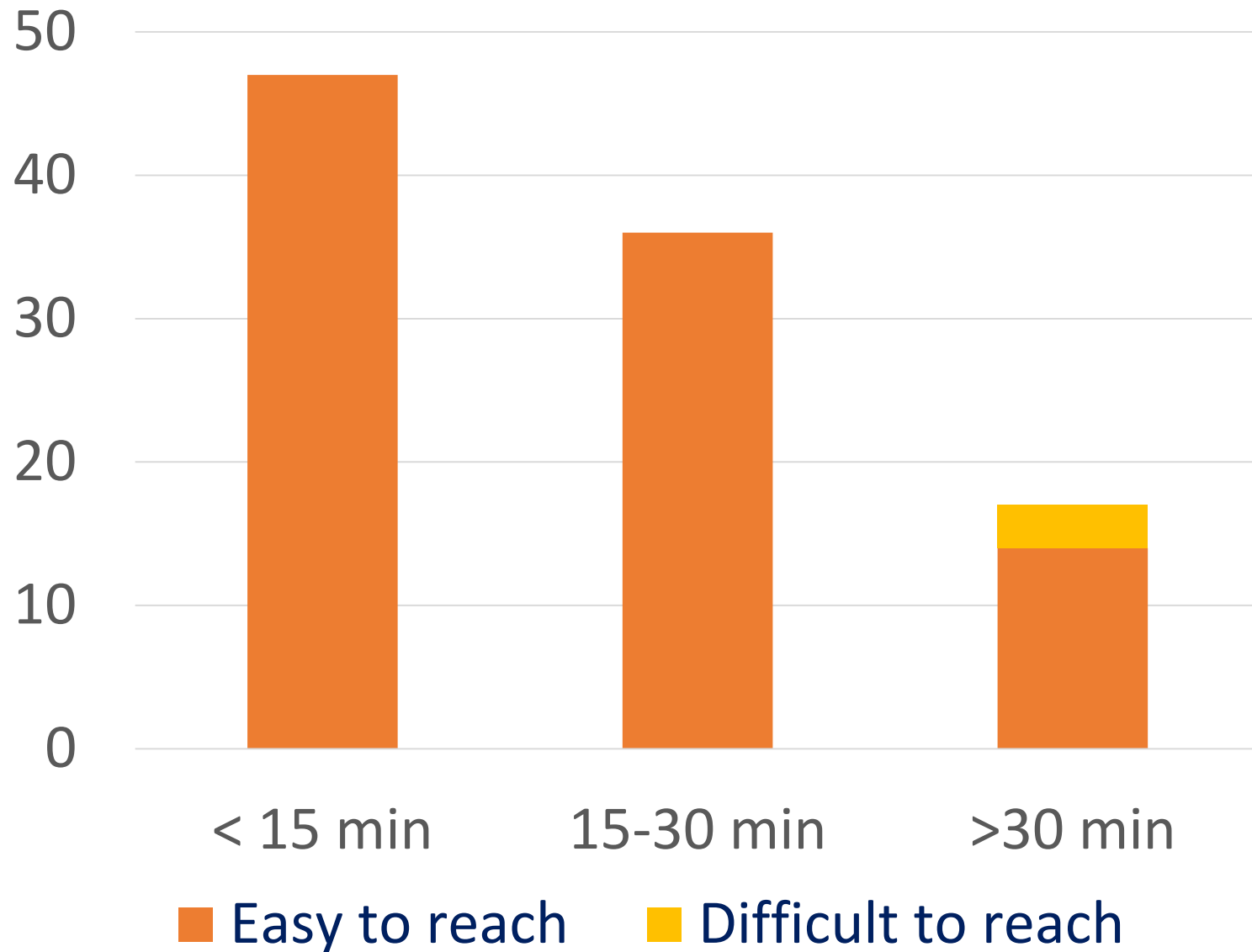
Eye problem not solved but still will recommend!

One interesting fact came out from the survey is that about 16% people whose eye problems are not solved / not satisfied with VC but will still recommend to their family and friends



- While it's obvious if there's no eye hospitals nearby or if the VC is close by, patients will still going to come and visit
- However more than 1/3rd people have also said that having a proper facility is one of the major criteria to choose or recommend a VC
- In turn it can be inferred that in case in future we plan to set up a VCs where there's other eye hospitals or other eye hospitals are getting set up near our VCs, we can still retail/get recommendations, if we have good facilities and proper counselling.

How well visible/accessible was the VC?

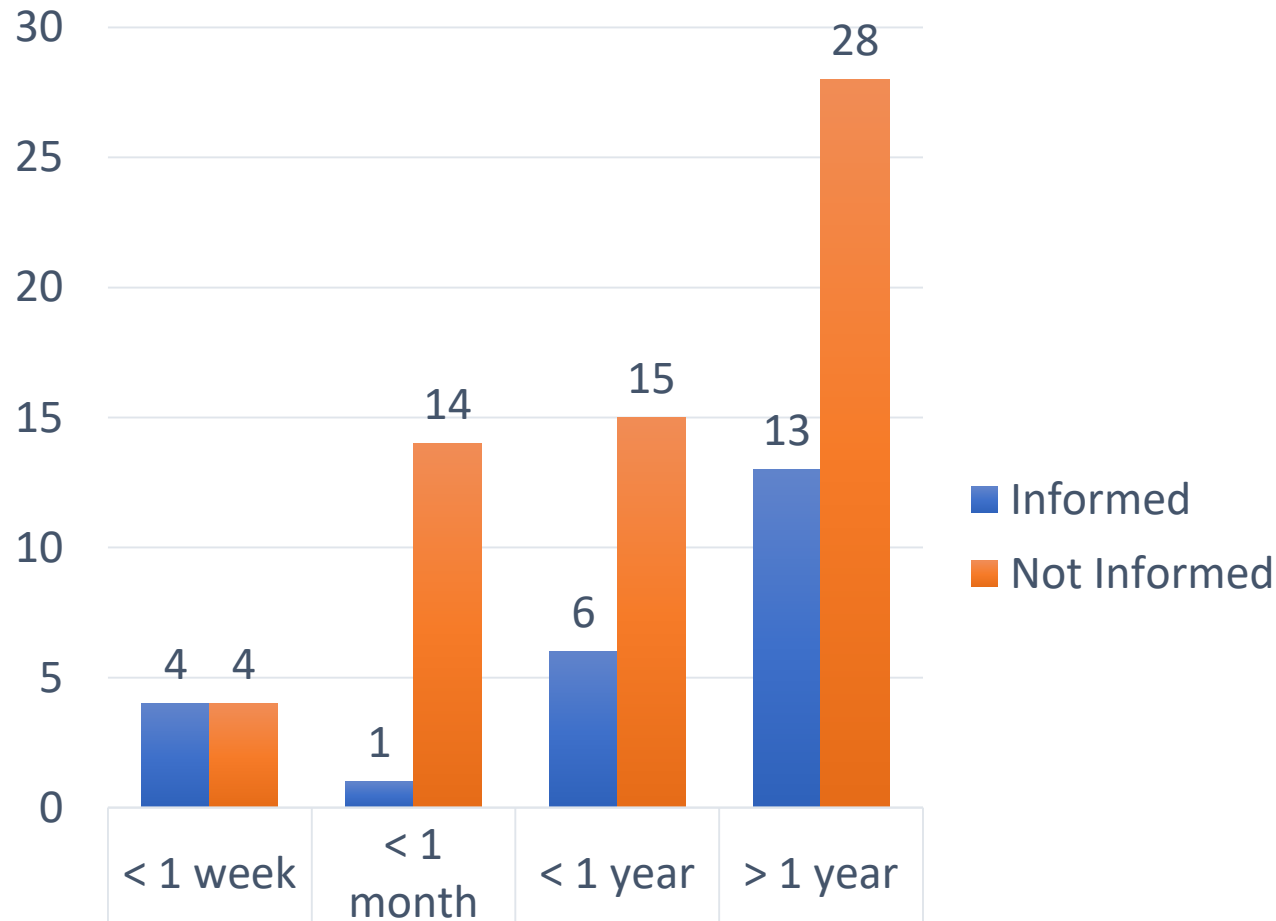


Observations

- The said VC is well visible and well accessible
- Only 3% people have faced trouble reaching here (because of bus timing issues)

Last Sugar/BP Check vs Awareness of availability of Sugar/BP check at VC

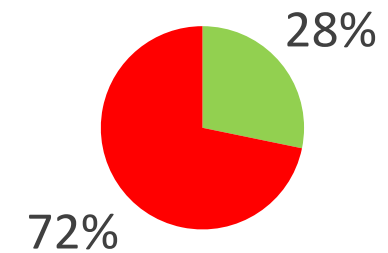
Last sugar/BP check



Informed	4	1	6	13
Not Informed	4	14	15	28

Information regarding Sugar/BP test availability

■ Informed ■ Not Informed

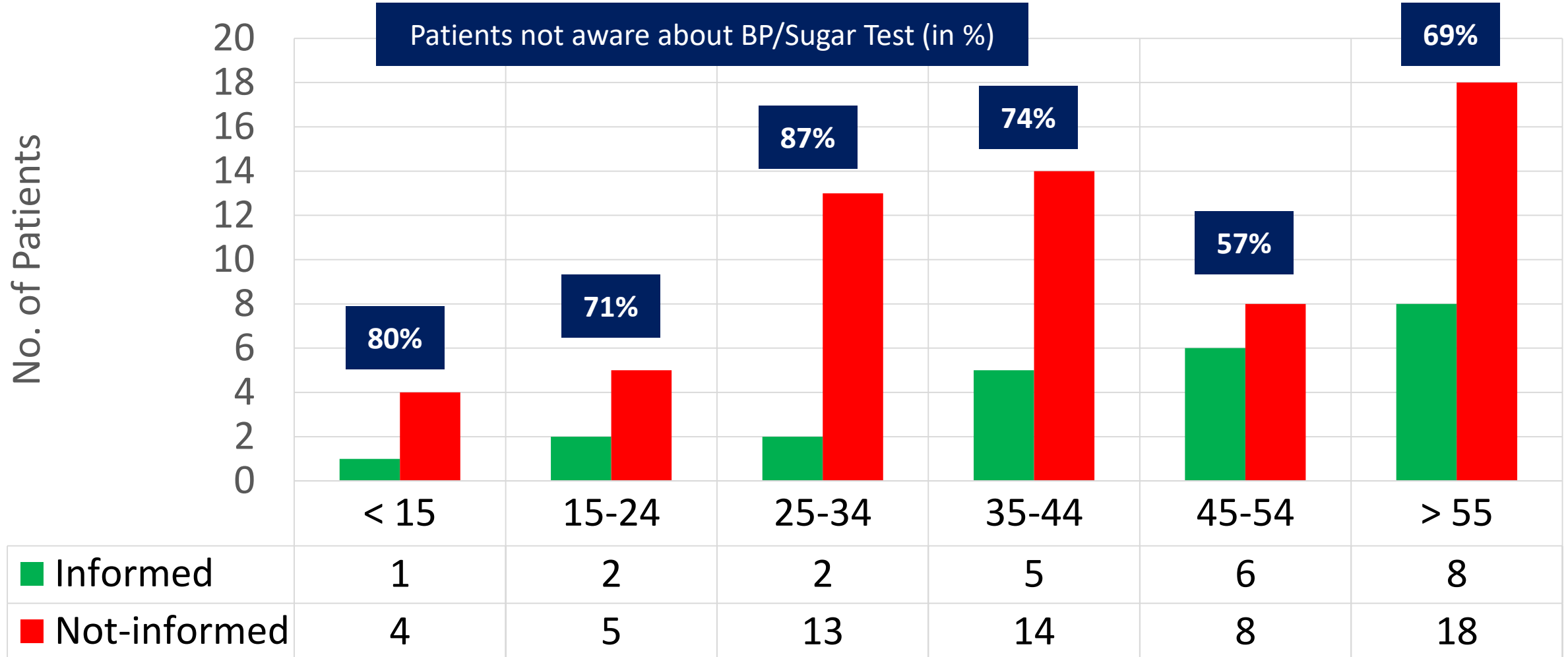


Observations

- While only 90% of the patients have done their sugar/BP check more than a week back, only 28% of them are aware of sugar/BP test availability
- All the patients can be informed the availability of Sugar/BP test.

Age-wise information regarding BP/Sugar check facility at VC

No. of patients who were aware about BP/Sugar Check at VC



[Refra-Counselor Questionnaire analysis.xlsx](#)

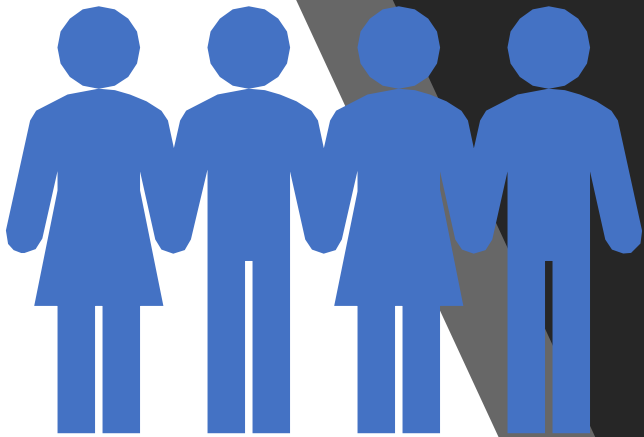
Field worker/vision centre

Sr. No	Vision Centres	Ideal field worker/VC	No of field workers
1	Annur	1	0
2	Perur	1	1
3	Krishnagiri	1	1
4	Sundarapuram	1	0

Findings

❖ Challenges:

1. Not all the VCs have field workers though some VCs stated that field workers must be there for more community participation which is one of the important factor for making VCs successful.
2. It is found from the study that Krishnagiri converts the max patient's to the BH while Annur not though it is good in terms of attracting patients and one of the reason behind it is counseling of packages for diff surgeries as Krishnagiri starts from particular range to pt. preference while others only tell ranges from min to max so it is difficult to convert those patient's after visiting the BH.
3. Spectacles are not as per the patients affordability and need based as the max range spectacles opted by the patients are diff in all VCs like Annur- Above 1000, perur- below 500, Sundarapuram, Krishnagiri- 500-1000 which is different for different VCs.
4. Though it is recommended to all VCs that only lens charge should be taken from the patients in advance, irrespective of it all the VCs are taking half amount of the total bill from the patients which is costly for patients.
5. On an average 67% of the patients those are above 40 age are not informed about the availability of the BP, sugar facility in the VCs and 68 % patients who did their BP, sugar check up back one year also not informed about same.



Benefits of VCs:

1. Vision centres are covering on an average 82% out patients without referring BH so helps in reducing the burden of patients in the BH as well as reducing the out of pocket expenditure of the patients for basic eye care facilities.
2. All the four vision centres collectively with BH services contributed around Rs.5,493,926 from April 2018 to Jan 2019.
3. It is found that on an average 82% spectacle selling is done from all the VCs and one of the reason for not converting rest of the population is affordability or high range of spectacles available in the VCs.
4. Around 60% patients who have visited the BH are satisfied with vision center in terms of accessibility and rest 20-30% is in terms of available facility.
5. Around 90% of the patients visited VCs based on word of mouth and visibility of the VCs.
6. Though 91% of patients said they will recommend the VCs to other patients but rest of the 9% denied it for improper information, not acceptance of patients after 4.30-5 pm.

Recommendation's

Every VC should have at least one field worker for maximum coverage and follow up of the patients.

Maximum no of spectacles should be of that range which is affordable by the patients which is different for different VCs (Annur- up to Rs.1000, Perur- below Rs.500, Sundarapuram & Krishnagiri- Rs.500 to 1000)

Package range given by the VCs for cataract should be explain in terms of min package (Rs.6000) to as per patient's preference and not in terms of min or min to max range.

Awareness of availability of the B.P, sugar in the VCs should be increase through field workers and counselor of the VCs as it is one of the revenue generation source.

Reference:

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- Planning for VISION 2020 at the District Level (2006). *INTERNATIONAL CENTRE FOR EYE HEALTH*. Retrieved from <https://www.cehjournal.org/wp-content/uploads/planning-for-vision-2020-at-the-district-level.pdf>

Thank You

