

Project Title

Supplementary Primary Eyecare Clinic (SPEC)

Project Lead and Members

Project lead: Caryn Yong, Senior Optometrist

Project members:

- Dr Benjamin Chang, Senior Consultant
- Deirdre Lan, Senior Optometrist
- Chua Si Qi, Senior Optometrist
- Yang Lijun, Optometrist
- Ong Shu Xuan, Optometrist
- Suriagandhi Selathorai, Operations
- Prof Yip Chee Chew, HOD & Senior Consultant

Organisation(s) Involved

Khoo Teck Puat Hospital

Project Period

Start date: July 2017

Completed date: On-going

Aims

- To train and utilise optometrists as physician extenders to manage stable eye conditions in SPEC.
- Free up appointment slots for new or urgent cases and allow ophthalmologists more time to manage complicated eye diseases.

Background

See attached

Methods

See attached

Results

See attached

Lessons Learnt

- Given the many stakeholders in this project, stakeholder dialogue (to get “buy-in”) and shared leadership (amongst the optometrists and ophthalmologists) will be important to co-develop the care model and work processes.
- If I were to start over, more stakeholder engagement, identifying committed change agents and a non-prescriptive approach (with few simple, flexible rules, broad goals and general change directions) will be useful.

Conclusion

See attached

Additional Information

This initiative goes to show the importance of allied health professionals in taking on more clinical roles to support our doctors in a multi-disciplinary team. Doctors, allied health professionals and patients have all benefited from this initiative.

Project Category

Care Redesign, Workforce Transformation

Keywords

Care Redesign, Workforce Transformation, Healthcare Training, Formal Workforce, Workflow Improvement, Resource Allocation, Productivity, Eye Care, Lead Time, Patient Satisfaction Score, Cost Savings, Ophthalmology, Operations, Specialist

Outpatient Clinic, Khoo Teck Puat Hospital, Yishun Health, Supplementary Primary
Eyecare Clinic, Community and Home Eye Screening Service

Name and Email of Project Contact Person(s)

Name: Caryn Yong

Email: Yong.caryn.sh@ktph.com.sg

Supplementary Primary Eyecare Clinic (SPEC)

Yong C.¹, Chang B.¹, Lan D.¹, Chua S.Q.¹, Yang L.¹, Ong S. X.¹, Tan K.², Lee S. C.³, Yip C.C.¹

¹Ophthalmology and Visual Sciences, ²Operations, ³Specialist Outpatient Clinic
Yishun Health

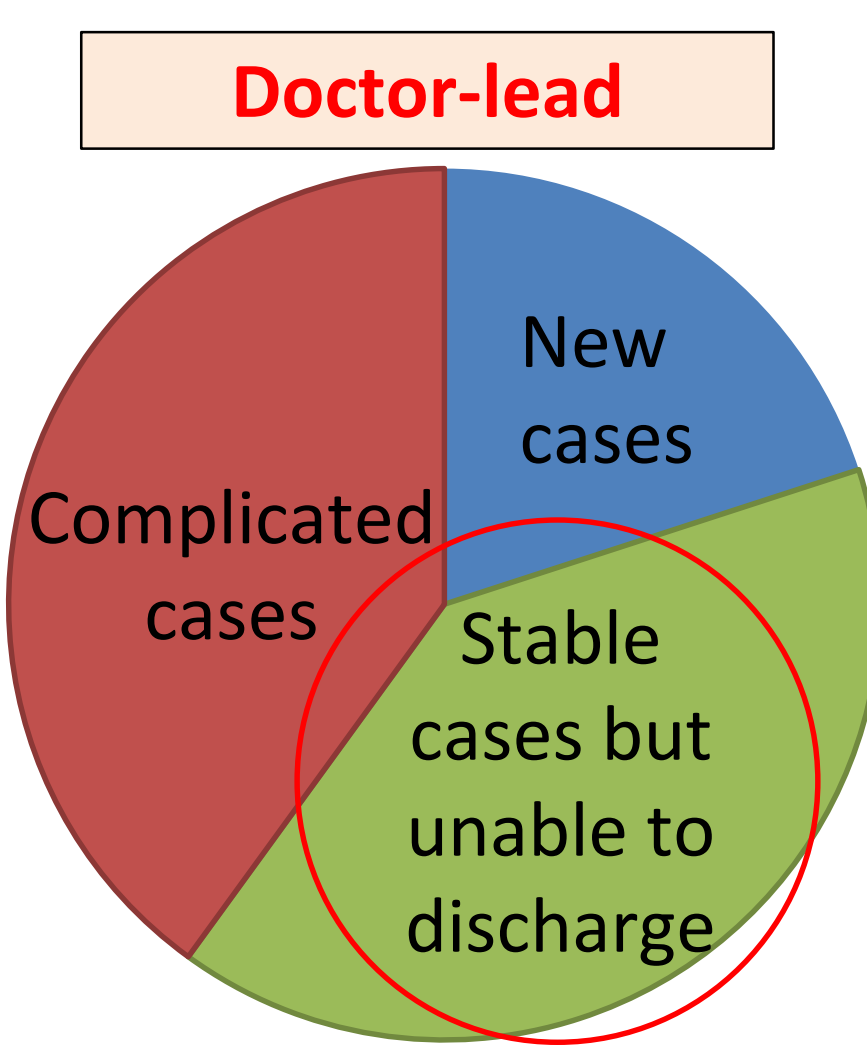
Background

A proportion (30%) of eye clinic patients have **stable eye conditions** which require observation and minimal intervention. The **Supplementary Primary Eyecare Clinic (SPEC)** was initiated to manage these patients and reduce eye clinic lead time.

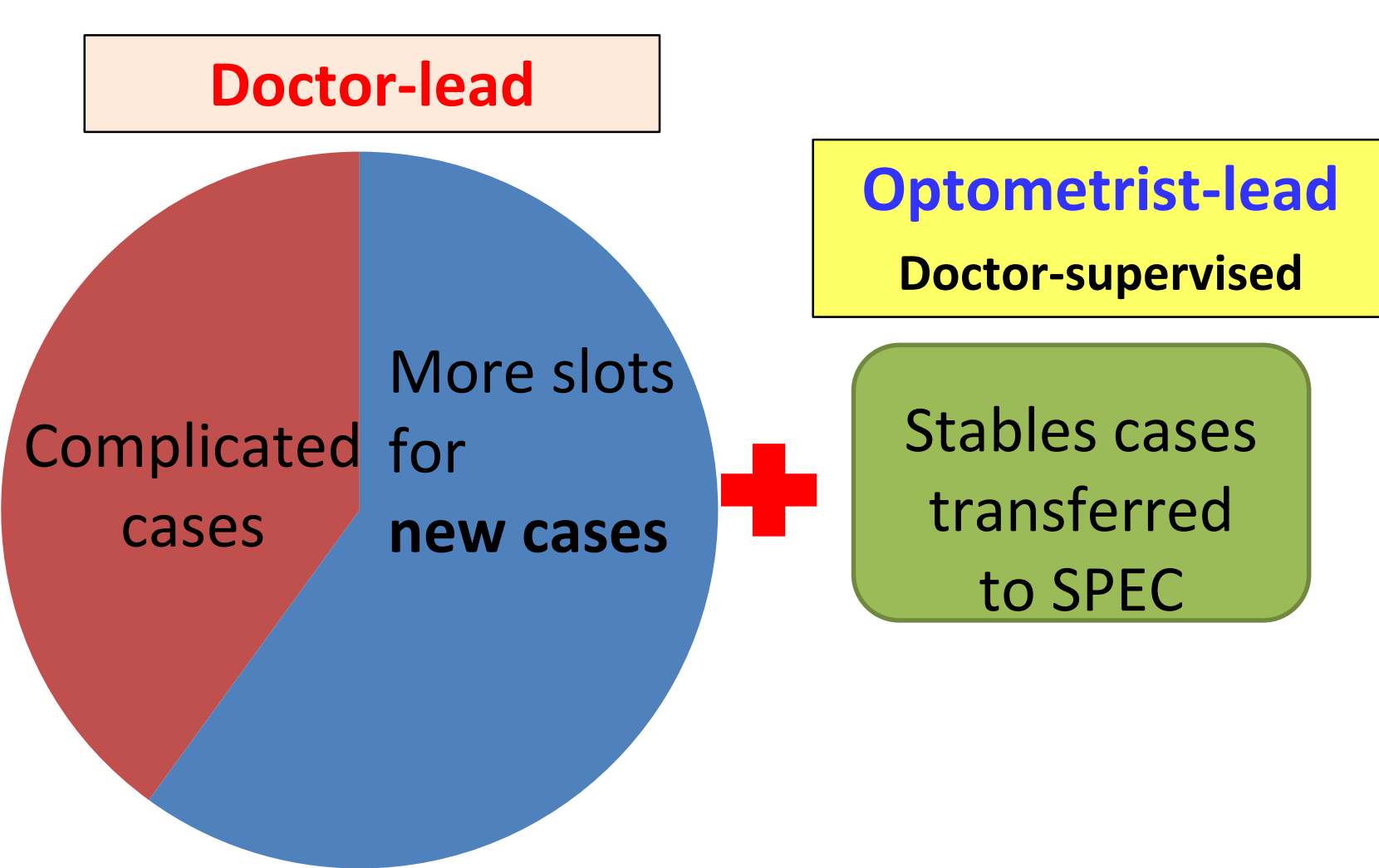
Objectives

- To train and utilise **optometrists as physician extenders** to manage stable eye conditions in SPEC.
- Free up appointment slots** for new or urgent cases & allow ophthalmologists more time to manage complicated eye diseases.

As-is Eye Clinic



To-be Eye Clinic



Methods

- A **Training & Accreditation Program** (conjoint with TTSH) was implemented to train suitable optometrists and to ensure clinical competency for running SPEC.
- Detailed referral guidelines** were used to ensure correct patient transfers to SPEC.
- A **patient satisfaction survey** was done to evaluate SPEC.
- A **doctor satisfaction survey** was also done to evaluate the optometrists' competency level.

Results

- High accreditation standard (passing score >90%)** was required.
- 5 optometrists were accredited to do SPEC.
- All passed with high scores (refer to table below) & were assessed on an average of 209 eyes (range, 201 - 245).

	Goldmann Applanation Tonometry	Slitlamp exam	Relative afferent pupillary defect	Van Herrick
Average score (%)	94.44	97.45	99.80	97.17
Range (%)	92.07-95.92	96.46-99.02	99-100	95-98.53

No of SPEC patients (Jul 2017- Feb 2020)

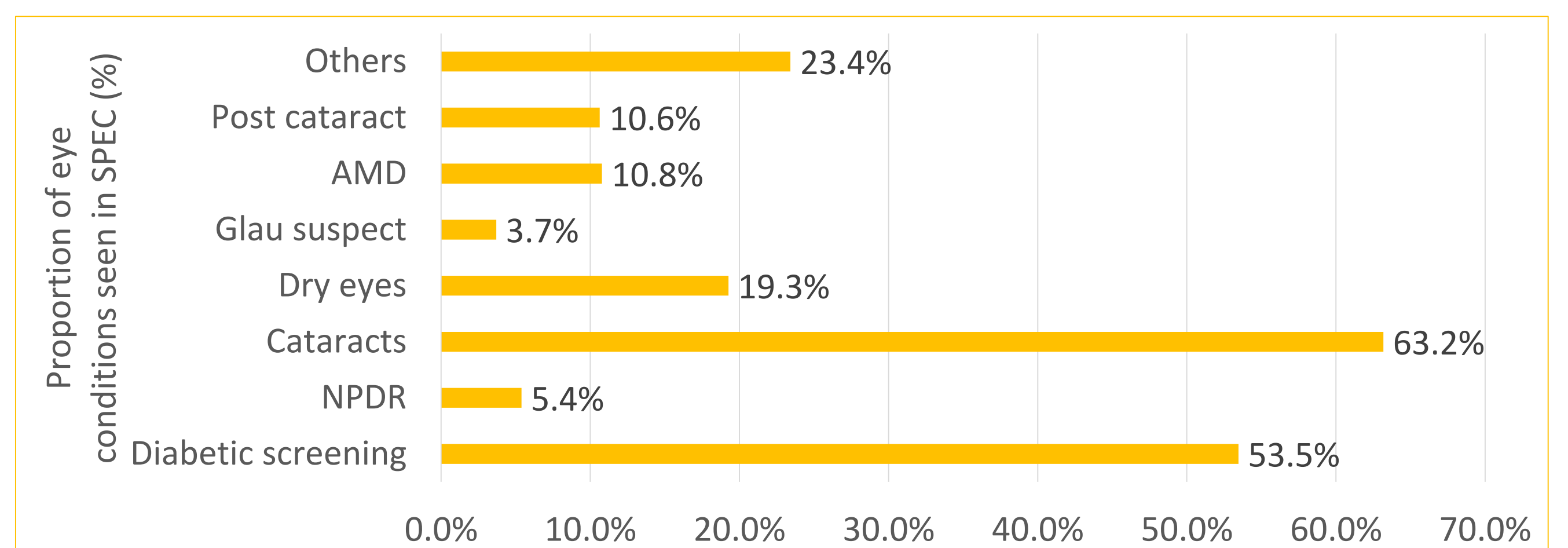
649

649 slots were freed up for new cases in the general clinic

- Majority (71.7%)** of SPEC patients **could be managed in SPEC**.
- Only 24.5% required specialist referral; 3.9% were discharged.

Results (continued)

Table below shows the main eye conditions seen in SPEC:



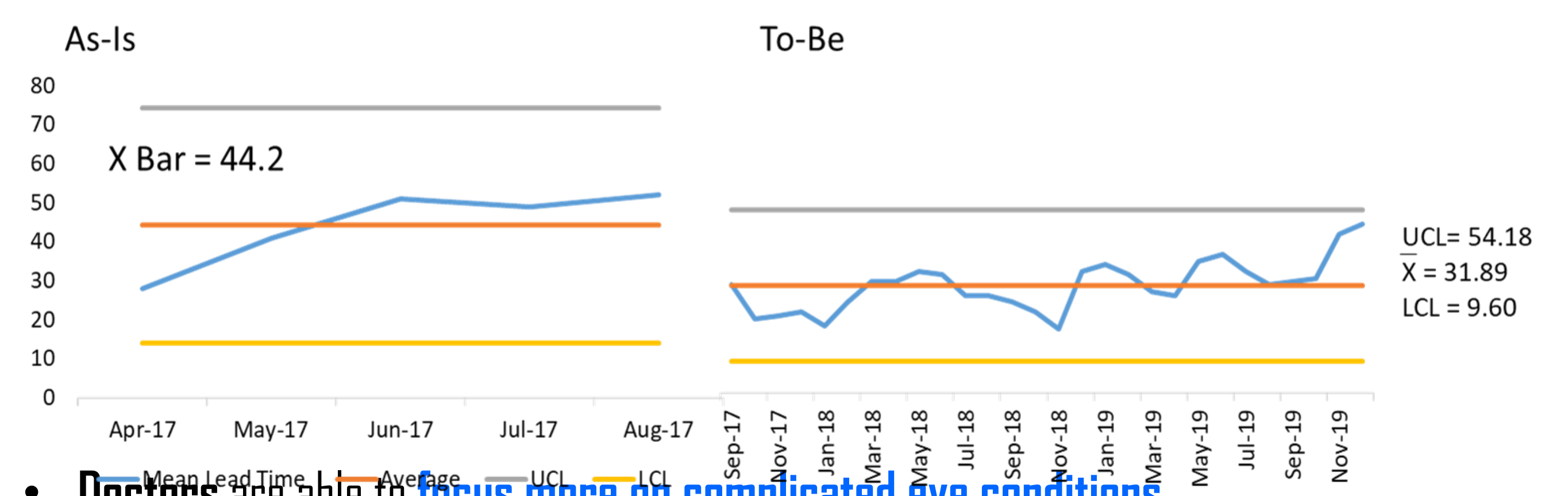
Survey results

- Mean patient satisfaction score was **4.56/ 5 (n= 58)**.
- Mean doctor satisfaction score was **4.97/ 5 (n= 5, 30 sessions)**.

Project Impact

- High patient satisfaction scores attained.** Patients found optometrists more approachable & gave **more detailed explanation**.
- Eye Clinic lead time reduced by 27.8%:** mean (X bar) lead time *decreased* from 44.2 to 31.89 days.

I-MR Chart of KTPH Eye Clinic Lead Time (As-Is Vs To-Be)



- Doctors** are able to **focus more on complicated eye conditions**.
- Optometrists** will raise their professional profiles thus potentially **increasing their job satisfaction**.
- Manpower Cost Savings:** The savings of using an optometrist instead of a doctor to run SPEC is **\$65,731.80 per annum**.
- Organisation:** The Eye Clinic has **increased revenue** from taking in more cases.
- Spread:** The trained optometrists are deployed to provide second level eye care of **Community & Home Eye Screening Service (CHESS)** at Wellness Kampung & NTUC Kampung Admiralty.

Sustainability

- Standardised **workflow & referral guidelines**.
- Continuous upgrading & updating** of the referral guidelines based on evidence-based medicine & best practices.
- Patient satisfaction surveys** every 6 months.
- Doctor satisfaction surveys** every 6 months to monitor clinical competency.
- To **increase the weekly SPEC sessions** to accommodate the increasing number of stable eye cases.
- Training of new optometrists** to ensure clinical competency in running SPEC.

Conclusion

SPEC is a **well received, safe, effective** and **cost-lowering** model of care to manage stable eye conditions, using trained optometrists as ophthalmologist extenders.