

## **Project Title**

Reducing Congestion & Patient Dwell Time in SNEC by Frontloading Pre-Consultation Eye Evaluation (EV) into the Community.

## **Project Lead and Members**

- Wendy Tsai Yin Yin
- Adj A/Prof Rahat Husain
- Dr Lim Hou Boon
- Yeo Wei Lim
- Florence Foo Chuan Yang
- Duke Ang Wee Hon

## **Organisation(s) Involved**

Singapore National Eye Centre

## **Aims**

The aim of the project is to identify the root causes resulting in the congestion at the Eye Evaluation.

## **Background**

See poster appended / below

## **Methods**

See poster appended / below

## **Results**

See poster appended / below

## **Conclusion**

See poster appended / below

## **Additional Information**

Singapore Healthcare Management (SHM) Conference 2021 – Merit Award  
(Operations Category)

## **Project Category**

Care & Process Redesign

## **Keywords**

Care & Process Redesign, Process Improvement, Right-Siting, Waiting Time, Turnaround Time, Root Cause Analysis, Value Stream Mapping, Healthcare Administration, Singapore National Eye Centre, Singapore Optometric Association, Operations, Eye Evaluation, SNEC Regional Eye System, 3 Beyonds

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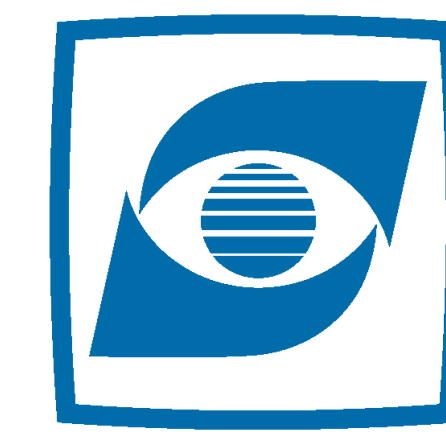
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Singapore Healthcare Management 2021

# Reducing Congestion & Patient Dwell Time in SNEC By Frontloading Pre-consultation Eye Evaluation (EV) Into The Community.

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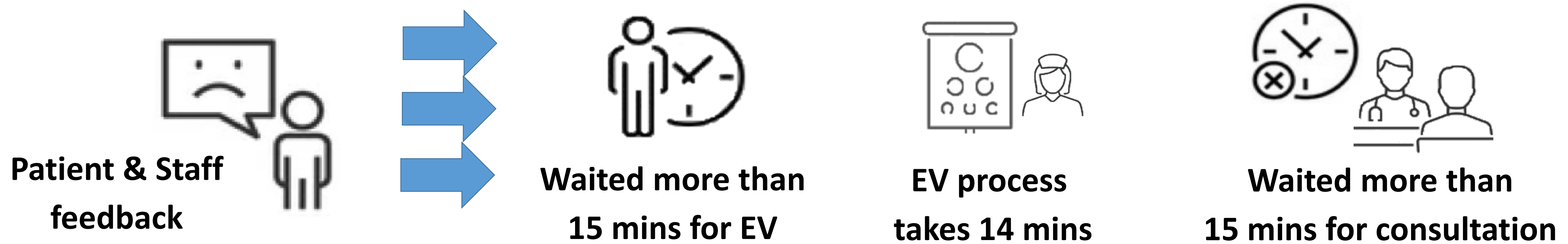
Singapore National Eye Centre  
SingHealth

## INTRODUCTION

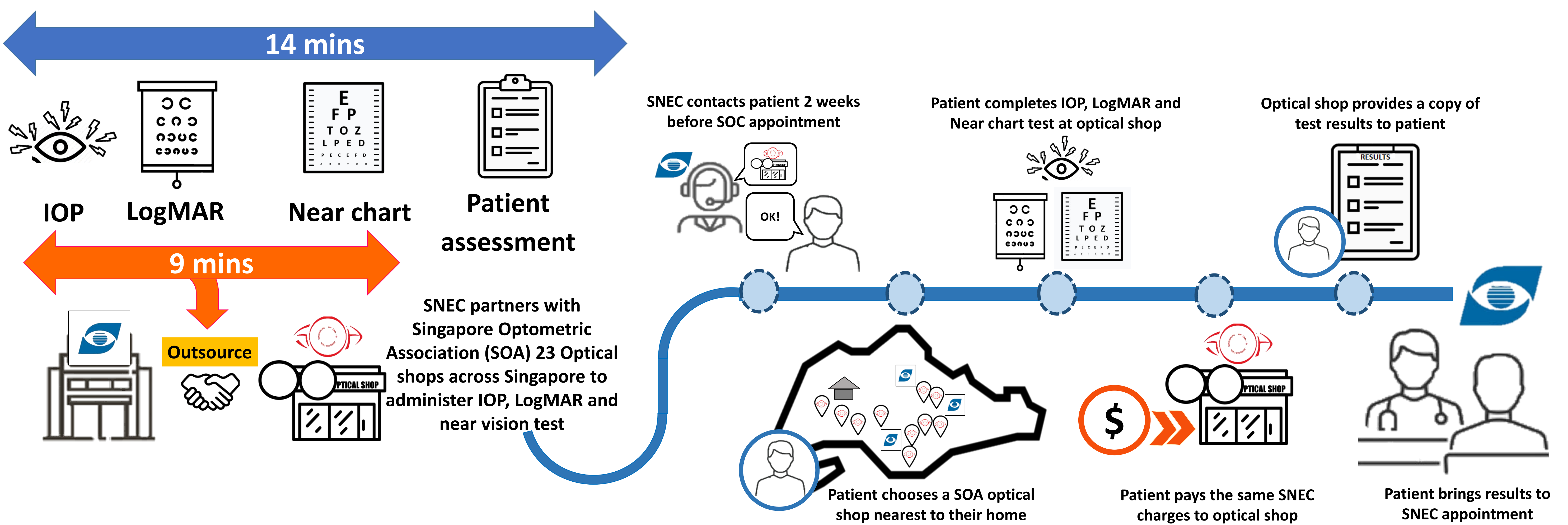
SNEC satellite clinics' patient workload increased by 30% from 2019 to 2020, yet the number of EV lanes remained the same due to manpower and infrastructure constraints, thereby adding to the congestion. SNEC Regional Eye System (RES) team together with Nursing colleagues formed a problem statement and conducted a workshop for root cause analysis through value stream mapping & fishbone diagram. The team determined that **Intraocular Pressure (IOP), far vision test (LogMAR) and near vision formed the Big 3 – taking up to 9 minutes out of 14 minutes, i.e. 60% of the total Eye Evaluation (EV) turn-around-time.** After conducting patient tracing, we also learnt that new case (NC) first visit patients tended to spend a longer time undergoing EV compared to the follow-up patients which only requires 7 mins. \*excludes fast track new case.

## OBJECTIVES

The aim of the project is to identify the root causes resulting in the congestion at the EV. Every patient has to undergo IOP air puff test, LogMAR, near vision test and a patient assessment questionnaire as part of their pre-consult routine tests at SNEC.



## METHODOLOGY

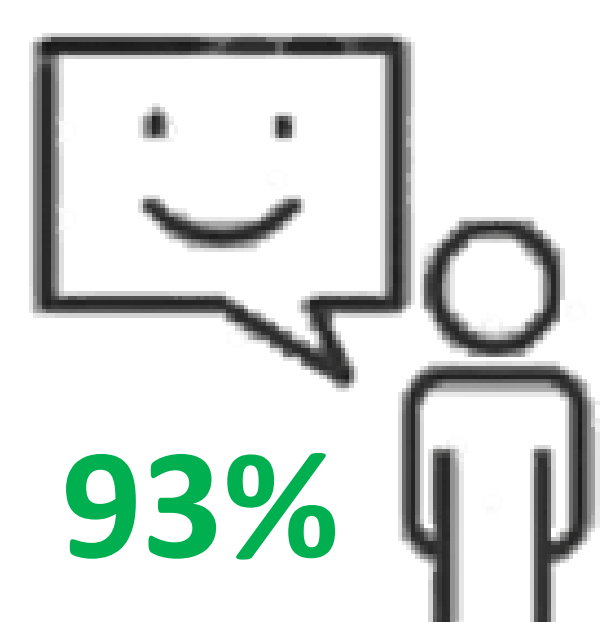


## RESULTS

Since December 2020, 73% of the NC patients, in the participating clinics, had been recruited into this outsourced EV model of care (n=1002).

## CONCLUSION

This pilot showed that right-siting EV into the community is not only an effective mitigation to **reduce congestion and adheres to safe distancing measures** in the eye SOC's but also aligned with the **3 Beyonds strategies**.



93%

Patient Feedback on new process (Satisfied and Very Satisfied)



EV Wait time within 15 mins % of patients **IMPROVED** from 80% to **92%**



Beyond Hospital to **COMMUNITY**

Right-site patients to receive eye care nearer to home



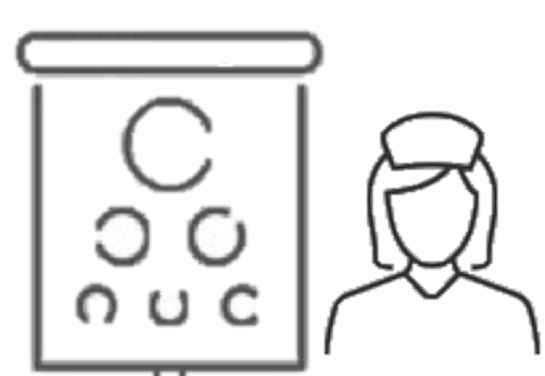
Beyond Quality to **VALUE**

Upskill community optical shops to offload some of the center's workload



Beyond Healthcare to **HEALTH**

Early detection of eye abnormalities to allow escalation for timely treatment



Time taken for EV Process **REDUCED by 86%** From 14 mins to 5 mins



Consult Wait time within 15 mins % of patients **IMPROVED** from 36% to **46%**

The team plans to expand this model of care to other clinics as well as follow-up patients as part of our continuous effort to proliferate effective models of care.