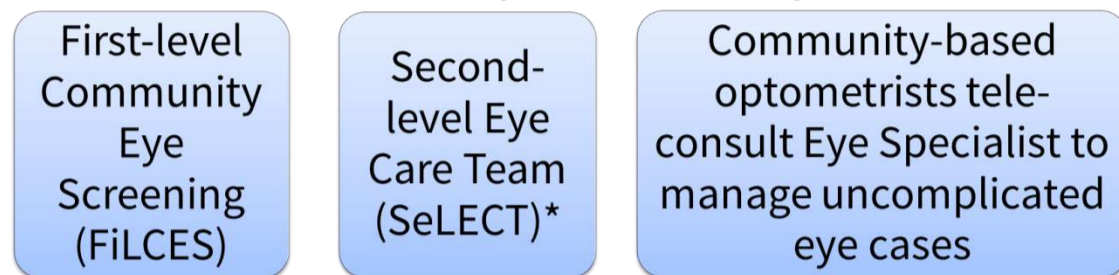


## Community & Home Eye Screening Service (CHESS)

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 Khoo Teck Puat Hospital (KTPH) and Admiralty Medical Centre (AdMC), Yishun Health (YH) Campus

### Background/Aims

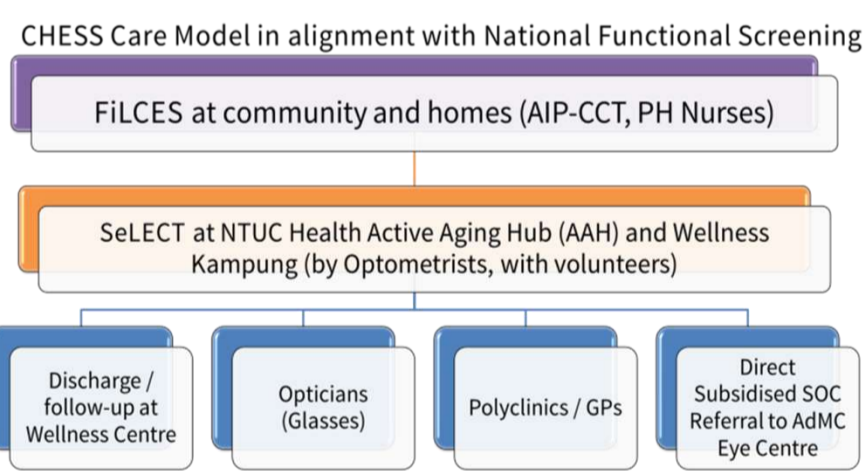
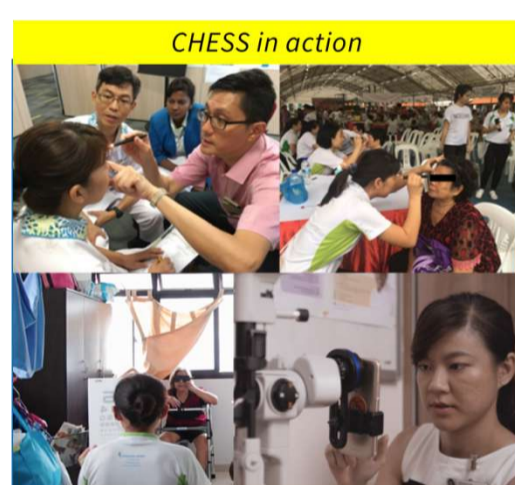
Regular home & community eye screenings do not adequately serve the elderly population in the northern region of Singapore. CHESS was piloted in 2016 with the aims to detect eye diseases early via:



\*In October 2018, Second-level Eye Consultation was renamed as Second Level Eye Care Team (SeLECT).

### Methods

AS-IS	TO-BE
<p>Mass eye screenings done infrequently:</p> <ul style="list-style-type: none"> <li>Labour-intensive: about 30 staff required per session</li> <li>Complex logistics: need to coordinate manpower &amp; equipment.</li> <li>Limited follow up of patients with eye conditions.</li> </ul>	<p>Trans-disciplinary collaboration involving various departments:</p> <ul style="list-style-type: none"> <li>Less labour intensive &amp; more cost effective with workforce transformation &amp; using existing manpower:               <ol style="list-style-type: none"> <li>Ageing-In-Place (AIP) – a community outreach program that facilitates patient home visits.</li> <li>Population Health Program (PHP) - conducts regular health screenings conducted in the community.</li> <li>Optometrists – function as ophthalmologist-extenders (OEs)</li> </ol> </li> <li>Simpler logistics &amp; increased accessibility of community eye care through the setting up of:               <ol style="list-style-type: none"> <li>Wellness Kampung &amp; NTUC Health Active Aging Hub (AAH) – social location with rooms &amp; volunteers to help in SeLECT</li> <li>Training and accreditation system (TAS)- training and accreditation of AIP &amp; PHP nurses to perform FiLCES and the optometrists to perform SeLECT.</li> </ol> </li> <li>Seamless follow up from community to hospital:               <ol style="list-style-type: none"> <li>Established FiLCES, SeLECT &amp; direct SOC referral</li> <li>Contributed &amp; aligned to Ministry of Health's (MOH) Project Silver Screen</li> </ol> </li> </ul>

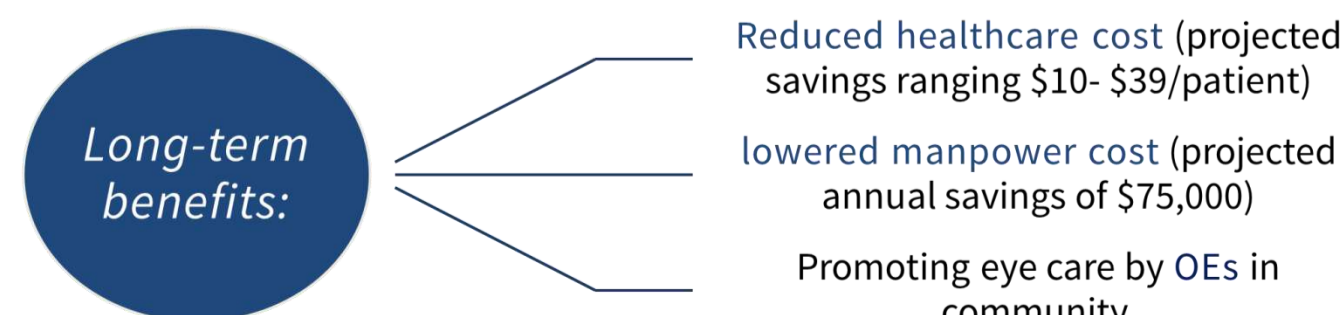
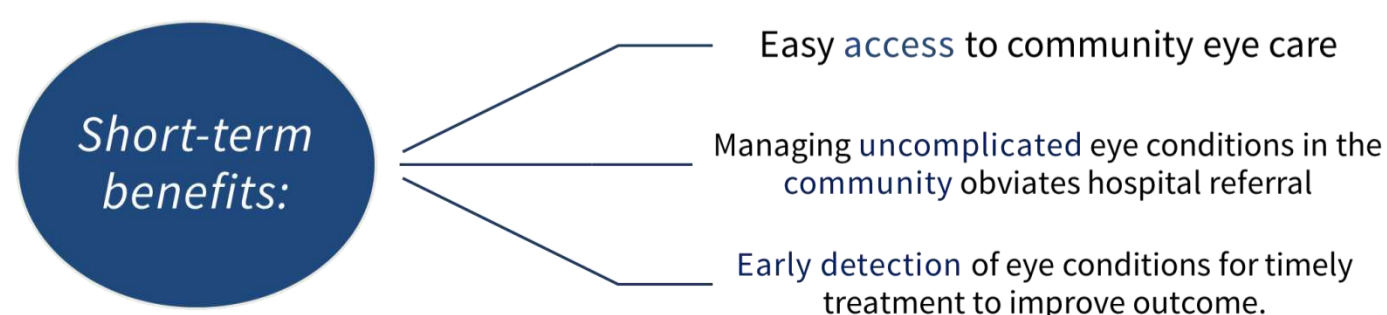


### New developments for CHESS since 2018



Left photo: NTUC Health AAH & AdMC MOU signing with YH CEO & GOH Dr Amy Khor looking on  
 Center photo: Volunteer performs visual acuity test on patient during SeLECT as Ms Ho Ching looks on  
 Right photo: Second location for SeLECT consult room at and in collaboration with NTUC Health AAH

### Project Impact



### Conclusion

CHESS is a feasible & effective eye care model to manage various eye abnormalities in the community. A significant number of asymptomatic eye conditions were detected.

### Results

As of January 2019, 228 service providers have been trained to provide CHESS:

Population Health nurse for FiLCES	Health Coaches for FiLCES	Opticians for FiLCES	Optometrist for SeLECT	Volunteers for SeLECT
40	17	162	5	4

Workload from February 2017 to January 2019:

Date	First-level Community Eye Screening (FiLCES)				Second-level Eye Care Team (SeLECT)		
	Total residents screened	Referred to specialist via GP/poly	Referred to optician for glasses	Referred to SeLECT	Total patients seen	Referred to poly/GP for specialist	Direct sub referral to SOC
CHESS Feb'17-Jan'19	2,228	304	238	413	600	217	32
CHESS + PSS Jan'18-Jan'19	7,499		1,630	2,319			
<b>Total</b>	<b>9,727</b>	<b>304</b>	<b>1,868</b>	<b>2,732</b>	<b>600</b>	<b>207</b>	<b>32</b>

One/more eye conditions detected (304+1,868+2,732= 4,904)

- FiLCES analysis:** Of the 9,727 FiLCES residents, 54.7% or 4,904 were detected having one/more eye conditions & 28.0% (2,732/9,727) needed to refer to SeLECT.
- SeLECT analysis:** Of the 600 residents currently referred to SeLECT, 60.2% could be managed in the community while 39.8% needed specialist referral.
- Overall, only 5.6% [(304+207+32)/(9,727)] require specialist referral.

### Sustainability & Follow-up

- Secured funding from MOH Health-Productivity for Acute Services Scheme (Health-PASS) (\$300k) & Alexandra Health Fund (AHF) (\$300k) for two years.
- Established support, training & accreditation of nurses & OEs thru trans-dept/agency collaborations:

### Yishun Health Partner Departments

- (i) Nursing & PHCT to co-develop the Training Accreditation System (TAS)
- (ii) Setting up of Optometrist-led SeLECT clinic @ Wellness Ctr
- (iii) Human resource for the CHESS e-learning.

### National Healthcare Group (NHG) Partners

- (i) NHG Polyclinic: setting seamless referral system with polyclinic & hospital for eye specialist management
- (ii) NHG Eye Institute: conjointly established TAS.

### Integrated Health Information Systems (IHIS) partners

- IHIS helped developed the tele-health system by using TigerConnect.

### Government partners

- (i) Collaboration on MOH Project Silver Screen aligning to the functional eye screening nationwide programme to directly refer subsidized patients to specialist eye clinic.
- (ii) Agency for Integrated Care (AIC): secondary school student volunteers were trained to help out in FiLCES

### Agency partners

- NTUC Health Active Ageing Hub (AAH) @ Kampung Admiralty: collaborated with AdMC to form SeLECT.

- CHESS contributes to YH Strategic Plan 2020 for Front 2 – Lifelong Care. This project aims to help keep the population healthy and focus on resident/patient wellness, self-care education, and early detection & prevention of diseases.