

# Community & Home Eye Screening Service (CHESS)

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# **Background & Objective**

Regular home and community eye screenings do not effectively reach out well to the elderly & frail.

CHESS aims to enable to detect early eye diseases via:

- 1. First-level Community Eye Screening (FiLCES)
- 2. Second-level Eye Consultation (SeLEC)
- 3. Training nurses & optometrists as ophthalmologist extenders (OE) to manage simple eye conditions at the top of their licenses.

### Methodology

### AS IS:

Mass eye screenings done infrequently due to:

- 1. Labour-intensiveness: about 30 staff required.
- 2. Complex logistics: need to coordinate manpower, equipment & participants.
- 3. Limited follow up of patients with eye conditions.

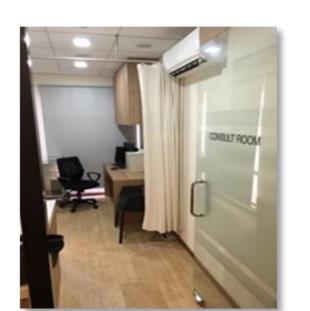
#### TO BE:

Trans-disciplinary collaboration involving various departments (as stated above):

- 1. To increase accessibility of community eye care by using trained nurses & optometrists.
- 2. To reduce eye referrals to hospitals
- 3. To be cost effective using existing resources:
  - a. Wellness Kampungs: AHS partnering with St Lukes Eldercare & Nee Soon GROs.
  - b. Trained Nurses (AIP-CCT & PH Programs)
  - c. Optometrists (KTPH OVS Department)
- 4. To facilitate community eye care via technology enablers for tele-health, patient self-monitoring & e-learning.









Nurses trained by ophthalmologist

FiLCES

Wellness Kampung SeLEC consult room

FiLCES at community and homes (AIP-CCT, PH Nurses)

SeLEC at Wellness Kampung (Optometrists)

Discharge / follow-up at Wellness (Glasses)

Centre

Opticians (Glasses)

Centre

Opticians (Glasses)

Centre

### Results

PILOT PROJECT (May – June 2016)
Community Eye Screening Results:

Setting		Patients eligible for CHESS (FiLCES)	Patients with eye abnormalities
Health Screening	76 (53%)	75	23 (30%)
<b>Community Nurse</b>	27 (19%)	27	11 (41%)
Posts			
Homes	40 (28%)	27	18 (45%)
Total	143	129 (90%)	52 (36%)

 40.3% (52/129 patients) diagnosed to have one or more eye conditions at FiLCES

# ROLLED-OUT PROJECT (February – May 2017) (on going) Community Eye Screening Results:

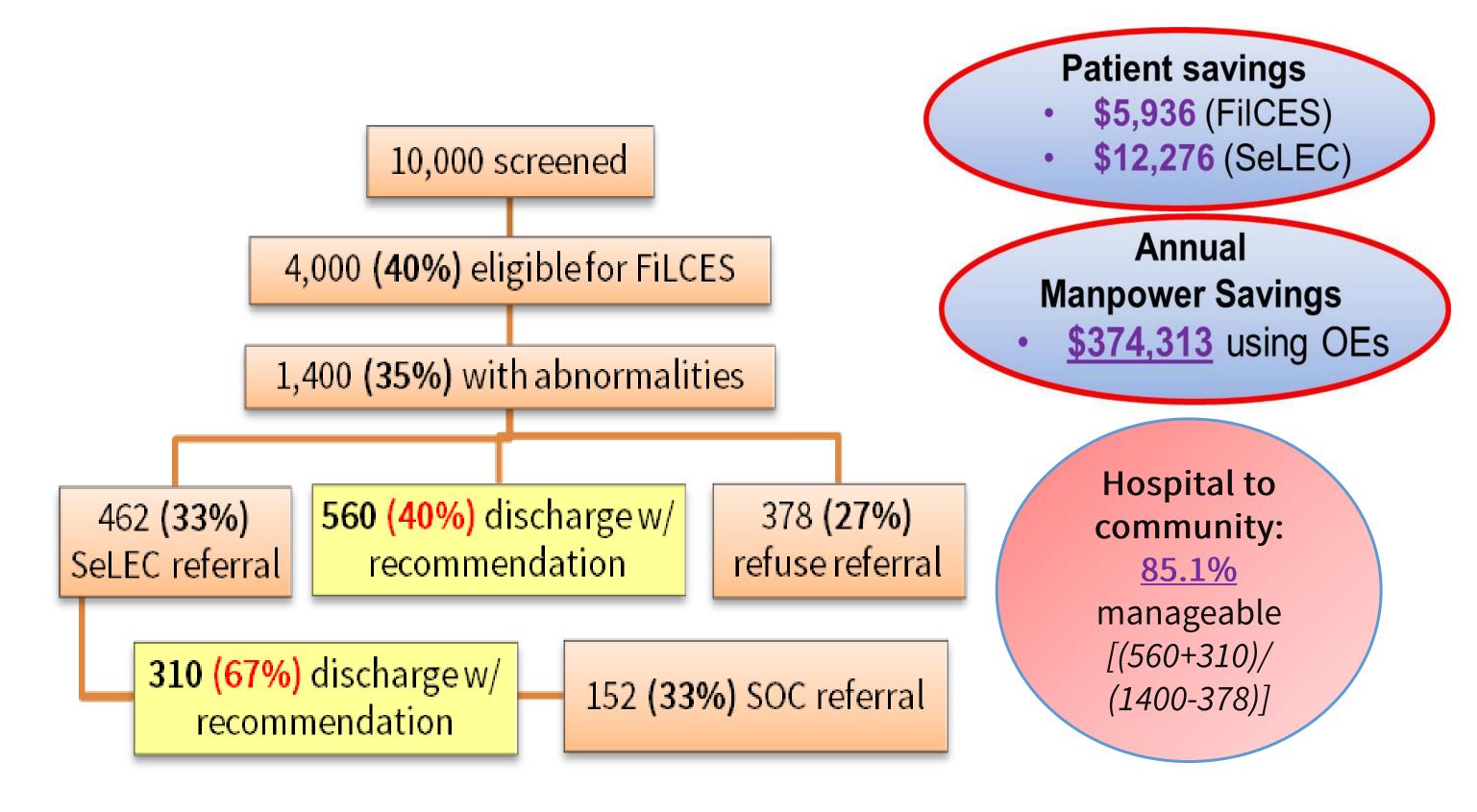
Date	Patients Screened at FilCES	One or more eye conditions		
Feb'17 – May'17 ongoing	883	366	<b>198</b> (177 seen)	82

- 41.4% (366/883 patients) diagnosed to have one or more eye conditions at FiLCES
- 54.1% (198/366 patients) referred for SeLEC
- Only 46.3% (82/177) patients from SeLEC referred to specialist

### **Project Impact**

### **BASED ON PILOT PROJECT**

- 52 patients with asymptomatic eye conditions were detected at FilCES.
- <u>71.2%</u> (37/52) could be <u>managed at SeLEC.</u>
- 28.8% (15/52) needed specialist referral.
- There were 72 eye conditions diagnosed in total.
- Projected workload: 560 patients (FiLCES); 310 patients (SeLEC)



### Sustainability

- 1. Infra-structure & system in place for:
  - Training & certification of nurses & OE
  - Wellness Centre & technology enablers
- 2. Training of external partners (Society of Opticianry Practitioners) as a potential referral source
- 3. Funding from MOH Health-PASS (\$300k) & Alexandra Health Endowment Fund (\$300k)

# Conclusion

CHESS is a feasible & cost-effective eye care model to manage many ophthalmic conditions in the community.