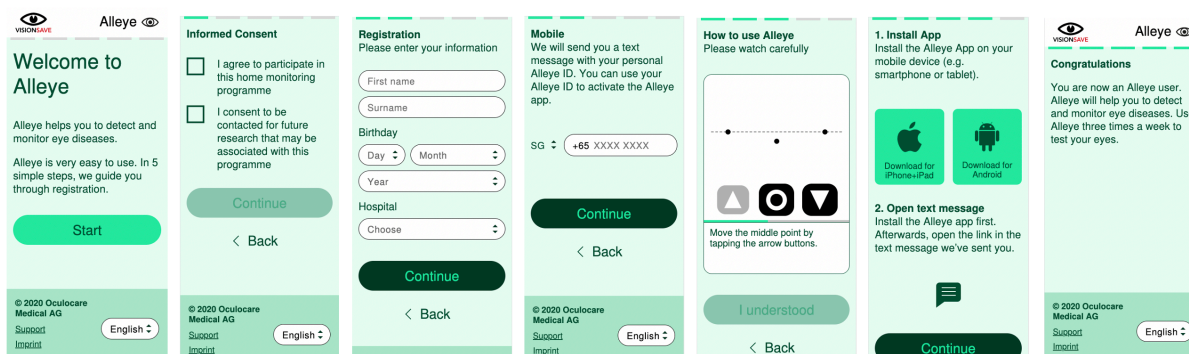


## Supplementary figure 1: Instructional flow for custom mobile page for initial onboarding



Supplementary figure 1: Seven-page instructions for information, consent and usage of the app. The onboarding process was exclusively via this flow.

## Supplementary document 1: Singapore National Eye Centre policy and procedure for self-monitoring initiative

### Home Monitoring Initiative (Alleye) Policy and Procedure

Date: 26 May 2020

#### INTRODUCTION

- 1.1 Retina home monitoring is a digital initiative to allow patients to monitor their retina conditions by a mobile app (alleye.io). This app tests hyperacuity of a patient's per eye and quantifying the amount of metamorphosis present due to the underlying retina condition. This app is an FDA approved app for used for monitoring patients with age related macular degeneration and diabetic macular edema on treatment and in this initiative expanded to other stable retina conditions.
- 1.2 The app ecosystem, in addition to the patient facing app, includes a “patient dashboard” which gives an overview of all the patients’ scores.
- 1.3 A “trigger” is initiated when a patient fails the test by predefined criteria. (figure 1)



Figure 1: explanation of trigger

## **2. PURPOSE**

2.1 To establish specific guidelines for surveillance and escalation of home monitoring triggers specific to alleye app.

## **3. DEFINITION**

3.1 SORC refers to Singapore National Eye Centre ocular reading centre

3.2 NA refers to Nurse Administrator

## **4. WORK FLOW FOR ALLEYE HOME MONITORING TRIGGER**

### **4.1 Trigger activation**

Triggers sent to home monitoring team (SORC NA) by:

1. automatic triggers via email in realtime via alleye AND/OR
2. daily monitoring of patient alleye dashboard

### **4.2 Clinical workflow and patient feedback (figure 2)**

**SORC NA will be responsible for:**

- Patients score review daily on alleye dashboard
- Monitoring trigger emails daily
- Contacting SNEC patients that have triggers via contact number provided on alleye within 3 days of the trigger
- Assessing if trigger constitutes an escalation for early appointment to SOC
  - If patient is assessed to have adhered to testing procedure and/or any subjective decline in vision he/she will be advised for early escalation of care (<1 week to seek tertiary eye care)
  - Patient will be advised to either 1) seek specialist eye care and 2) offered an appointment with SNEC retina department within the week.
- If patient trigger is deemed to be non-clinical in nature (examples include but not restricted to: wrong eye tested, wrong subject, or improper use of the app), further education on the proper use of the app will be performed.
- SORC NA will report all triggers to SORC clinicians including non-clinical triggers within 1 week
- Patients follow up appointment tracked for audit purposes

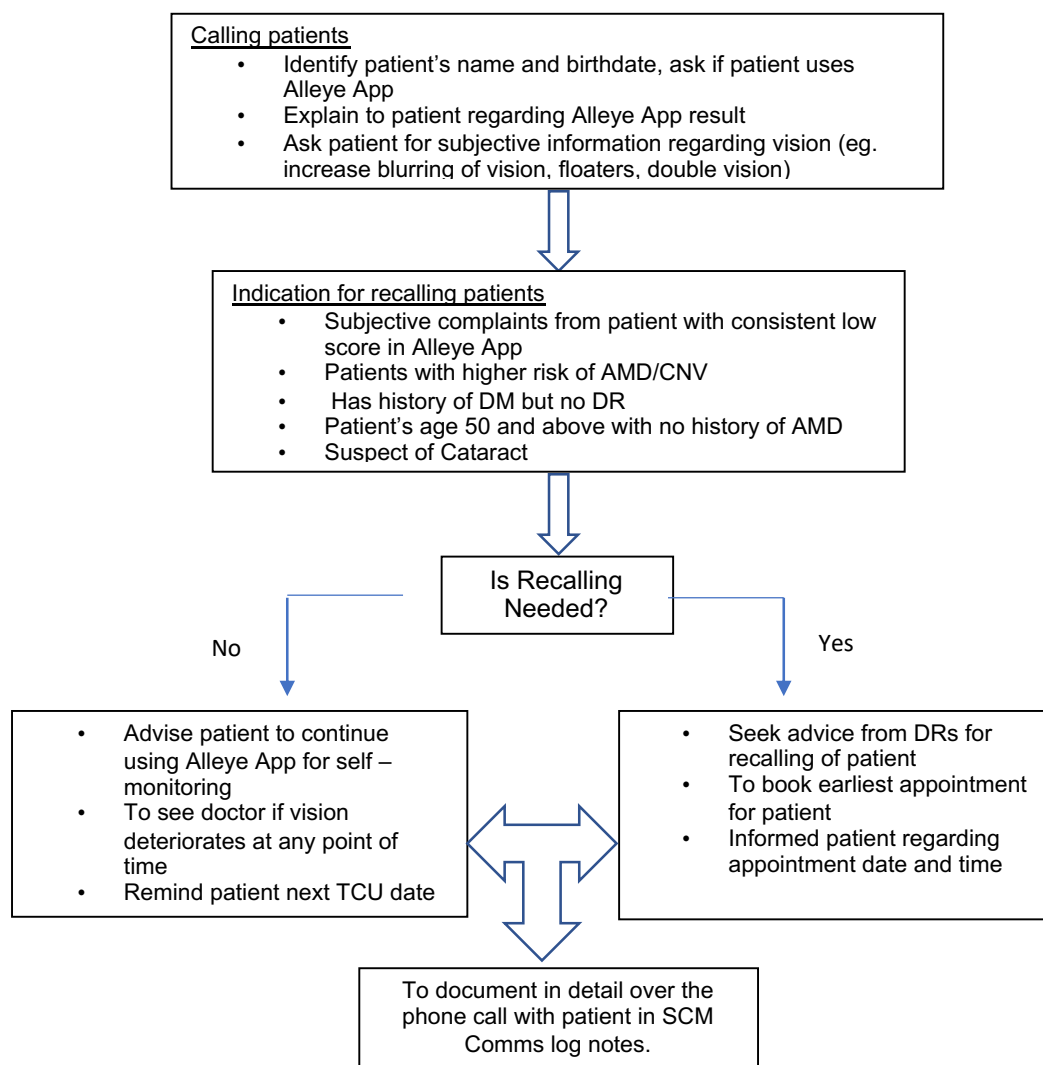


Figure 2: workflow for patient trigger

## 5. REFERENCE DOCUMENTS

1. Schmid MK, Thiel MA, Lienhard K, Schlingemann RO, Faes L, Bachmann LM. Reliability and diagnostic performance of a novel mobile app for hyperacuity self-monitoring in patients with age-related macular degeneration. *Eye (Lond)*. 2019;33(10):1584-1589. doi:10.1038/s41433-019-0455-6