

# Improving Patient Safety: A Novel Drive-Through Glaucoma Service During the COVID-19 Pandemic



Royal Surrey

NHS Foundation Trust

Hasan Naveed, Eleonora Bianchi, Amna Hasni, Dan Lindfield  
Ophthalmology Department, Royal Surrey NHS Foundation Trust

**Bringing patient care from the clinic to the car park!**

## INTRODUCTION

Glaucoma is an irreversible blinding disease that is asymptomatic until its advanced stages. Its main risk factor for progression is high intraocular pressure (IOP).

COVID-19 forced many organisations to reduce outpatient activity to priority patients only – but with 15,000 glaucoma patients under monitoring, how do we know who is progressing over the telephone?

During the first lockdown, we learned that we needed to establish a safe, quick, face to face method of monitoring our patients. We learnt from our experience and we designed and delivered a drive-through IOP glaucoma service at the Royal Surrey NHS Foundation Trust!

## OBJECTIVES

To set up a service that allows us to:

- ✓ Risk stratify a high-volume of patients in a timely and efficient manner
- ✓ Maintain safety of our patients and of our staff

## METHODS

An outside area was established with dedicated parking. Patients received an invitation letter including a time slot, detailed map and instructions for the drive-through service. They would drive up, wind down their window and a team-member would confirm details and measure their IOP using a portable tonometer (iCare). With clinical notes available, IOP was deemed satisfactory or a change in treatment was arranged. Some patients' IOP was dangerously high and an immediate clinic review was arranged.



Figure 1: The drive through glaucoma service in action

Figure 2: The iCare portable device used to measure eye pressure



## RESULTS

This service ran from 11/01/21 to 19/03/21 with four clinics/week, each with two doctors. A total of 358 patients were seen. 48 (13.4%) required action as below.



! We detected 4 patients that had dangerously high IOP (28-40mmHg) – all required medication changes and 2 had urgent surgical intervention !

A questionnaire was sent to 200 patients (82 respondents), results are in the below table.

Rating out of 10	9.09
Sense of safety	100%
Preferred drive through to telephone	97.6%
Quick service	100%

## LEADERSHIP

This drive-through IOP service is thought to be the first of its kind in England. Consultations were sought with involvement from specialty managers, infection control, divisional support, estates and booking managers. The teams helped achieve rapid approvals in just 2 weeks. The hospital purchased the iCare portable device specifically for this service.

The trust was highlighted in the Trust's website, twitter and weekly-updates. We received wider praise through 'Optometry today'<sup>1</sup>, International Glaucoma Association, Royal College of Ophthalmologists and other Trusts in the country.

## CONCLUSION – NEXT STEPS

It is clear from the number of interventions that it succeeded in detecting patients at greater risk that would not have otherwise been recognised via telephone consultations.

We are now focusing our available outpatient appointments for patients triaged as higher-risk via the drive-through and telephone appointments. The risk-stratification is allowing us to target our resources more effectively in our COVID catch-up phase.

## REFERENCES

- 1) Serina Powell. (2021). *The new renaissance*. Available: <https://www.aop.org.uk/ot/professional-support/health-services/2021/04/27/the-new-renaissance>. Last accessed 1st June 2021.