

## Introduction

- COVID-19 has had a significant impact on cataract services across Scotland. At the GJNH, services were on hold from March to July 2020 during the first wave of COVID-19.
- Surgery then restarted in the Vanguard with a single theatre and limited patient throughput due to social distancing restrictions.
- In November 2020, the unit moved into the new purpose built Eye Centre. The service has continued to expand, with opening of double clinics and a fourth theatre, as well as appointment of new consultant, optometry, nursing and healthcare assistant staff.

## Aim

- The aim of the audit was to compare the GJNH cataract service pre and post the first wave of COVID-19, including clinic throughput, number of operations, degree of surgical difficulty, complication rate, and refractive outcomes.

## Methods

- We have an ongoing optometry-run audit; data was extracted from audit spreadsheet, Opera, and Portal. Return of audit forms from July 2020 onwards was initially delayed due to closure of community optometry practices; we are now back to pre-COVID return rate of ~80%.

## Results

- The overall trend has been a steady increase in clinic throughput over the past year (fig 1). The slightly increased number of DNAs Dec 2020 onwards is thought to be due to delays in sending out appointment letters (staffing shortages).

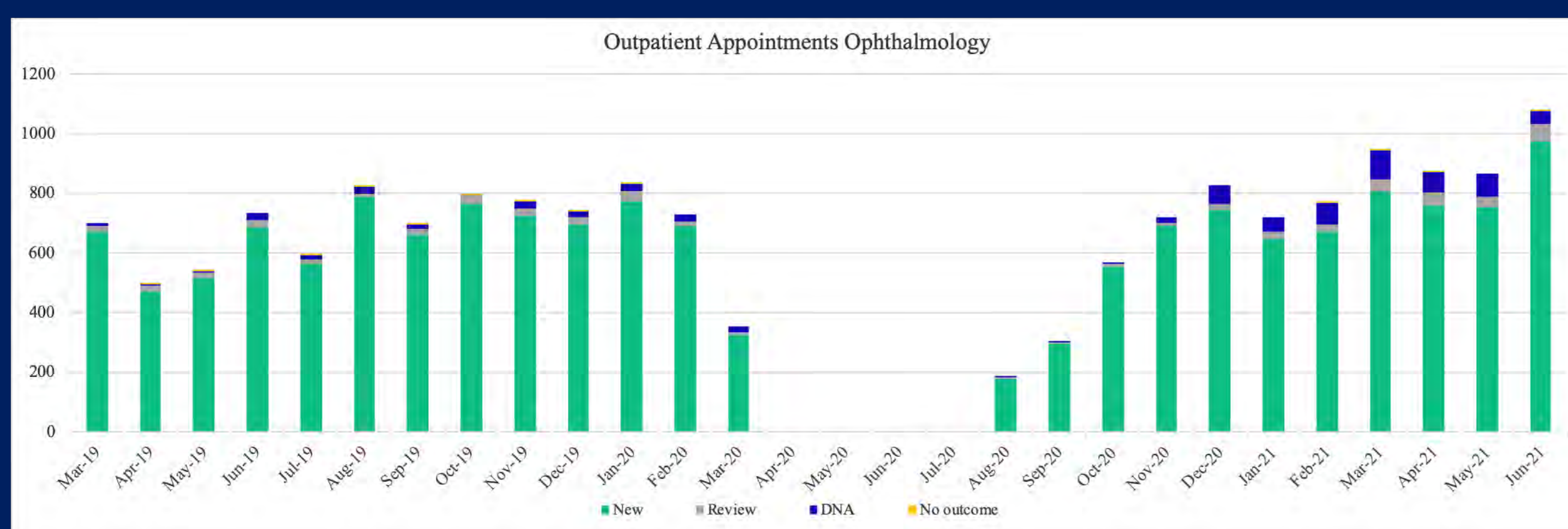


Figure 1: Total Numbers of Outpatient Appointments

- In the year pre-COVID we did 8,716 cases. Following a 4 month hiatus, surgery restarted in July with a single theatre and reduced numbers. Since moving into the new Eye Centre, we are achieving pre-COVID surgical numbers (fig 2) and continuing to expand. Over the year June-June we did 6,036 cases. There was an initial spike in PCR rate which correlates with the hiatus in operating, as well as post COVID changes (new theatres, increased throughput, higher case complexity, appointment of new staff). The trend is now decreasing.

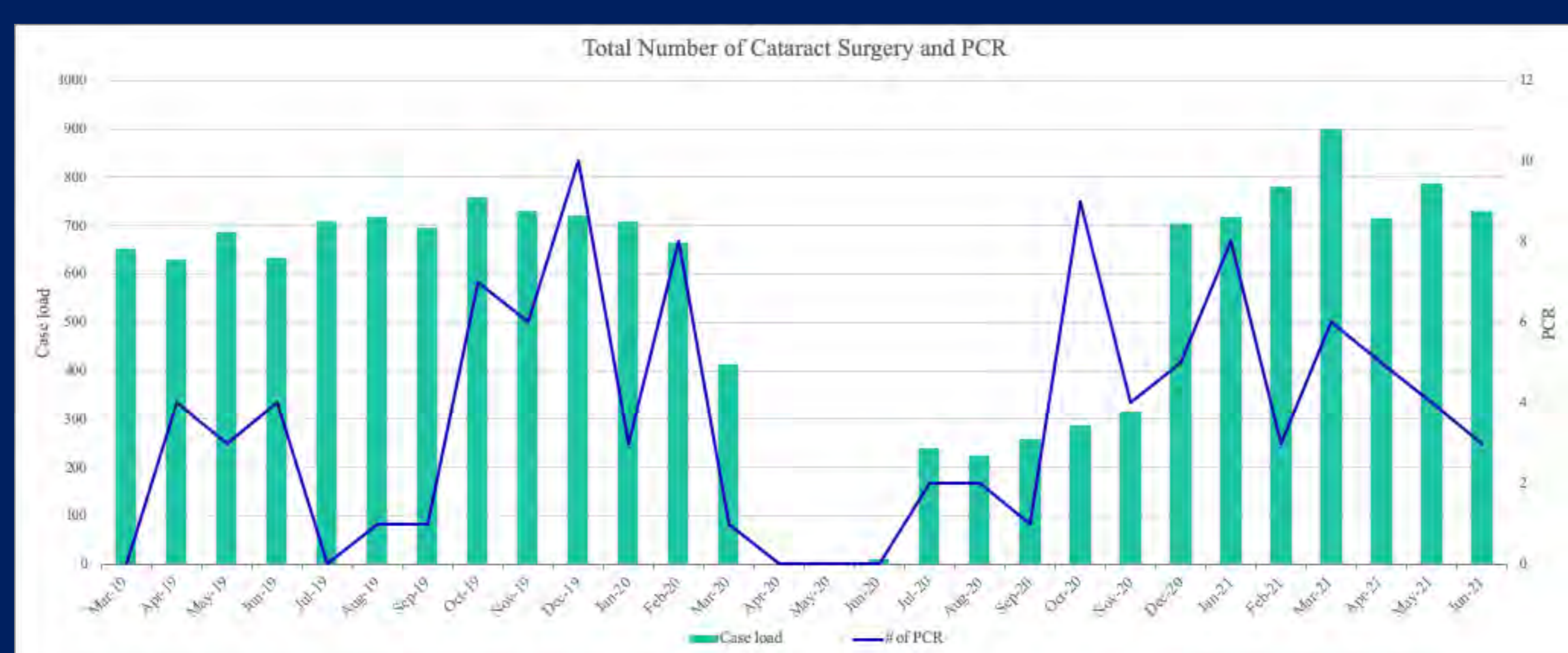


Figure 2: Total Numbers of Cataract Surgeries per Month and PCR Rate (this includes PCR +/- vitrectomy and vitrectomy for zonular dehiscence)

## Acknowledgements

S McLaughlin, J Ellis, J Ross, N Boyle, S Park, A Houtman, E Millar, T Lavy, D Miller, P Flavahan, S Mantry, P Kearns, C Kinnon, G Bryson



Figure 3: Degree of Surgical Difficulty. Post COVID there was a slight rise in proportion of DSD 3 (higher complexity) cases.

- Unfortunately we are not documenting co-morbidities in the database (however, in our previous audit of the first TSC experience, 48% of patients had at least one co-morbidity). For patients with co-pathology, National Audit standard for achieving VA of 6/12 is 82% and this increases to 94.6% in patients without co-pathology. As seen in figure 4, over 95% of patients are achieving 6/12 VA aided. We will aim to do further data collection and analysis on the effect of co-morbidities on our visual outcomes.

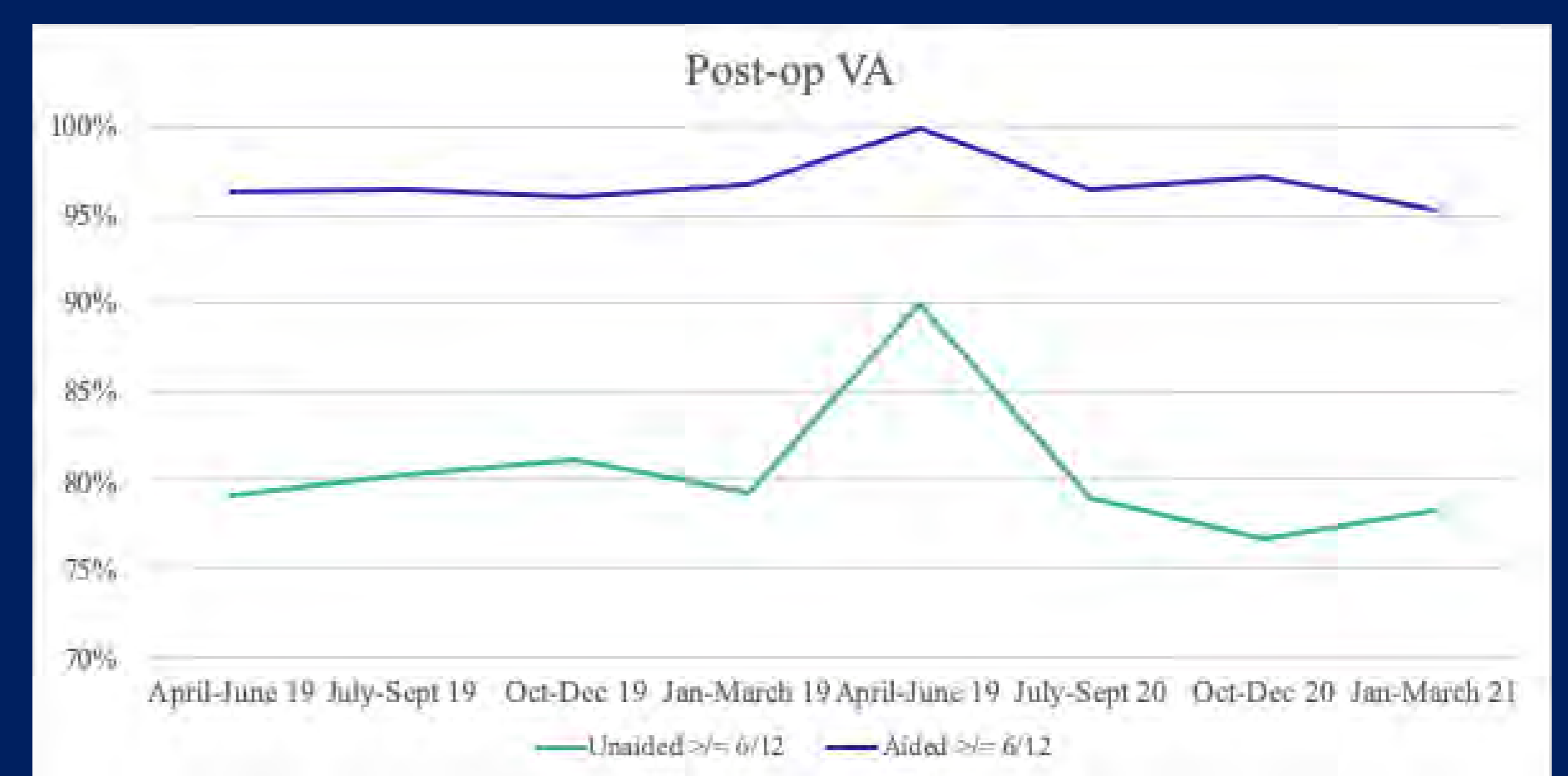


Figure 4: Percentage of Patients Achieving VA of 6/12 or Better Aided and Unaided. The apparent rise from April-June is due to the low number of cases done in that timeframe (11).

- The National Audit standard for refractive outcomes is 55% of patients with post operative spherical equivalent within 0.5 D of target, and 85% within 1 D. We are well within this target.

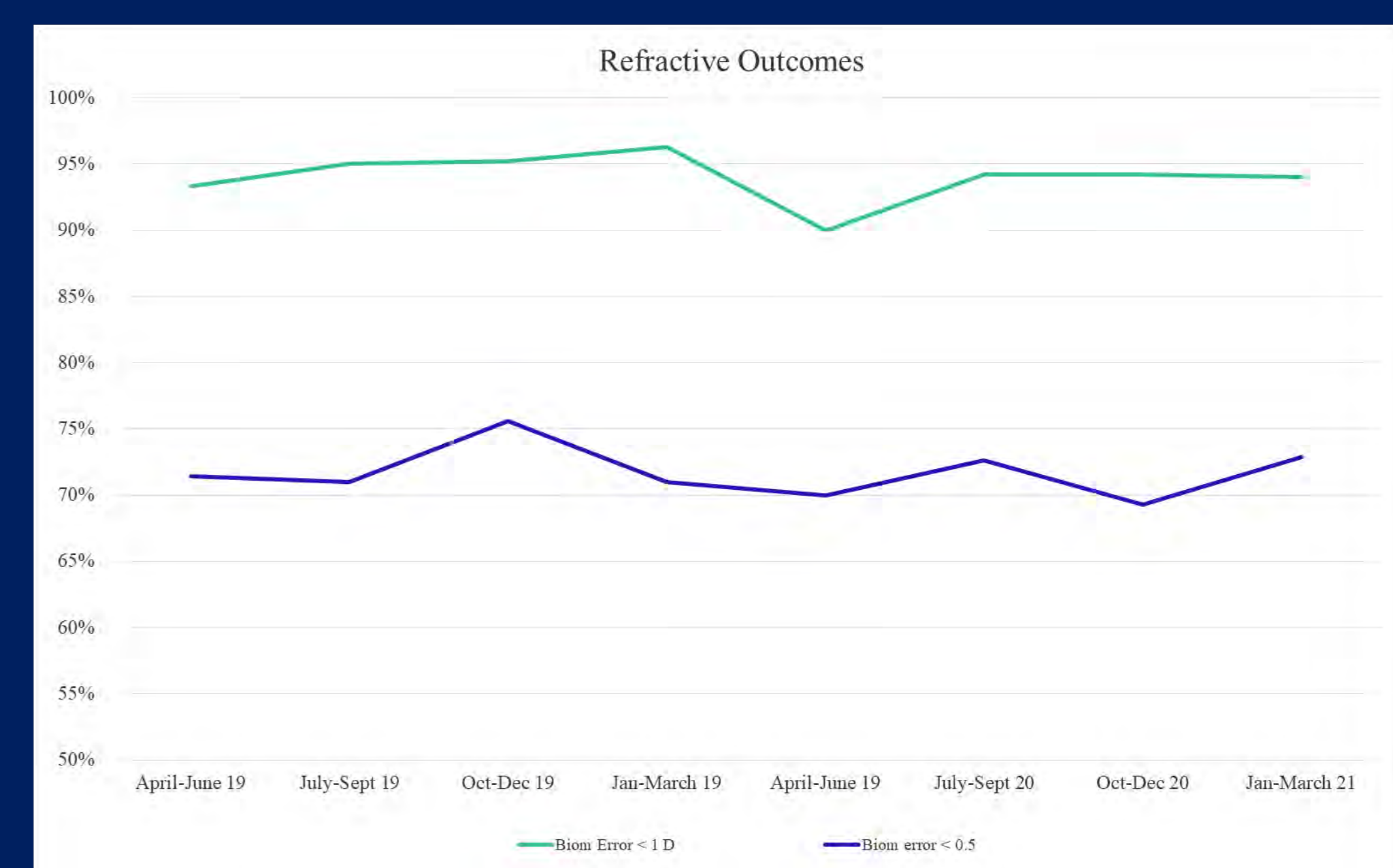


Figure 5: Post Operative Refractive Outcomes

## Conclusion

- Cataract services at GJNH have been expanding steadily since the first wave of COVID-19. This is reflected by a rise in the number of surgical cases and the number of patients attending clinic.
- We are seeing an increase in complexity of cases as reflected by higher DSD grading.
- There were two spikes in PCR rates reflecting surgical hiatus and increasing case load in the new Eye Centre; this is now on a downward trend.
- Our visual and refractive outcomes remain within national targets.