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Waiting Times for Cataract Surgery in a Dedicated Cataract Clinic: A Retrospective Audit.

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ABSTRACT

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Background: Cataract surgery is a popular & cost-effective solution that helps to prevent needless vision impairment & maintain functional independence. As a result, timely access to cataract surgery is an important indication of surgical system performance & healthcare fairness. Despite the introduction of Dedicated Cataract Clinics (DCCs) to improve efficiency & throughput, elective ophthalmic services continue to face rising capacity constraints.

Aim: To assess waiting times for cataract surgery in a Dedicated Cataract Clinic & analyze improvements in access over two years.

Methods: A retrospective clinical audit of cataract surgery waiting list data was performed for patients who had surgery in March-April 2024 & March-April 2025. Waiting times for all eyes, first-eye surgeries, & second-eye surgeries were investigated using descriptive data & non-parametric comparisons.

Results: A total of 233 cataract surgeries were examined (114 in 2024, 119 in 2025). The median waiting time for all eyes increased dramatically, from 113.5 days in 2024 to 194.0 days in 2025 ($p = 0.0002$). The wait time for first-eye surgery rose from 109.0 to 171.0 days ($p = 0.0175$). The biggest significant increase was seen in second-eye procedures, with median waiting times rising from 134.5 to 322.0 days ($p = 0.0008$).

Conclusion: Waiting times for cataract surgery rose significantly over a 12-month period, showing rising service pressure & insufficient capacity to fulfil demand, even in a dedicated service paradigm. Continuous auditing, capacity optimization, & targeted system-level interventions are necessary to restore timely & equitable access to cataract surgery.

Keywords: Cataract surgery; audit; surgical access; ophthalmology services; waiting times.

INTRODUCTION

Cataract is the biggest cause of reversible blindness worldwide, & it continues to be a substantial contributor to visual impairment, particularly in older adults¹. As populations age & life expectancy rises, the prevalence of cataracts rises, resulting in increased demand for surgical intervention & ongoing strain on publicly supported health systems. Cataract surgery is largely regarded as one of the most effective & cost-effective surgical procedures available, providing significant gains in visual acuity, functional independence, & overall quality of life^{2,3}. In addition to vision restoration, prompt cataract surgery has broader societal & health-system benefits, such as lower risk of accident, more mobility, decreased reliance on social care, & lower long-term healthcare utilization.

Given these advantages, timely access to cataract surgery is viewed as an important indicator of surgical effectiveness, equity, & responsiveness. Prolonged waiting periods have been consistently linked to vision impairment, an increased risk of falls, decreased involvement in daily activities, & negative mental health outcomes such as anxiety & depression⁴. These repercussions are more obvious in older persons, for whom visual impairment can jeopardize independence, safety, & quality of life, putting additional strain on health & social care systems.

Second-eye cataract surgery delays need to be taken into account. Data indicates that long-term binocular vision impairment following unilateral surgery has a detrimental effect on depth perception, balance, and mobility⁵, even though first-eye surgery is often prioritized in resource-constrained settings. Long-term postponements of second-eye surgery have been associated with a higher risk of harmful falls and inadequate functional recovery, highlighting the importance of equitable access to both eyes rather than viewing second-eye surgeries as optional or low priority.

Dedicated Cataract Clinics (DCCs) are a service delivery innovation that many health systems have implemented in response to growing demand and backlogs in elective surgery. By using streamlined referral channels, standardized pre-operative evaluations, protocol-driven care, and high-volume surgical lists, these clinics aim to increase efficiency and throughput. Elective ophthalmology services still face severe capacity issues, despite the fact that DCCs have been helpful in maximizing theatre utilization and removing needless variation in care delivery. Rising referral rates, personnel difficulties, limited operating theatre availability, & system-wide elective care backlogs have all posed challenges to the models' long-term viability⁶.

Within this context, routine audit of cataract surgery waiting times is essential to monitor service performance, identify emerging access challenges, & inform targeted quality improvement initiatives. Clinical audit provides a pragmatic mechanism for evaluating real-world service delivery, benchmarking performance against access standards, & guiding data-driven system redesign. In order to produce actionable service-level evidence to support prompt, equitable, and sustainable access to care, this audit assesses changes in waiting times for cataract surgery within a Dedicated Cataract Clinic over the course of two consecutive years.

AIM & OBJECTIVES

Aim

To assess waiting times for cataract surgery in a Dedicated Cataract Clinic & analyze improvements in access over two years.

Objectives

1. To quantify cataract surgery waiting times in March-April 2024 & March-April 2025.
2. To compare wait times for all eyes, first- & second-eye procedures.
3. To determine whether waiting times have drastically increased over time.
4. To identify the consequences for service capacity & quality improvement.

METHODS

Study Design

This study was carried out as a retrospective clinical audit to assess service performance & promote quality improvement, rather than to test hypotheses or generate generalizable research findings.

Setting

The audit was carried out in a Dedicated Cataract Clinic at a publicly financed regional hospital. The hospital was anonymized in accordance with best practices for audit distribution & service evaluation.

Data Source & Population

We evaluated surgical waiting list data for individuals who received cataract surgery in March-April 2024 & March-April 2025. Both first- & second-eye cataract surgeries were included to account for differences in prioritization & access.

Outcome Measure

Waiting time was defined as the number of days between being placed on the surgical waiting list & having surgery.

Data Analysis

The data were analyzed using GraphPad Prism version 10. Descriptive statistics were created; normality tests were run, & non-parametric statistical tests were used due to skewed waiting-time distributions. Median differences & Hodges-Lehmann estimators were computed. Statistical significance was determined at $p < 0.05$.

Ethical Considerations

Ethical approval was not requested because this study was a clinical audit of routinely gathered service data undertaken for quality improvement. There was no usage of patient-identifiable information, & conventional clinical treatment was followed exactly.

Analytical Framework

An analytical framework based on service evaluation & quality improvement concepts was used to guide data analysis & interpretation. Waiting time was used as the major performance criterion to assess access to elective surgical care & system capacity. The analyses were designed to look at variations in waiting times over two consecutive audit periods, as well as to distinguish between all cataract surgeries, first-eye procedures, & second-eye procedures, considering differences in clinical prioritisation & functional impact. Due to the non-normal distribution of waiting time data, a non-parametric analytical method was used to ensure robust comparison of medians & distributional shifts over time. The findings were interpreted in respect to published access criteria & service-level standards for elective ophthalmic care^{6,7,8}, allowing for an assessment of system performance & identification of areas that require focused quality improvement. This paradigm promotes a pragmatic, systems-based assessment of access rather than causal inference, which is congruent with the goals of a clinical audit.

RESULTS

A total of 233 cataract surgeries were studied, 114 in 2024 & 119 in 2025.

Surgical Activity

Table 1. Cataract surgical activity by year & eye status.

Year	Total procedures	First-eye surgeries	Second-eye surgeries
2024	114	90	24
2025	119	91	28

Table 1 illustrates that overall surgical throughput remained consistent during both audit periods. Increased demand and/or system capacity limits rather than lower productivity are indicated by the observed increase in waiting times, which happened despite equivalent operating volume.

Wait Times for All Eyes

The median wait time for all eyes increased from 113.5 days in 2024 to 194.0 days in 2025 (p=0.0002).

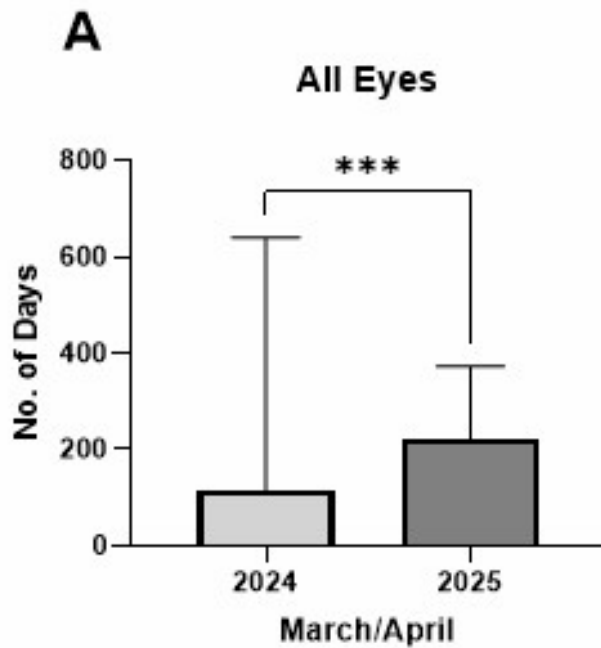


Figure 1A: Median waiting times for all cataract surgeries (2024 vs 2025)

Figure 1A shows a noticeable rightward shift in waiting time distribution in 2025, indicating a statistically significant delay in operation.



First Eye Surgery Waiting Times

The median wait time for first-eye procedures has grown from 109.0 days in 2024 to 171.0 days in 2025 ($p = 0.0175$).

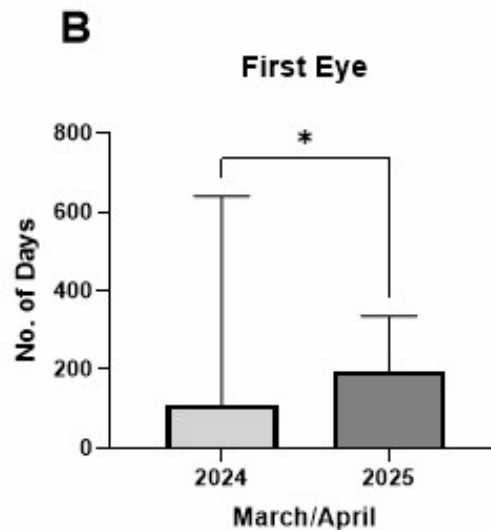


Figure 1B. Median waiting times for first-eye cataract surgeries

Figure 1B shows a considerable drop in access to first cataract surgery, with possible consequences for long-term vision impairment & functional decline.

Second-Eye Surgery Waiting Times

Second-eye procedures saw the highest rise in wait time, from 134.5 days in 2024 to 322.0 days in 2025 ($p=0.0008$).

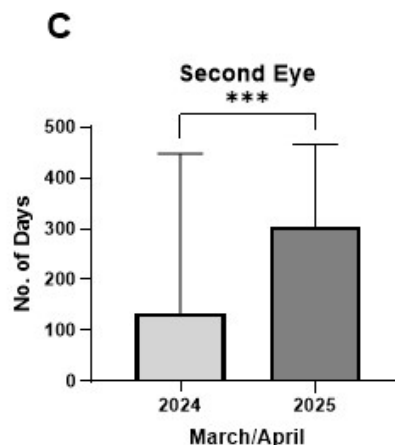


Figure 1C. Median waiting times for second-eye cataract surgeries

Figure 1C shows a significant increase in delays for second-eye treatments, indicating reprioritization due to capacity constraints & raising concerns about binocular vision, fall risk, & patient safety.

Service-Level Access Standards

Category	Benchmark source	Recommended standard	Median 2025
First-eye surgery	NHS Referral-to-Treatment	≤18 weeks (126 days)	171 days
Second-eye surgery	Royal College of Ophthalmologists	≤6 months where indicated	322 days
All cataract surgery	OECD benchmarks	≤4 months	194 days

Table 2. Observed waiting times compared with published access benchmarks

Table 2 showed that waiting times in 2025 surpassed specified access targets in all categories, with the most dramatic breach reported for second-eye operation.

DISCUSSION

This audit shows a dramatic decline in availability to cataract surgery over a 12-month period at a Dedicated Cataract Clinic, with waiting times increasing across all surgical categories. Importantly, these delays occurred despite steady surgical throughput across the two audit periods, implying that the observed rise in waiting times was caused by rising demand & limited system capacity, rather than decreased productivity. This research demonstrates a growing disparity between service provision & population need, even within a care paradigm designed to maximise efficiency. Waiting periods for second-eye cataract surgery have increased significantly. In resource-constrained systems, first-eye surgery is frequently prioritized to maximize population-level benefit by restoring functional vision to as many patients as feasible.

However, the results of this audit indicate that such prioritizing processes may have unforeseen repercussions. Prolonged delays in second-eye surgery are linked to compromised binocular vision, decreased depth perception, an increased risk of falls, & insufficient functional recovery after first-eye surgery^{4,5}. As a result, long wait times for second-eye surgeries pose serious issues about patient safety, equity of access, & quality of care.

From an equality standpoint, lengthy delays in second-eye surgery may disproportionately affect older persons & those with pre-existing mobility or balance problems, aggravating health disparities. The significant difference in waiting times seen between first & second-eye procedures shows that second-eye surgery may be progressively deprioritised due to capacity constraints, despite its well-documented importance to functional independence & quality of life. These findings highlight the need of including both eyes in access planning frameworks, rather than treating second-eye surgery as elective or deferrable.

The findings of this audit are consistent with national & international research demonstrating that ophthalmology has been one of the most impacted specialties in elective surgery backlog. According to reports from professional bodies & international organisations, waiting lists for cataract surgery have been steadily increasing due to rising demand, personnel shortages, limited operating theatre capacity, & system-wide elective care demands following the COVID-19 pandemic^{6,7}. The congruence of local audit findings with these broader trends implies that the reported difficulties are not isolated but represent systemic pressures affecting elective ophthalmology services more broadly.

When combined, these results highlight the difficulties of meeting growing demand solely through service reconfiguration models, like Dedicated Cataract Clinics, without also investing in labor capacity, theater availability, and system-wide planning. DCCs are vulnerable to outside demands that surpass available resources, even though they can improve care efficiency and consistency. Therefore, regular waiting time audits are essential for identifying early signs of

deteriorating access and motivating targeted quality improvement projects. In this context, the current audit's results highlight the need for a balanced approach to cataract service planning that safeguards access to both first & second-eye surgery, includes transparent prioritisation criteria, & involves continuous performance monitoring. Without such controls, lengthy waiting periods risk compromising the therapeutic & societal benefits of cataract surgery & may contribute to preventable injury.

QUALITY IMPROVEMENT FRAMEWORK

We propose a four-domain Cataract Access Improvement Framework:

1. Optimize capacity with protected high-volume lists, prolonged sessions, & workforce optimisation.
2. Improved efficiency through streamlined pre-operative assessments & eliminated duplication.
3. Ensuring transparency & equity in prioritizing & protecting capacity for second-eye surgeries.
4. Performance monitoring includes periodical audit cycles & waiting-time dashboards.

This strategy outlines a systematic way to restoring timely access while maintaining service quality.

IMPLICATIONS FOR PRACTICE & POLICY

This audit's results have significant consequences for clinical practice & health system policy. The observed increase in cataract surgery waiting times, despite consistent surgical throughput, suggests that present service capacity is insufficient to meet demand, even under a Dedicated Cataract Clinic paradigm. This emphasizes the importance of proactive capacity planning, which goes beyond service reconfiguration & includes workforce expansion, protected theatre time, & flexible scheduling to cope with increased referral volumes.

From a clinical practice standpoint, the unequal delays found for second-eye cataract surgery underline the importance of transparent & equitable prioritization systems. While first-eye surgery frequently provides the greatest immediate functional benefit, delaying second-eye surgeries increases the risk of falling, impairs binocular vision, & lowers quality of life^{4,5}. Services should therefore guarantee that second-eye surgery is expressly considered into access planning & not routinely deprioritised due to capacity constraints.

On a policy level, these findings justify the routine use of waiting time parameters as key performance indicators for elective ophthalmic services. Regular audit cycles & continual tracking dashboards can aid in the early detection of access deterioration & prompt remediation. Furthermore, aligning local service delivery with published access criteria can help to improve accountability & guide resource allocation decisions at the organizational & system levels^{6,7}.

Lastly, the findings highlight the need of including continual audits into elective surgery paths. Clinical audits provide actionable, locally relevant evidence that can help lead service improvement, inform data-driven legislative choices, & contribute to more equitable & long-term access to surgery for cataracts.

LIMITATIONS

This audit was confined to a single service & two specific time periods. Patient-reported outcomes, referral patterns, & workforce indicators were not investigated. Nonetheless, the findings provide strong service-level data to help guide quality enhancements.

CONCLUSION

Over a 12-month period, wait times for cataract surgery climbed dramatically, with second-eye treatments seeing the most pronounced delays. These findings show increased service demand & underscore the importance of targeted capacity building, pathway optimization, & continual auditing to ensure timely & impartial access to cataract surgery.

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The authors also recognize the value of clinical audit as a tool for improving surgical system performance & ensuring fair access to care.

AUTHOR CONTRIBUTIONS (CRedit)

Original draft & formal analysis: Emma Hennessy (E.H.) & Emily Greenan (E.G.)

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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REFERENCES

1. World Health Organization (2019). World Report on Vision. Geneva: WHO.
2. Liu, Y.-C., Wilkins, M., Kim, T., Malyugin, B. and Mehta, J.S. (2017). 'Cataracts', *The Lancet*, 390(10094), pp. 600–612.
3. Keay, L., Lindsley, K., Tielsch, J., Katz, J. and Schein, O. (2021). 'Cataract surgery & quality of life: systematic review', *Ophthalmology*, 128(1), pp. 56–67.
4. Harwood, R.H., Foss, A.J.E., Osborn, F., Gregson, R.M., Zaman, A. & Masud, T. (2005). 'Falls & health status in elderly women following first eye cataract surgery: a randomised controlled trial', *British Journal of Ophthalmology*, 89(1), pp. 53–59.
5. Meuleners, L.B., Fraser, M.L., Ng, J.Q. and Morlet, N. (2014). 'The impact of first- & second-eye cataract surgery on injurious falls', *Ophthalmology*, 121(4), pp. 916–921.
6. Royal College of Ophthalmologists (2022). *The Way Forward for Cataract Services*. London: RCOphth.
7. OECD (2020) *Waiting Times for Health Services: Next in Line*. Paris: OECD Publishing.
8. Ahern, T., Owokole, A.A. and Hurley, C. (2025). 'Patterns of intravitreal injection utilisation, treatment burden, & cost implications in a public ophthalmology service: a retrospective audit', *The Operating Room Global Journal (TORGJ)*, 1(2). <https://doi.org/10.64573/torgj2512002>