



Patients benefit from optometric scope expansion authorizing doctors of optometry to perform YAG laser capsulotomies.

According to an American Optometric Association (AOA) Research & Information Committee (RIC) survey of doctors practicing in states with current laser authority, 56% of doctors of optometry report providing YAG laser capsulotomies in their practices and 89% have availability to perform procedures within one week. Nearly all responding doctors who perform YAG procedures (97%) report patient satisfaction with convenience of care.

Survey highlights from doctors of optometry on YAG laser procedures:

- 89% report scheduling availability to perform YAG in office within one week
- 35% of necessary YAG procedures are performed in the office on the same day
- 97% report patient satisfaction in convenience of having YAG performed in optometrist's office
- 95% report satisfaction and value in the continuity of care provided when YAG is performed by their doctor of optometry
- 46% report satisfaction with direct costs savings when YAG procedures are performed in their local doctor's office

Background

As the U.S. population continues to grow and age, the demand for eye care and ophthalmic surgeries increases. Ninety million Americans over the age of 40 have vision problems, and it is estimated that within this same group, 25.4 million have cataracts, 7.7 million have diabetic retinopathy, 2.7 million have glaucoma and 1.8 million have age-related macular degeneration.¹ While the demand for eye care continues to grow, the number of ophthalmologists available to meet surgical demand has continued to decrease and is expected to worsen as 50% of ophthalmologists are closer to retirement than training. The Health Resources and Services Administration estimated that by 2025 there will be a shortage of more than 6,000 ophthalmologists. Doctors of optometry, on the other hand, are expected to maintain an adequate supply with the optometric workforce over the next decade projected to grow 1.4% annually, which is 0.6 to 0.7% greater than the U.S. population.²

Secondary cataract, or posterior capsule opacification (PCO) is the most common complication of cataract surgery with incidence rates of 20-50% within two to five years post-surgery but can occur within months postoperative.³ Patients with PCO may experience blurry, foggy or hazy vision, light halos, inability to

perceive contrasts and colors, or decline in visual acuity after having cataract surgery. Diagnosis of PCO can be made by doctors of optometry through comprehensive eye examinations. PCO is treated with YAG laser capsulotomy, which takes about five minutes to perform and can be done in the doctor’s office. Currently doctors of optometry are authorized to perform YAG laser capsulotomy in only 10 states.

Therefore, the purpose of this survey is to look at the benefits and value patients experience when doctors of optometry are authorized to perform YAG capsulotomies. We examined the patient’s experience prior to optometric scope expansion authorizing doctors of optometry to perform YAG laser in the states and experiences now that YAG lasers are being performed.

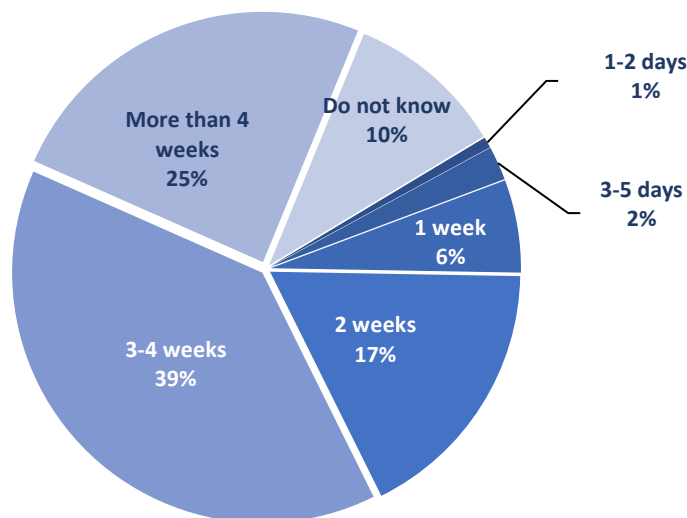
Methods

In April 2023, the AOA RIC developed a brief online survey seeking real-world data from doctors practicing in states that currently authorize doctors of optometry to perform YAG laser surgery. A total of 5,645 doctors were invited to participate in the survey from Alaska, Arkansas, Colorado, Indiana, Kentucky, Louisiana, Mississippi, Oklahoma, Virginia and Wyoming. The survey was in the field from April 5 through April 28 with one reminder sent on April 18. The survey received 406 qualified responses from doctors of optometry licensed and practicing in each of the states targeted.

Findings

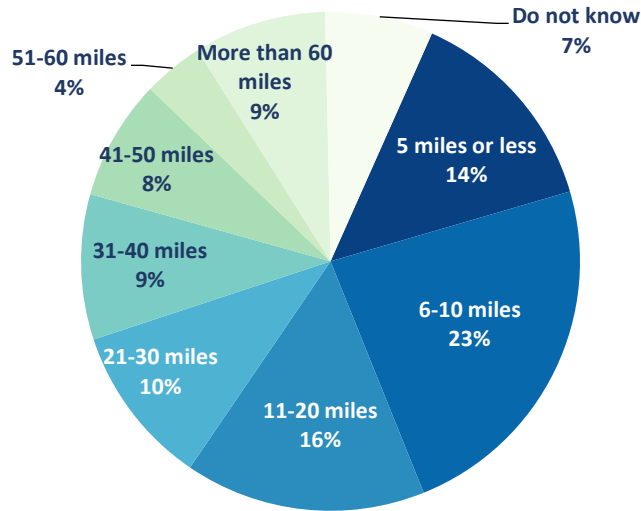
Two-thirds of doctors (64%) report patients waited three weeks or more for an appointment with an ophthalmologist to perform YAG laser prior to the optometric scope expansion authorizing doctors of optometry to perform YAG laser in their state (see Figure1).

Figure 1: Typical wait time patient experienced when referred to an ophthalmologist for YAG.



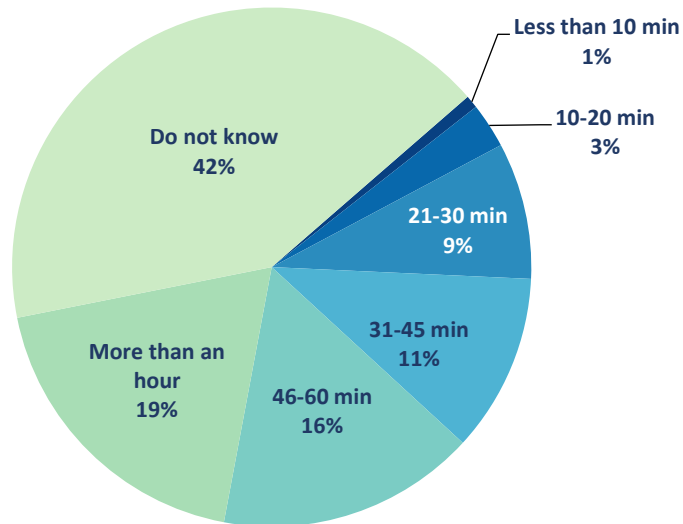
As seen in Figure 2, 30% of doctors report patients had to travel more than 30 miles to an ophthalmologist for YAG procedure.

Figure 2: Miles traveled by patients, on average, to an ophthalmologist for YAG.



Sixty-one percent of doctors reported that ophthalmologists required a consultation with the patient prior to scheduling YAG for the patient resulting in multiple copays and/or visits. As seen in figure 3, a third of doctors report patients had to wait more than 45 minutes, on average, for their procedure after arriving for their scheduled YAG with the ophthalmologist.

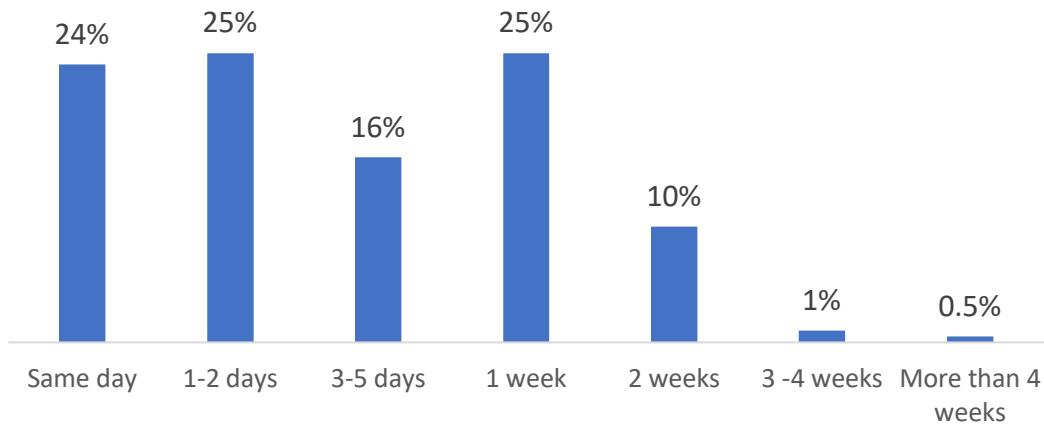
Figure 3: Patient average wait time for their procedure when arriving for scheduled YAG with ophthalmologist.



Over half of responding doctors of optometry (56%) are currently performing YAG procedures in their office and another 17% are awaiting regulations to be finalized.

Doctors of optometry reported performing on average 35% (median of 10%) of YAG procedures on the same day PCO was diagnosed and an average of 69% (median of 90%) of YAG procedures were scheduled out. As seen in Figure 4, 90% of doctors said the next available appointment to perform YAG for a patient is within one week.

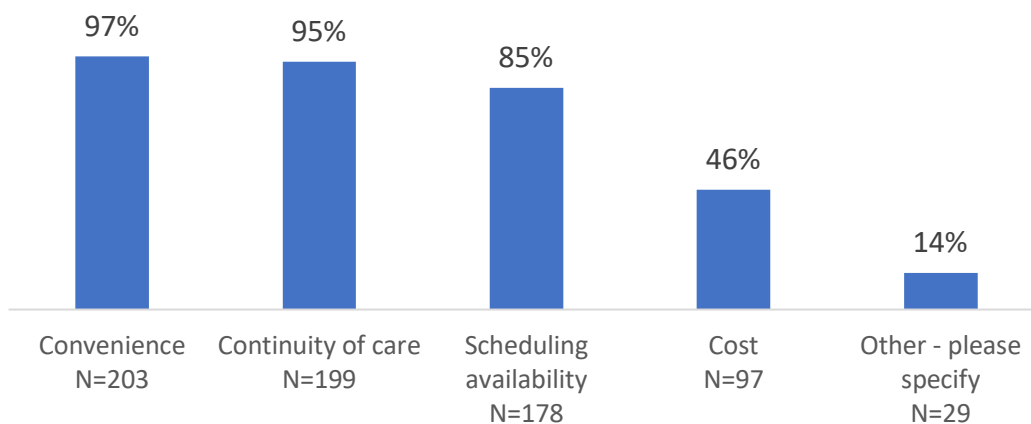
Figure 4: When is the next available appointment for you to perform YAG for a patient?



Among doctors performing YAG in each of the states with authority to do so, the average number of procedures performed in the past month was 13 with a median of eight and total sum of 2,700 monthly procedures. The average number of YAG procedures performed within the past year was 125 with a median of 70 and a total sum of 25,279 YAG procedures performed by doctors of optometry.

Finally, doctors were asked about patient satisfaction with YAG performed in the doctor’s office. As seen in Figure 5, nearly all respondents indicated satisfaction with convenience and continuity of care.

Figure 5: Patient satisfaction with having YAG performed in offices of doctors of optometry offices.



Additional comments provided on patient satisfaction include not having to travel, trust of doctor, no wait time, quality outcomes, no facility fee and shorter visits.

Conclusion and Recommendations

The AOA RIC survey demonstrates that patients benefit from optometric scope expansion allowing doctors of optometry to provide YAG laser surgery in their offices. Patients' treatment is typically delayed, often by weeks, when they must be referred to an ophthalmologist for the procedure. Ophthalmologists often require a consultation with the patient prior to scheduling the YAG procedure after a doctor of optometry has already diagnosed and referred the patient for care resulting in multiple copays, visits and costs associated with time and travel. Patients value the convenience of having necessary procedures performed by their primary doctor of optometry in their local office with a flexible schedule allowing most procedures to be performed on the same day or within a week. Patients value continuity of care and trust the quality of care received by their doctor of optometry.

As demand for YAG surgery continues to increase in the future, we will see even longer wait times and travel times for patients to receive care as ophthalmology numbers continue to decline. Patients should not have to delay their eye care procedures or incur unnecessary costs for multiple visits or added travel when doctors of optometry are fully trained to perform these procedures. Doctors of optometry are in a unique position to fill the gap for YAG surgery (and other ophthalmic procedures) as they are locally accessible to patients in 78% of all U.S. counties and county equivalents and 82% of counties or county equivalents where most of the population is rural.⁴

¹Vision Health Initiative. (n.d.). Looking Ahead: Improving Our Vision for the Future. Retrieved from Centers for Disease Control and Prevention Website: <https://www.cdc.gov/visionhealth/resources/infographics/future.html>

² Heath, D. A., Spangler, J. S., Wingert, T. A., Chan, M. O., Smith, E. L., Grover, L. L., & Flanagan, J. G. (2021, May 1). 2017 National Optometry Workforce Survey. *Optometry and Vision Science*, 98(5), 500-511

³ Jordan Scott Masters, M. D. (2023, January 12). Posterior Capsule Opacification. Retrieved from American Academy of Ophthalmology EyeWiki: https://eyewiki.aao.org/Posterior_Capsule_Opacification

⁴ Health Policy Institute. (n.d.). County Data Demonstrates Eye Care Access Nationwide. Retrieved from American Optometric Association Website: <https://www.aoa.org/AOA/Documents/Advocacy/HPI/County%20Data%20Demonstrates%20Eye%20Care%20Access%20Nationwide.pdf>