Cataract Surgery





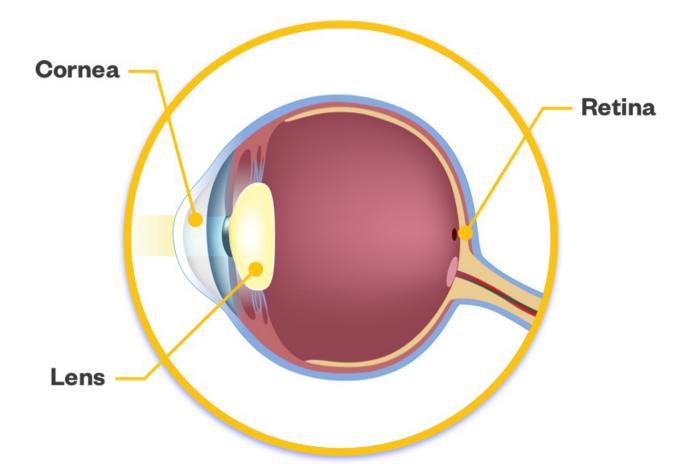
PAUL PHILLIPS EYE & SURGERY CENTER

We hope this booklet helps to guide you by providing some general education about planning cataract surgery.

Your pre-surgical appointment is very thorough. You can expect this visit to last approximately 2 to $2\frac{1}{2}$ hours. We encourage you to bring a family member or a friend with you.

A comprehensive eye examination is mandatory prior to any eye surgery! We will gain an understanding of the health of your eyes, from the front (cornea) to the back (retina) and the optics of the eye. Your vision will be measured and your eyes will most likely be dilated. Optical biometry and corneal topography will be performed to help calculate the strength of the intraocular implant inserted at the time of surgery. High-resolution scans of the cornea and the retina will be obtained to understand the health of those tissues.

You will meet with a surgical counselor to discuss all pre-operative instructions and lens implant options. You will then meet with the surgeon who will review your eye health and overall health history to calculate and determine the best implant choice for you, and determine if there are any specific surgical needs. You will have the opportunity to have your questions answered!



When we are younger, light enters the eye through the cornea, passes through the crystalline lens, and is focused onto the retina to provide a clear, crisp image. As we age, the crystalline lens inside the eye becomes cloudy, causing vision to blur.

A cloudy lens is called a cataract. The lens becomes cloudier with age. This happens at different rates, but all people will develop cataracts eventually.

Risk factors for earlier cataract formation include:

- » Diabetes
- » Family history of cataracts at a young age
- » Smoking
- » Obesity
- » High blood pressure
- » Past eye injury
- » Eye inflammation
- » Previous eye surgery
- » Steroid medication use

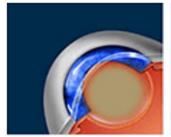


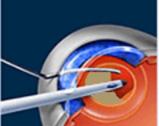
Cataracts may make it progressively more difficult to read, drive, watch TV, and perform normal daily activities.

There is no pain associated with the condition, but there are several symptoms that indicate failing vision due to cataracts. These include:

- » Blurred / hazy vision
- » Colors that seem faded
- » Increasing glare
- » Poor night vision
- » Difficulty reading small print

More advanced stages of cataract formation can eventually cause serious damage to the eye, including glaucoma, eye inflammation, and can make cataract surgery more difficult.









Eye with a cataract

Cataract is broken up and removed

IOL is folded and placed

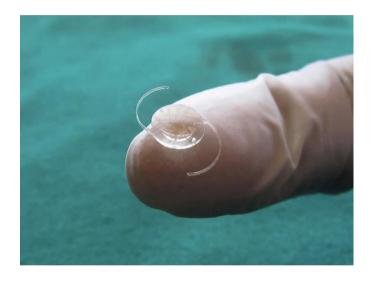
Eye with IOL after surgery

Surgery is performed when a patient's vision is significantly affected due to cataract formation. Cataract surgery is one of the most frequently performed procedures in the country. It takes place on an outpatient basis in a surgery center.

- » Before the procedure, the skin around your eye will be cleansed and covered with a sterile drape.
- » An anesthetist will be present for the entire procedure. Appropriate sedation may be used as needed for comfort and safety.
- » The eye will be numbed with topical drops and medicine in the eye.
- » The procedure is performed under a powerful microscope and involves removing the clouded lens and inserting an artificial lens. The procedure lasts about 10 to 20 minutes.
- » At the conclusion of the case, medicated eye drops will be started. An eye patch is used only in special circumstances.
- » You will be at the surgery center for about 2 to 2 $\frac{1}{2}$ hours.
- » Cataract surgery is performed on only one eye at a time. The second eye is usually scheduled about 2 weeks after the first eye.

Informed consent forms must be signed prior to surgery.

Cataract surgery is regarded as one of the most beneficial and safest of all surgeries. However, all operations and procedures have risks and can result in unsuccessful results and complications, but severe complications that can cause permanent vision loss are rare. Rare and unpredictable complications can occur with local or general anesthesia. Other uncommon, but possible complications include prolonged elevation of intraocular pressure, persistent internal eye inflammation, macular edema, damage to the cornea, retinal detachment, and droopy eyelid. Also, patients' visual expectations may not be met. If you are concerned or have any questions about complications, discuss them with your surgeon.

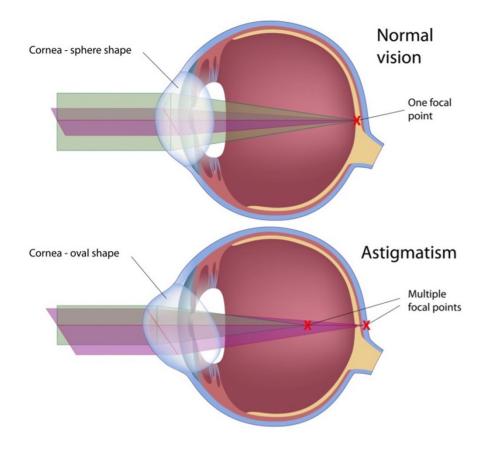


The artificial lens implant that replaces the eye's natural lens is called an intraocular lens, or IOL. IOLs are permanently fixed inside the eye and are individually selected for each patient. IOLs do not change the outward appearance of your eye. Lenses are made of either silicone or acrylic.

In choosing an IOL implant, one of the goals is to reduce or eliminate the need for glasses for some or possibly most tasks.

There are two areas that will independently be addressed:

- 1. Determining whether there is a need to correct astigmatism.
- 2. Addressing the vision at different distances to further decrease the need for glasses.



Prior to surgery, numerous measurements will be taken in our office to try and predict how much astigmatism needs to be corrected.

Astigmatism is a natural condition that occurs when the front surface of your eye, the cornea, is shaped irregularly. This condition is usually present from birth.

An ideal cornea is spherical, like a basketball. A person with astigmatism has a cornea that is shaped more like a football. This irregular shape causes blurry vision because light rays are distorted as they enter the eye and don't focus properly.

Most people have some amount of astigmatism. Small amounts of astigmatism usually don't affect vision enough to require correction during cataract surgery. However, larger amounts can cause distorted or blurred vision, ghosting, eye strain and headaches if not corrected with glasses, contact lenses, or special intraocular lenses at the time of cataract surgery.



It is helpful to think of vision as having three zones which can be categorized based on distance:

Near Vision: This zone is also known as reading vision, but also includes any near task, such as using a cell phone, looking at a watch, and sewing.

Intermediate Vision: This zone involves tasks that require viewing objects at an intermediate distance, usually around arm's length to a few feet away. Examples include using a computer and household tasks, such as cooking and cleaning.

Far or Distant Vision: This zone pertains to seeing objects at a greater distance. Classic examples are driving, watching television or a movie, and looking at a landscape.

Standard (Monofocal) implants can be chosen to see best in one zone. Glasses will be needed in the other zones. Advanced focus lenses are used to provide clear vision in 2 to 3 zones without glasses.

We find it helpful to classify lenses as Levels 1 through 5.

Level 1 – Monofocal: This is a standard IOL. It provides clear vision at one zone. You will require glasses or contacts at the other 2 zones of vision. This is a great choice for people who are comfortable wearing glasses daily. *

Level 2 – Extended Depth of Field (EDOF): Example: Eyhance IOL. This lens will provide good quality vision in the far zone and some in the intermediate zone.*

Level 3 – Multifocal: Example: Symfony IOL. This lens provides good vision in the far and intermediate zones and possibly some in the near zone as well. *, +

Level 4 - Multifocal: Examples: PanOptix, Synergy. These lenses provide good quality vision for all 3 zones with the least dependency on glasses. *, +

Level 5 – Light Adjustable Lens (LAL): A light adjustable lens will be customized in the office in the healing period, weeks after surgery. The LAL lens can provide clear vision in 2 to 3 zones, decreasing or eliminating the need for glasses as much as possible, without the introduction of haloes and glare. This lens also corrects for astigmatism.

- * Levels 1 through 4 lenses all have astigmatism correction (Toric) options.
- + If a Level 3 or Level 4 is chosen, haloes and glare will be observed. These will decrease over time and most patients are very happy with the choice they made. People with certain eye health problems or those who have had prior refractive surgery (LASIK or PRK) may not be good candidates for these multifocal lenses.



Introduction to the Light Adjustable Lens (LAL) from RxSight®

The Light Adjustable Lens (LAL) is the first intraocular lens (IOL) that allows you to customize your vision *after* cataract surgery. Despite numerous advances in cataract surgery technology, many patients continue to be disappointed with their visual outcomes. With the Light Adjustable Lens, you will have the unique ability to test drive and adjust your vision until it meets your personal desires and lifestyle requirements. This optimization is done by your eye doctor through a series of light adjustments in the weeks following surgery that take only a few minutes each.

How does it work?

The Light Adjustable Lens is made of a special material that changes the shape and power of your implanted lens in response to ultraviolet (UV) light. The Light Adjustable Lens itself has special particles (called macromers), which are distributed throughout the lens. When ultraviolet (UV) light is directed to a specific area of the lens, the particles in the path of the light connect with other particles (forming polymers). The remaining unconnected particles then move

to the exposed area. This movement causes a highly predictable change in the curvature of the lens. The new shape of the lens will match the prescription that you select during your post-operative exam.



Light Treatments after Surgery with the Light Adjustable Lens

We will need to see you for brief postoperative appointments the day after each surgery, and approximately 1-2 weeks after surgery. Your first light treatment will be performed approximately 3 weeks after your surgeries are complete, once your prescription has stabilized. After your initial light treatment, you may

RXSIGHT

have up to 2 other refractive treatments, for a total of up to 3 light treatments to customize your vision.

Once you are happy with your custom vision, you will need two lock-in treatments to prevent the lens from changing in the future.

The total number of light treatments is based on your happiness with your vision and achievement of the desired visual outcome.

There is no specific time frame in which the light treatments must be completed. We understand that life can be unpredictable, so we will work with you to customize your light treatment schedule to fit your life as much as possible. We can work around vacations and delay treatments if needed.

Eye Drops For Cataract Surgery LessDrops®

Patients must use **3 types of medicated eye drops** before and after cataract surgery: an antibiotic drop is used to decrease the risk of infection, steroidal and non-steroidal (NSAID) eye drops are used to protect the eye from the normal inflammation that occurs with any surgery. These drops are becoming more expensive at the pharmacy, with many patients reporting out of pocket costs in excess of \$400 for the brand name medications. Generic medications are less expensive, but still often cost more than \$100 out of pocket.

We are always looking for a more affordable way for patients to obtain the necessary prescription eye drops:

LessDrops®, compounded by ImprimisRx, combines three medicated eye drops into one bottle. This means that most patients can use less drops for their cataract surgery and it is often the most affordable option.

At your pre-operative visit, you will be able to purchase LessDrops® directly from our office. We will also prescribe an additional steroid eye drop which you can purchase from your local pharmacy. When using LessDrops, you will use two bottles of eye drops for your surgery instead of three. Of course, you always have the option of using three separate prescription brand name or generic medications from your pharmacy.

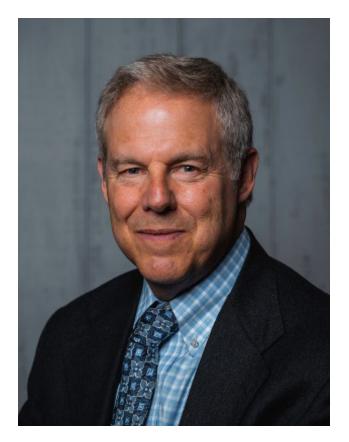
We will discuss your drop regimen in detail at your pre-operative appointment.

Please note that patients with certain eye conditions may need to supplement LessDrops with additional medications at the time of surgery.

Patient with certain allergies may not be able to use LessDrops following their cataract surgery. In that case, you will have drops prescribed for pick up at your pharmacy.



- » After a short stay in the outpatient recovery area, you will be ready to leave. You must have a driver to drive you home and to drive you to your first post-operative visit the following day. Do not drive until you are cleared by your eye doctor.
- » The small incision is commonly said to be "self-sealing" because the eye's natural internal pressure holds the incision tightly closed, allowing the eye to heal without stitches.
- » You will be instructed on how to use your eye drops. It is very important that you use the drops as directed.
- » A general restriction is no swimming for one week following surgery. You should follow your surgeon's specific instructions, though in most cases you can resume your everyday activities right away, as well as your regular physical exercise. Showering and washing your face can resume as usual.
- » Several postoperative visits are needed to check on the progress of the eye as it heals.
- » Call your ophthalmologist if you experience any of the following after surgery: severe pain not relieved by nonprescription pain medication, sudden loss of vision, bursts of floaters, or flashes of light, (like a camera going off), or a shadow or curtain appears in your side vision.





Paul Phillips, MD

Dr. Phillips has been in practice since 1991. His primary focus is cataract and refractive surgery. He has performed approximately 30,000 cataract surgeries. Prior to completing medical school at Stony Brook University, Dr. Phillips was an optical engineer. His unique interest in optics has been optimized to acquire and utilize the latest ophthalmic technological advances to provide patients with the best visual quality.

Joan Lee, DO

Dr. Lee graduated from The University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine. Her interest in ocular inflammation led her to complete an Ocular Immunology and Uveitis fellowship with Dr. C Stephen Foster at The Massachusetts Eye Research and Surgical Institution in Cambridge, Massachusetts where she served as chief fellow. Dr. Lee performs cataract surgery and treats patients with complex ocular inflammatory conditions.





Emily Moriarty, MD

Dr. Moriarty earned her medical degree from the University of Pittsburgh School of Medicine. After several years in a busy private practice, Dr. Moriarty re-entered training and completed a fellowship in glaucoma at Mount Sinai University Hospital. She practices comprehensive ophthalmology with an emphasis on the management of glaucoma, cataracts, and retinal disease.

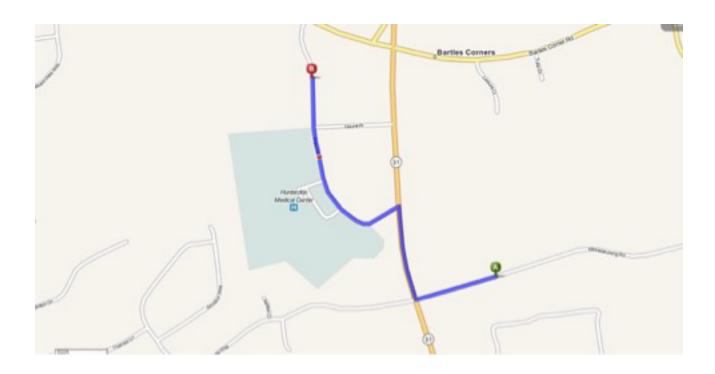
Angana Shah, MD

Dr. Shah graduated from Thomas
Jefferson University. She continued
fellowship training in surgical retina
at Boston University Medical Center.
She specializes in the treatment of
macular degeneration and diabetic
eye diseases. She has the distinction of
being one of very few surgeons in the
state who performs both retinal and
complex cataract surgeries. Dr. Shah
performs her surgery in Mercer County.

Cataract surgery in Hunterdon County is performed at Hunterdon Center for Surgery, Wescott Medical Arts Building, 9100 Wescott Drive, Flemington, NJ 08822.

From Route 31, turn onto Wescott Drive at the light. Continue on Wescott past Hunterdon Medical Center, past the parking garage, and past the orthopedic building on the left. The last building on the left before you reach Sand Hill Road is the Wescott Medical Arts Building. Turn left into the parking lot and follow the signs for Hunterdon Center for Surgery to the left and back of the building.

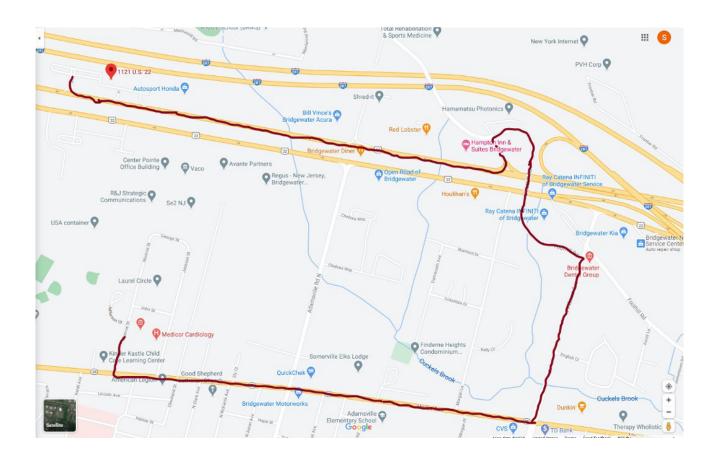
From Sand Hill Road, turn onto Wescott Drive. The first building on your right is the Wescott Medical Arts Building. Turn in here and follow the signs for Hunterdon Center for Surgery to the left and back of the building.



Hunterdon Center for Surgery Wescott Medical Arts Building 9100 Wescott Drive Flemington, NJ 08822 (908) 806-7017

Cataract surgery in Somerset County is performed at Bridgewater Ambulatory Surgery Center, Hunterdon Health Care Building, 1121 US-Hwy 22 West, Suite 301, Bridgewater, NJ 08807

From Route 28 (by our Bridgewater office): Turn left onto Route 28/Easton Tpk. Continue for 1.5 miles. Make a left at the traffic light onto Finderne Ave. Make a left at the traffic light onto Foothill Rd then make a left at the light by the Hampton Inn and proceed onto Route 22 West. The entrance for the surgery center will be on your right-hand side immediately after the Honda dealership.



Bridgewater Ambulatory Surgery Center

Hunterdon Health Care Building 1121 US-Hwy 22 West, Suite 301 Bridgewater, NJ 08807



PAUL PHILLIPS EYE & SURGERY CENTER

We are available to answer your questions

Surgical Department

908.824.7144 - Prompt 8

Fax: 908.751.5485 www.njlasereye.com



Questions?

Paul Phillips Eye & Surgery Center

Flemington

6B Minneakoning Rd Flemington, NJ 08822 Phone: (908) 824-7144 Fax: (908) 968-3239

Clinton

64 Walmart Plaza Clinton, NJ 08809 Phone: (908) 735-4100 Fax: (908) 735-7494

Bridgewater

1 Monroe St. Bridgewater, NJ 08807 Phone: (908) 526-4588 Fax: (908) 231-6718

njlasereye.com