The Complete Guide to LASIK

Learn How Vision Correction Could Change Your Life





Congratulations on taking your first step to better vision. There are many things to consider in your decision to have LASIK. We created this guide to help answer your questions. The more confident you are about your decision, the more comfortable you will be in moving forward with your LASIK procedure.

This comprehensive LASIK guide will cover:

- Introduction to LASIK
- Are you a Candidate?
- Beyond LASIK: PRK, Implantable Contact Lens (ICL) and Refractive Lens Exchange
- What does Age have to do with it?
- Choosing a LASIK provider / Checklist
- The Importance of Technology
- The LASIK Procedure
- Is LASIK Affordable?
- Patient Satisfaction

We hope this guide will help you understand what is going on with your vision and give you a better understanding of the LASIK procedure and the alternatives to LASIK. In addition, address risk factors, cost comparisons and important information you need to know regarding the technology options available. To further aide you in your LASIK research and preparation, you may also take advantage of our LASIK Self Evaluation Test and the handy printable consultation checklist that will guide you through important questions to ask during your consultation.

1. Introduction to LASIK

What is LASIK?

LASIK is a life-changing procedure that has improved the lives of millions of people around the world. It is one of the <u>most frequently per-</u> <u>formed elective procedures</u> in North America and has been successful in vision correction for millions.

LASIK, an acronym for Laser Assisted In-Situ Keratomileusis, is an outpatient surgical procedure that uses a laser to gently reshape the front surface (cornea) of your eye to treat nearsightedness, farsightedness, and astigmatism. The surgery adjusts how light rays are focused onto the eye's retina, which improves vision.

What is Myopia?



If a person has a reactive error then light is not properly focusing on the retina in the back of the eye.

Myopia is a medical term for "nearsightedness". It occurs when you eye is too long in relation to the curvature of your cornea. Myopia causes light rays entering the eye to focus in front of the retina, producing a blurred image. The term nearsightedness means that you can see objects that are "near" to you more clearly than the objects in a distance. The more myopic you are the more blurred distant objects appear.





What is Hyperopia?



LASIK corrects refractive errors by changing the shape of the cornea.

Hyperopia is the medical term for "farsightedness." Hyperopia occurs when your eye is too short in relation to the curvature of your cornea. Light rays entering your eye focus behind the retina, producing a blurred image.

What is Astigmatism?



The goal of LASIK is to reduce or eliminate the dependence on glasses or contact lenses.

Many patients with myopia and hyperopia have some degree of astigmatism, or an oval shape to their cornea. It occurs when your cornea is shaped more like a football than a basketball. As a result, you experience distortion or tilting of images due to the unequal bending of light rays entering your eye. People with high degrees of astigmatism have blurred vision for both near and distant objects.

What is Presbyopia?

Presbyopia is the normal aging process. It develops as the lens of the eye loses some of the flexibility that characterizes a younger eye. Everyone experiences the effects of presbyopia, typically between the ages of 40 and 50. Nearsighted people who become presbyopic may require bifocals in their forties, and those who never needed glasses before may require reading glasses.

If you are considering changing your life with LASIK, you will gain confidence by doing your research beforehand in order to familiarize yourself with what happens before, during, and after the procedure. This guide will help you gain a comprehensive understanding, recognize if you would be a LASIK candidate, and learn about the potential advantages and risks of LASIK.

2. Are you a candidate?

Are you considering correcting your vision with LASIK? When it comes to your eyes, its important to do your homework. Knowledge equals confidence. Once you complete a thorough vision evaluation with your eye doctor and identify your expectations and vision goals, you can determine which treatment is right for you.

Not everyone is a good candidate for LASIK but you may be if you are at least 18 years old, in good general health, and have good eye health with no diseases such as keratoconus, cataracts or glaucoma and possess some of the following characteristics:





- A diagnosis for nearsightedness (myopia), farsightedness or astigmatism
- Current prescription to wear glasses or contact lenses
- Desire to enhance your lifestyle with better vision.

You may not be a candidate if you have uncontrolled diabetes or an autoimmune disease, or if you are severely nearsighted or farsighted or are pregnant or breast feeding.

To determine if you are a good candidate for LASIK, you will need to schedule a visit with your eye care provider. But first, take the Barnet Dulaney Perkins <u>Vision Correction LASIK Self</u> <u>Evaluation</u> to help determine your eligibility.

Beyond LASIK, PRK, and ICL

LASIK is the process of using a laser to reshape the cornea after a thin flap has been created on the eye's surface. This bends the light entering the eye, focusing on the retina and producing a clear image.

PRK, or Photorefractive Keratectomy is another type of cornea based vision correction procedure. As with LASIK, PRK involves reshaping the cornea. However, a flap in the cornea is not created. Instead, the top layer of corneal cells is removed with a specialized instrument to allow the laser treatment to be applied. During the healing process, the cell layer replenishes itself. PRK is a good option a doctor may recommend if creating flap may be problematic. A flap may not be advisable, for example, for patients who are prone to dry eye or have thin or irregular shaped corneas. Like LASIK, PRK procedures are customized to each individual eye and should be delivered with the best available technologies to produce excellent results.

An exciting advancement to vision correction technology is the ICL, often called the Implantable Contact Lens. Commonly referred to as offering high definition vision, this procedure is used to treat myopia or nearsightedness by permanently implanting a corrective lens in the eye in front of the natural lens. It mimics a contact lens, except it is permanently implanted in the eye. The ICL procedure involves the surgeon making a small incision to insert the lens in the eye behind the iris (the colored part of the eye). This surgery uses anesthetizing drops so there is no discomfort for most patients and within a few minutes, patients begin to see clearly.

The ICL has been implanted in more than 100,000 eyes with unprecedented patient satisfaction. This is an ideal option for patients who are not candidates for LASIK due to a thin cornea, have a history of chronic dry eye, or an extremely high level of nearsightedness. Furthermore, no corneal tissue is permanently removed, and if your prescription changes over time, the ICL is removable and replaceable. Like LASIK, not everyone is a candidate for the ICL. To find out if you qualify complete the ICL Self Evaluation form on goodeyes.com

Ask your eye doctor which vision correction option is right for you.

What does age have to do with it?

If you have never worn glasses and are between the ages of 45 and 50, you may be experiencing changes in your vision. Many people think LASIK is the answer. However, you may be experiencing the natural aging of the eye.



There is a procedure known as Refractive Lens Exchange that could benefit you. Similar to cataract surgery, your natural lens in your eye is replaced with what is called a refractive or advanced technology lens known as an IOL or intra-ocular lens. This lens helps you achieve better vision without the need for glasses.

3. Choosing a LASIK Provider / Doctor

There are more options for LASIK now than ever. It is a good idea to visit more than one LASIK surgeon to get your questions answered and help you make a more informed decision. Barnet Dulaney Perkins Eye Center invites you to visit with them first and is committed to helping you make an informed decision.

Most Important Factors to Consider

When researching your LASIK options, cost should be a concern, but also consider the amount of experience of your ophthalmologist and the type of technology used. Make sure to ask questions about the type of technology used for LASIK surgery. New innovations are made all the time and it is important to choose a provider with the most up-to-date, proven technology. Bring this guide with you or read it first to ask the best questions.

How to Evaluate a Provider/Clinic

When evaluating a provider/clinic, make sure the ophthalmologist laser surgeon has a high level of experience and will take responsibility for every step in your vision procedure. It is also beneficial to find a practice that offers comprehensive eye care. Symptoms of most eye diseases are undetected until your vision is evaluated. Visiting with a practice offering comprehensive eye care ensures that should you experience any eye health issues, they are able to assist in your treatment. Barnet Dulaney Perkins Eye Center is a good example as they have cornea, retina, glaucoma, cataract, oculoplastics and refractive specialists available to evaluate your vision. It is also important you are comfortable with the office staff who should be there to address your concerns throughout the process.

Ask if they stand behind your results for qualified patients with a <u>Vision for Life program</u>.

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How to Evaluate an Ophthalmologist

As with any medical procedure, the experience level and skill of your surgeon are very important factors to consider. Ask how many LASIK procedures the ophthalmologist has performed and for results from past patients.

Be sure to talk to your ophthalmologist about what kind of results you can expect, and about the best and worst case scenarios.

Cautionary Tips

- Beware of low-cost pricing models. If the cost seems too good to be true, it probably is
- Watch out for inexperienced ophthalmologists. While the prices may be discounted, the quality of the procedure may also suffer





Positive Signs

- An experienced ophthalmologist who can clearly answer all of your questions and put you at ease about LASIK surgery
- A clear explanation of fees detailing exactly what's included, even for all-inclusive plans
- A clinic that provides the most current and up-to-date technology

Consultation checklist

The top 10 questions to ask your ophthalmologist during your LASIK consultation:

- 1. Am I at the right age and stage in life to have LASIK?
- 2. Has my vision been stable for at least a year?
- 3. Is my level of refractive error within the ideal range for LASIK?
- 4. What results can I expect from a LASIK procedure? What is the best/worst case scenario?
- 5. If LASIK does not meet my expectations, what would we do to help me reach my vision goals?
- 6. After the LASIK procedure, how long does it take to recover? Will I be able to return to work the next day? (Remember this differs with each person.)
- 7. Could the medications I'm taking affect the results of LASIK?
- 8. Are there any eye conditions or health concerns that I have that may rule out or affect the procedure?
- 9. How many LASIK procedures have you performed? Will you be responsible for every step in my vision correction procedure?
- 10. What is the cost of LASIK at your practice and what financing options are available to help cover the cost?

Before you go in for a consult, take our <u>LASIK</u> <u>self-evaluation</u> to help you decide if LASIK is right for you.

4. Advanced Technology

Types of lasers used in LASIK surgery

LASIK procedures use a highly specialized excimer laser to correct refractive errors and reshape the cornea to improve vision. The field of eye surgery has been revolutionized by these lasers, which have greatly improved over the decades.

Femtosecond Lasers: In early days of LASIK, the flap created during LASIK surgery was made with a mechanical blade called a microkeratome. In today's most advanced LASIK procedures, a femtosecond laser is used instead of the hand controlled blade. Femotsecond lasers. whose speed is measured in guadrillionths of a second, are the pinnacle of laser technology development. The doctors of Barnet Dulaney Perkins Eye Centers use the Intralase iFS femtosecond laser. This allows the flap to be created to precise dimensions so that it conforms to your eye's anatomy and fits securely back in place. Its precision also means it is less disruptive to your eye tissue. All these features contribute to a lower risk of complications, faster healing and more accurate results.

Wavefront Guided Lasers – A wavefront guided laser allows surgeons to map defects that may exist in the optical system of the eye based on how light travels. These devices produce a custom LASIK treatment plan unique to each patient.





The doctors of Barnet Dulaney Perkins use the German Engineered Wavelight Allegretto Wave Eye-Q laser. In addition to correcting each eye's unique visual imperfections, this laser is capable of preserving the natural curvature of the cornea, which is important for preventing unwanted side effects such as glare or poor night vision. The Wavelight Allegretto Wave Eye-Q also tracks even your slightest eye movements during the procedure to ensure the exact intended location of the laser treatment is maintained.

5. The LASIK Procedure

Who will be involved in your care?

A comprehensive evaluation is critical prior to your LASIK procedure, you will typically be greeted by a technician who will take some measurements of your eye using technology such as pachymetry which measures the thickness of your cornea. Pupilometry which measures the size of your pupil in darkness and topography which maps the surface of your cornea. In addition, you meet with either an ophthalmologist or optometrist to examine the overall health of your eyes and determine if you may be a candidate. You will also meet with a patient counselor who can provide information about the procedure, discuss pricing and help answer your questions. An Ophthalmologist (surgeon) will perform your LASIK surgery.

The LASIK process: The surgical procedure

LASIK is an outpatient procedure that usually takes about 10 to 15 minutes to perform. Immediately prior to your procedure your eyelids and lashes will be cleaned and topical anesthetic drops are used to numb the eyes to prevent discomfort during the procedure. With approval, medication may also be provided to help the patient relax. After the drops are used, the laser will be positioned over the eye; a lid speculum is used to keep the eyelids from closing.

Most LASIK patients notice dramatic visual results within the first few days following their procedure.

A femtosecond laser, is used to create a thin flap in the top of the cornea. The hinged flap is folded back to access the underlying cornea and some corneal tissue is removed using a highly specialized laser called an excimer laser. This process is done to more accurately focus light on the retina, which improves eyesight.

The type of LASIK surgery varies depending on your vision goals. For those who are farsighted, the goal is a steeper cornea. For nearsighted patients, the cornea needs to be flattened. To correct astigmatism, an irregular cornea can be smoothed into a normal shape.

Once the cornea is reshaped, the flap is laid back down, covering the area where tissue was removed. The cornea then heals naturally.

The success of your LASIK procedure depends on several factors including the expertise of the surgeon and the sophistication of the equipment. Barnet Dulaney Perkins Eye Center's primary objective is to provide you with the best results, the greatest degree of safety and some of the most advanced equipment.





After your LASIK procedure, your eye may feel irritation or it may tear or water for a few hours. Most patients are quite comfortable after taking a short nap while wearing protective eye shields to keep from rubbing their eyes.

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Do/Don't list following a LASIK procedure

What to do after LASIK:

- **Do** prepare yourself for some hazy vision right after the surgery
- Do get plenty of rest
- **Do** ask your doctor how much time (if any) you should take off work
- **Do** follow your doctor's instructions and take any medication prescribed

What not to do following LASIK:

- **Don't** participate in strenuous exercise or physical activity for at least a week
- **Don't** drive until you have had your vision tested by your eye doctor
- **Don't** rub your eyes— there's a slight chance it could dislodge the flap that is healing

6. Is LASIK Affordable?

Why evaluate the price?

Just as cost is a concern for any big purchase, it's understandable that cost will be a big part of your decision making process. Understanding what is included in the price can get complicated. Although you may see lower prices advertised, most patient can expect to spend approximately \$1600-\$3500 per eye depending on which procedure will best meet their expectations and provide the best vision results.

Insurance eligibility and paying out of pocket

The LASIK procedure is often considered an elective or cosmetic surgery, which means many insurance companies may not cover LASIK. Most patients end up paying for the majority (if not all) of the procedure out of pocket. It's still very much worth asking your insurance company about your options and if your policy includes a benefit for advanced vision correction. Each person's needs and circumstances are different.

Flexible Spending Accounts (Tax Free Dollars)

Many employers offer flexible spending accounts to help offset medical expenses. These accounts may allow you to set aside pre-tax dollars for certain medical costs, including procedures like LASIK.

Financing options

While most insurance companies deny coverage for LASIK surgery, there are still a number of <u>financing options available</u> to make vision correction more affordable. At Barnet Dulaney Perkins, patients have a variety of ways to help make LASIK affordable — ask one of our patient counselors about custom payment options.

Frequently Asked Questions about LASIK

Is the LASIK procedure safe?

As with any surgery, there are risks associated with LASIK. However, there are many safeguards in place to reduce the risk of error and the FDA has recognized LASIK as a safe, effective, and proven method of vision correction.





Does it hurt to get LASIK?

Patients do not feel pain during LASIK because the surgeon uses anesthetic eye drops before the procedure begins. After the surgery, many LASIK patients report mild discomfort for a day or so. If this is the case, your surgeon can prescribe pain medication.

How long does LASIK take?

The entire LASIK procedure takes about 15 minutes per eye, although the treatment with the laser usually takes less than a minute.

Are there any side effects?

After LASIK, some people experience dry eye, which can be relieved with eye drops. Some

people may also experience halos around lights, especially at night. Both of these side effects typically lessen or disappear over time.

7. Reported Patient Satisfaction

What determines a successful outcome?

The vast majority of LASIK procedure results are thought of as excellent by patients. The worldwide satisfaction rate for LASIK patients is more than 95% according to the <u>American Society of</u> <u>Cataract and Refractive Surgery.</u>

Testimonials

"I was scared and hesitant about having the procedure at first. Being dependent on glasses and contacts left me feeling disabled. I never thought my eyes were capable of seeing so clear, it was like a miracle. It has been over one year since my procedure and I'm still in shock." (Source: <u>The Best Decision of my Life</u>).

"I have been dependent on glasses or contacts to see, as I suffered from an astigmatism for 20 years. As a television sports reporter, my job is to SEE the action... LASIK corrected my vision and gave me the freedom to see just about anything, no matter the distance. No more squinting, messing with contacts in bad weather conditions or worrying how often my vision would change. I go to bed reading a book and wake up seeing the alarm clock, plus I watch sports with clarity in between." (Source:LASIK saved my Job).

See Video Testimonials from Barnet Dulaney Perkins patients.



