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## Health

## Which Vision Correction Choice Is Best For You?

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LOS ANGELES -- Anna McNeal has been severely nearsighted all her life. The thick glasses that she needed not only were an inconvenience, but they limited her activities and lifestyle. As she reached her 40s, this baby boomer was finding that her near vision was getting weaker and she had to switch to bifocals and then progressive glasses in order to read or use her computer. Now as she entered her 50s, she felt it was time to make some changes.



Her search on the Internet showed her that vision correction in 2007 is a story of many options. The options depend on how nearsighted or farsighted you are, whether you have astigmatism, how old you are and, most importantly, what you want out of vision correction.

Here's what Anna found. There are two main focusing structures of the eye, the cornea and the lens. The cornea is the outer clear tissue over the center of the eye whose shape and focusing ability can be improved with procedures like LASIK, the best known of the vision correction procedures. Over the past decade, millions of people have been able to leave their glasses behind thanks to this advancement in vision correction. The improvements in LASIK surgery over that time have been breathtaking.

Two new technologies have caused a resurgence of LASIK. Custom LASIK involves mapping a detailed optical "fingerprint" of the eye and using it to guide the laser. "Custom LASIK gives better night vision and sharper clarity of vision than the traditional LASIK procedure," says Dr. Robert Maloney, director of the Maloney Vision

Institute and the first surgeon to perform LASIK in Western North America.

Complementing custom LASIK is Intralase "all-laser" LASIK, in which the flap is made with an ultra fast laser instead of the traditional machine. "All laser" LASIK alleviates the fear many patients have of having a flap cut on the eye. But, LASIK can't correct high levels of nearsightedness or farsightedness, and it can't correct people with thin corneas (LASIK can weaken a thin cornea). For people with thin corneas or weak corneas, "flapless LASIK", also called PRK, is the way to go. But PRK still can't safely correct people as nearsighted as Anna.

Anna also considered the Implantable Contact Lens. This is a special lens that is inserted permanently inside the eye. Unlike ordinary contact lenses, it never needs to be cleaned or changed, and lasts a lifetime. The appealing feature of the FDA-approved Implantable Contact Lens was its ability to safely correct all of Anna's nearsightedness without weakening her cornea. But, while the Implantable Contact Lens would give her great distance vision, it wouldn't eliminate her reading glasses too, because her natural lens was aging as she aged.

The human eye's natural lens is flexible in young people. This allows the lens to change focus, much as a camera lens can focus on distant mountains and a close up baby's face. Unfortunately, as we get older, the natural lens hardens, impairing its ability to focus up close. This process of hardening of the lens is called "presbyopia", and it happens to every human on the planet. Because of presbyopia Anna was already wearing bifocals at age 51.

Anna's surgeon, Uday Devgan, MD thought the newest development in vision correction, the multifocal intra ocular lens would work best for Anna McNeal.

"This lens allowed us to fully correct her nearsightedness as well as correct her presbyopia. This gave Anna the gift of being able to see both at distance and up close, which she had never been able to do. Now whether she's driving or working at her computer, she doesn't need her glasses."

"Like all patients who have been trapped in glasses, I was looking for a way out. Dr. Devgan helped me and I am very happy today," said Anna McNeal.

This same Multifocal intra ocular lens (the ReZoom lens) is also being used to treat cataracts. As a result, many older patients are finding they are less dependent on glasses.

Anna's story is important for all of us. Many new vision correction options are available to patients, and the quality of vision is better than ever. But it is not a one size fits all. Patients need to do their research and consider all their choices.