Hartford Hospital Eye Surgery Center

Outcomes Report 2023

Celebrating 25 years of outstanding eye care
1998-2023
Hartford Hospital Eye Surgery Center
2023 Outcomes Report

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This year marks 25 years of excellence in eye surgery at the Hartford Hospital Eye Surgery Center and we are incredibly proud of this accomplishment.

Every day, because of the expertise and dedication of our ophthalmologists and their teams, patients regain not just their eye sight, but also vibrancy in their lives. For a quarter of a century now, our Center has been a leading destination for outstanding care, a place where patients from around the world come for the highest level of skill and experience.

We are committed to being fully transparent and continually demonstrating our success to the people we serve. We are grateful that physicians and patients alike frequently ask for quality data so they can better understand the outcomes of care delivery.

That’s why we are so proud to share our 2023 Eye Surgery Center Outcomes Report.

We benchmark ourselves against the very best organizations in eye surgery, both nationally and internationally, to ensure we are meeting the highest standards. As a result, our patients can feel confident they are receiving world-class care when they choose our Eye Surgery Center.

This report highlights the superb work of our physician leaders, affiliated physicians, support staff and clinical partners. The entire team works tirelessly to surpass all expectations for care and satisfaction. Their results reflect our culture and bring our values of excellence and safety to life.

We are proud of the track record of the Hartford Hospital Eye Surgery Center and invite you to read this report front to back. Here you will find data on high patient satisfaction, low surgical complications, and superb surgical results that exceed international benchmarks.

Thank you for trusting us with your patients’ care.
A destination for world-class eye surgery

We’re proud to have the best and brightest ophthalmologists affiliated with the Hartford Hospital Eye Surgery Center. Nearly 40 board-certified physicians, with more than 30 office locations across the state, have trusted our center for their patients’ care.

Patrick Albergo, MD  
Duane Austin, MD  
Joseph Bentivegna, MD  
Robert Block, MD  
Ari Brandsdorfer, MD*  
Daniel Chin, MD*  
Neeru Dua, MD  
Martin Edwards, MD*  
Geoffrey Emerick, MD*  
David Emmel, MD*  
Paul Gaudio, MD  
Michael Gingold, MD  
Laura Hall, MD*  
Jeremy Hwang, MD, PhD  
David Jeng, MD  
Michael Koval, MD  
Lyndon Lee, MD  
Roger Luskind, MD*  
Richard Manganiello, MD  
Kristy Mascarenhas, MD*  
Patricia McDonald, MD*  
Richard Molk, MD*  
Raji Mulukutla, MD*  
Robert Noecker, MD  
Matthew Nicholas, MD  
Christopher Orr, MD*  
Mary Gina Ratchford, MD*  
Shari Roth, MD  
Timothea Ryan, MD*  
Martin Seremet, MD*  
Peter Shriver, MD*  
Alan Solinsky, MD*  
Jonathan Stein, MD  
Alan Stern, MD*  
Inna Stroh, MD, PhD

* An asterisk denotes our Quality Improvement Partners. These physicians are committed to improving health outcomes through data collection and other methodologies.

Serving the community

Hartford Hospital’s ophthalmologists have a long-standing commitment to community health. For decades, our doctors have donated their time and expertise to Brownstone Health Services, which provides needed medical care to the underserved and uninsured in the local area. Brownstone cares for upwards of 250 medical patients a day.

Eye care is one of the many specialties offered. Since 2013, ophthalmologists from the Hartford Hospital Eye Surgery Center have provided outpatient eye care.

Surgery Center have provided outpatient eye care.

They screen and follow patients with systemic eye disease and monitor patients on an ongoing basis for uncomplicated eye problems. They also triage and make referrals for specialized eye care for those patients that require more advanced and complex care.

Our ophthalmologists pride themselves in providing care to patients who would not otherwise receive it. In 2022, they saw 550 eye patients at Brownstone, as well as provided charity care to over a thousand patients in their private offices. The Hartford Hospital Eye Surgery Center also provided approximately $100,000 in charity care to patients in need.

Additionally, they provide 24/7 emergency eye care coverage and consult services to the Hartford Hospital Emergency Department.
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STATISTICAL HIGHLIGHTS

Our surgical experience

Founded in 1998, the Hartford Hospital Eye Surgery Center is a regional leader in surgical eye care, offering procedures to treat cataracts, glaucoma, corneal diseases, eyelid malfunctions and tumors, and select retinal diseases.

At the Eye Surgery Center, we perform the most cataract and glaucoma procedures in Connecticut. And we use the most advanced technologies available. We were the first eye surgery center in New England to offer Femtosecond-Laser Assisted Cataract Surgery — a minimally invasive, bladeless option that enhances precision during eye surgery.

We also offer the ORA, VerifEye, and Verion systems, sophisticated technology that can help our surgeons select and place lens implants during cataract surgery. Along with advanced in-office imaging, this allows customized vision correction for astigmatism at the same time. Our tailored approach for all patients leads to the best possible visual outcomes soon after surgery and for a lifetime.

The data in this report is based on an analysis of more than 2,000* procedures performed at the Hartford Hospital Eye Surgery Center.

Breakdown of procedures

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataract surgeries</td>
<td>5,298</td>
</tr>
<tr>
<td>Combined cataract and glaucoma surgeries</td>
<td>366</td>
</tr>
<tr>
<td>Micro-invasive glaucoma surgeries</td>
<td>224</td>
</tr>
<tr>
<td>Other laser procedures</td>
<td>3,672</td>
</tr>
<tr>
<td>Astigmatism correcting lens implants</td>
<td>394</td>
</tr>
<tr>
<td>Filtering glaucoma surgeries</td>
<td>298</td>
</tr>
<tr>
<td>Presbyopia correcting lens implants</td>
<td>470</td>
</tr>
<tr>
<td>Eyelid surgeries</td>
<td>69</td>
</tr>
</tbody>
</table>

* Sample was obtained by means of a double randomization process using the last digit of randomly assigned hospital ID numbers chosen in a random sequence

eyesurgerycenter.org
Effective communication puts patients at ease

At the Eye Surgery Center, how patients feel is important to us. We are proud that nearly 99 percent of our patients say they are satisfied with their surgical outcome.
Cataracts are a clouding of the eye's lens that results in decreased vision. They are fairly common, with most people developing them with age. We use traditional and laser-assisted techniques to perform cataract surgery with unprecedented precision — and without using a scalpel.

Our Eye Surgery Center has some of the lowest intraoperative complication rates when compared to international benchmarks. The most common complication is rupture of the capsular support structure. Of the 1,505 cataract surgeries analyzed in 2022, 0.6% experienced this intraoperative complication. International benchmarks are between 0.3 – 4.4%.

Percentage of Intraoperative Complications* (lower is better)

- Eye Surgery Center: 0.6%
- International Benchmark: 0.3% - 4.4%

* According to data from Massachusetts Eye and Ear
Achieving Target Refraction

Glass prescriptions are measured in units called diopters. A surgical result within one diopter is considered a good outcome. A surgical result within 0.5 diopters is considered an excellent outcome.

During the 2022 calendar year, 99.2 percent of 1,505 eyes studied achieved within one diopter of predicted refraction after cataract surgery. The international benchmark is 94 percent. The Hartford Hospital Eye Surgery Center has met or exceeded these international benchmarks for successful cataract surgery.

**Percentage of Patients within 1 Diopter of Target Refraction**

- Eye Surgery Center: 99.2%
- International Benchmark: 94%
- European Registry of Quality Outcomes: 93%

*According to data from Massachusetts Eye and Ear*

**Percentage of Patients within 0.5 Diopters of Target Refraction**

- Eye Surgery Center: 90.5%
- European Registry of Quality Outcomes: 72.7%
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VISUAL ACUITY

Hartford Hospital's Eye Surgery Center results compared very favorably to national benchmarks. 20/40 or better vision was achieved by 97.3 percent of Hartford Hospital Eye Surgery Center patients compared to 83.2 percent of patients in the national benchmark study.

Corrected Visual Acuity with Glasses

Uncorrected Visual Acuity (No Glasses)

* 20/40 or better visual acuity is required to drive in Connecticut
** American Academy of Ophthalmology, IRIS Registry (Intelligence Research In Sight)
*** Centers for Medicare and Medicaid Services (CMS)

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Glaucoma is a disease of the eye in which high pressure damages the optic nerve. The optic nerve is responsible for transmitting images from the retina to the brain. Our surgeons perform two types of surgery to treat glaucoma: microinvasive glaucoma surgery (MIGS) and filtering glaucoma surgery. A total of 136 MIGS and 58 filtering eye surgeries were evaluated.

Filtering glaucoma surgery includes trabeculectomies and glaucoma drainage implants which make small openings to allow fluid to leave the eye. MIGS surgery involves techniques to improve flow through the eye’s natural drainage system or laser treatment to decrease inflow. All of these are designed to lower eye pressure and decrease the chance of vision loss from glaucoma.

The goal of glaucoma surgery is to lower pressure. With MIGS surgery, the average pressure drop was 4.8 points, or a 25% reduction. The more severe glaucoma patients requiring larger pressure decreases with traditional surgery had an average decrease in pressure of 13.0 points, or a 47% reduction.
## Eye Drop Usage

Most glaucoma patients take eye drops to control their pressure. Our eye surgeons were able to significantly decrease the number of drops patients use after surgery.

### Number of Eye Drops Patients Use Before and After MIGS Glaucoma Surgery

- **Pre-Op Drops:** 1.9
- **Post-Op Drops:** 0.9

### Number of Eye Drops Patients Use Before and After Glaucoma Filtering Surgery

- **Pre-Op Drops:** 3.4
- **Post-Op Drops:** 1.0
Hartford Hospital’s Eye Surgery Center complication rates with both MIGS and filter surgery are significantly lower than international benchmarks. The most common complication is transient hyphema (bleeding). In 2022, 2.0% of MIGS had a complication and 0.8% of the filtering operations had a complication. International benchmarks for filtering operations are between 1-8 percent. There are currently no national or international benchmarks for MIGS.

* According to data from Massachusetts Eye and Ear
Study shows safety in taking blood thinners before eye surgery

Up until recently, doctors had no idea if people who needed eye surgery but were on blood thinners could continue taking their medication safely prior to their procedure. Many patients receive a nerve block on their eye and it was unclear if patients needed to stop taking them before receiving the nerve block.

But thanks to a study led by anesthesiologists at Hartford Hospital’s Eye Surgery Center, patients should feel reassured that they can safely continue their medications when receiving eye nerve blocks for eye procedures. The study, called the Blocking Eyes with Quality and Safety (BEQUEST) Initiative, examines procedures like cataract and glaucoma surgery, and some cornea procedures.

“A lot of our patients are taking blood thinners for serious medical conditions,” said Kevin Finkel, MD, an anesthesiologist at the Hartford Hospital Eye Surgery Center.

These medications are helpful in preventing heart attacks and strokes, but there hasn’t been much research on the safety of the newer blood thinners and the nerve blocks used in some eye surgeries. This includes medications such as Eliquis (apixaban), Xarelto (rivaroxaban), and Pradaxa (dabigatran etexilate). “About 40 percent of our patients receive a nerve block anesthetic during their eye surgery, with over 50 percent taking some sort of blood thinner. Based on the findings from our study, we don’t want patients to have to stop taking these important medications simply because they are receiving a block. We want to do the safest thing for our patients,” said Dr. Finkel.

In 2014, Dr. Finkel began collecting data on bleeding complications and the quality of the nerve blocks offered at the Center. Since that time, doctors have collected data on nearly 14,000 patients.

The data shows that nerve blocks are incredibly safe and done with high-quality. In fact, 90 percent have been deemed “perfect” blocks. This means that there is no movement and no sensation at all felt by the patients in the eye.

The most serious, but rare complication with a nerve block is a retrobulbar hematoma, which is bleeding behind the eye. The typical incidence of this complication nationally is around 1 to 3 percent. In this study, the incidence was 0.018%, nearly 100 times less than the national average.
What our patients say about us

“I was very pleased with my surgery! The nurses were professional, kind and compassionate. They made me feel calm and relaxed. The doctor was amazing and did a fabulous job on my procedure! I am very happy with everyone!!! Thank you all!!!”

“Totally satisfied with my Doctor, staff, and facility. Completely satisfied with my overall experience with Hartford HealthCare.”

“Received excellent care, nurses and surgeon very responsive to my needs. The whole time I was made as comfortable as possible and the surgeon was very considerate as were the OR and prep nurses.”

“Everyone at the facility was fantastic from reception to doctor. I would recommend this facility to everyone!!!!”

“I am the father of a healthcare COO and the husband of an MPH. Being what I think is an informed consumer, I would give this facility an outstanding rating. Well done!”

“All the staff members that I interacted with were attentive to me before, during and after the procedure. Couldn’t have asked for better care.”

“This was my second cataract surgery at the center. Both visits were excellent—good preparation, staff attentive and professional, safety practices adhered to, efficient, but not rushed. Overall, I had an excellent healthcare procedure experience!”

“It was a positive experience from the introduction, procedure, all the nurses and everyone that attended to me. It was the best care I was given and I am very happy that I went to Hartford Hospital for my procedure.”
About Hartford Hospital

Hartford Hospital is an 867-bed, not-for-profit hospital located in the heart of Connecticut’s capital city. It has 7,000 employees and an active medical staff that includes more than 1,000 physicians and dentists in 18 departments. The hospital is one of New England’s largest tertiary care centers and has one of the region’s busiest surgery practices.

The hospital is a respected academic medical center. It trains physicians in collaboration with the University of Connecticut School of Medicine and is a major teaching site for nurses and allied health professionals. Our Center for Education, Simulation and Innovation is a unique, high-technology medical education center that attracts learners from around the world. U.S. News & World Report annually ranks Hartford Hospital among America’s Best Hospitals. The hospital was ranked No. 1 in U.S. News & World Report’s latest Regional Ranking. Many of the hospital’s clinical programs have received national recognition for quality.

Major centers of clinical excellence include cardiology, oncology, emergency services and trauma, mental health, women’s health, orthopedics, bloodless surgery and advanced organ transplantation. The Hartford HealthCare Bone & Joint Institute, which opened in January 2017 adjacent to Hartford Hospital, is Connecticut’s first and only orthopedic hospital. Among Hartford Hospital’s divisions are the Institute of Living, a 114-bed mental health facility with a national and international reputation for excellence; and Jefferson House, a 104-bed long-term-care facility.

In addition to its 65-acre campus in downtown Hartford, the hospital operates satellite facilities in numerous suburban locations. It owns and operates LIFE STAR — an air ambulance service with bases in Connecticut and Massachusetts. Hartford Hospital was founded in 1854 in response to a community need identified when an industrial explosion resulted in mass casualties and no facility existed to treat the injured. Service to the community remains a Hartford Hospital priority more than 160 years later.

eyesurgerycenter.org
You can partner with us in achieving these important outcomes. Charitable gifts help make the Hartford Hospital Eye Surgery Center exceptional. Every gift can help support such important uses as patient care, new technology, educational programs, research, and facility improvements.

To give, please visit our website at giving.hartfordhospital.org/eye or call our Philanthropy office at 860.972.2322.