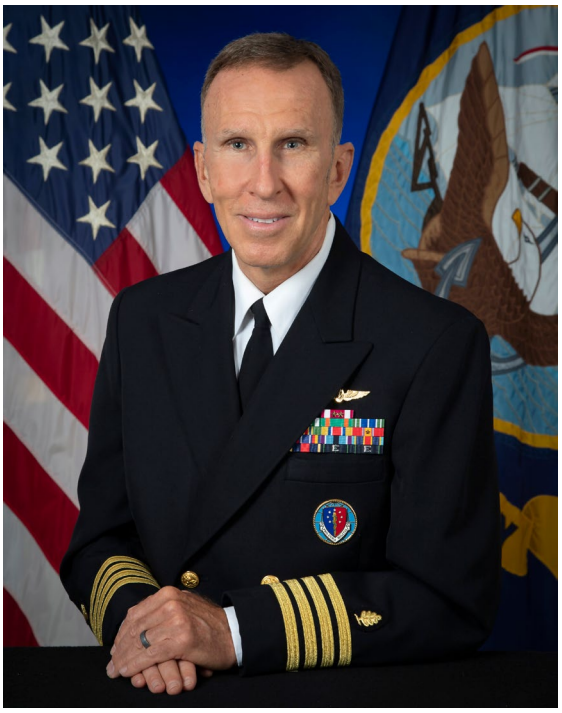
Defense Health Agency
VISION CENTER OF EXCELLENCE ®

VISION CENTER OF EXCELLENCE
ANNUAL REPORT
2025

CONTENTS



LETTER FROM THE CHIEF

Now in my third year of leading the Vision Center of Excellence (VCE), the past year has been both challenging and rewarding. In 2025, the VCE continued to excel in providing clinical, educational, policy, data, and research support to the DoD and VA eye care communities in order to fulfill our critical mission.

I continue to be inspired by working with people of excellence who want to improve vision health, optimize warfighter readiness, and enhance the quality of life of our service members and veterans. One of VCE's greatest strengths is the partnership between clinical eye care and research: using data to drive evidence-based decision-making; performing gap analyses to prioritize and facilitate research; answering requests from the field to provide focused educational support and clinical recommendations; coordinating patient care within the DoD and VA healthcare systems with our vision care coordinators; and supporting DHA's Ocular Trauma Centers and graduate medical education to ensure sustainment of a ready medical force while investing in our future clinician-researchers.

In Fiscal Year 2025, the VCE collaborated with the CDC in a milestone project bringing MHS ocular data into the national Vision and Eye Health Surveillance System and we kicked-off the FOCUS mTBI study that will be recruiting patients at eight sites across the MHS (*page 12*). VCE's Residency Research Partnership Program continues to gain steam as new innovative research projects contribute to advances in military medicine and improved patient outcomes (*page 16*).

In the pages that follow, you will see many more examples of how our work directly impacts warfighter vision health and readiness.

This year's success was made possible due to the dedication of our staff and the support of our stakeholders and partners. Thank you all and I look forward to what we can accomplish in 2026 and beyond!

CAPT Todd J. Lauby, MSC, USN
Chief, Vision Center of Excellence
DHA Research & Engineering

FY 2025 SNAPSHOT

The VCE published *Sympathetic Ophthalmia: Epidemiology and Cohort-Based Assessment of Clinical Outcomes in the British Journal of Ophthalmology*[1]. The study provides key insights into the management and prognosis of this rare but serious condition.

The VCE supported the RAND Research Report, *Cost-Benefit Analysis of Comprehensive Military Eye Examination Policies*[2], directed by Under Secretary of Defense for Personnel and Readiness (USD(P&R)). The report highlights that comprehensive periodic exams for service members are cost-effective measures to improve warfighter readiness and retention.

The VCE sponsored the Principal Investigator Certification and Training Course to familiarize research staff with the FOCUS project, its protocol and its procedures. The training addressed the frequency and types of oculomotor dysfunction in military members with recent traumatic brain events.

The VCE, in collaboration with the Congressionally Directed Medical Research Programs (CDMRP) Vision Research Program, co-hosted the 2nd Vision Injury Research Forum (VIRF). This one-day forum brought together over 200 registrants, including Department of Defense (DoD) and Department of Veterans Affairs (VA) stakeholders, academic researchers, and industry investigators. The event fostered communication and collaboration to address capabilities, gaps, opportunities, and the current state of science in vision injury research. Over 70 abstracts were submitted and 30 presenters were invited to speak during six breakout sessions, contributing to the advancement of vision injury research.

The VCE developed the manuscript, *Atraumatic Rhegmatogenous Retinal Detachment: Epidemiology and Association with Refractive Error in U.S. Armed Forces Service Members*[3], which was published in *Ophthalmic Epidemiology*[4]. This study examines the epidemiology of atraumatic rhegmatogenous retinal detachment and its association with refractive error among U.S. Armed Forces service members. The findings provide critical insights into the risk factors and prevention strategies for this condition.

The VCE developed and deployed the Vision health page to the VCE website, to support warfighter readiness by providing essential vision care information and connecting users to specialized content. The inclusion adds guidance on combat-specific eye injuries, preventive measures, and provides links to comprehensive vision wellness benefits, supported by TRICARE.

MAR

The VCE submitted technical reports with the largest group of open globe injuries described to Walter Reed's Ocular Trauma Center. The reports detail the clinical outcomes of open globe injuries among Active Duty Service Members (ADSM).

APR

A VCE-Centers for Disease Control and Prevention (CDC) collaboration resulted in published MHS ocular data on the Vision and Eye Health Surveillance System (VEHSS). The data provided information on the prevalence of eye disorders and disabilities to provide understanding on the scope of vision loss and eye care services in the U.S.

MAY

To promote medical readiness, the VCE presented the "VCE Vision Care Coordination Program" at the annual Tri-Service Ocular Trauma Skills Lab. This course informs deploying eye care providers to evaluate and manage ocular trauma with structured lessons and surgical lab simulations.

JUN

VCE Data Abstractors completed a five-month long project to review and revise patient records in the Defense and Veterans Eye Injury and Vision Registry (DVEIVR), standardizing how injuries are categorized and providing researchers with clearer, more enhanced reporting.

JUL

The VCE developed a new quarterly report to evaluate the care coordination program and referral patterns of complex ocular referrals, medevacs, surgeries, and care coordination to the VA. This report is part of the OTC Measures of Effectiveness that addresses Vision Care Coordinators at the four DHA Ocular Trauma Centers (OTCs).

AUG

The VCE secured accreditation from the Council on Optometric Practitioner Education (COPE) for its educational course, Vision Dysfunction Following Traumatic Brain Injury. This five-module, nine-hour course, available on the Joint Knowledge Online (JKO) platform, provides nine hours of continuing education credit. The course educates DoD primary eye care providers on vision dysfunction associated with TBI. It ensures the standardization of care and referral practices across the DoD and the VA.

SEP

VCE hosted its 5th Annual Research & Industry Day, which focused on AI in Eyecare and provided a platform to explore current developments, share ongoing research, and foster interdisciplinary collaborations aimed at improving visual health. Speakers from WRNMMC Ophthalmology, Singapore National Eye Center, and the MedTech industry (OcuSmart and Altris AI) gave presentations to the DoD and VA vision research communities.

ADVANCING THE DHA MISSION

The VCE works to improve vision health, optimize warfighter readiness, and enhance quality of life for service members and veterans. Congress established the VCE in 2008 (P.L.110-181, Sec 1623)[5] to address the prevention, diagnosis, treatment, and rehabilitation of military eye injuries and diseases, including vision dysfunction caused by traumatic brain injury (TBI). The law required the creation of DVEIVR, which collects eye injury and vision dysfunction data from DoD and VA medical records from September 12, 2001, to the present.

The VCE leads programs and initiatives that improve ocular care across the DoD and VA. These efforts include clinical care, education, and research. The VCE works with military and veteran health systems to ensure service members and veterans receive high-quality vision care. By improving access to care and advancing research, the VCE helps patients maintain readiness and achieve better vision health outcomes.

This annual report highlights the VCE's achievements during Fiscal Year 2025. It shares the impact of the VCE's programs and initiatives on the lives of those who serve and have served.

Ocular Trauma Centers

The VCE set up four congressionally mandated Ocular Trauma Centers (OTC's) to provide specialized care for service members and veterans with eye injuries. These centers are to be the primary centers for providing specialized medical services for vision with a focus on diagnosing, treating, and rehabilitating ocular trauma. They also support research and training to improve outcomes for patients with complex eye injuries.

Each OTC is located within a major military medical facility across the United States and aims to provide 24/7 specialty care from initial medical/surgical treatment through rehabilitation and follow-on care. These centers use advanced technology and are staffed by skilled ophthalmologists, optometrists, and vision care specialists. They treat a wide range of eye injuries, including penetrating trauma, chemical burns, blast, and other injuries.

Role of Ocular Trauma Centers

1 Nation Capital Network

Shared Responsibility between:

Walter Reed National Military Medical Center (WRNMMC)

Bethesda, MD

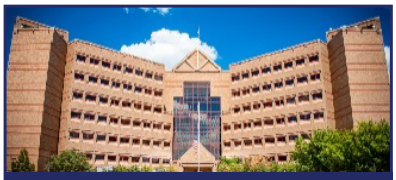
Alexander T. Augusta Military Medical Center (ATAMMC)

Fort Belvoir, VA

2 Central Network

Shared Responsibility between:

Brooke Army Medical Center (BAMC)



Fort Sam Houston, TX

Wilford Hall Ambulatory Surgical Center (WHASC)

Joint Base San Antonio Lackland, TX

3 Indo-Pacific Network

Naval Medical Center San Diego (NMCSD)

San Diego, CA

4 Pacific Rim Network

Madigan Army Medical Center (MAMC)

Joint Base Lewis-McChord, WA

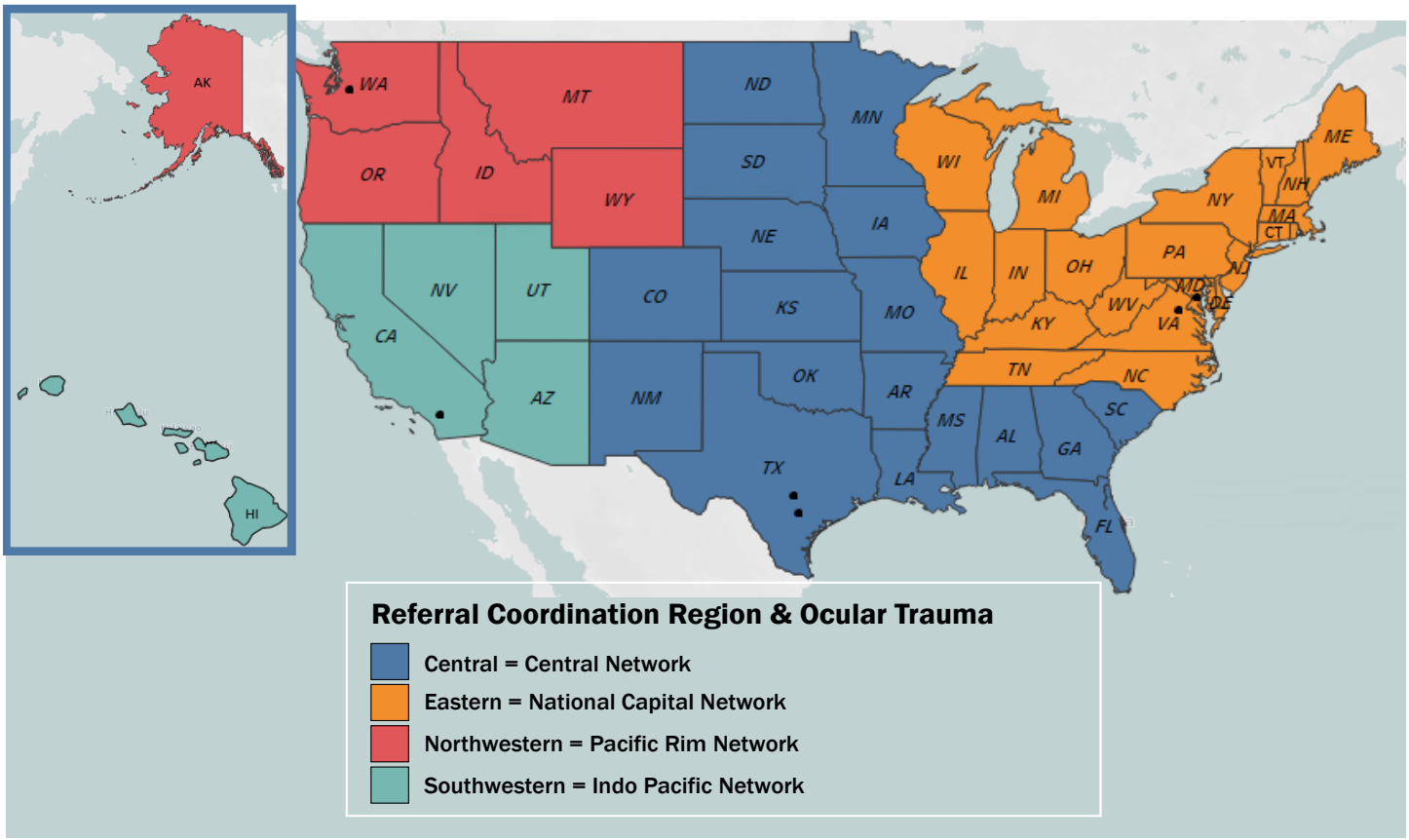
OTCs are essential to the military health system. They ensure service members, veterans and covered beneficiaries receive timely and effective care for eye injuries. These centers work with the Vision Center of Excellence to:

- **Standardize Care Protocols:** Develop and implement best practices for treating ocular trauma
- **Conduct Research:** Advance knowledge in the prevention, treatment, and rehabilitation of eye injuries
- **Support Training:** Provide education and training for military ophthalmologists and optometrists
- **Facilitate Continuity of Care:** Ensure smooth transitions for patients moving between DoD, VA health systems, and between regions

Impact on Vision Health

The centers play a critical role in the treatment, rehabilitation, and recovery of service members and veterans who sustain ocular trauma, particularly in operational environments. Through cutting-edge technology and evidence-based practices, the centers deliver world class care that is tailored to the unique needs of each patient. The OTCs are at the forefront of ocular trauma research. The studies are conducted to better understand the mechanisms of eye injuries and to develop new prevention, treatment, and rehabilitation strategies. MHS Ocular Trauma Centers prioritize collaboration with other healthcare providers, academic institutions, and industry partners to advance the field of ocular trauma care. The commitment to specialized care set the standard for excellence, ensuring the best possible outcomes to patients within the DoD and VA systems.

Vision Care Services Coordinator Referral Regional Map Ocular Trauma Centers

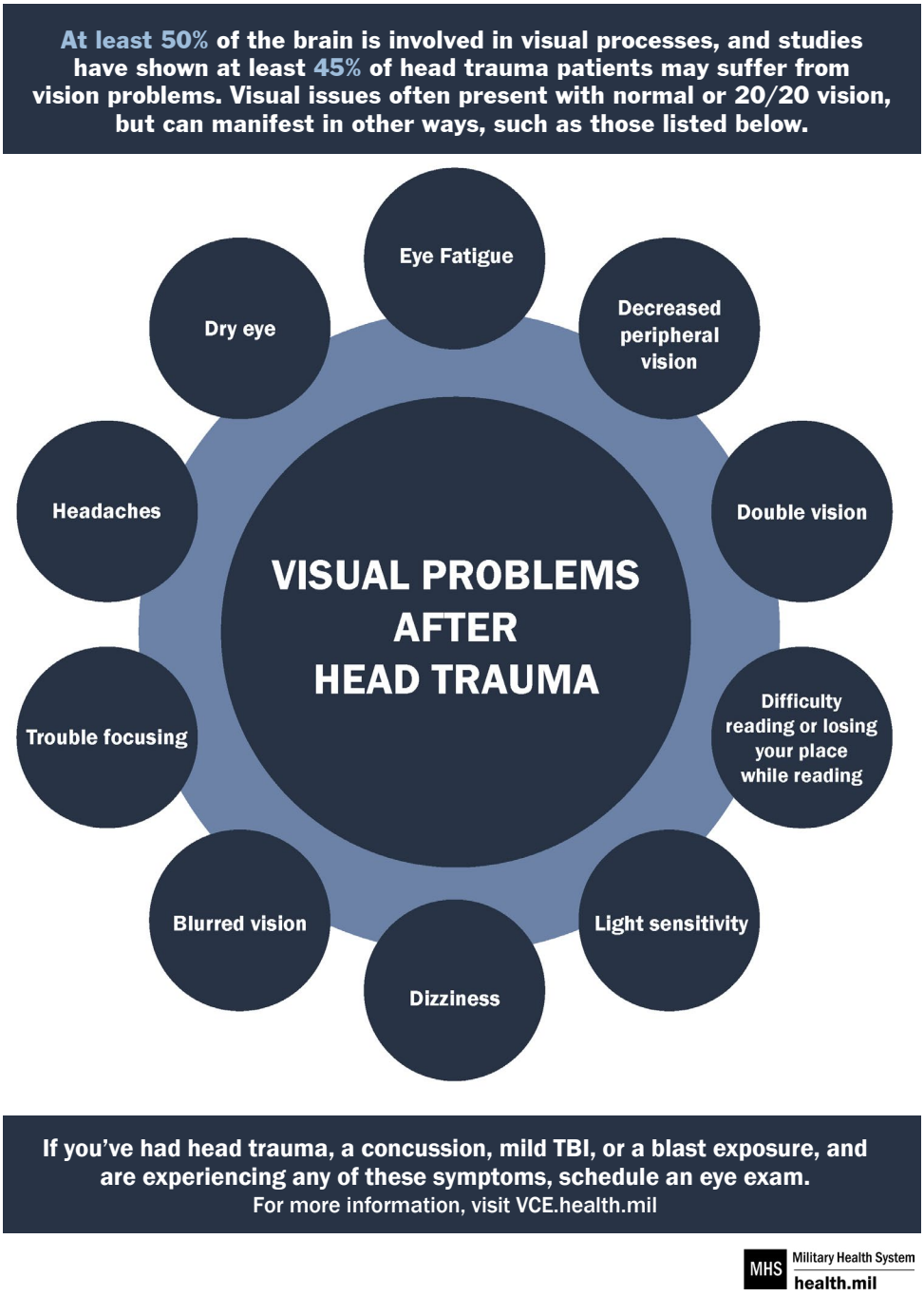


Vision Center of Excellence. "Vision Care Services Coordinator Referral Regional Map". DHA SharePoint. 2025 [Restricted access]

Defense and Veterans Eye Injury and Vision Registry (DVEIVR)

The DVEIVR program was established as part of the National Defense Authorization Act (NDAA) in 2008 (P.L.110-181, Section 1623). This legislation mandated the creation of the VCE to improve care for service members and veterans with eye injuries and vision problems, as well as a joint registry for ocular injuries. The VCE created DVEIVR to collect and analyze data from the DoD and the VA. This registry tracks eye injuries and vision

conditions over time. It gives healthcare providers, researchers, and policymakers the information they need to improve vision care.



Vision Center of Excellence. "Visual Problems After Head Trauma". DHA SharePoint. 2025 [Restricted access]

The NDAA Quarterly Report was mandated as part of DVEIVRs inception. These reports are intended to provide updates on the progress of the VCE and the DVEIVR program, ensuring transparency and accountability in the use of federal funding for vision research and care. The quarterly report provides DVEIVR identifiers for VA patients in three categories: significant injury; low vision at 20/200 or less; and visual field loss. This provision ensures continuity of care and visual rehabilitation benefits for eligible patients, transitioning to the VA.

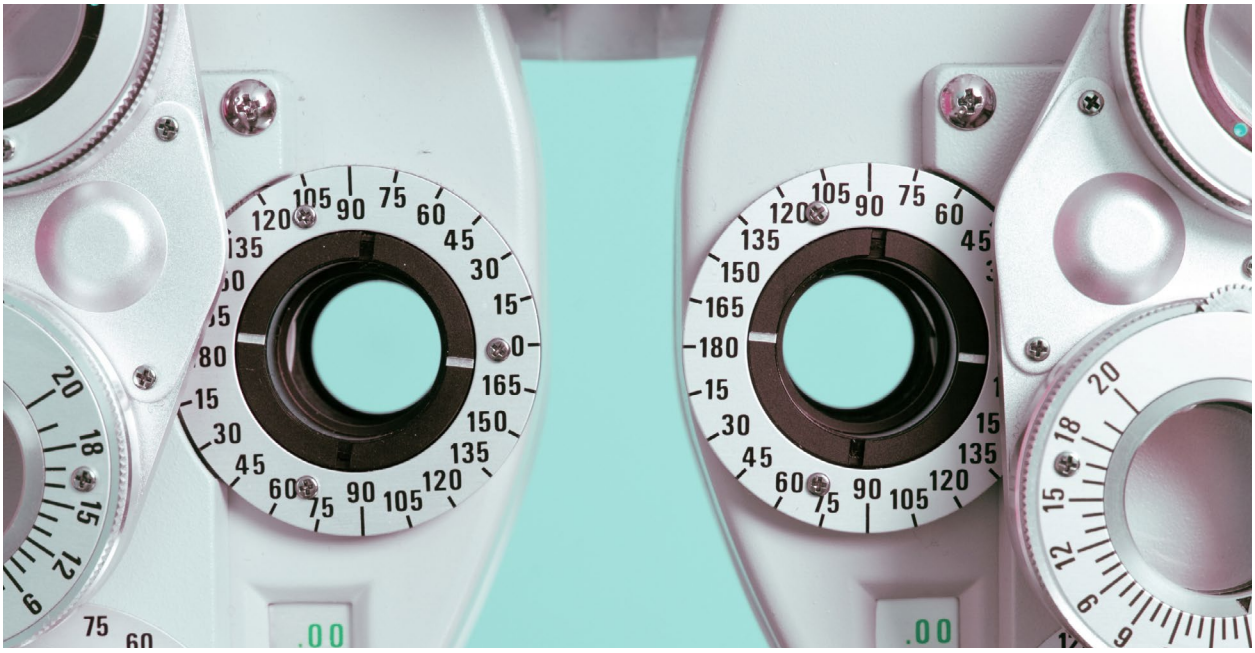
DVEIVR supports the VCE's mission to improve vision health, optimize warfighter readiness, and enhance quality of life for service members and veterans. The registry tracks how often eye injuries happen, how they are treated, and what the outcomes are. This data helps identify trends and gaps in care. It also supports collaboration between the DoD and VA, ensuring patients receive seamless care as they move between these systems. DVEIVR also advances research on preventing, diagnosing, treating, and rehabilitating eye injuries and vision problems, including vision issues caused by TBI.

Vision Center of Excellence. "Oculomotor Screening Saccades". DHA SharePoint. 2025 [Restricted access]

Residency Research Partnership Program (RRPP)

The VCE's Residency Research Partnership Program (RRPP) is an initiative designed to support and enhance research opportunities for ophthalmology and optometry residents within the MHS. The program's directive is to identify and bridge gaps in research resources, mentorship, and infrastructure, allowing residents to conduct high quality research that contributes to advancements in military medicine and patient care. The VCE stood up the RRPP to invest in our future clinician-researchers in the field of eye care.

Key features of the RRPP include collaborative research opportunities, skill development, mentorship, and positive impacts to healthcare. The program prepares the residents for leadership roles in academic medicine or research focused careers, by enhancing the necessary skills needed in research and career advancement. For institutions, RRPP strengthens the partnership between residency programs and research organizations, while promoting innovation and evidence-based practices within a healthcare system.



Vision Center of Excellence. “Phoroptor”. Getty Images. 2025

The collaboration with the VCE allows residents to study patient outcomes after traumatic eye injuries. Residents can analyze data from DVEIVR to identify trends, improve protocols and contribute to the development of new guidelines.

Collaborative Research and Surveillance Efforts: Advancing Vision Health

RAND/VCE Project: Cost-Benefit Analysis of Comprehensive Military Eye Examination Policies

The VCE partnered with the RAND National Security Research Division to study the costs and benefits of implementing comprehensive military eye examination policies. Currently, there is no policy for periodic comprehensive eye exams for service members. Service members face unique risks, including exposure to hazards such as TBIs and direct ocular damage, which increase the likelihood of undiagnosed visual disorders.

This study modeled the costs and benefits of adding comprehensive periodic eye exams to existing basic acuity screening policies. Comprehensive eye exams would allow for earlier detection and treatment of visual disorders, improving visual fitness and readiness. The findings provide valuable insights into how enhanced eye examination policies could improve military health and operational effectiveness.

VCE and CDC Vision and Eye Health Surveillance System (VEHSS) Collaboration

The VCE collaborated with the CDC to include military health data in VEHSS. VEHSS is a publicly available resource that provides estimates of the population prevalence of vision loss, eye disorders, and the receipt of eye care services. It aggregates data from multiple sources, including Medicare, Medicaid, private insurance claims, the Intelligent Research in Sight (IRIS) Registry, and national surveys.

Through this partnership, VCE contributed vision health data from the Military Health System (MHS) to the VEHSS. This ensures that military health beneficiaries are represented in this national surveillance effort. The collaboration enhances understanding of vision health trends and disparities, supporting efforts to improve eye care services for service members, veterans, and the broader population. The addition of MHS ocular data in the VEHSS provides researchers, clinicians, policy makers, and patients a better understanding of the scope of vision loss and eye care services in the United States.

Frequency of Oculomotor Dysfunction in Symptomatic Mild Traumatic Brain Injury (FOCUS mTBI)

The FOCUS mTBI study is a two-year, multi-site observational project led by the VCE. This study aims to assess the prevalence and types of oculomotor dysfunction among U.S. military service members who have experienced concussive symptoms following mild traumatic brain injury (mTBI). Using standardized valuations, the investigation compares affected individuals with non-concussed controls to identify patterns and impacts of oculomotor dysfunction.

The findings from the FOCUS mTBI study will have far-reaching implications for military health care, such as enhanced screening and treatment, improved quality of life after injury, and increased operational readiness.

As the lead organization for this study, the Vision Center of Excellence continues to advance research and innovation in vision health. The FOCUS mTBI study reflects the VCE's commitment to addressing the unique challenges faced by military personnel and improving outcomes for those impacted by brain injuries.

Multisensory Effects of Mild and Moderate Traumatic Brain Injury (m/MTBI) (MUST)

The VCE is leading a collaborative research study titled, Multisensory Effects of Mild and Moderate TBI in Service Members, in partnership with the Hearing Center of Excellence (HCE) and the Traumatic Brain Injury Center of Excellence (TBICoE). This study focuses on understanding how mild and moderate TBI affects vision, hearing, balance, and cognitive function in service members.

The primary goal of the MUST study is to improve interdisciplinary TBI management by examining the multisensory effects of TBI. The VCE aims to provide insights into effective treatment strategies, ensure support readiness, and advance proactive treatment for TBI related sensory and cognitive dysfunctions.

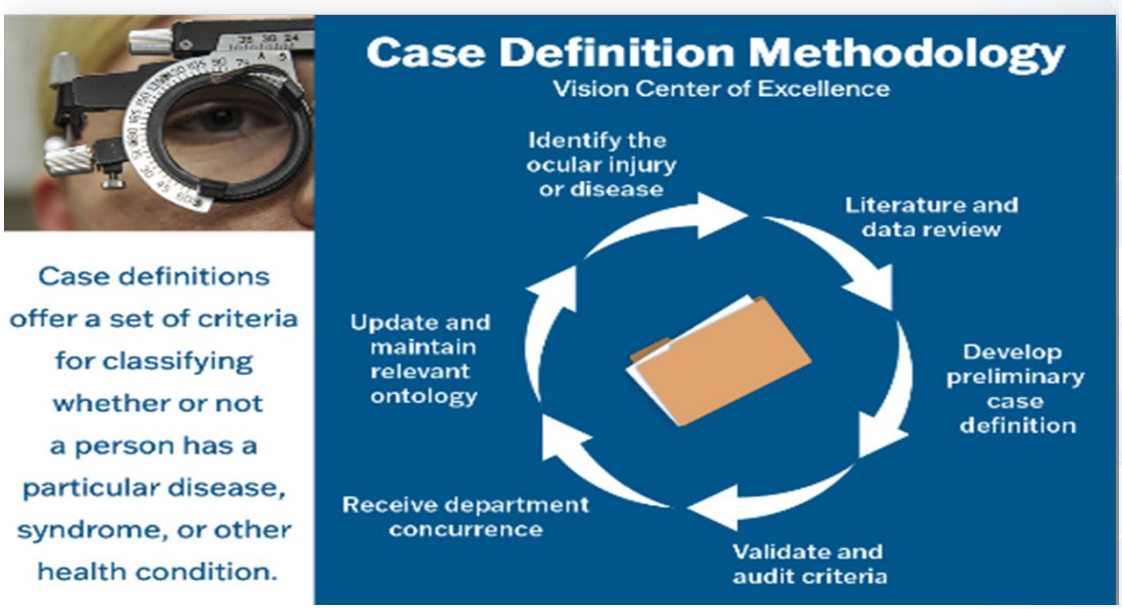
The findings from this study will contribute to improving the health and readiness of service members impacted by TBI. By addressing the complex interactions between vision, hearing, balance, and cognitive function, the MUST study supports the mission of the Military Health System to deliver high-quality care and enhance operational effectiveness.

Publications

Atraumatic Rhegmatogenous Retinal Detachment: Epidemiology and Association with Refractive Error in U.S. Armed Forces Service Members[4]

This study examines the incidence, refractive error (RE) association, and distribution of atraumatic rhegmatogenous retinal detachment (RRD) among service members, between 2017 and 2022. RE refers to common vision conditions (i.e. myopia and astigmatism) where the eye cannot properly focus light into the retina, resulting in blurred vision. RRD is a serious eye condition where the retina separates from the underlying tissue due to a tear or hole, allowing fluid to accumulate and disrupt retinal function. RDD is often associated with aging and trauma, and can lead to vision loss without prompt intervention.

The primary goal is to assess the incidence of RRD in service members, versus other populations and between genders and age groups. The study concluded that the incidence of RRD in U.S. SMs is comparable to findings in other populations and is consistent across genders. The strong association between RRD and refractive error, particularly myopia, highlights the importance of monitoring visual health in SMs. These findings provide valuable insights into the epidemiology of RRD and its relationship with refractive error, supporting efforts to enhance vision readiness and care for military personnel.



Vision Center of Excellence. "Case Definition Methodology". DHA SharePoint. 2025 [Restricted access]

Behavioral Health Status After Globe Removal in U.S. Service Members[6]

This study explores the psychological and emotional impact of globe removal (enucleation) on U.S. service members. Globe removal is a surgical procedure performed to remove a severely damaged or diseased eye, often a result of combat-related injuries

or trauma. While the physical aspects of recovery are well-documented, this research focuses on the behavioral health outcomes and challenges faced by service members following this life-altering procedure.

The primary goal of this study is to assess the behavioral health status of service members after globe removal and identify factors that influence their psychological well-being. By understanding the emotional and mental health challenges associated with this procedure, the study aims to inform clinical practices and improve support systems for affected individuals.

This research highlights the need for comprehensive care strategies to support service members recovering from globe removal. By addressing the behavioral health challenges associated with this procedure, the study contributes to improving overall health, readiness, and quality of life for affected individuals.

Conferences and Meetings

Military Health System Research Symposium (MHSRS): August 2025

At the Military Health System Research Symposium (MHSRS) in August 2025, a poster presentation titled *Compositional Analysis of Ocular Foreign Bodies Obtained Within the Military Health System*[7] showcased research aimed at improving the diagnosis, treatment, and outcomes of ocular trauma cases. This study analyzed the composition of foreign bodies removed from the eyes of service members and veterans treated within the Military Health System (MHS).

Also presented was the poster, *Long-Term Outcomes in Open Globe Injuries with Delayed Removal of Retained Intraocular Foreign Bodies*[8], which examines the clinical and visual outcomes of patients who sustained open globe injuries with retained intraocular foreign bodies (IOFBs) and underwent delayed surgical removal. The study focuses on the impact of delayed intervention on visual acuity, ocular health, and complications such as infection or inflammation.

The research underscores the importance of individualized treatment plans and provides valuable insights for military and civilian ophthalmologists managing complex ocular trauma cases. The presentation at MHSRS reflects the Military Health System's commitment to advancing vision care and readiness for service members and veterans. By addressing the unique challenges of ocular trauma, this research contributes to improving the quality of care and enhancing operational effectiveness in military populations.

State of the Science Symposium (April 2025)

In April 2025, the VCE collaborated with the Center of Health Services Research (CHSR) and the Uniformed Services University of the Health Sciences (USUHS) to secure access to the Academic Research Cloud (ARC) platform. This accomplishment represents

a significant step forward in advancing research capabilities for military health professionals, particularly residents conducting vision-related research projects.

The ARC platform is a cutting-edge research tool designed to facilitate data analysis, collaboration, and innovation in academic and clinical research. It integrates advanced Artificial Intelligence (AI) tools, enabling researchers to process large datasets, identify patterns, and generate insights with greater efficiency and accuracy. By leveraging ARC, researchers can access secure, cloud-based resources to conduct high-quality studies that address complex health challenges.

The integration of ARC into vision-related research projects demonstrates the Vision Center of Excellence's commitment to advancing the state of the science in military health care. By providing access to cutting-edge tools and fostering collaboration, this initiative supports the development of evidence-based practices that improve health outcomes for service members and veterans.

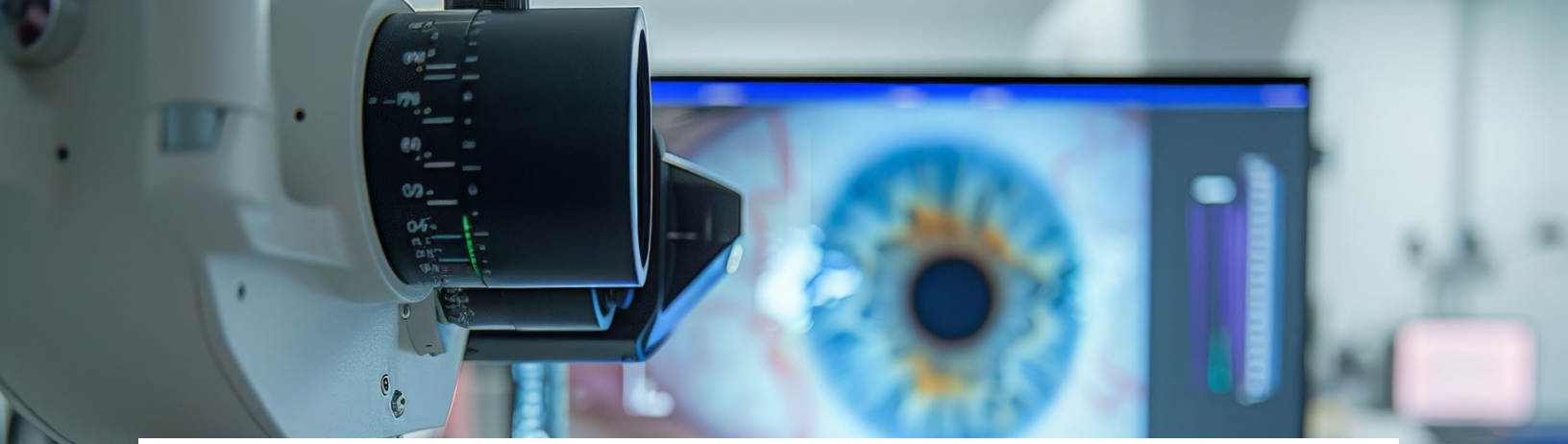
The success of this collaboration opens the door for expanded use of ARC across other research projects within the DoD and VA. The Vision Center of Excellence plans to continue working with CHSR, USUHS, and other partners to leverage ARC's capabilities for addressing critical gaps in vision health research and care.

Ongoing Residency Research Partnership Projects

The VCE supports multiple research projects through the Residency Research Partnership Program. These projects address critical gaps in vision health research and provide residents with valuable research experience that contributes to advancements in military medicine and improvement in patient outcomes. The following studies are currently underway or recently completed:

Retinal Vascular Events Epidemiology
This study identifies risk factors in U.S. Armed Forces members that predispose them to retinal vascular events, including branch retinal vein occlusion (BRVO), central retinal vein occlusion (CRVO), branch retinal artery occlusion (BRAO), and central retinal artery occlusion (CRAO). While many risk factors for these conditions have been identified in civilian populations, they have not been evaluated specifically in the military community. This research will help assess whether military service may alter the course of these disease processes and identify unique risk factors in deployed populations.

Retinal Holes and Vitreoretinal Tufts Study
This project examines the relationship between retinal holes, vitreoretinal tufts, and the risk of retinal detachment in service members. The study focuses on the incidence, causes, and visual outcomes of retinal detachment in military populations. By analyzing data from the DVEIVR, researchers aim to identify risk factors and improve prognostic outcomes to support better career outcomes for service members.



Ocular Complications of Autoimmune Diseases
This retrospective study provides insights into the epidemiology and impact of ocular disorders associated with autoimmune diseases in service members and beneficiaries, including both children and adults. The research examines clinical and demographic characteristics of patients with these conditions and evaluates treatment outcomes and quality of life. The findings may help develop more effective prevention and treatment strategies.

Central Serous Chorioretinopathy Research
Central serous chorioretinopathy (CSCR) affects central visual function and can produce blurred or distorted vision that impacts military duties. This study examines the epidemiology of CSCR in military populations, including incidents and recurrent diagnoses. The research aims to provide evidence-based clinical practice guidelines and improve visual outcomes for patients with this condition.

OCT Analysis Using Machine Learning in mTBI Patients
This innovative study explores the use of artificial intelligence (AI) and machine learning (ML) to analyze optical coherence tomography (OCT) images for detecting mild and severe traumatic brain injury (TBI). Given the visual involvement of TBIs and the need for new diagnostic technologies, researchers are investigating the utility of OCT biomarkers in association with local and systemic changes for TBI detection.

Open Globe Injuries Study
This research analyzes open globe injuries using data from DVEIVR to describe their causes, injury mechanisms, timing of surgical repair, long-term visual acuity, and follow-up care. The study focuses on clinical outcomes of patients with delayed removal of retained foreign bodies, providing valuable insights for improving treatment protocols.

Eye Injury Epidemiology During COVID-19
This study assesses the impact of the COVID-19 pandemic on ocular injury rates in U.S. Armed Forces members from 2016 to 2021. The research examines changes in injury patterns related to altered outdoor activities, sports, and training during the pandemic period.

Intraocular Foreign Bodies Analysis
This project covers foreign body (FB) analysis performed at the Joint Pathology Center from 2014 through 2024. The study examines compositional data, contributing facilities, injury types, and ophthalmic outcomes. The research aims to determine how FB compositional data impacts medical management and treatment decisions.

Brain Tissue Project
This multi-aim study identifies post-mortem molecular and cellular changes in the visual pathway in patients with mild and moderate TBI. The research correlates structural abnormalities with clinical visual dysfunction symptoms and examines neurotransmitter-related gene expression in the visual cortex.

Glaucoma Suspects Conversion Rate Study
This research estimates the overall conversion rate and average time to conversion from glaucoma suspect to diagnosed glaucoma. The study evaluates patient characteristics associated with glaucoma conversion and explores whether prolonged clinical stability can inform surveillance protocols.

Allergy Immunotherapy (AIT) Ocular Symptoms Study
This study evaluates the effectiveness of allergy immunotherapy in reducing ocular symptoms in patients with allergic rhinitis. The research examines the impact on healthcare utilization, medication costs, and ophthalmology visit frequency.

Ocular Pain Research
This retrospective study examines ocular pain following severe eye trauma, comparing pain outcomes based on injury type and timing of enucleation. The research analyzes pain patterns across different trauma categories and compares outcomes between primary and delayed enucleation.

MISSION SUPPORT

Management Administrative Team

The Management Administrative Team provides comprehensive financial analysis, management analysis, business administration, and executive administrative support services to the VCE. The team's capabilities encompass drafting senior-level documentation, briefings, and congressional responses; handling day-to-day operations; providing Defense Travel System (DTS) and procurement support; managing in and out-processing and relocation for staff members; maintaining reception services; and executing task management for the VCE. The team also serves as the liaisons for the Public Affairs Office/Operations Security, facilities, finance, human resources, legal, and records management functions.

Throughout FY2025, the Management Administrative Team achieved significant accomplishments. The most recent actions include extensive process improvement activities, resulting in VCE's Publication Catalog and an enhanced Operational Desk Manual with updated SOPs for visitor requirements, travel, and staff support. They developed enhanced shelter-in-place and active shooter guidelines for the VCE WRNMMC office, provided support for VCE's Fifth (5th) Annual Research and Industry Day, and spearheaded team-building initiatives, such as the field trip to the National Museum of Health and Medicine and a recognition process for contract staff members. The Team has also successfully collaborated with the SSMC1 building Facilities Management to acquire surplus office supplies at no cost.

The Management Team has earned an "Excellent" score with 100% compliance on the DHA Records Management Self Evaluation. They ensured the proper filing of all Public Affairs Office approved artifacts. The DHA Biennial Records Management Evaluation has also resulted in a "Excellent" rating, from managing contract transitions and providing subject matter expertise for various organizational documents and procedures. This team has also successfully completed 325 taskers, achieving a 100% completion rate. All taskers assigned to the VCE were completed either on time or ahead of schedule. These comprehensive efforts have enhanced operational efficiency, ensured regulatory compliance, and fostered a more engaged workforce while supporting VCE's mission to advance care throughout the MHS.

Functional Management Team (FMT)

The Functional Management Team (FMT) plays a vital role in advancing the VCE mission by providing expert information management, project support, and operational oversight. FMT supports the Informatics and Information Management Program (I&IM) through project planning, configuration and change management, standard operating procedure (SOP) development, quality assurance, risk management, requirements management, and Defense Health Agency (DHA) governance planning. The team ensures alignment with DoD and VA standards, facilitating seamless integration and regulatory compliance.

FMT fosters expertise by identifying, drafting, and refining requirements for VCE projects. They facilitate stakeholder workgroups, assist with data requests, and serve as functional experts for business architecture documentation. Collaborating closely with the VCE Data Team, FMT ensures metrics-gathering guidelines follow best practices and maintain consistency.

In fiscal year 2025, FMT developed a comprehensive SOP template to standardize operations across the OTCs. They finalized the OTC Metrics Report template, incorporating updated performance measures, and created the Referral Management Plan Guideline to streamline provider workflows using Service-Related Groups (SRGs). FMT also spearheaded the IRMAC Process Management Plan, improving referral workflows, and conducting gap analyses to address healthcare coordinators' needs.

FMT was instrumental in designing and coding Patient Reported Outcomes Questionnaires into the clinical assessment management portal (CAMP) system. After piloting the questionnaires at Walter Reed OTC, they analyzed data and prepared for broader implementation. Additionally, FMT supports the Human Research Protection Program (HRPP), tracking collaborative institutional training initiative (CITI) requirements, assisting with institutional review board (IRB) applications, and achieving approval for VCE's first multi-site protocol.

Ongoing projects include enhancing Vision Care Service Coordinator (VCSC) Referral Management integration into Genesis, developing an Ocular Research Dashboard, and ensuring DHA Governance Compliance. FMT's expertise in governance, data analysis, and process improvement ensures VCE remains a leader in advancing vision care and research for service members and veterans.

Program Management Office (PMO)

The Program Management Office (PMO) is an essential part of the VCE, comprised of specialized roles that provide programmatic and operational support. They ensure the successful execution of VCE initiatives while driving efficiency and innovation.

The PMO made significant contributions to DVEIVR throughout fiscal year 2025. They drafted the DVEIVR Validation Report to address official inquiries, prepared Digital Health Portfolio Review slides to define reported risks, and collaborated with external technical teams to provide budget and scheduling data. The team also managed the project to create the Introduction to DVEIVR Reports Video, enhancing accessibility and understanding of registry data. Additionally, they spearheaded the DVEIVR Reporting Overhaul Project to improve usability and provide researchers with enhanced ocular data. The PMO remediated the DVEIVR dictionary, quick reference guide, and reports, ensuring compliance with Executive Orders and coordinating final tasks with external teams.

Beyond DVEIVR, the PMO provided program-level support by preparing Strategic Resource Review Board (SRRB) slides to outline VCE contract requirements and developing Sustainment Findings Briefing materials integrated into VCE's Project Framework. They created Research and Engineering (R&E) Programmatic Review slides for all VCE programs and collaborated on quarterly metrics reports. The team also initiated the development of VCE branding and a style guide to enhance marketing materials and organizational consistency.

Their extensive contribution to project-level support includes coordinating VCE's participation in the Vision and TBI Awareness event, remapping Eye Injury Event data, and managing Sustainment Reviews for Abstractor Computer-Based Training. They have successfully planned and executed SharePoint Online migration, rebuilding websites, testing functions, and conducting training sessions for VCE teams.

Ongoing projects include the Ocular Research Dashboard Project, which aims to create a repository of ongoing research topics. PMO continues to deliver exceptional service, meeting all goals while advancing VCE's mission to improve vision care and research for service members and veterans.

Data Management Team

The VCE Data Team plays a pivotal role in managing the DVEIVR database. Comprising three data scientists and one data architect, the team develops Extract, Transform, Load (ETL) processes and algorithms to ingest data from multiple sources, ensuring data quality and alignment with research objectives. They create dashboards to help end users identify patterns and trends, supporting evidence-based decision-making and informing Planning, Programming, Budgeting, and Execution (PPBE) processes.

The team has made significant contributions to DVEIVR, including delivering key reports and datasets. They provided the Eye Injury Report to the U.S. Army Institute of Surgical Research, documenting visual acuity outcomes for over 2,000 patients, and the Evacuated Service Members Dataset, detailing medical treatment for evacuated personnel. They submitted the Open Globe Injuries Report to the WRNMMC Ocular Trauma Center, the largest reported series of military open globe injuries, and prepared a technical report on visual dysfunction associated with TBI for the United Kingdom military ophthalmology consultant as part of a DoD-UK partnership.

The Data Team also supports clinical and research initiatives, such as delivering datasets for a VA/DoD pilot program on low vision rehabilitation, providing patient lists for mTBI Optical Coherence Tomography (OCT) research, and supplying data for a retinal detachment study at WRNMMC. Additionally, they published Military Health System (MHS) ocular data on the CDC Vision and Eye Health Surveillance System (VEHSS) website and collaborated with Harvard Medical School researchers on combat-related ocular trauma.

Ongoing efforts include OTC metrics analysis, dashboard usability improvements, and preparation of the 2025 MHS Vision Report, Low Vision Report, and Military Ocular Injury Report. The team is also supporting the DVEIVR server upgrade and user interface enhancements. Their work ensures high-quality data is available to inform research, clinical care, and policy decisions, ultimately improving vision health outcomes and enhancing military readiness.

Epidemiology Team

The VCE Epidemiology Team provides technical expertise in epidemiology and disease surveillance to investigate ocular trauma, vision-threatening conditions, and other scientific areas affecting U.S. military and veteran populations. By conducting epidemiological studies, the team estimates the burden, trends, costs, and risk factors associated with ocular injuries and conditions, informing clinical practice and supporting VCE's mission to prevent and mitigate the adverse effects of vision injuries.

The team's expertise spans public health, epidemiology, biochemistry, environmental health, scientific writing, and project management. Collaborating with clinicians and other VCE teams, they aim to improve vision health and enhance the quality of life for service members and veterans.

In fiscal year 2025, the team achieved several key accomplishments. They conducted an analysis of behavioral health outcomes following eye globe removal in active-duty service members, providing critical insights into the psychological and physical challenges faced by affected individuals. For a study on Central Serous Chorioretinopathy (CSCR), they completed lag time analyses and estimated preliminary incidence rates, contributing to the understanding of CSCR burden and progression in military populations. Additionally, the team supported the Residency Research Partnership Program (RRPP) by providing analytical and study design recommendations, facilitating high-quality research projects.

Ongoing projects include a study on uveitis and autoimmune diseases among TRICARE beneficiaries, with two planned manuscripts examining disease burden and associations between diagnoses. The team is also updating a descriptive analysis comparing ocular trauma injuries before, during, and after the COVID-19 pandemic, testing for statistically significant differences across time periods. Collaborative efforts with subject matter experts (SMEs), RRPP residents, and clinicians ensure high-quality research that advances the state of the science in vision health and supports improved clinical practices.

Data Abstraction Support Services

The Data Abstraction Team is integral to DVEIVR, ensuring high-quality abstraction of ophthalmic and visual information to support evidence-based care and research. The team conducts quality reviews, audits, and training services to maintain the accuracy and relevance of DVEIVR data for its users. They collaborate with the VCE to design reports, improve data integration, and track eye-related injuries and diseases, enabling advanced analysis and clinical research. The team identifies and evaluates ophthalmic and vision encounters for relevancy, refines business rules to translate data into user-friendly formats, and develops tailored reporting solutions for the DoD and VA eye care communities. Additionally, they provide training on data abstraction processes to enhance user proficiency and ensure consistency across the system. As active participants in VCE working groups, such as the Data Management Working Group (DMWG), the team supports the collection, interpretation, and utilization of DVEIVR data to advance vision care and research for service members and veterans. Their efforts ensure the registry remains a robust resource for improving clinical practices and driving innovation in ocular health.

Vision Care Service Coordinators (VCSC)

The Vision Care Service Coordination (VCSC) Program ensures service members, veterans, and their families have seamless access to advanced eye and vision care. Operating at four Ocular Trauma Centers (OTCs), the program coordinates care across DoD Military Treatment Facilities, Veterans Administration (VA) facilities, the TRICARE network, and community organizations. By identifying and removing barriers to care, the VCSC team, composed of highly skilled registered nurses specializing in care coordination and case management, improves vision health and enhances quality of life for patients.

In fiscal year 2025, the VCSC Program achieved several milestones to improve vision care. The program enhanced continuity of care through consistent case management at all OTCs and expanded surgical opportunities for DoD providers by coordinating VA referrals at Madigan Army Medical Center and Naval Medical Center San Diego. A civilian trauma monitoring process was established at Brooke Army Medical Center and Wilford Hall Ambulatory Surgical Center, ensuring better oversight of civilian trauma patients. Ophthalmology trauma consultations were made available in all four regions, with the newest addition at Madigan Army Medical Center. Outreach efforts engaged diverse audiences, including participants at key conferences and stakeholders such as Navy Wounded Warrior Foundation case managers, the Braille Institute, and TRICARE.

The VCSC team participated in the VCE Vision Care Service Coordination Annual Workshop at the Long Beach, California VA Blind Rehabilitation Facility, focusing on strategic planning, collaboration, and identifying opportunities to enhance services. The visit strengthened partnerships and provided insights to inform future initiatives aimed at improving care coordination and accessibility.

Ongoing projects include piloting telehealth referral systems for DoD retirees to access VA blindness services, referring DoD patients to VA low vision care, and assessing patient surgical experiences at OTCs. These initiatives aim to address gaps in care, improve patient satisfaction, and ensure better long-term vision health for service members and veterans.

Educational and Clinical Research Program Support (ECRPS) Team

The Educational and Clinical Research Program Support (ECRPS) Team supports the VCE in the advancement of ophthalmic and vision-related education, training and readiness throughout the MHS. The team coordinates the development and production of eLearning and multimedia products and services. Empaneled at Walter Reed National Medical Center in Bethesda, Maryland, ECRPS is multifunctional, comprised of medical doctors, low vision and research specialists, technical writers, graphic developers, a biostatistician, and a program manager.

ECRPS achieved significant milestones in fiscal year 2025, advancing vision care, research and education. They participated in the publication of the *Expeditionary Eye Care Manual* (5th Edition, 2025)[9] with chapter revisions, medication and procedural cross references, adding a new appendices section and including critical documentation. The team supported key training and educational initiatives, providing administrative and logistical support for the Tri-Service Ocular Trauma Skills Laboratory, an annual training program for military ophthalmologists and optometrists. Additionally, the team managed the AI in Eyecare Research and Industry Conference and facilitated the accreditation of nine continuing education hours for the Visual Dysfunction Following TBI course on JKO.

Their participation in the Ocular Trauma and Vision Readiness Video Teleconferences also provided stakeholders with continuing education credits.

ECRPS' support of FOCUS mTBI led to clinician certification workshops, the drafting of manual procedures, coordinating the eIRB process across nine sites, and patient recruitment at Walter Reed. The team played a pivotal role in the RRPP by supporting over 10 active projects in FY2025, assisting residents with project planning, data analysis, manuscript drafting, and conference poster creation. These efforts reflect the ECRPS Team's commitment to advancing the mission in vision care and research for service members, veterans, and their families.

LOOKING AHEAD: ADVANCING VISION HEALTH AND READINESS

The VCE remains steadfast in its mission to improve vision health, optimize warfighter readiness, and enhance the quality of life for service members, veterans, and their families. Throughout FY2025, the VCE has achieved significant milestones across its core areas of research, data management, clinical practice support, and education. These accomplishments reflect the dedication and expertise of the VCE's teams, including the Epidemiology Team, Data Team, mission support staff, and leadership, all working collaboratively to address the unique challenges of ocular health within the military and Veteran communities.

The VCE has supported groundbreaking research projects, such as studies on retinal vascular events, ocular trauma, and the integration of machine learning in detecting TBI-related visual dysfunction. These efforts continue to push the boundaries of innovation in vision care and research.

The VCE's commitment to collaboration has been evident in its partnerships with organizations such as the Defense Health Agency, the Department of Veterans Affairs, and international stakeholders like the UK Joint Ocular Trauma Task Group. These partnerships have strengthened the VCE's ability to address complex challenges, from combat-related eye injuries to the long-term effects of systemic diseases on vision.

Vision Center of Excellence. Ophthalmology puts the ‘eye’ in readiness. DHA SharePoint. 2017. [Restricted access]

Looking ahead, the VCE is focused on expanding its research capabilities, enhancing data accessibility through initiatives like the DVEIVR Reporting Overhaul Project, and fostering interdisciplinary collaboration to address emerging needs. By leveraging cutting-edge technologies, evidence-based practices, and the expertise of its dedicated teams, the VCE will continue to shape the future of vision health for the military and Veteran communities.

As we close this year, the VCE reaffirms its unwavering dedication to supporting the readiness, resilience, and well-being of those who serve. The accomplishments highlighted in this report are a testament to the VCE’s commitment to excellence and its vision for a future where every service member and veteran has access to world-class ocular health care.

APPENDIX: SUPPORTING DATA AND RESOURCES

ACRONYM	FULL FORM
ADSM	ACTIVE DUTY SERVICE MEMBER
AI	ARTIFICIAL INTELLIGENCE
AIT	ALLERGY IMMUNOTHERAPY
ARC	ACADEMIC RESEARCH CLOUD
ATAMMC	ALEXANDER T. AUGUSTA MILITARY MEDICAL CENTER
BAMC	BROOKE ARMY MEDICAL CENTER
BRAO	BRANCH RETINAL ARTERY OCCLUSION
BRVO	BRANCH RETINAL VEIN OCCLUSION
CAMP	CLINICAL ASSESSMENT MANAGEMENT PORTAL
CAPT	CAPTAIN
CDC	CENTER OF DISEASE CONTROL AND PREVENTION
CITI	COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE
CPG	CLINICAL PRACTICE GUIDELINES
CPT	CURRENT PROCEDURAL TERMINOLOGY
CRAO	CENTRAL RETINAL ARTERY OCCLUSION
CRVO	CENTRAL RETINAL VEIN OCCLUSION
CSCR	CENTRAL SEROUS CHORIORETINOPATHY ANALYSIS
DHA	DEFENSE HEALTH AGENCY
DoD	DEPARTMENT OF DEFENSE
DTS	DEFENSE TRAVEL SYSTEM
DVEIVR	DEFENSE AND VETERANS EYE INJURY AND VISION REGISTRY
EIDS	ENTERPRISE INTELLIGENCE AND DATA SOLUTIONS
ETL	EXTRACT, TRANSFORM, LOAD
FB	FOREIGN BODY
FMT	FUNCTIONAL MANAGEMENT TEAM
FOCUS	FREQUENCY OF OCULOMOTOR DYSFUNCTION IN SYMPTOMATIC
FY2025	FISCAL YEAR 2025
HCE	HEARING CENTER OF EXCELLENCE
HRPP	HUMAN RESEARCH PROTECTION PROGRAM
IRB	INSTITUTIONAL REVIEW BOARD

ACRONYM	FULL FORM
IRIS	INTELLIGENCE RESEARCH IN SIGHT
IRMAC	INTEGRATED REFERRAL MANAGEMENT AND APPOINTING CENTER
JKO	JOINT KNOWLEDGE ONLINE
MAMC	MADIGAN ARMY MEDICAL CENTER
MHS	MILITARY HEALTH SYSTEM
MHSRS	MILITARY HEALTH SYSTEM RESEARCH SYMPOSIUM
ML	MACHINE LEARNING
mTBI	MILD TRAUMATIC BRAIN INJURY
MTBI	MODERATE TRAUMATIC BRAIN INJURY
MTF	MILITARY TREATMENT FACILITY
MUST	MULTISENSORY EFFECTS OF m/MTBI IN SERVICE MEMBERS
NMCSD	NAVAL MEDICAL CENTER SAN DIEGO
OTC	OCULAR TRAUMA CENTER
PMO	PROGRAM MANAGEMENT OFFICE
PPBE	PLANNING, PROGRAMMING, BUDGETING, AND EXECUTION
R&E	RESEARCH AND ENGINEERING
RRD	RHEGMATOGENOUS RETINAL DETACHMENT
RRPP	RESIDENCY RESEARCH PARTNERSHIP PROGRAM
SME	SUBJECT MATTER EXPERT
SOP	STANDARD OPERATING PROCEDURE
SRG	SERVICE RELATED GROUPS
TBI	TRAUMATIC BRAIN INJURY
TBICoE	TRAUMATIC BRAIN INJURY CENTER OF EXCELLENCE
UK	UNITED KINGDOM
US	UNITED STATES OF AMERICA
VA	VETERANS AFFAIRS
VCE	VISION CENTER OF EXCELLENCE
VCSC	VISION CARE SERVICE COORDINATOR
VEHSS	VISION AND EYE HEALTH SURVEILLANCE SYSTEM
VRP	VISION RESEARCH PROGRAM
WHASC	WILFORD HALL AMBULATORY SURGICAL CENTER
WRNMMC	WALTER REED NATIONAL MILITARY MEDICAL CENTER

REFERENCES

1. Public Law 110-181, Section 1623
   National Defense Authorization Act for Fiscal Year 2008. This section establishes the Vision Center of Excellence (VCE) to improve the prevention, diagnosis, treatment, and rehabilitation of eye injuries and diseases for Service members and Veterans (pg. 4)(pg.9)

2. Eliason, D., & Gu, W. 2025. Sympathetic Ophthalmia: Epidemiology and Cohort-Based Assessment of Clinical Outcomes. British Journal of Ophthalmology (pg. 4)

3. RAND National Defense Research Institute. 2025. Cost-Benefit Analysis of Comprehensive Military Eye Examination Policies. Santa Monica, CA: RAND Corporation (pg. 4)

4. Vision Center of Excellence. 2025. Atraumatic Rhegmatogenous Retinal Detachment: Epidemiology and Association with Refractive Error in U.S. Armed Forces Members. Ophthalmic Epidemiology (pg. 4)

5. Public Law 110-181, Section 1623
   National Defense Authorization Act for Fiscal Year 2008. This section establishes the Vision Center of Excellence (VCE) to improve the prevention, diagnosis, treatment, and rehabilitation of eye injuries and diseases for Service members and Veterans (pg. 6)

6. McMurray, H., Gu, W., Millian-Morell, L., Curry, J. C., Regasa, L. E., Chou, E., & Viswanathan, M. (2025). Behavioral Health Status After Globe Removal in U.S. Service Members. American Academy of Ophthalmology, 132(9) (pg. 13)

7. Merezhinskaya, N. 2025. Compositional Analysis of Ocular Foreign Bodies Obtained Within the Military Health System [Poster Presentation]. Military Health System Research Symposium, Kissimmee, FL (pg. 15)

8. Merezhinskaya, N. 2025. Long-Term Outcomes in Open Globe Injuries with Delayed Removal of Retained Intraocular Foreign Bodies [Poster Presentation]. Military Health System Research Symposium, Kissimmee, FL (pg. 15)

9. Vision Center of Excellence. (2025). Expeditionary Eye Care Manual, Edition 2. Available on CarePoint and DHA SharePoint (pg. 24)

For more information, please scan the QR code or visit us at health.mil/VCE

Defense Health Agency
VISION CENTER OF EXCELLENCE ®

Photo Credit: © visoot/Adobe Stock, © HAKKI ARSLAN/Adobe Stock, © LK/Adobe Stock, © NicoElNino/Shutterstock
Released: January 2026 by the Vision Center of Excellence. This product is reviewed annually and is current until superseded.