FY 2024 Houston EMA/HSDA Ryan White Part A/MAI Service Definition **Vision Care** (Last Review/Approval Date: November 2021)	
HRSA Service Category Title: **RWGA Only**	**Ambulatory/Outpatient Medical Care**
Local Service Category Title:	**Vision Care**
Budget Type: **RWGA Only**	**Fee for Service**
Budget Requirements or Restrictions: **RWGA Only**	Corrective lenses are not allowable under this category. Corrective lenses may be provided under Health Insurance Assistance and/or Emergency Financial Assistance as applicable/available.
HRSA Service Category Definition (**do not change or alter**): **RWGA Only**	***Outpatient/Ambulatory medical care*** is the provision of professional diagnostic and therapeutic services rendered by a physician, physician's assistant, clinical nurse specialist, or nurse practitioner in an outpatient setting. Settings include clinics, medical offices, and mobile vans where clients generally do not stay overnight. Emergency room services are not outpatient settings. Services includes diagnostic testing, early intervention and risk assessment, preventive care and screening, practitioner examination, medical history taking, diagnosis and treatment of common physical and mental conditions, prescribing and managing medication therapy, education and counseling on health issues, well-baby care, continuing care and management of chronic conditions, and referral to and provision of specialty care (includes all medical subspecialties). *Primary medical care* for the treatment of HIV includes the provision of care that is consistent with the Public Health Service's guidelines. Such care must include access to antiretroviral and other drug therapies, including prophylaxis and treatment of opportunistic infections and combination antiretroviral therapies. HRSA policy notice 16-02 states funds awarded under Part A or Part B of the Ryan White CARE Act (Program) may be used for optometric or ophthalmic services under Primary Medical Care. Funds may also be used to purchase corrective lenses for conditions related to HIV, through either the Health Insurance Premium Assistance or Emergency Financial Assistance service categories as applicable.
Local Service Category Definition:	**Primary Care Office/Clinic Vision Care** is defined as a comprehensive examination by a qualified Optometrist or Ophthalmologist, including Eligibility Screening as necessary. A visit with a credentialed Ophthalmic Medical Assistant for any of the following is an allowable visit: • Routine and preliminary tests including Cover tests, Ishihara Color Test, NPC (Near Point of Conversion), Vision Acuity Testing, Lensometry. • Visual field testing • Glasses dispensing including fittings of glasses, visual

	acuity testing, measurement, segment height. • Fitting of contact lenses is not an allowable follow-up visit.
Target Population (age, gender, geographic, race, ethnicity, etc.):	Persons with HIV residing in the Houston EMA/HSDA.
Services to be Provided:	Services must be provided at an eye care clinic or Optometrist's office. Services must include but are not limited to external/internal eye health evaluations; refractions; dilation of the pupils; glaucoma and cataract evaluations; CMV screenings; prescriptions for eyeglasses and over the counter medications; provision of eyeglasses (contact lenses are not allowable); and referrals to other service providers (i.e. Primary Care Physicians, Ophthalmologists, etc.) for treatment of CMV, glaucoma, cataracts, etc. Agency must provide a written plan for ensuring that collaboration occurs with other providers (Primary Care Physicians, Ophthalmologists, etc.) to ensure that patients receive appropriate treatment for CMV, glaucoma, cataracts, etc.
Service Unit Definition(s): **RWGA Only**	One (1) unit of service = One (1) patient visit to the Optometrist, Ophthalmologist or Ophthalmic Assistant.
Financial Eligibility:	Refer to the RWPC's approved *Current FY Financial Eligibility for Houston EMA Services*.
Client Eligibility:	Houston EMA/HSDA resident living with HIV.
Agency Requirements:	Providers and system must be Medicaid/Medicare certified to ensure that Ryan White Program funds are the payer of last resort to the extent examinations and eyewear are covered by the State Medicaid program.
Staff Requirements:	Vendor must have on staff a Doctorate of Optometry licensed by the Texas Optometry Board as a Therapeutic Optometrist.
Special Requirements: **RWGA Only**	Vision care services must meet or exceed current U.S. Dept. of Health and Human Services (HHS) guidelines for the treatment and management of HIV as applicable to vision care

FY 2025 RWPC "How to Best Meet the Need" Decision Process

Step in Process: **Council**		Date: **06/13/2024**
Recommendations:	Approved: Y:_____ No: _____ Approved With Changes:_____	If approved with changes list changes below:
1.		
2.		
3.		

Step in Process: **Steering Committee**		Date: **06/06/2024**
Recommendations:	Approved: Y:_____ No: _____ Approved With Changes:_____	If approved with changes list changes below:
1.		
2.		
3.		

Step in Process: **Quality Improvement Committee**		Date: **05/14/2024**
Recommendations:	Approved: Y:_____ No: _____ Approved With Changes:_____	If approved with changes list changes below:
1.		
2.		
3.		

Step in Process: **HTBMTN Workgroup #1**	Date: **04/16/2024**
Recommendations:	Financial Eligibility:
1.	
2.	
3.	

FY 2020 PERFORMANCE MEASURES HIGHLIGHTS

RYAN WHITE GRANT ADMINISTRATION

HARRIS COUNTY PUBLIC HEALTH (HCPH)

TABLE OF CONTENTS

Highlights from FY 2020 Performance Measures

Measures in this report are based on the *2021-2022 Houston Ryan White Quality Management Plan*, *Appendix B. HIV Performance Measures*. The document can be referenced here: https://publichealth.harriscountytx.gov/Services-Programs/Programs/RyanWhite/Quality

Vision Care

- During FY 2020, 750 clients were diagnosed with HIV/AIDS related and general ocular disorders. Among 99 clients with follow-up appointments, 19% of clients had disorders that were either resolved or improved, while 78% of clients had disorders that remained the same.

Ryan White Part A
HIV Performance Measures
FY 2020 Report

Vision Care
All Providers

HIV Performance Measures	**FY 2020**
75% of clients with diagnosed HIV/AIDS related and general ocular disorders will resolve, improve or stay the same over time	See ocular disorder table

Clinical Chart Review Measures*	**FY 2018**	**FY 2019**
100% of vision clients will have a medical health history (initial or updated) at least once in the measurement year	100%	99%
100% of vision clients will have a vision history (initial or updated) at least once in the measurement year	100%	100%
100% of vision clients will have a comprehensive eye exam at least once in the measurement year	100%	100%

* To review the full FY 2019 chart review reports, please visit:
http://publichealth.harriscountytx.gov/Services-Programs/Programs/RyanWhite/Quality

Ocular Disorder	Number of Diagnoses	Number with Follow-up	*Improved		*Resolved		*Same		*Worsened	
			#	%	#	%	#	%	#	%
Accommodation Spasm										
Acute Retinal Necrosis										
Anisocoria	1	0								
Bacterial Retinitis										
Cataract	92	9					9	100%		
Chalazion	5	0								
Chorioretinal Scar	7	1					1	100%		
Chorioretinitis										
CMV Retinitis - Active										
CMV Retinitis - Inactive										
Conjunctivitis	64	12	6	50%	6	50%				
Covergence Excess										
Convergence Insufficiency										
Corneal Edema	1	0								
Corneal Erosion	1	0								
Corneal Foreign Body	1	1			1	100%				
Corneal Opacity	27	3					3	100%		
Corneal Ulcer	1	0								
Cotton Wool Spots										
Diabetic Retinopathy	11	1							1	100%
Dry Eye Syndrome	198	26					26	100%		
Ecchymosis										
Esotropia	1	0								
Exotropia	4	0								
Glaucoma	5	3					3	100%		
Glaucoma Suspect	37	8			1	12%	6	75%	1	12%
Iritis	6	1			1	100%				
Kaposi Sarcoma										
Keratitis	10	2			1	50%	1	50%		
Keratoconjuctivitis										
Keratoconus	2	1					1	100%		
Lagophthalmos	4	1					1	100%		
Macular Hole										
Meibomianitis	3	1					1	100%		
Molluscum Contagiosum										
Optic Atrophy	2	1					1	100%		
Papilledema	2	0								

Ocular Disorder	Number of Diagnoses	Number with Follow-up	*Improved		*Resolved		*Same		*Worsened	
			#	%	#	%	#	%	#	%
Paresis of Accommodation										
Pseudophakia	8	0								
Refractive Change/Transient	1	0								
Retinal Detachment	3	1					1	100%		
Retinal Hemorrhage	4	0								
Retinal Hole/Tear	12	0								
Retinopathy HTN	5	0								
Suspicious Optic Nervehead(s)	1	0								
Thyroid Eye Disease	1	0								
Toxoplasma Retinochoriochitis										
Visual Field Defect	3	1					1	100%		
Vitreous Degeneration	15	4					4	100%		
Other	212	22	1	5%	2	9%	18	82%	1	5%
Total	**750**	**99**	**7**	**7%**	**12**	**12%**	**77**	**78%**	**3**	**3%**

Harris County
Public Health
Building a Healthy Community

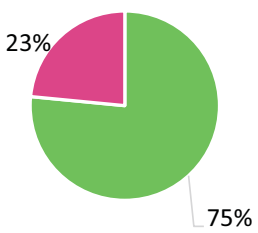
Ryan White Part A, Houston EMA FY20-21 Clinical Care Chart Review Summary of Findings

Review period was March 1, 2020 - February 28, 2021

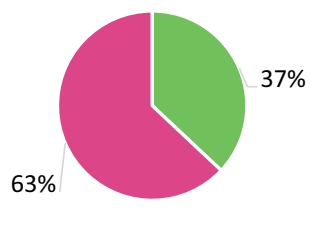
Vision Care Chart Review

- 150 charts reviewed
- Each sample was determined to be comparable to the racial, ethnic, gender and age demographics of each site's overall vision care population

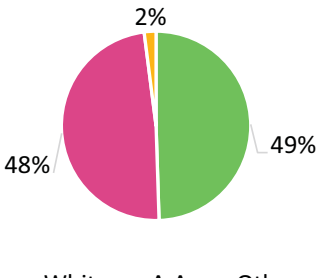
Gender



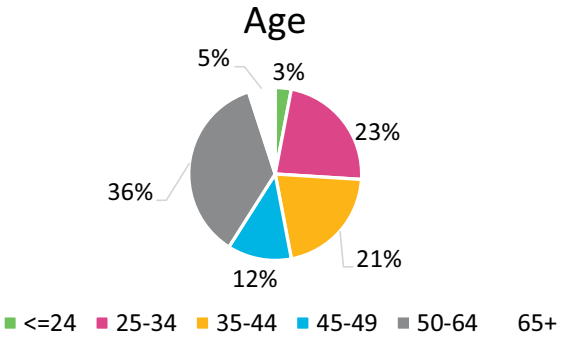
Ethnicity



Race



Age



Vision Chart Review

Performance Measure	2020
CD4 & VL	93%
Primary Care Provider	92%
Medication Allergies	91%
Medical History	91%
Current Medications	98%
Reason for Visit	98%
Ocular History	91%
Complete Eye Exam	100%
Dilated Fundus Exam	93%

Performance Measure	2020
Internal Eye Exam	100%
Diagnosis Documented	100%
Treatment Plan Documented	100%
Visual Acuity Test	100%
Refraction Test	100%
External Structures Observed	100%
Glaucoma Test	100%
Cytomegalovirus (CMV) Screening	93%

Health problems & ageing

Eye problems and HIV

Abbey Stanford | February 2023

HQuality/Shutterstock.com

Key points

- Most people living with HIV don't experience eye problems related to HIV.
- Sight problems are more likely to occur in people with very low CD4 counts.
- The most common HIV-related eye problems are HIV retinopathy, optic neuropathy, cataracts, dry eyes, infectious retinitis, and uveitis.
- The best way to prevent serious eye problems related to HIV is to take HIV treatment.

If you would like to listen to a recording of this page being read aloud, please click the link in the following section.

Can HIV affect my eyesight?

HIV can affect your eyesight, but this is much less common than it used to be thanks to effective anti-HIV treatment. However, some people with HIV will develop eye problems. These are usually caused by:

- HIV affecting the blood vessels and nerves in your eye
- opportunistic infections such as cytomegalovirus (CMV)
- medication that you're taking to treat an opportunistic infection.

You're much more likely to experience HIV-related eye problems if you have a very low CD4 count, if you're not taking HIV treatment, or if your HIV treatment isn't working properly.

The most common HIV-related eye problems are HIV retinopathy, optic neuropathy, cataracts, dry eyes, infectious retinitis, and uveitis. There is more information about these conditions on this page.

Jump to

Eye health

HIV retinopathy

HIV retinopathy is a condition where the blood vessels in your retina become damaged. This causes small haemorrhages (bleeding) and cotton wool spots (damage to the nerve cells). HIV retinopathy can affect your eyesight, but the amount of vision loss is usually small. You might not notice these changes in your eyes. They are more commonly found during an eye test.

What causes HIV retinopathy?

It's not always known for sure why the blood vessels in your eye become damaged. It's thought it might be the result of changes in your blood that are caused by HIV. HIV retinopathy can happen if you're taking anti-HIV treatment but it's more common in people with CD4 counts below 100 who aren't taking treatment or whose treatment isn't working well.

HIV retinopathy by itself rarely leads to serious sight loss but it increases the risk of more severe eye problems such as infectious retinitis.

There is no specific eye treatment for HIV retinopathy. If you're not taking anti-HIV treatment then starting treatment should help. If you are already taking treatment your doctor might want to check it's working properly.

Optic neuropathy

Optic neuropathy is a condition where the optic nerve in your eye becomes damaged. Your optic nerve sends visual signals from your retina to your brain. Optic neuropathy causes the colours you see in your affected eye to get fainter, or 'washed out'. If it's more serious, or it isn't treated it can lead to significant sight loss.

What causes optic neuropathy?

Optic neuropathy most commonly develops if you:

- have an opportunistic infection such as toxoplasmosis (a parasite infection)
- are taking medications such as ethambutol, which is used to treat tuberculosis (TB)
- have syphilis
- have cryptococcus (a common cause of meningitis).

Optic neuropathy was also a side effect of an older anti-HIV medication called didanosine, but this isn't used anymore.

In some people living with HIV, there is no clear cause of optic neuropathy. It's thought it could happen as a result of changes in the blood vessels caused by HIV, in a similar way to HIV retinopathy. The treatment of optic neuropathy depends on what is causing it. Early diagnosis and prompt treatment give the best results.

Cataracts and dry eyes

Cataracts and dry eyes are very common conditions that affect many people. People living with HIV seem more likely to develop cataracts and dry eyes. It's thought that this is because of changes in your eyes that are caused by HIV. However, as they are both very common conditions, you might also experience them for reasons unrelated to HIV such as getting older.

Cataracts are cloudy patches on the lens of your eye. People living with HIV seem to be more likely to develop them at a younger age compared to the general population. The risk of developing cataracts is higher if you've had a very low CD4 count in the past.

People living with HIV are also more likely to experience dry eyes. This seems to be because the virus can affect the way your eyes make tears. If you have dry eyes your doctor or optician can give

you advice about how to manage your symptoms. You might be prescribed eye drops or creams to help.

CMV retinitis

CMV retinitis is an infection that causes severe damage to your retina. Early symptoms of CMV retinitis can include:

- blurred vision
- new 'floaters' (spots that move around in your line of sight)
- a blind spot in your vision
- flashes of bright light.

CMV can lead to retinal damage or even a detached retina, which needs to be treated with surgery.

What causes CMV retinitis?

CMV retinitis is caused by cytomegalovirus, which is an opportunistic infection. Many people with HIV have active CMV infection and don't know they are infected. However, you're much more likely to develop problems because of CMV, including retinitis, if you have a very low CD4 count (below 50).

Glossary

retinitis

Cytomegalovirus (CMV)

uveitis

neuropathy

CD4 cell count

You may be offered anti-CMV medication to try and prevent CMV retinitis from developing if you have a low CD4 count, or if a blood test finds signs of CMV.

If your CD4 count is low you should take any symptoms of CMV retinitis very seriously and contact your doctor. CMV retinitis might only damage one eye first but the infection will usually spread to the other eye if it isn't treated. CMV retinitis can cause serious, permanent, loss of sight.

If your CD4 count is above 50, a vision problem is unlikely to be CMV retinitis, but you should still tell your doctor about your symptoms. The sooner an eye problem is diagnosed and treated, the less damage it is likely to do.

How is CMV retinitis treated?

Treatment of CMV retinitis aims to stop the damage to your retina from getting worse. Sight loss caused by CMV retinitis can't be corrected by glasses because your eye is permanently damaged.

Medications such as valganciclovir, ganciclovir, cidofovir, and foscarnet can slow down or stop CMV from doing any more damage to your eyes. These medications can be taken in different ways, including tablets, injections into a vein (intravenous infusion), and injections into your eye.

Once the CMV retinitis is stable (not getting any worse), you will continue to take medication to stop it from reactivating. You might be able to stop taking this medication once anti-HIV treatment has strengthened your immune system. You should speak to your doctor about whether this is safe for you to do.

Uveitis

Uveitis is inflammation (swelling) in the middle layer of your eye. It causes:

- redness
- a dull pain in your eye, particularly when focusing
- sensitivity to light
- new 'floaters' (spots that move around in your line of sight)

- blurred vision.

Your symptoms might start suddenly or they might take a few days to develop. The sooner uveitis is treated, the less damage it will do.

What causes uveitis?

Uveitis can develop if:

- you have an opportunistic infection such as toxoplasmosis (a parasite infection)
- you are taking cidofovir to treat CMV
- you are taking the antibiotic rifabutin which is used to treat opportunistic infections such as tuberculosis and MAC (this is more likely if you take ritonavir or cobicistat)
- you experience immune reconstitution inflammatory syndrome (IRIS) when you start anti-HIV treatment – there is more information on this below.

Uveitis can also be caused by syphilis and tuberculosis.

What is immune recovery uveitis?

Some people develop a condition called immune reconstitution inflammatory syndrome (IRIS) within the first few months of taking anti-HIV medication. You're more likely to develop IRIS if you have a low CD4 count when you start your treatment. IRIS causes inflammatory symptoms as your immune system gets stronger. If it affects your eyes, it can cause a condition called immune recovery uveitis.

It's thought that immune recovery uveitis develops when your immune system becomes strong enough to react to a previously treated CMV infection that was treated before you began anti-HIV treatment. It causes the same symptoms as other types of uveitis and is usually treated in the same way.

How is uveitis treated?

If you have uveitis, you might be prescribed anti-inflammatory treatments such as steroids to help with your symptoms.

If your uveitis is caused by an infection then treatment of the infection will often help. If your uveitis is caused by medication, it might be treated by stopping or reducing your dose.

Retinal necrosis

Retinal necrosis is when some of the tissue in your retina dies. Symptoms of retinal necrosis include:

- vision loss
- sensitivity to light
- pain in your eye
- redness.

Retinal necrosis causes permanent damage to your retina. This causes sight loss because the damage stops your retina from picking up light or because the retina detaches. Detached retinas can sometimes be reattached with surgery but this isn't always possible.

What causes retinal necrosis?

Retinal necrosis is usually caused by an opportunistic infection. This means you're much more likely to develop retinal necrosis if you have a low CD4 count. Retinal necrosis is most often caused by the varicella zoster virus, which is a type of herpes. It can also be caused by other herpes viruses.

If you develop retinal necrosis, it's usually treated with antiviral medication and steroids.

Eye health

The best way to prevent serious eye problems related to HIV is to take your HIV treatment.

Many things that keep you generally healthy will also help maintain the health of your eyes. Exercise, a healthy diet, not smoking, and not drinking too much alcohol will all help, as will protecting your eyes from direct sunlight.

In the UK, it's recommended that all adults, whatever their HIV status, have their eyes checked at least every two years. You may be advised to go more often if you're over 40, if you have certain health conditions, or if you're at higher risk of some eye problems. If you have a CD4 count under 50 you might be advised to have an eye test every three months.

People with HIV may be more likely to develop sight problems such as glaucoma and cataracts as they get older. If you notice any changes in your eyes or your sight, speak to your doctor or an optician.

If you have permanent loss of vision your HIV clinic can refer you to social services that can help you adjust.

This page was last reviewed in February 2023. It is due for review in February 2026.

Acknowledgements

Thanks to Professor Remco Peters and Dr Michael Stewart for their advice.