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### FY 2017 Houston EMA/HSDA Ryan White Part A/MAI Service Definition

	Vision Care
	(Last Review/Approval Date: 6/3/16)
HRSA Service Category Title: <b>RWGA Only</b>	Ambulatory/Outpatient Medical Care
Local Service Category Title:	Vision Care
Budget Type: RWGA Only	Fee for Service
Budget Requirements or Restrictions: <b>RWGA Only</b>	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: <b>RWGA Only</b>	<i>Outpatient/Ambulatory medical care</i> 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). <i>Primary medical care</i> for the treatment of HIV infection 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 10-02 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 infection, through either the Health Insurance Premium Assistance or Emergency Financial Assistance service categories as applicable.
Local Service Category Definition:	<b>Primary Care Office/Clinic Vision Care</b> 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:
	<ul> <li>Routine and preliminary tests including Cover tests, Ishihara Color Test, NPC (Near Point of Conversion), Vision Acuity Testing, Lensometry.</li> <li>Visual field testing</li> <li>Glasses dispensing including fittings of glasses, visual acuity testing, measurement, segment height.</li> </ul>

### FY 2017 Houston EMA/HSDA Ryan White Part A/MAI Service Definition

	• Fitting of contact lenses is not an allowable follow-up visit.
Target Population (age, gender, geographic, race, ethnicity, etc.):	HIV-infected individuals 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):	One (1) unit of service = One (1) patient visit to the Optometrist, Onlythelastic as Onlythelastic Assistant
<b>RWGA Only</b> Financial Eligibility:	Ophthalmologist or Ophthalmic Assistant. Refer to the RWPC's approved <i>FY 2017 Financial Eligibility for</i> <i>Houston EMA Services</i> .
Client Eligibility:	HIV-infected resident of the Houston EMA/HSDA.
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 disease as applicable to vision care

### FY 2017 Houston EMA/HSDA Ryan White Part A/MAI Service Definition

FY 2018 RW	PC "How to Best Meet the Nee	d" Decis	sion Process
Step in Process: Co	Juncil		Date: 06/08/17
Recommendations:	Approved: Y No: Approved With Changes:	If approved below:	with changes list changes
1.			
2.			
3.			
Step in Process: St	eering Committee		Date: 06/01/17
Recommendations:	Approved: Y No: Approved With Changes:	If approved below:	with changes list changes
1.		I	
2.			
3.			
Step in Process: Qu	uality Assurance Committee		Date: 05/18/17
Recommendations:	Approved: Y No: Approved With Changes:	If approved below:	with changes list changes
1.		1	
2.			
3.			
Step in Process: H'	TBMTN Workgroup		Date: 04/25/17
Recommendations:	Financial Eligibility:		
1.			
2.			
3.			

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Umair A. Shah, M.D., M.P.H. Executive Director



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# Vision Care Chart Review Report FY 2015

Ryan White Part A Quality Management Program–Houston EMA

January 2017

CONTACT:

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#### Introduction

Part A funds of the Ryan White Care Act are administered in the Houston Eligible Metropolitan Area (EMA) by the Ryan White Grant Administration of Harris County Public Health & Environmental Services. During FY 15, a comprehensive review of client vision records was conducted for services provided between 3/1/15 to 2/28/16.

The primary purpose of this annual review process is to assess Part A vision care provided to persons living with HIV and AIDS in the Houston EMA. Unlike primary care, there are no federal guidelines published by the U.S Public Health Service for general vision care targeting individuals with HIV/AIDS. Therefore, Ryan White Grant Administration has adopted general guidelines published by the American Optometric Association, as well as internal standards determined by the clinic, to measure the quality of Part A funded vision care. The Ryan White Grant Administration Project Coordinator for Clinical Quality Improvement (PC/CQI) performed the chart review.

#### Scope of This Report

This report provides background on the project, supplemental information on the design of the data collection tool, and presents the pertinent findings of the FY 15 vision care chart review. Also, any additional data analysis of items or information not included in this report can likely be provided after a request is submitted to Ryan White Grant Administration.

#### The Data Collection Tool

The data collection tool employed in the review was developed through a period of in-depth research conducted by the Ryan White Grant Administration. By researching the most recent vision practice guidelines, a listing of potential data collection items was developed. Further research provided for the editing of this list to yield what is believed to represent the most pertinent data elements for vision care in the Houston EMA. Topics covered by the data collection tool include, but are not limited to the following: completeness of the Client Intake Form (CIF), CD4 and VL measures, eye exams, and prescriptions for lenses. See Appendix A for a copy of the tool.

#### The Chart Review Process

All charts were reviewed by the PC/CQI, a Master's-level registered nurse experienced in identifying documentation issues and assessing adherence to published guidelines. The collected data for each site was recorded directly into a preformatted database. Once all data collection was completed, the database was queried for analysis. The data collected during this process is intended to be used for the purpose of service improvement.

The specific parameters established for the data collection process were developed from vision care guidelines and the professional experience of the reviewer on standard record documentation practices. Table 1 summarizes the various documentation criteria employed during the review.

Table 1. D	ata Collection Parameters
Review Area	Documentation Criteria
Laboratory Tests	Current CD4 and Viral Load Measures
Client Intake Form (CIF)	Completeness of the CIF: includes but not limited to documentation of primary care provider, medication allergies, Hx of medical problems, Ocular Hx, and current medications
Complete Eye Exam (CEE)	Documentation of annual eye exam; completeness of eye exam form; comprehensiveness of eye exam (visual acuity, refraction test, binocular vision assessment, fundus/retina exam, and glaucoma test)
Ophthalmology Consult (DFE)	Performed/Not performed
Lens Prescriptions	Documentation of the Plan of Care (POC) and completeness of the dispensing form

#### The Sample Selection Process

The sample population was selected from a pool of 2,066 unduplicated clients who accessed Part A vision care between 3/1/15 and 2/28/16. The medical charts of 150 of these clients were used in the review, representing 7.3% of the pool of unduplicated clients.

In an effort to make the sample population as representative of the actual Part A vision care population as possible, the EMA's Centralized Patient Care Data Management System (CPCDMS) was used to generate the lists of client codes. The demographic make-up (race/ethnicity, gender, age) of clients accessing vision care services between 3/1/15 and 2/28/16 was determined by CPCDMS, which in turn allowed Ryan White Grant Administration to generate a sample of specified size that closely mirrors that same demographic make-up.

#### **Characteristics of the Sample Population**

The review sample population was generally comparable to the Part A population receiving vision care in terms of race/ethnicity, gender, and age. It is important to note that the chart review findings in this report apply only to those who receive vision care from a Part A provider and cannot be generalized to all Ryan White clients or to the broader population of persons with HIV or AIDS. Table 2 compares the review sample population with the Ryan White Part A vision care population as a whole.

Table 2. Demographic	Characteristics		ton EMA Ryan V	White
	Sam	ble	Ryan White F	Part A EMA
Race/Ethnicity	Number	Percent	Number	Percent
African American	75	50%	1,013	49%
White	74	49.3%	1,006	49%
Asian Native Hawaiian/Pacific Islander	1	.7%	19	1%
	0	0%	3	<1%
American Indian/Alaska Native	0	0%	11	<1%
Multi-Race	0	0%	24	<1%
TOTAL	150		2,066	100%
Hispanic Status				
Hispanic	48	32%	699	34%
Non-Hispanic	102	68%	1,367	66%
TOTAL	150		2,066	100%
Gender				
Male	109	72.7%	1,533	74%
Female	38	25.3%	520	25%
Transgender Male to Female	3	2%	13	<1%
Fransgender Female to Male	0	0%	0	0
TOTAL	150			100%
Age				
<= 24	7	4.7%	116	6%
25 – 34	36	24%	451	22%
35 – 44	34	22.7%	497	24%
45 – 54	46	30.7%	630	30%
55 – 64	23	15.3%	309	15%
65+	4	2.7%	63	3%
TOTAL	150		2,066	100%

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#### Findings

#### Laboratory Tests

Having up-to-date lab measurements for CD4 and viral load (VL) levels enhances the ability of vision providers to ensure that the care provided is appropriate for each patient. CD4 and VL measures indicate stage of disease, so in cases where individuals are in the late stage of HIV disease, special considerations may be required.

Patient chart records should provide documentation of the most recent CD4 and VL information. Ideally this information should be updated in coordination with an annual complete eye exam. As noted in the table below, significant decreases were noted in lab documentation compared to previous years.

	2012	2013	2014	2015
CD4	90%	49%	48%	64%
VL	89%	49%	48%	64%

#### Client Intake Form (CIF)

A complete and thorough assessment of a patient's health history is essential when caring for individuals infected with HIV or anyone who is medically compromised. The agency assesses this information by having patients complete the CIF. Information provided on the CIF, such as ocular history or medical history, guides clinic providers in determining the appropriateness of diagnostic procedures, prescriptions, and treatments. The CIF that is used by the agency to assess patient's health history captures a wide range of information; however, for the purposes of this review, this report will highlight findings for only some of the data collected on the form.

	2012	2013	2014	2015
Primary Care Provider	99%	51%	52%	50%
Medication Allergies	100%	93%	100%	100%
Medical History	100%	99%	100%	100%
Current Medications	99%	96%	100%	100%
Reason for Visit	100%	99%	100%	100%
Ocular History	97%	99%	100%	100%

Below are highlights of the findings measuring completeness of the CIF.

#### Eye Examinations (Including CEE/DFE) and Exam Findings

Complete and thorough examination of the eye performed on a routine basis is essential for the prevention, detection, and treatment of eye and vision disorders. When providing care to individuals with HIV/AIDS, routine eye exams become even more important because there are a number of ocular manifestations of HIV disease, such as CMV retinitis.

CMV retinitis is usually diagnosed based on characteristic retinal changes observed through a DFE. Current standards of care recommend yearly DFE performed by an ophthalmologist for clients with CD4 counts <50 cells/mm3 (2). One client in this sample had CD4 counts <50 cells/mm3.

	2012	2013	2014	2015
	0.00/	1000/	0001	4000/
Complete Eye Exam	96%	100%	99%	100%
Dilated Fundus Exam	76%	53%	94%	95%
Internal Eye Exam	100%	100%	100%	100%
Documentation of Diagnosis	100%	100%	99%	100%
Documentation of	1009/	1009/	00%	100%
Treatment Plan	100%	100%	99%	100%
Visual Acuity	100%	100%	100%	100%
Refraction Test	96%	99%	98%	100%
Observation of External Structures	97%	56%	100%	100%
	0170	0070	10070	10070
Glaucoma Test	100%	99%	100%	100%
Cytomegalovirus (CMV)				
screening	78%	55%	94%	95%

#### **Ocular Disease**

Eleven clients (7.3%) demonstrated ocular disease, including hypertensive retinopathy, diabetic retinopathy, cataracts, glaucoma, and upper chalazion. One client received treatment for ocular disease, 2 clients were referred to a specialty eye clinic, and 8 clients did not need treatment at the time of visit.

#### Prescriptions

Of records reviewed, 97% (95%-FY14, 97%-FY13 reviews) documented new prescriptions for lenses at the agency within the year.

#### Conclusions

Findings from the FY 15 Vision Care Chart Review indicate that the vision care providers perform comprehensive vision examinations for the prevention, detection, and treatment of eye and vision disorders. Performance rates are very high overall, and are consistent with quality vision care.

#### Appendix A—FY 15-Vision Chart Review Data Collection Tool

#### <u>Mar 1, 15 to Feb 28, 16</u>

Pt. ID # \_\_\_\_\_

Site Code:\_\_\_\_\_

#### CLIENT INTAKE FORM (CIF)

- 1. PRIMARY CARE PROVIDER documented: Y Yes N No
- 2. MEDICATION ALLERGIES documented: Y Yes N No
- 3. MEDICAL HISTORY documented: Y Yes N No
- 4. CURRENT MEDS are listed: Y Yes N No
- 5. REASON for TODAY's VISIT is documented: Y Yes N No
- 6. OCULAR HISTORY is documented: Y Yes N No

#### <u>CD4 & VL</u>

- 7. Most recently documented CD4 count is within past 12 months: Y Yes N No
- 8. CD4 count is < 50: Y Yes N No
- 9. Most recently documented VL count is within past 12 months: Y Yes N No

#### EYE CARE:

- 10. COMPLETE EYE EXAM (CEE) performed: Y Yes N No
- 11. Eye Exam included ASSESSMENT OF VISUAL ACUITY: Y Yes N No
- 12. Eye Exam included REFRACTION TEST: Y Yes N No
- 13. Eye Exam included OBSERVATION OF EXTERNAL STRUCTURES: Y Yes N No
- 14. Eye Exam included GLAUCOMA TEST (IOP): Y Yes N No
- 15. Internal Eye Exam findings are documented: Y Yes N No
- 16. Dilated Fundus Exam (DFE) done within year: Y Yes N No
- 17. Eye Exam included CYTOMEGALOVIRUS (CMV) SCREENING: Y Yes N No
- 18. New prescription lenses were prescribed: Y Yes N No
- 19. Eye Exam written diagnoses are documented: Y Yes N No
- 20. Eye Exam written treatment plan is documented: Y Yes N No
- 21. Ocular disease identified? Y Yes N No
- 22. Ocular disease treated appropriately? Y Yes N No
- 23. Total # of visits to eye clinic within year:\_\_\_\_\_

Revised March, 2013

#### Appendix B – Resources

- Casser, L., Carmiencke, K., Goss, D.A., Knieb, B.A., Morrow, D., & Musick, J.E. (2005). Optometric Clinical Practice Guideline—Comprehensive Adult Eye and Vision Examination. *American Optometric Association*. Retrieved from <u>http://www.aoa.org/Documents/CPG-1.pdf</u> on April 15, 2012.
- Heiden D., Ford N., Wilson D., Rodriguez W.R., Margolis T., et al. (2007). Cytomegalovirus Retinitis: The Neglected Disease of the AIDS Pandemic. *PLoS Med* 4(12): e334. Retrieved from: <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2100142/</u> on April 15, 2012.
- International Council of Ophthalmology. (2011). ICO International Clinical Guideline, Ocular HIV/AIDS Related Diseases. Retrieved from <u>http://www.icoph.org/resources/88/ICO-International-Clinical-Guideline-Ocular-HIVAIDS-Related-Diseases-.html</u> on December 15, 2012.
- 4. Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from the Centers for Disease Control and Prevention, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. Available at <u>http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult\_oi.pdf</u>. Accessed July 25, 2013.

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#### FY 2015 PERFORMANCE MEASURES HIGHLIGHTS

#### **RYAN WHITE GRANT ADMINISTRATION**

#### HARRIS COUNTY PUBLIC HEALTH (HCPH)

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#### Ryan White Part A HIV Performance Measures FY 2015 Report

#### **Vision Care**

All Providers

HIV Performance Measures	FY 2015
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 2013	FY 2014
100% of HIV-infected vision patients will have a medical health history (initial or updated) at least once in the measurement year	99%	100%
100% of HIV-infected vision patients will have a vision history (initial or updated) at least once in the measurement year	99%	100%
100% of HIV-infected vision patients will have a comprehensive eye examination at least once in the measurement year	100%	99%

\* To view the full FY 2014 chart review reports, please visit: http://www.hcphes.org/Services-Programs/Programs/RyanWhite/Quality

Ocular Disorder	Number of	Number with	*Resolved	olved	*Improved	oved	*Same	ne	*Worsened	ened
	Diagnoses	ronow-up	#	%	#	%	#	%	#	%
Accommodation Spasm										
Acute Retinal Necrosis										
Anisocoria										
Bacterial Retinitis	1	0								
Cataract										
Chalazion										
Chorioretinal Scar										
Chorioretinitis										
CMV Retinitis - Active										
CMV Retinitis - Inactive										
Conjunctivitis										
Covergence Excess										
Convergence Insufficiency										
Corneal Edema										
Corneal Erosion										
Corneal Foreign Body										
Corneal Opacity										
Corneal Ulcer										
Cotton Wool Spots										
Diabetic Retinopathy										
Dry Eye Syndrome										
Ecchymosis										
Esotropia										
Exotropia										
Glaucoma										
Glaucoma Suspect										
Iritis										
Kaposi Sarcoma										
Keratitis										
Keratoconjuctivitis										
Keratoconus										
Lagophthalmos										
Macular Hole										
Meibomianitis										
Molluscum Contagiosum										
Optic Atrophy										
Papilledema										
										1

Ocular Disorder	Number of	Number with	*Reso	*Resolved	*Imp	*Improved	*Sa	*Same	*Worsened	sened
	Diagnoses	dn-womo r	#	%	#	%	#	%	#	%
Paresis of Accommodation										
Pseudophakia										
Refractive Change/Transient										
Retinal Detachment										
Retinal Hemorrhage										
Retinopathy HTN										
Retinal Hole/Tear										
Suspicious Optic Nervehead(s)										
Toxoplasma Retinochoriochitis										
Thyroid Eye Disease										
Visual Field Defect										
Vitreous Degeneration										
Other										
Total	1	0								

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EyeSmart<sup>®</sup>

# How Does HIV/AIDS Affect the Eye?

Written by: <u>David Turbert</u> Reviewed by: <u>Robert H Janigian Jr MD</u> Mar. 01, 2017

Because HIV causes a breakdown of your body's immune system, all areas of the body can get an infection. This includes the eye. People with HIV who are otherwise in good health are not likely to have eye problems related to a suppressed immune system. But an estimated 70 percent of patients with advanced AIDS experience eye disorders.

AIDS-related eye problems due to a suppressed immune system can include the following:

# **HIV retinopathy**

This is the most common finding in people with AIDS. Cotton-wool spots and blood from broken blood vessels appear on the <u>retina</u>. Ophthalmologists think the HIV virus causes these changes to the small blood vessels in the retina.

# **CMV** retinitis

CMV retinitis is a more serious eye infection that occurs in about 20 to 30 percent of people with AIDS. A virus called cytomegalovirus (CMV) causes it. It usually happens in people who have more advanced stages of AIDS in which T-cell count is very low. Symptoms include inflammation of the retina, bleeding and vision loss. If left undiagnosed and untreated, CMV can cause severe vision loss within a few months.

If you have HIV/AIDS, you should see your ophthalmologist immediately if you see:

- floating spots or "spider-webs"
- flashing lights
- blind spots or blurred vision

CMV retinitis cannot be cured, but medication can slow the progression of the virus.

## **Detached retina**

CMV can sometimes cause <u>detached retina</u>. This is where the retina pulls away, or detaches, from the back of the eye. A detached retina is a serious problem that causes severe vision loss unless treated. Almost all retinal detachments need <u>detached retina surgery</u>. This surgery puts the retina back in its proper position.

## Kaposi sarcoma

Kaposi sarcoma is a rare form of cancer that occurs in AIDS patients. This cancer can cause purple-red lesions to form on the eyelids. It can also cause a red, fleshy mass to form on the <u>conjunctiva</u>. Kaposi sarcoma may look frightening, but it usually does not harm the eye, and can often be treated.

## Squamous cell carcinoma of the conjunctiva

This is a tumor of the conjunctiva. Ophthalmologists believe that this condition is related to several things, including HIV/AIDS infection. It is also related to prolonged sunlight exposure and human papillomavirus (HPV) infection.

Increased risk of various eye infections. Some eye infections may be more common in patients with HIV. These infections include:

- syphilis
- herpes virus
- gonorrhea
- Chlamydia
- toxoplasmosis
- Candida
- Pneumocystis
- microsporidia

These infections can threaten vision and must be treated by an ophthalmologist.