

Ryan White Part A Quality Management Program–Houston EMA

# Vision Care Chart Review FY 2014

Harris County Public Health – Ryan White Grant  
Administration

November 2015

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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. During FY 14, a comprehensive review of client vision records was conducted for services provided between 3/1/14 to 2/28/15.

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 14 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.

<b>Table 1. Data Collection Parameters</b>	
<b>Review Area</b>	<b>Documentation Criteria</b>
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 2,099 unduplicated clients who accessed Part A vision care between 3/1/14 and 2/28/15. The medical charts of 151 of these clients were used in the review, representing 7.2% 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 3/1/14 and 2/28/15 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 of FY 14 Houston EMA Ryan White  
Part A Vision Care Clients**

Race/Ethnicity	Sample		Ryan White Part A EMA	
	Number	Percent	Number	Percent
African American	82	54%	1,031	49%
White	69	46%	1,007	48%
Asian	0	0%	29	1%
Native Hawaiian/Pacific Islander	0	0%	4	<1%
American Indian/Alaska Native	0	0%	7	<1%
Multi-Race	0	0%	21	<1%
<b>TOTAL</b>	<b>151</b>		<b>2,099</b>	<b>100%</b>
<b>Hispanic Status</b>				
Hispanic	46	30%	686	33%
Non-Hispanic	105	70%	1,413	67%
<b>TOTAL</b>	<b>151</b>		<b>2,099</b>	<b>100%</b>
<b>Gender</b>				
Male	121	81%	1,605	76%
Female	29	19%	482	23%
Transgender Male to Female	1	<1%	12	<1%
Transgender Female to Male	0	0%	0	0
<b>TOTAL</b>	<b>151</b>		<b>2,099</b>	<b>100%</b>
<b>Age</b>				
<= 24	10	7%	145	7%
25 – 34	36	24%	472	22%
35 – 44	37	25%	530	25%
45 – 54	47	31%	605	29%
55 – 64	18	12%	290	14%
65+	3	2%	57	3%
<b>TOTAL</b>	<b>151</b>		<b>2,099</b>	<b>100%</b>

## 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.

	2011	2012	2013	2014
<b>CD4</b>	93%	90%	49%	48%
<b>VL</b>	94%	89%	49%	48%

## ***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.

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

	2011	2012	2013	2014
<b>Primary Care Provider</b>	100%	99%	51%	52%
<b>Medication Allergies</b>	100%	100%	93%	100%
<b>Medical History</b>	100%	100%	99%	100%
<b>Current Medications</b>	100%	99%	96%	100%
<b>Reason for Visit</b>	100%	100%	99%	100%
<b>Ocular History</b>	96%	97%	99%	100%

## ***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/mm<sup>3</sup> (2). Zero clients in this sample had CD4 counts <50 cells/mm<sup>3</sup>.

	2011	2012	2013	2014
<b>Complete Eye Exam</b>	96%	96%	100%	99%
<b>Dilated Fundus Exam</b>	80%	76%	53%	94%
<b>Internal Eye Exam</b>	100%	100%	100%	100%
<b>Documentation of Diagnosis</b>	100%	100%	100%	99%
<b>Documentation of Treatment Plan</b>	100%	100%	100%	99%
<b>Visual Acuity</b>	99%	100%	100%	100%
<b>Refraction Test</b>	96%	96%	99%	98%
<b>Observation of External Structures</b>	96%	97%	56%	100%
<b>Glaucoma Test</b>	95%	100%	99%	100%
<b>Cytomegalovirus (CMV) screening</b>	80%	78%	55%	94%

### ***Ocular Disease***

Sixteen clients (10.6%) demonstrated ocular disease, including optic nerve hypoplasia, cataracts, glaucoma, blindness, post vitreous detachment, and macular degeneration. Three clients received treatment for ocular disease, 2 clients were referred to a specialty eye clinic, and 11 clients did not need treatment at the time of visit.

### ***Prescriptions***

Of records reviewed, 95% (97%-FY13, 94%-FY 12 reviews) documented new prescriptions for lenses at the agency within the year.

### **Conclusions**

Findings from the FY 14 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. Significant improvements have been noted for a few measures, including CMV screening, Dilated Fundus Exam, and Observation of External Structures.

## Appendix A—FY 14-Vision Chart Review Data Collection Tool

Mar 1, 14 to Feb 28, 15

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

### **CD4 & VL**

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

1. 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 <http://www.aoa.org/Documents/CPG-1.pdf> on April 15, 2012.
2. 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: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2100142/> on April 15, 2012.
3. International Council of Ophthalmology. (2011). *ICO International Clinical Guideline, Ocular HIV/AIDS Related Diseases*. Retrieved from <http://www.icoph.org/resources/88/ICO-International-Clinical-Guideline-Ocular-HIVAIDS-Related-Diseases-.html> 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 [http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult\\_oi.pdf](http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult_oi.pdf). Accessed July 25, 2013.