

Ryan White Part A Quality Management Program – Houston EMA

# Primary Care Chart Review Report FY 2014

Harris County Public Health  
Ryan White Grant Administration

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## **PREFACE**

### **EXPLANATION OF PART A QUALITY MANAGEMENT**

In 2014 the Houston Eligible Metropolitan Area (EMA) awarded Part A funds for adult Outpatient Medical Services to four organizations. Approximately 7,800 unduplicated-HIV positive individuals are serviced by these organizations.

Harris County Public Health (HCPH) must ensure the quantity, quality and cost effectiveness of primary medical care. The Ryan White Grant Administration (RWGA) Project Coordinator for Clinical Quality Improvement (PC/CQI) performed the medical services review.

## Introduction

On April 13, 2015, the RWGA PC/CQI commenced the evaluation of Part A funded Primary Medical Care Services funded by the Ryan White Part A grant. This grant is awarded to HCPH by the Health Resources and Services Administration (HRSA) to provide HIV-related health and social services to persons living with HIV/AIDS. The purpose of this evaluation project is to meet HRSA mandates for quality management, with a focus on:

- evaluating the extent to which primary care services adhere to the most current HIV United States Health and Human Services Department (HHS) treatment guidelines;
- provide statistically significant primary care utilization data including demographics of individuals receiving care; and,
- make recommendations for improvement.

A comprehensive review of client medical records was conducted for services provided between 3/1/14 and 2/28/15. The guidelines in effect during the year the patient sample was seen, *Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents: February 12, 2013*, were used to determine degree of compliance. The current treatment guidelines are available for download at: <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>. The initial activity to fulfill the purpose was the development of a medical record data abstraction tool that addresses elements of the guidelines, followed by medical record review, data analysis and reporting of findings with recommendations.

## Tool Development

The PC/CQI worked with the Clinical Quality Management (CQM) committee to develop and approve data collection elements and processes that would allow evaluation of primary care services based on the *Guidelines for use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents, 2013* that were developed by the Panel on Clinical Practices for Treatment of HIV Infection convened by the U.S. Department of Health and Human Services (DHHS). In addition, data collection elements and processes were developed to align with the Health Resources and Services Administration (HRSA), HIV/AIDS Bureau's (HAB) HIV/AIDS Core Clinical Performance Measures for Adults & Adolescents. These measures are designed to serve as indicators of quality care. HAB measures are available for download at: <http://hab.hrsa.gov/deliverhivaidscares/habperformmeasures.html>. An electronic database was designed to facilitate direct data entry from patient records. Automatic edits and validation screens were included in the design and layout of the data abstraction program to "walk" the nurse reviewer through the process and to facilitate the accurate collection, entering and validation of data. Inconsistent information, such as reporting GYN exams for men, or opportunistic infection prophylaxis for patients who do not need it, was considered when designing validation functions. The PC/CQI then used detailed data validation reports to check certain values for each patient to ensure they were consistent.

## Chart Review Process

All charts were reviewed by a Master's-level registered nurse experienced in identifying documentation issues and assessing adherence to treatment guidelines. The collected data for each site was recorded directly into a preformatted computerized database. The data collected during this process is to be used for service improvement.

If documentation on a particular element was not found a "no data" response was entered into the database. Some elements require that several questions be answered in an "if, then" format. For example, if a Pap smear was abnormal, then was it repeated at the prescribed interval? This logic tree type of question allows more in-depth assessment of care and a greater ability to describe the level of quality. Using another example, if only one question is asked, such as "was a mental health screening done?" the only assessment that can be reported is how many patients were screened. More questions need to be asked to get at quality and the appropriate assessment and treatment, e.g., if the mental health screening was positive, was the client referred? If the client accepted a referral, were they able to access a Mental Health Provider? For some data elements, the primary issue was not the final report per se, but more of whether the requisite test/exam was performed or not, i.e., STD screening or whether there was an updated history and physical.

The specific parameters established for the data collection process were developed from national HIV care guidelines.

| Tale 1. Data Collection Parameters |   |
|------------------------------------|---|
| Review Item                        | Standard  |
| Primary Care Visits                | Primary care visits during review period, denoting date and provider type (MD, NP, PA, other). There is no standard of care to be met per se. Data for this item is strictly for analysis purposes only |
| Annual Exams                       | Dental and Eye exams are recommended annually   |
| Mental Health                      | A Mental Health screening is recommended annually screening for depression, anxiety, and associated psychiatric issues  |
| Substance Abuse                    | Clients should be screened for substance abuse potential at every visit and referred accordingly  |
| Specialty Referrals                | This item assesses specialist utilization   |

| Table 1. Data Collection Parameters (cont.) |  |
|---|--|
| Review Item                                 | Standard   |
| Antiretroviral Therapy (ART) adherence      | Adherence to medications should be documented at every visit with issues addressed as they arise   |
| Lab   | CD4, Viral Load Assays, and CBCs are recommended every 3-6 months. Clients on ART should have a Liver Function Test and a Lipid Profile annually (minimum recommendations) |
| STD Screen                                  | Screening for Syphilis, Gonorrhea, and Chlamydia should be performed at least annually   |
| Hepatitis Screen                            | Screening for Hepatitis B and C are recommended at initiation to care. At risk clients not previously immunized for Hepatitis A and B should be offered vaccination.       |
| Tuberculosis Screen                         | Annual screening is recommended, either PPD or chest X-ray   |
| Cervical Cancer Screen                      | Women are assessed for at least one PAP smear during the study period  |
| Immunizations                               | Clients are assessed for annual Flu immunizations and whether they have ever received pneumococcal vaccination.  |
| HIV/AIDS Education                          | Documentation of topics covered including disease process, staging, exposure, transmission, risk reduction, diet and exercise  |
| Pneumocystis carinii Pneumonia Prophylaxis  | Labs are reviewed to determine if the client meets established criteria for prophylaxis  |
| Mycobacterium Avium Complex Prophylaxis     | Labs are reviewed to determine if the client meets established criteria for prophylaxis  |
| Toxoplasma Gondii                           | Clients should be tested for prior exposure to <i>T. gondii</i> by measuring anti- <i>Toxoplasma</i> immunoglobulin G upon initiation of care                              |

### The Sample Selection Process

The sample population was selected from a pool of 6,814 clients (adults age 18+) who accessed Part A primary care (excluding vision care) between 3/1/14 and 2/28/15. The medical charts of 635 clients were used in this review, representing 9.3% of the pool of unduplicated clients. The number of clients selected at each site is proportional to the number of primary care clients served there. Two caveats were observed during the sampling process. In an effort to focus on women living with HIV/AIDS health issues, women were over-sampled, comprising 46.6% of the sample population. Second,

providers serving a relatively small number of clients were over-sampled in order to ensure sufficient sample sizes for data analysis.

In an effort to make the sample population as representative of the Part A primary care population as possible, the EMA's Centralized Patient Care Data Management System (CPCDMS) was used to generate the lists of client codes for each site. The demographic make-up (race/ethnicity, gender, age) of clients who accessed primary care services at a particular site during the study period was determined by CPCDMS. A sample was then generated to closely mirror that same demographic make-up. The clinic-specific lists were forwarded to the clinic 10 business days prior to the review.

### Characteristics of the Sample Population

Due to the desire to over sample for female clients, the review sample population is not generally comparable to the Part A population receiving outpatient primary medical care in terms of race/ethnicity, gender, and age. No medical records of children/adolescents were reviewed, as clinical guidelines for these groups differ from those of adult patients. Table 2 compares the review sample population with the Ryan White Part A primary care population as a whole.

| <b>Gender</b>                 | <b>Sample</b> |         | <b>Ryan White Part A Houston EMA</b> |         |
|-------------------------------|---------------|---------|--------------------------------------|---------|
|                               | Number        | Percent | Number                               | Percent |
| Male                          | 308           | 48.5%   | 5,005                                | 73.45%  |
| Female                        | 293           | 46.1%   | 1,750                                | 25.68%  |
| Transgender<br>Male to Female | 34            | 5.4%    | 57                                   | .84%    |
| Transgender<br>Female to Male | 0             | 0%      | 2                                    | .03%    |
| <b>TOTAL</b>                  | <b>635</b>    |         | <b>6,814</b>                         |         |
| <b>Race</b>                   |               |         |                                      |         |
| Asian                         | 10            | 1.6%    | 93                                   | 1.36%   |
| African-Amer.                 | 299           | 47.1%   | 3,404                                | 49.96%  |
| Pacific Islander              | 0             | 0%      | 9                                    | .13%    |
| Multi-Race                    | 2             | .3%     | 51                                   | .75%    |
| Native Amer.                  | 2             | .3%     | 26                                   | .38%    |
| White                         | 322           | 50.7%   | 3,231                                | 47.42%  |
| <b>TOTAL</b>                  | <b>635</b>    |         | <b>6,814</b>                         |         |
| <b>Hispanic</b>               |               |         |                                      |         |
| Non-Hispanic                  | 390           | 61.4%   | 4,439                                | 65.15%  |
| Hispanic                      | 245           | 38.6%   | 2,375                                | 34.85%  |
| <b>TOTAL</b>                  | <b>635</b>    |         | <b>6,814</b>                         |         |

## Report Structure

In November 2013, the Health Resource and Services Administration's (HRSA), HIV/AIDS Bureau (HAB) revised its performance measure portfolio<sup>1</sup>. The categories included in this report are: Core, All Ages, and Adolescents/Adult. These measures are intended to serve as indicators for use in monitoring the quality of care provided to patients receiving Ryan White funded clinical care. In addition to the HAB measures, several other primary care performance measures are included in this report. When available, data and results from the 2 preceding years are provided, as well as comparison to national benchmarks. Performance measures are also depicted with results categorized by race/ethnicity.

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<sup>1</sup> <http://hab.hrsa.gov/deliverhivaidscares/habperformmeasures.html> Accessed November 10, 2013

## Findings

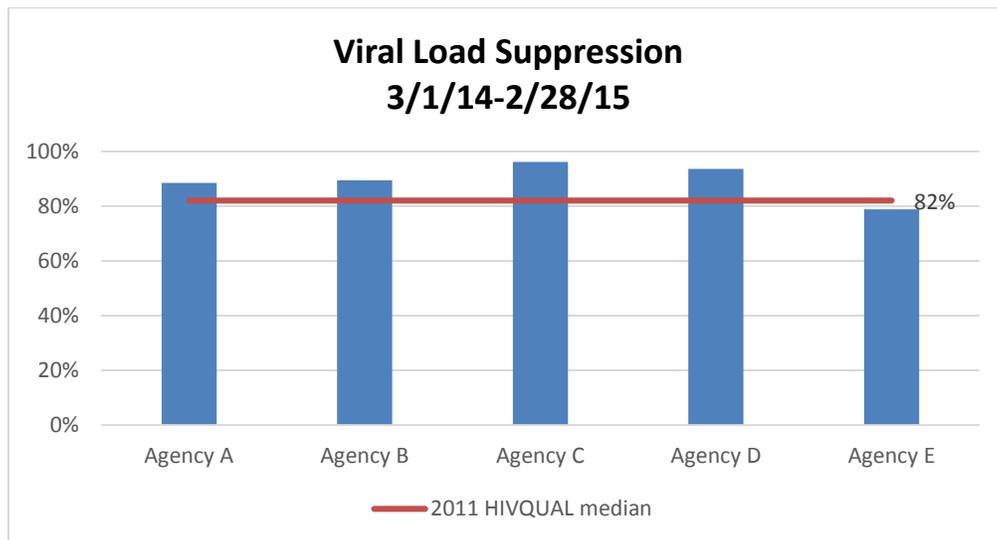
### **Core Performance Measures**

#### **Viral Load Suppression**

- Percentage of clients with HIV infection with viral load below limits of quantification (defined as <200 copies/ml) at last test during the measurement year

|   | 2012         | 2013         | 2014        |
|---|--------------|--------------|-------------|
| Number of clients with HIV infection with viral load below limits of quantification at last test during the measurement year  | 448          | 509          | 539         |
| Number of HIV-infected clients who: <ul style="list-style-type: none"> <li>had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and</li> <li>were prescribed ART for at least 6 months</li> </ul> | 519          | 579          | 586         |
| <b>Rate</b>   | <b>86.3%</b> | <b>87.9%</b> | <b>92%</b>  |
|   | <b>-1.2%</b> | <b>1.6%</b>  | <b>4.1%</b> |

| <b>2014 Viral Load Suppression by Race/Ethnicity</b>  |              |            |              |
|---|--------------|------------|--------------|
|   | Black        | Hispanic   | White        |
| Number of clients with HIV infection with viral load below limits of quantification at last test during the measurement year  | 221          | 217        | 93           |
| Number of HIV-infected clients who: <ul style="list-style-type: none"> <li>had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and</li> <li>were prescribed ART for at least 6 months</li> </ul> | 243          | 241        | 94           |
| <b>Rate</b>   | <b>90.9%</b> | <b>90%</b> | <b>98.9%</b> |



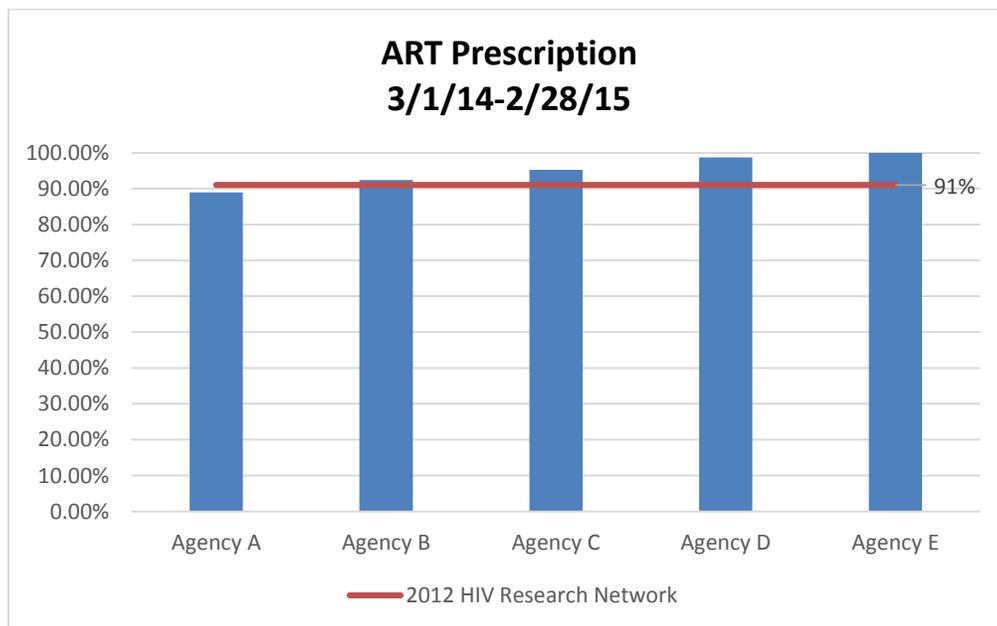
## ART Prescription

- Percentage of clients who are prescribed antiretroviral therapy (ART)

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of clients who were prescribed an ART regimen within the measurement year  | 557          | 609          | 605          |
| Number of clients who:<br>• had at least two medical visit with a provider with prescribing privileges, i.e. MD, PA, NP in the measurement year | 597          | 635          | 635          |
| <b>Rate</b>   | <b>93.3%</b> | <b>95.9%</b> | <b>95.3%</b> |
| <b>Change from Previous Years Results</b>   | <b>1.6%</b>  | <b>2.6%</b>  | <b>-0.6%</b> |

- Of the 30 clients not on ART, none had a CD4 <200

| 2014 ART Prescription by Race/Ethnicity   |              |              |              |
|---|--------------|--------------|--------------|
|   | Black        | Hispanic     | White        |
| Number of clients who were prescribed an ART regimen within the measurement year  | 259          | 242          | 94           |
| Number of clients who:<br>• had at least two medical visit with a provider with prescribing privileges, i.e. MD, PA, NP in the measurement year | 284          | 245          | 96           |
| <b>Rate</b>   | <b>91.2%</b> | <b>98.8%</b> | <b>97.9%</b> |

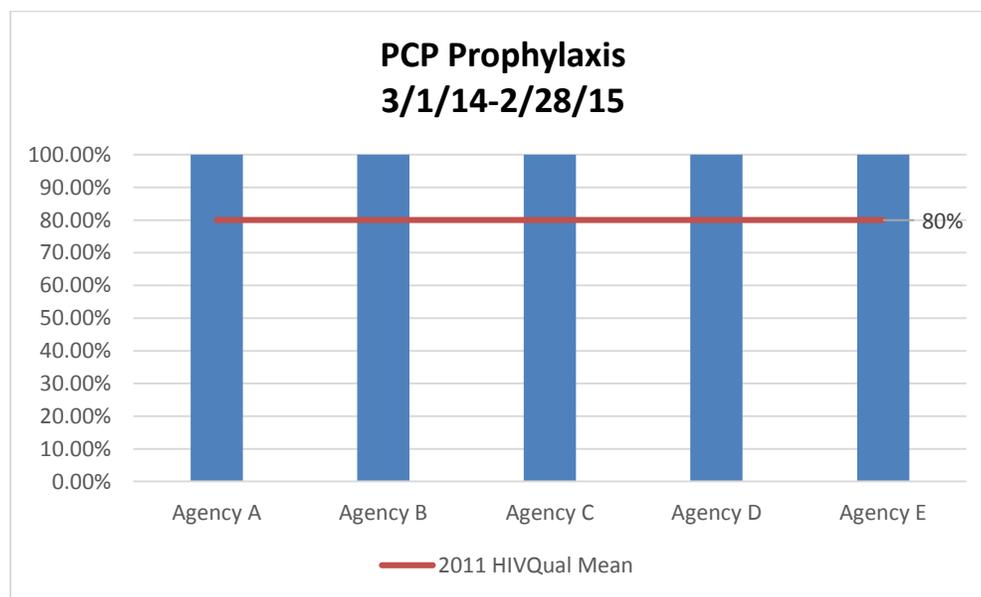


## PCP Prophylaxis

- Percentage of clients with HIV infection and a CD4 T-cell count below 200 cells/mm<sup>3</sup> who were prescribed PCP prophylaxis

|   | 2012         | 2013         | 2014        |
|---|--------------|--------------|-------------|
| Number of HIV-infected clients with CD4 T-cell counts below 200 cells/mm <sup>3</sup> who were prescribed PCP prophylaxis   | 90           | 75           | 45          |
| Number of HIV-infected clients who:<br>• had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and<br>• had a CD4 T-cell count below 200 cells/mm <sup>3</sup> , or any other indicating condition | 92           | 76           | 45          |
| <b>Rate</b>   | <b>97.8%</b> | <b>98.7%</b> | <b>100%</b> |
| <b>Change from Previous Years Results</b>   | <b>-2.2%</b> | <b>.9%</b>   | <b>1.3%</b> |

| 2014 PCP Prophylaxis by Race/Ethnicity   |             |             |             |
|--|-------------|-------------|-------------|
|  | Black       | Hispanic    | White       |
| Number of HIV-infected clients with CD4 T-cell counts below 200 cells/mm <sup>3</sup> who were prescribed PCP prophylaxis  | 12          | 24          | 8           |
| Number of HIV-infected clients who:<br>• had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least once in the measurement year, and<br>• had a CD4 T-cell count below 200 cells/mm <sup>3</sup> , or any other indicating condition | 12          | 24          | 8           |
| <b>Rate</b>  | <b>100%</b> | <b>100%</b> | <b>100%</b> |



## All Ages Performance Measures

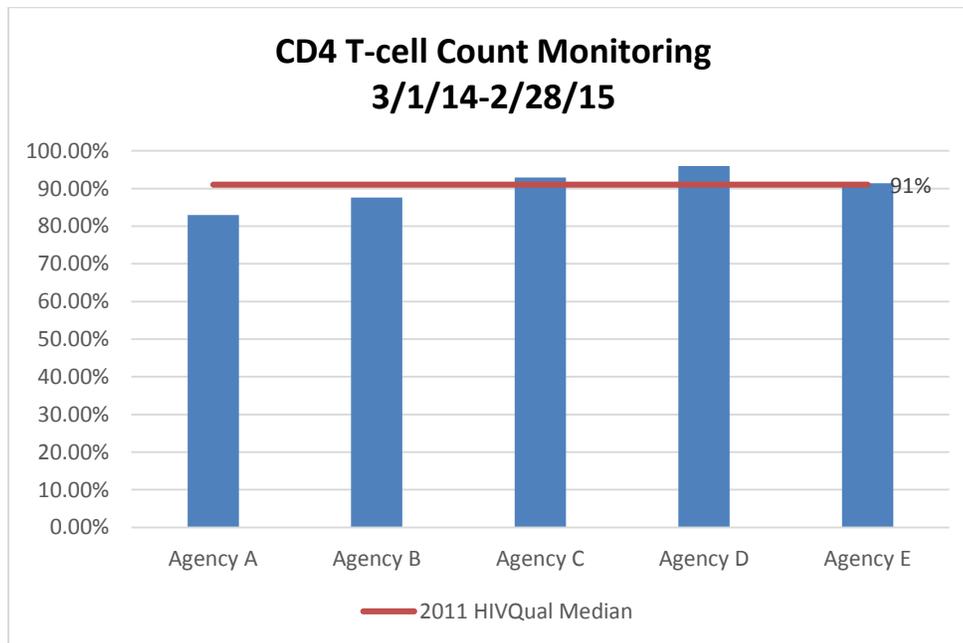
### CD4 T-Cell Count

- Percentage of clients with HIV infection who had a CD4 T-cell count performed at least every six months during the measurement year

|  | 2013         | 2014         |
|--|--------------|--------------|
| Number of HIV-infected clients who had a CD4 T-cell count performed at least every six months during the measurement year                                  | 575          | 581*         |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year | 635          | 635          |
| <b>Rate</b>  | <b>90.6%</b> | <b>91.5%</b> |
| <b>Change from Previous Years Results</b>  | <b>18.1%</b> | <b>.9%</b>   |

\*Includes 3 clients for whom only 1 CD4 count test was indicated.

| 2014 CD4 by Race/Ethnicity   |              |              |              |
|--|--------------|--------------|--------------|
|  | Black        | Hispanic     | White        |
| Number of HIV-infected clients who had a CD4 T-cell count performed at least every six months during the measurement year  | 260          | 226          | 87           |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges <sup>1</sup> , i.e. MD, PA, NP at least twice in the measurement year | 284          | 245          | 96           |
| <b>Rate</b>  | <b>91.5%</b> | <b>92.2%</b> | <b>90.6%</b> |

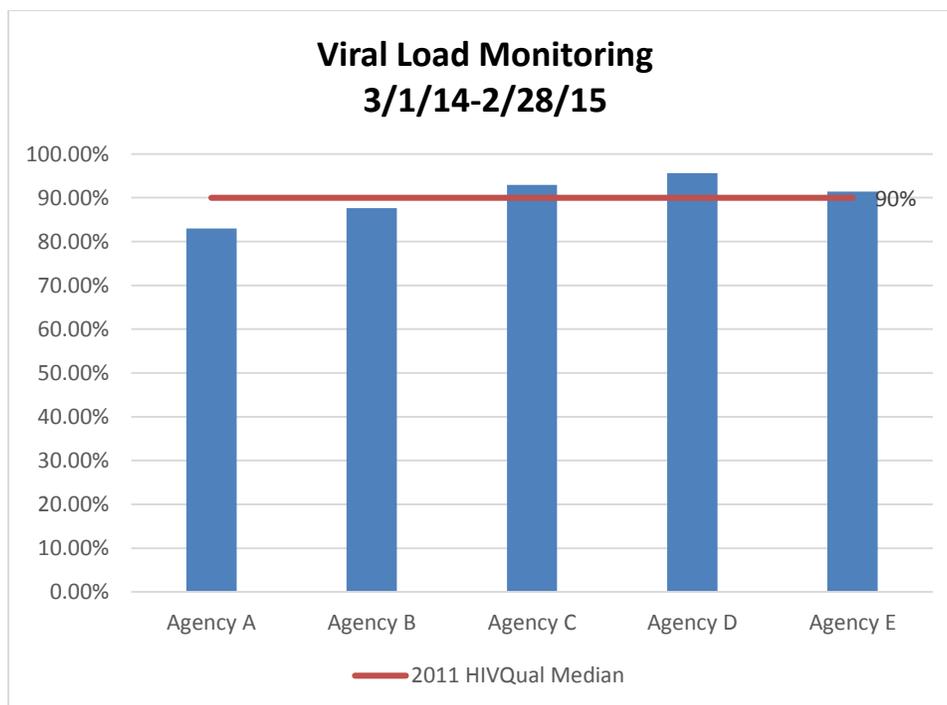


## Viral Load Monitoring

- Percentage of clients with HIV infection who had a viral load test performed at least every six months during the measurement year

|  | 2013         | 2014         |
|--|--------------|--------------|
| Number of HIV-infected clients who had a viral load test performed at least every six months during the measurement year*                                  | 573          | 580          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year | 635          | 635          |
| <b>Rate</b>  | <b>90.2%</b> | <b>91.3%</b> |
| <b>Change from Previous Years Results</b>  | <b>17.3%</b> | <b>1.1%</b>  |

| 2014 Viral Load by Race/Ethnicity  |              |              |              |
|--|--------------|--------------|--------------|
|  | Black        | Hispanic     | White        |
| Number of HIV-infected clients who had a viral load test performed at least every six months during the measurement year   | 259          | 226          | 87           |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges <sup>1</sup> , i.e. MD, PA, NP at least twice in the measurement year | 284          | 245          | 96           |
| <b>Rate</b>  | <b>91.2%</b> | <b>92.2%</b> | <b>90.6%</b> |

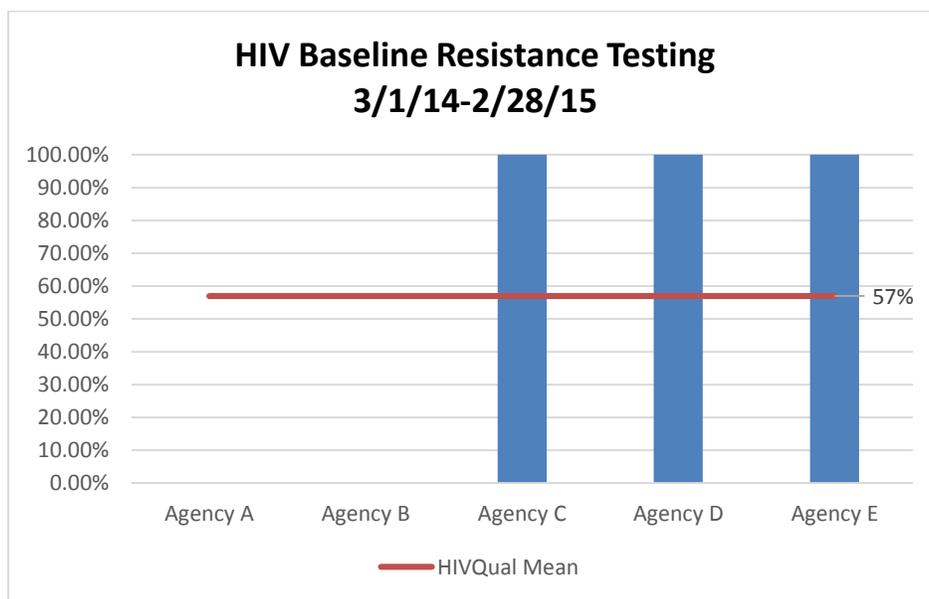


### **HIV Drug Resistance Testing Before Initiation of Therapy**

- Percentage of clients with HIV infection who had an HIV drug resistance test performed before initiation of HIV ART if therapy started in the measurement year

|   | 2013         | 2014         |
|---|--------------|--------------|
| Number of patients who had an HIV drug resistance test performed at any time before initiation of HIV ART   | 14           | 17           |
| Number of HIV-infected clients who:<br>• had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and<br>• were prescribed ART during the measurement year for the first time | 21           | 20           |
| <b>Rate</b>   | <b>66.7%</b> | <b>85%</b>   |
| <b>Change from Previous Years Results</b>   |              | <b>18.3%</b> |

| <b>2014 Drug Resistance Testing by Race/Ethnicity</b>   |            |              |             |
|---|------------|--------------|-------------|
|   | Black      | Hispanic     | White       |
| Number of patients who had an HIV drug resistance test performed at any time before initiation of HIV ART   | 8          | 6            | 1           |
| Number of HIV-infected clients who:<br>• had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and<br>• were prescribed ART during the measurement year for the first time | 10         | 7            | 1           |
| <b>Rate</b>   | <b>80%</b> | <b>85.7%</b> | <b>100%</b> |



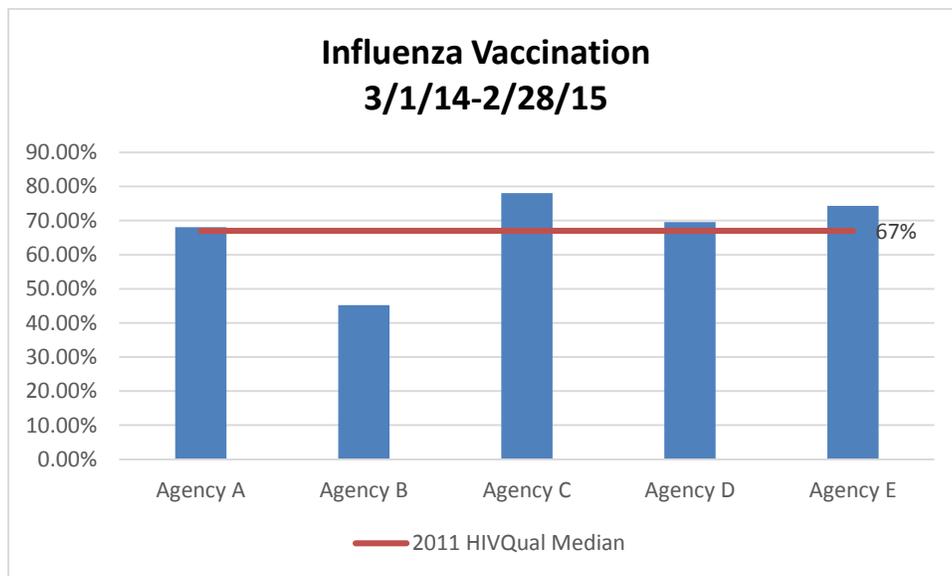
### Influenza Vaccination

- Percentage of clients with HIV infection who have received influenza vaccination within the measurement year

|   | 2012         | 2013*        | 2014*        |
|---|--------------|--------------|--------------|
| Number of HIV-infected clients who received influenza vaccination within the measurement year   | 353          | 383          | 404          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement period | 597          | 615          | 607          |
| <b>Rate</b>   | <b>59.1%</b> | <b>62.3%</b> | <b>66.6%</b> |
| <b>Change from Previous Years Results</b>   | <b>9.6%</b>  | <b>3.2%</b>  | <b>4.3%</b>  |

- The 2013 & 2014 definition excludes from the denominator medical, patient, or system reasons for not receiving influenza vaccination

| 2014 Influenza Screening by Race/Ethnicity  |              |              |              |
|---|--------------|--------------|--------------|
|   | Black        | Hispanic     | White        |
| Number of HIV-infected clients who received influenza vaccination within the measurement year   | 168          | 176          | 53           |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 269          | 237          | 91           |
| <b>Rate</b>   | <b>62.5%</b> | <b>74.3%</b> | <b>58.2%</b> |

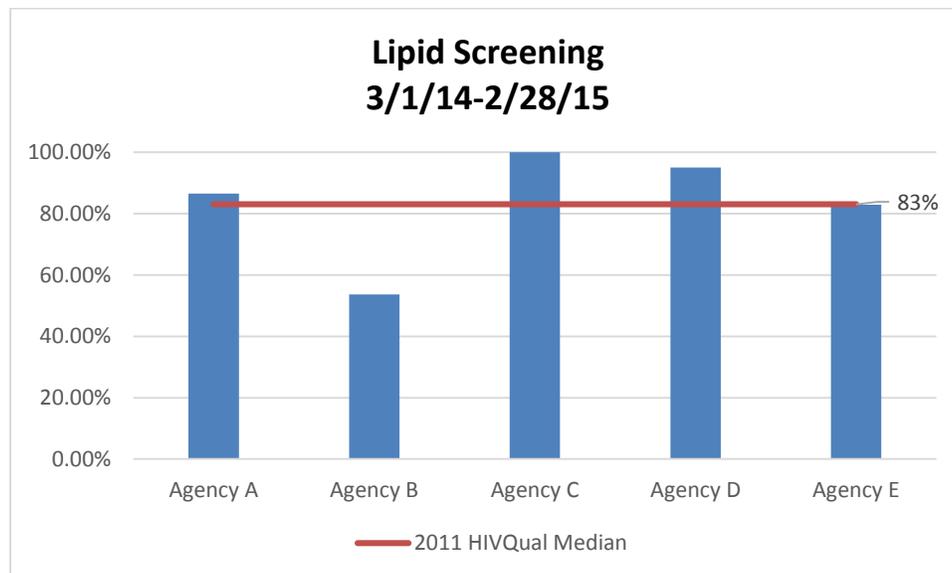


## Lipid Screening

- Percentage of clients with HIV infection on ART who had fasting lipid panel during measurement year

|  | 2012         | 2013         | 2014         |
|--|--------------|--------------|--------------|
| Number of HIV-infected clients who:<br>• were prescribed ART, and<br>• had a fasting lipid panel in the measurement year                                     | 485          | 562          | 563          |
| Number of HIV-infected clients who are on ART and who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 557          | 609          | 605          |
| <b>Rate</b>  | <b>87.1%</b> | <b>92.3%</b> | <b>93.1%</b> |
| <b>Change from Previous Years Results</b>  | <b>-3.9%</b> | <b>5.2%</b>  | <b>.8%</b>   |

| 2014 Lipid Screening by Race/Ethnicity   |              |              |              |
|--|--------------|--------------|--------------|
|  | Black        | Hispanic     | White        |
| Number of HIV-infected clients who:<br>• were prescribed ART, and<br>• had a fasting lipid panel in the measurement year                                     | 244          | 222          | 89           |
| Number of HIV-infected clients who are on ART and who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 259          | 242          | 94           |
| <b>Rate</b>  | <b>94.2%</b> | <b>91.7%</b> | <b>94.7%</b> |

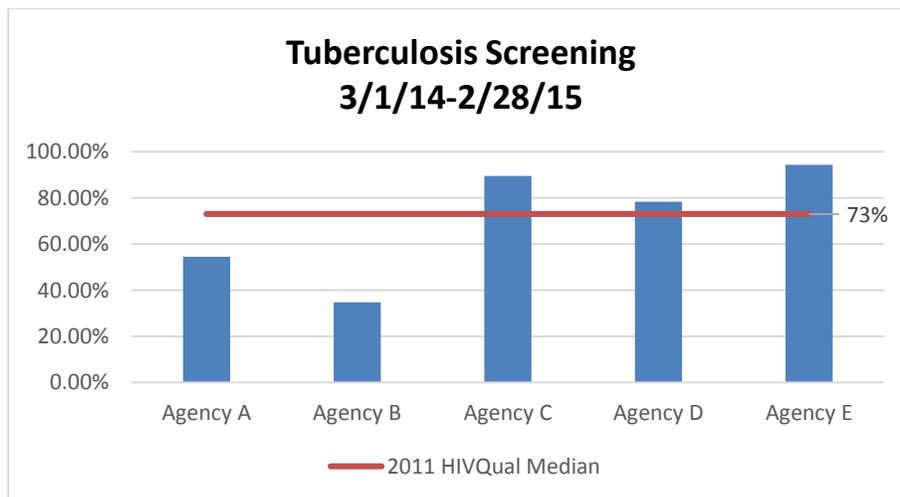


### Tuberculosis Screening

- Percent of clients with HIV infection who received testing with results documented for LTBI with any approved test (tuberculin skin test [TST] or interferon gamma release assay [IGRA]) since HIV diagnosis

|   | 2012         | 2013        | 2014         |
|---|--------------|-------------|--------------|
| Number of clients who received documented testing for LTBI with any approved test (tuberculin skin test [TST] or interferon gamma release assay [IGRA]) since HIV diagnosis   | 310          | 355         | 404          |
| Number of HIV-infected clients who:<br>• do not have a history of previous documented culture-positive TB disease or previous documented positive TST or IGRA; and<br>• had a medical visit with a provider with prescribing privileges at least twice in the measurement year. | 550          | 573         | 568          |
| <b>Rate</b>   | <b>56.4%</b> | <b>62%</b>  | <b>71.1%</b> |
| <b>Change from Previous Years Results</b>   | <b>7.9%</b>  | <b>5.6%</b> | <b>9.1%</b>  |

| 2014 TB Screening by Race/Ethnicity  |              |              |              |
|--|--------------|--------------|--------------|
|  | Black        | Hispanic     | White        |
| Number of clients who received documented testing for LTBI with any approved test (tuberculin skin test [TST] or interferon gamma release assay [IGRA]) since HIV diagnosis  | 176          | 157          | 63           |
| Number of HIV-infected clients who:<br>• do not have a history of previous documented culture-positive TB disease or previous documented positive TST or IGRA; and<br>• had a medical visit with a provider with prescribing privileges at least once in the measurement year. | 264          | 213          | 83           |
| <b>Rate</b>  | <b>66.7%</b> | <b>73.7%</b> | <b>75.9%</b> |



## Adolescent/Adult Performance Measures

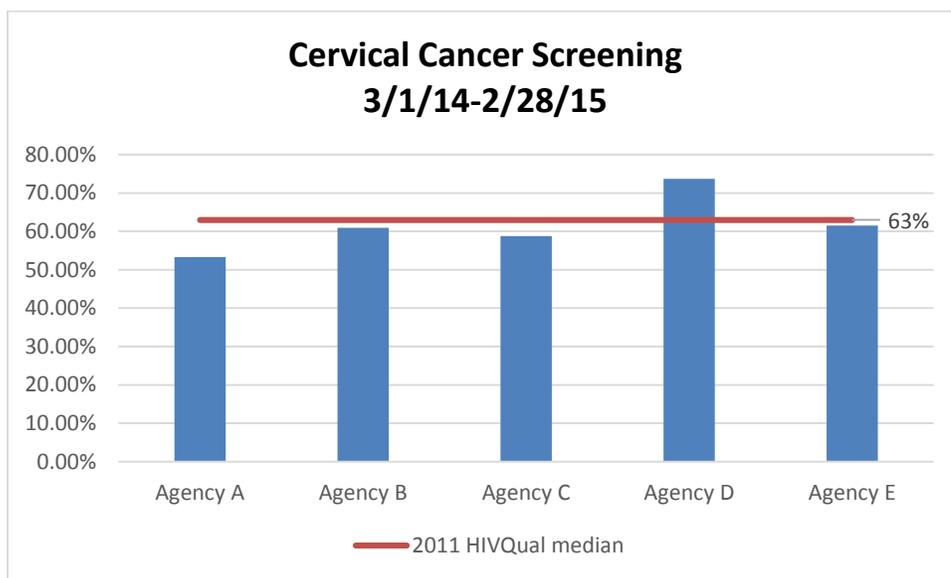
### Cervical Cancer Screening

- Percentage of women with HIV infection who have Pap screening results documented in the measurement year

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected female clients who had Pap screen results documented in the measurement year   | 145          | 167          | 183          |
| Number of HIV-infected female clients: <ul style="list-style-type: none"> <li>for whom a pap smear was indicated, and</li> <li>who had a medical visit with a provider with prescribing privileges at least twice in the measurement year*</li> </ul> | 266          | 273          | 288          |
| <b>Rate</b>   | <b>54.5%</b> | <b>61.2%</b> | <b>63.5%</b> |
| <b>Change from Previous Years Results</b>   | <b>-4%</b>   | <b>6.7%</b>  | <b>2.3%</b>  |

- 19.7% (36/183) of pap smears were abnormal
- 71.5% (206/288) had a pap smear screening within an 18 month measurement period

| 2014 Cervical Cancer Screening Data by Race/Ethnicity  |              |              |              |
|--|--------------|--------------|--------------|
|  | Black        | Hispanic     | White        |
| Number of HIV-infected female clients who had Pap screen results documented in the measurement year  | 99           | 77           | 6            |
| Number of HIV-infected female clients: <ul style="list-style-type: none"> <li>for whom a pap smear was indicated, and</li> <li>who had a medical visit with a provider with prescribing privileges at least twice in the measurement year</li> </ul> | 174          | 103          | 9            |
| <b>Rate</b>  | <b>56.9%</b> | <b>74.8%</b> | <b>66.7%</b> |



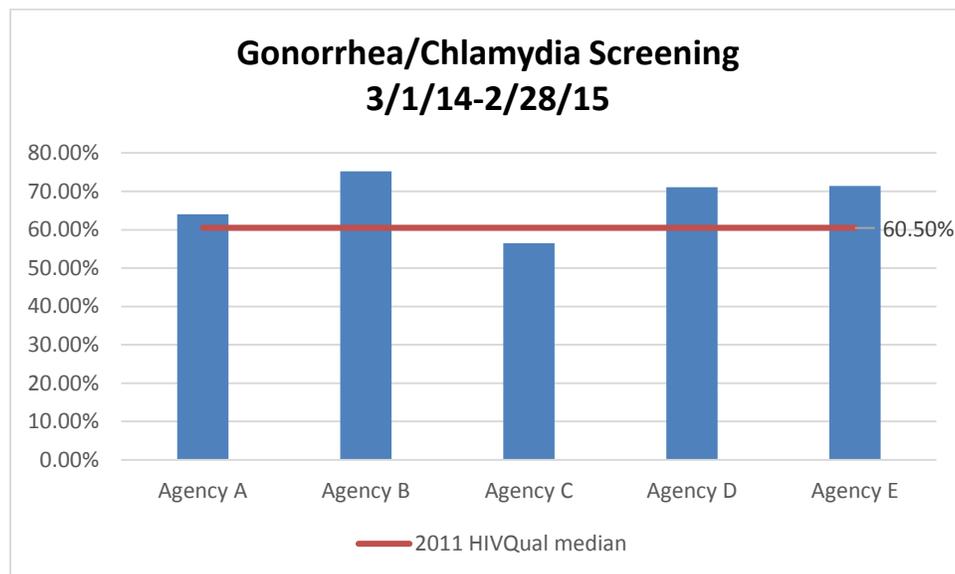
## Gonorrhea/Chlamydia Screening

- Percent of clients with HIV infection at risk for sexually transmitted infections who had a test for Gonorrhea/Chlamydia within the measurement year

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected clients who had a test for Gonorrhea/Chlamydia   | 314          | 396          | 424          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 578          | 635          | 631          |
| <b>Rate</b>   | <b>54.3%</b> | <b>62.4%</b> | <b>67.2%</b> |
| <b>Change from Previous Years Results</b>   | <b>4%</b>    | <b>8.1%</b>  | <b>4.8%</b>  |

- 9 cases of CT and 11 cases of GC were identified

| 2014 GC/CT by Race/Ethnicity  |              |              |              |
|---|--------------|--------------|--------------|
|   | Black        | Hispanic     | White        |
| Number of HIV-infected clients who had a serologic test for syphilis performed at least once during the measurement year                  | 187          | 175          | 57           |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 284          | 245          | 96           |
| <b>Rate</b>   | <b>65.8%</b> | <b>71.4%</b> | <b>59.4%</b> |



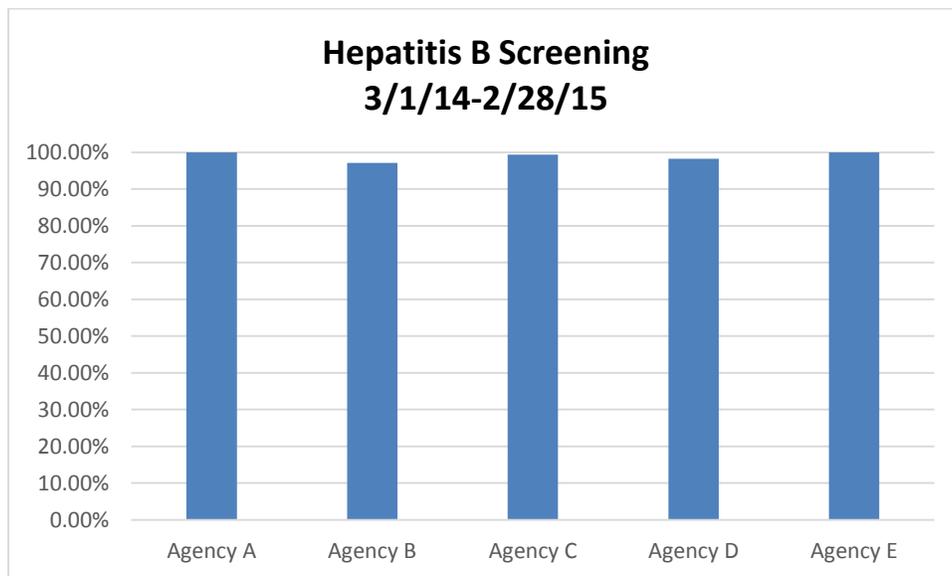
### Hepatitis B Screening

- Percentage of clients with HIV infection who have been screened for Hepatitis B virus infection status

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected clients who have documented Hepatitis B infection status in the health record                                      | 585          | 620          | 627          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 597          | 635          | 635          |
| <b>Rate</b>   | <b>98%</b>   | <b>97.6%</b> | <b>98.7%</b> |
| <b>Change from Previous Years Results</b>   | <b>-0.6%</b> | <b>-0.4%</b> | <b>1.1%</b>  |

- 3.3% (21/635) were Hepatitis B positive

| 2014 Hepatitis B Screening by Race/Ethnicity  |              |              |            |
|---|--------------|--------------|------------|
|   | Black        | Hispanic     | White      |
| Number of HIV-infected clients who have documented Hepatitis B infection status in the health record                                      | 281          | 241          | 95         |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 284          | 245          | 96         |
| <b>Rate</b>   | <b>98.9%</b> | <b>98.4%</b> | <b>99%</b> |

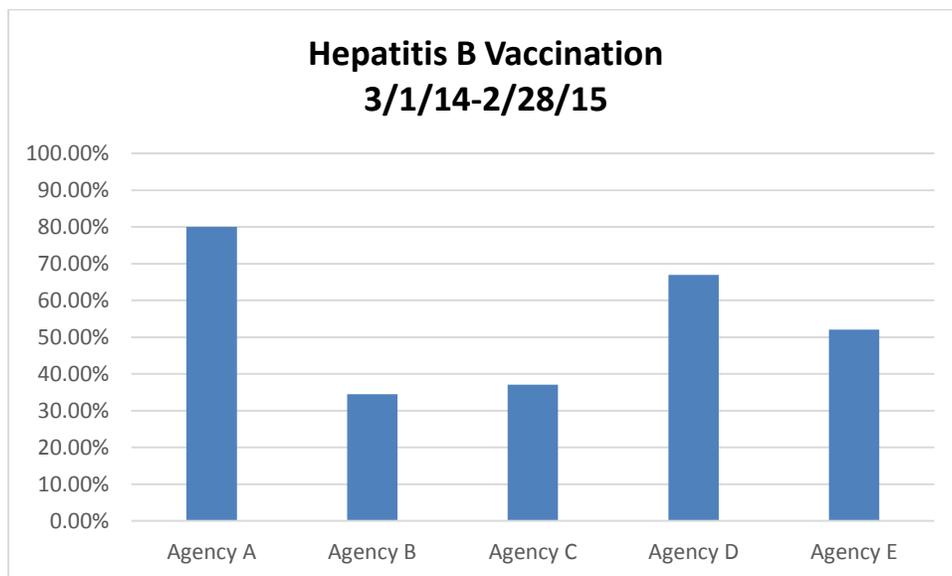


### Hepatitis B Vaccination

- Percentage of clients with HIV infection who completed the vaccination series for Hepatitis B

|  | 2012         | 2013         | 2014         |
|--|--------------|--------------|--------------|
| Number of HIV-infected clients with documentation of having ever completed the vaccination series for Hepatitis B  | 143          | 165          | 179          |
| Number of HIV-infected clients who are Hepatitis B Nonimmune and had a medical visit with a provider with prescribing privileges at least twice in the measurement year* | 333          | 328          | 322          |
| <b>Rate</b>  | <b>42.9%</b> | <b>50.3%</b> | <b>55.6%</b> |
| <b>Change from Previous Years Results</b>  | <b>10.4%</b> | <b>7.4%</b>  | <b>5.3%</b>  |

| 2014 Hepatitis B Vaccination by Race/Ethnicity  |            |              |              |
|---|------------|--------------|--------------|
|   | Black      | Hispanic     | White        |
| Number of HIV-infected clients with documentation of having ever completed the vaccination series for Hepatitis B   | 66         | 99           | 13           |
| Number of HIV-infected clients who are Hepatitis B Nonimmune and had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 127        | 155          | 37           |
| <b>Rate</b>   | <b>52%</b> | <b>63.9%</b> | <b>35.1%</b> |



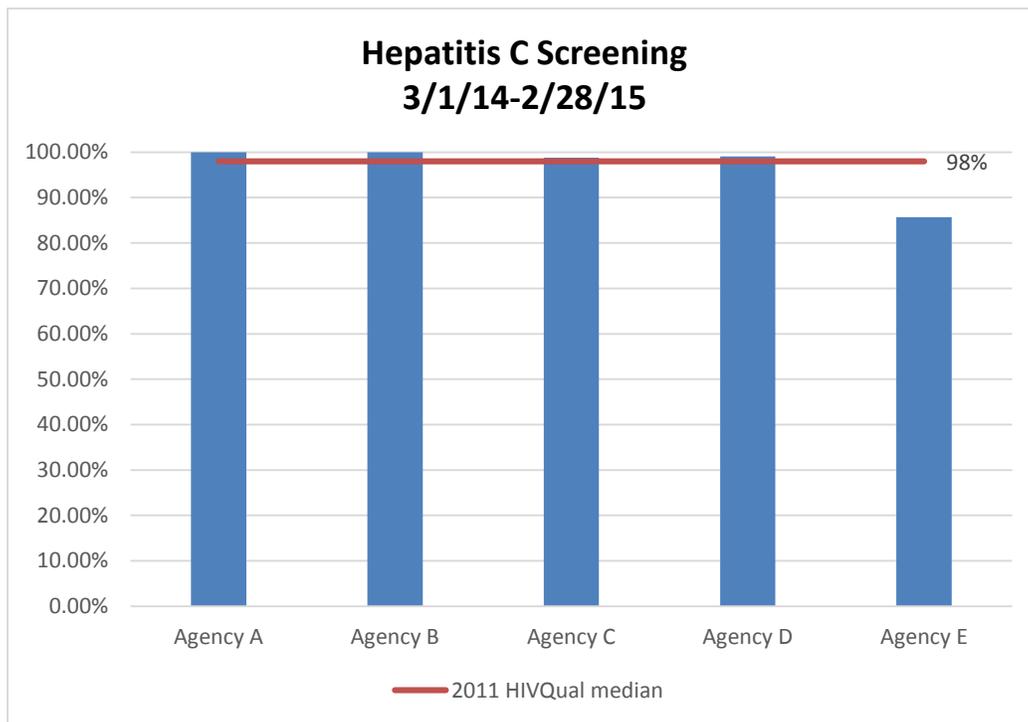
## Hepatitis C Screening

- Percentage of clients for whom Hepatitis C (HCV) screening was performed at least once since diagnosis of HIV infection

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected clients who have documented HCV status in chart  | 588          | 607          | 626          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 597          | 635          | 635          |
| <b>Rate</b>   | <b>98.5%</b> | <b>95.6%</b> | <b>98.6%</b> |
| <b>Change from Previous Years Results</b>   | <b>-.3%</b>  | <b>-2.9%</b> | <b>3%</b>    |

- 7.6% (48/635) were Hepatitis C positive, including 14 acute infections only and 7 cures

| 2014 Hepatitis C Screening by Race/Ethnicity  |            |            |            |
|---|------------|------------|------------|
|   | Black      | Hispanic   | White      |
| Number of HIV-infected clients who have documented HCV status in chart  | 281        | 240        | 95         |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 284        | 245        | 96         |
| <b>Rate</b>   | <b>99%</b> | <b>98%</b> | <b>99%</b> |

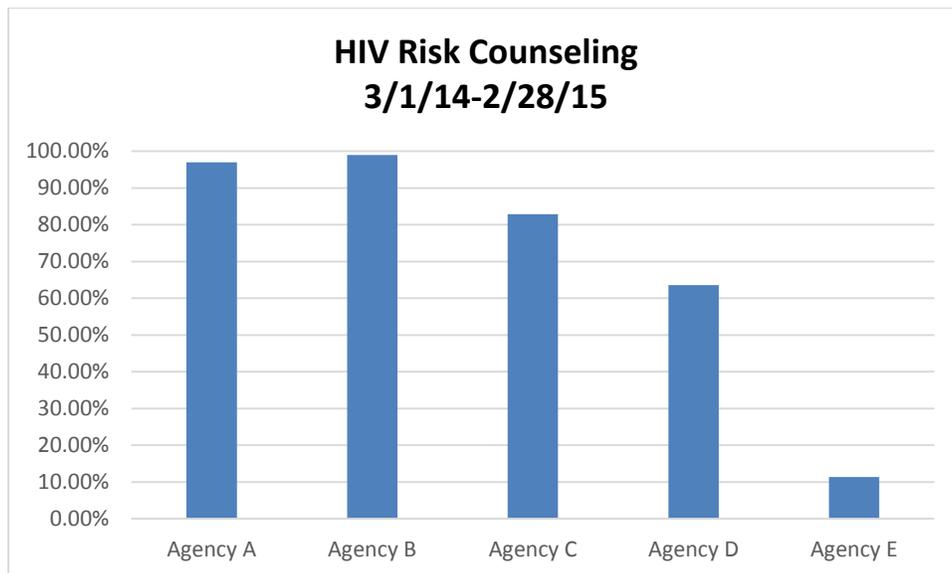


### **HIV Risk Counseling**

- Percentage of clients with HIV infection who received HIV risk counseling within measurement year

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected clients, as part of their primary care, who received HIV risk counseling   | 510          | 526          | 489          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 597          | 635          | 635          |
| <b>Rate</b>   | <b>85.4%</b> | <b>82.8%</b> | <b>77%</b>   |
| <b>Change from Previous Years Results</b>   | <b>3.3%</b>  | <b>-2.6%</b> | <b>-5.8%</b> |

| <b>2014 HIV Risk Counseling by Race/Ethnicity</b>   |              |              |              |
|---|--------------|--------------|--------------|
|   | Black        | Hispanic     | White        |
| Number of HIV-infected clients, as part of their primary care, who received HIV risk counseling   | 234          | 181          | 69           |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 284          | 245          | 96           |
| <b>Rate</b>   | <b>82.4%</b> | <b>73.9%</b> | <b>71.9%</b> |

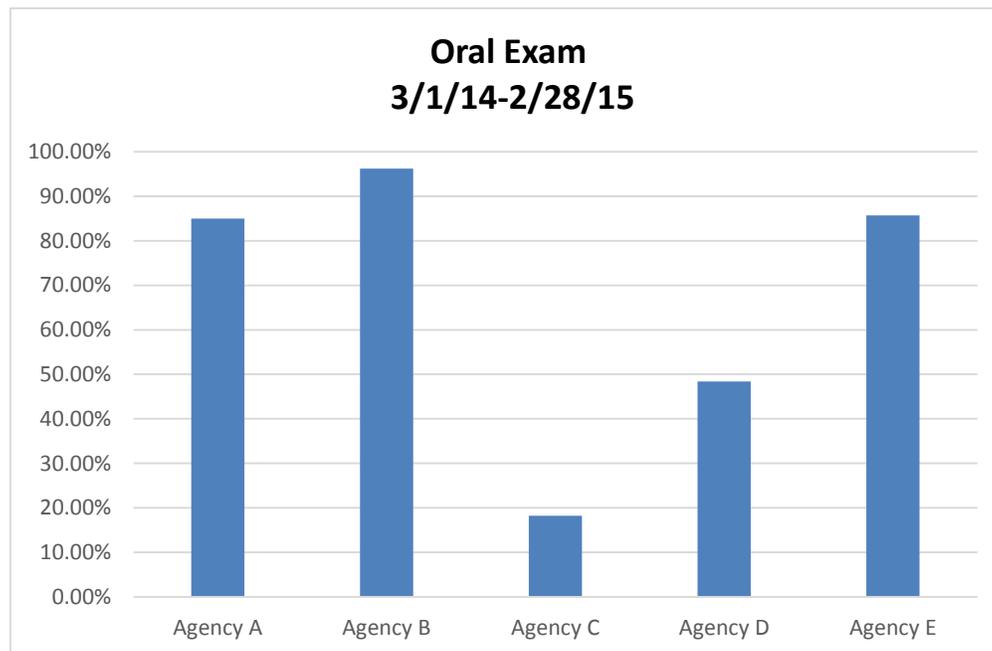


## Oral Exam

- Percent of clients with HIV infection who were referred to a dentist for an oral exam or self-reported receiving a dental exam at least once during the measurement year

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of clients with HIV infection who were referred to a dentist for an oral exam or self-reported receiving a dental exam at least once during the measurement year | 325          | 364          | 356          |
| Number of clients with HIV infection who had a medical visit with a provider with prescribing privileges at least twice in the measurement year                         | 597          | 635          | 635          |
| <b>Rate</b>   | <b>54.4%</b> | <b>57.3%</b> | <b>56.1%</b> |
| <b>Change from Previous Years Results</b>   | <b>.3%</b>   | <b>2.9%</b>  | <b>-0.8%</b> |

| 2014 Oral Exam by Race/Ethnicity  |              |              |              |
|---|--------------|--------------|--------------|
|   | Black        | Hispanic     | White        |
| Number of clients with HIV infection who were referred to a dentist for an oral exam or self-reported receiving a dental exam at least once during the measurement year | 171          | 141          | 37           |
| Number of clients with HIV infection who had a medical visit with a provider with prescribing privileges at least twice in the measurement year                         | 284          | 245          | 96           |
| <b>Rate</b>   | <b>60.2%</b> | <b>57.6%</b> | <b>38.5%</b> |



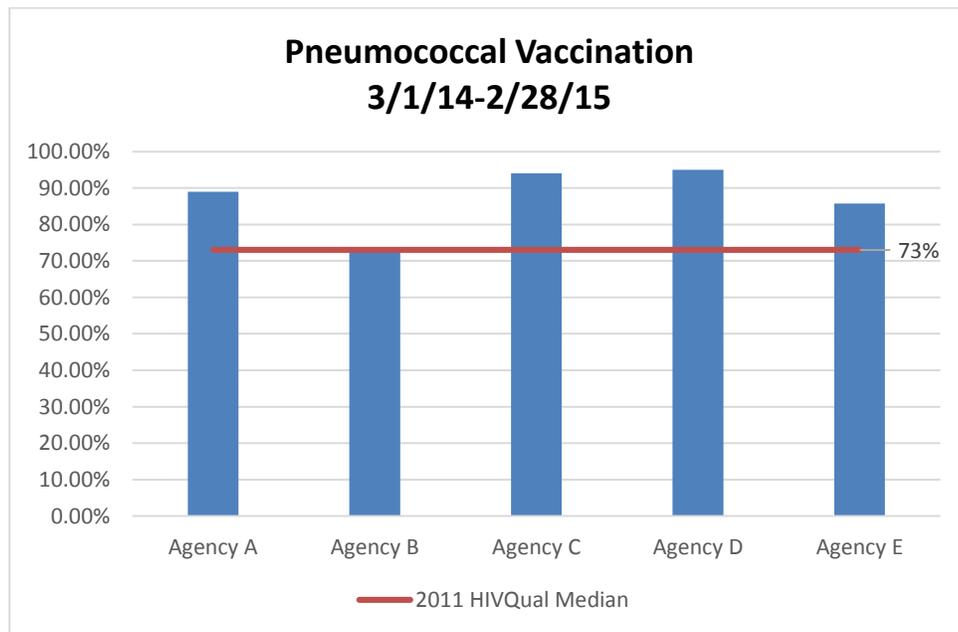
### ***Pneumococcal Vaccination***

- Percentage of clients with HIV infection who ever received pneumococcal vaccination

|  | 2012         | 2013         | 2014         |
|--|--------------|--------------|--------------|
| Number of HIV-infected clients who received pneumococcal vaccination   | 467          | 470          | 556          |
| Number of HIV-infected clients who: <ul style="list-style-type: none"> <li>had a CD4 count &gt; 200 cells/mm<sup>3</sup>, and</li> <li>had a medical visit with a provider with prescribing privileges at least twice in the measurement period</li> </ul> | 562          | 555          | 623          |
| <b>Rate</b>  | <b>83.1%</b> | <b>84.7%</b> | <b>89.2%</b> |
| <b>Change from Previous Years Results</b>  | <b>5.9%</b>  | <b>1.6%</b>  | <b>4.5%</b>  |

- 234/635 clients (36.9%) received both PPV13 and PPV23 (FY13- 13.7%)

| <b>2014 Pneumococcal Vaccination by Race/Ethnicity</b>   |              |              |              |
|--|--------------|--------------|--------------|
|  | Black        | Hispanic     | White        |
| Number of HIV-infected clients who received pneumococcal vaccination   | 240          | 225          | 82           |
| Number of HIV-infected clients who: <ul style="list-style-type: none"> <li>had a CD4 count &gt; 200 cells/mm<sup>3</sup>, and</li> <li>had a medical visit with a provider with prescribing privileges at least twice in the measurement period</li> </ul> | 284          | 245          | 96           |
| <b>Rate</b>  | <b>84.5%</b> | <b>91.8%</b> | <b>85.4%</b> |



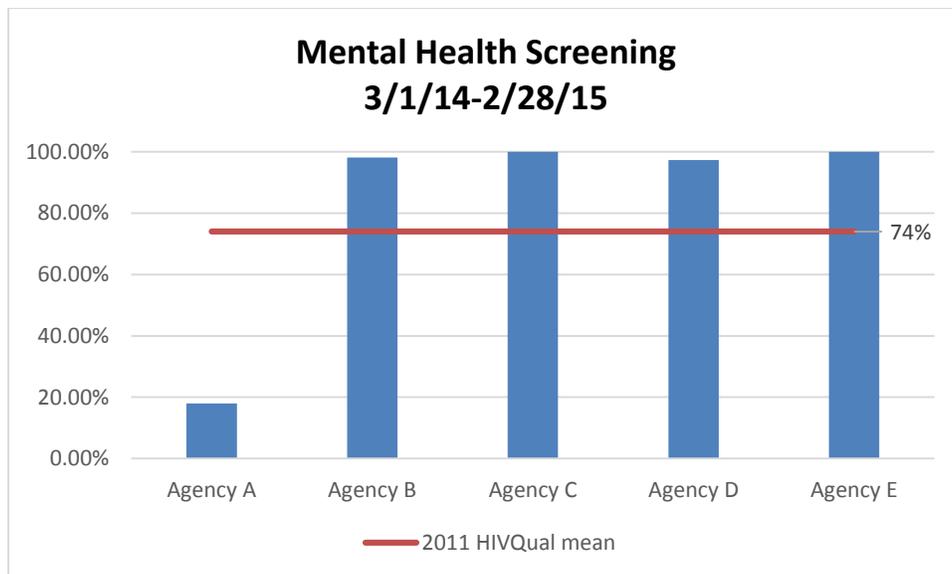
### **Preventative Care and Screening: Mental Health Screening**

- Percentage of clients with HIV infections who have had a mental health screening

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected clients who received a mental health screening*  | 522          | 520          | 567          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement period | 597          | 635          | 635          |
| <b>Rate</b>   | <b>87.4%</b> | <b>81.9%</b> | <b>89.3%</b> |
| <b>Change from Previous Years Results</b>   | <b>12.8%</b> | <b>-5.5%</b> | <b>1.9%</b>  |

\*The 2014 definition only includes those who had a mental health screening using a standardized tool

- 30.6% (194/635) had mental health issues. Of the 115 who needed additional care, 86 (74.8%) were either managed by the primary care provider or referred; 12 clients refused a referral.

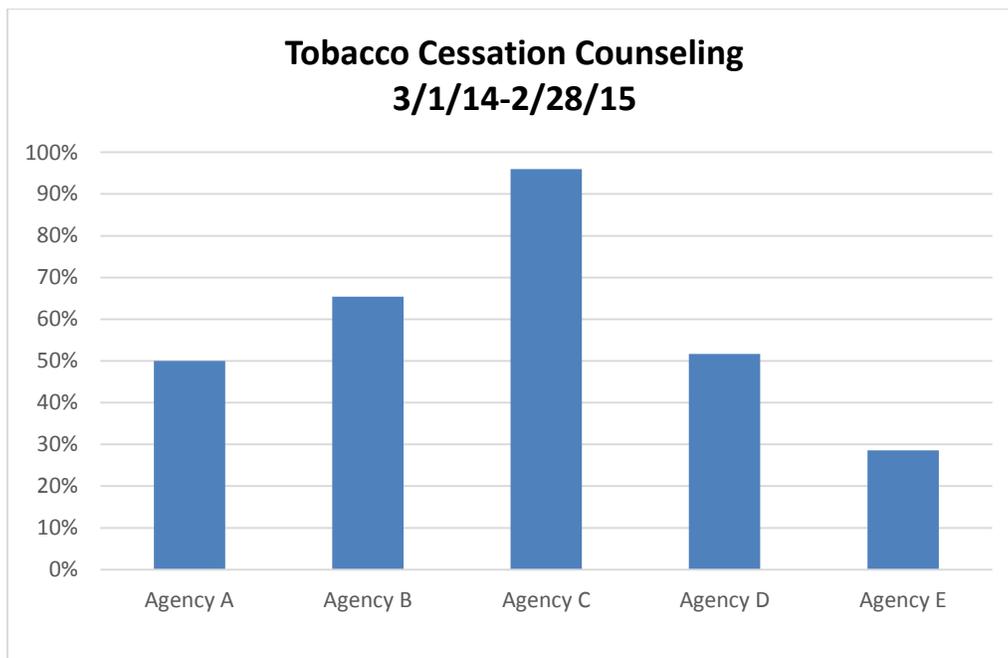


**Preventative Care and Screening: Tobacco Use: screening & cessation intervention**

- Percentage of clients with HIV infection who were screened for tobacco use one or more times with 24 months and who received cessation counseling if indicated

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected clients who were screened for tobacco use in the measurement period  | 505          | 633          | 631          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement period | 597          | 635          | 635          |
| <b>Rate</b>   | <b>84.6%</b> | <b>99.7%</b> | <b>99.4%</b> |
| <b>Change from Previous Years Results</b>   | <b>4.4%</b>  | <b>15.1%</b> | <b>-.3%</b>  |

- HIVQUAL-US Mean 86%**
- Of the 631 clients screened, 161 (25.5%) were current smokers.
- Of the 161 current smokers, 107 (66.5%) received smoking cessation counseling, and 36 (22.4%) refused smoking cessation counseling



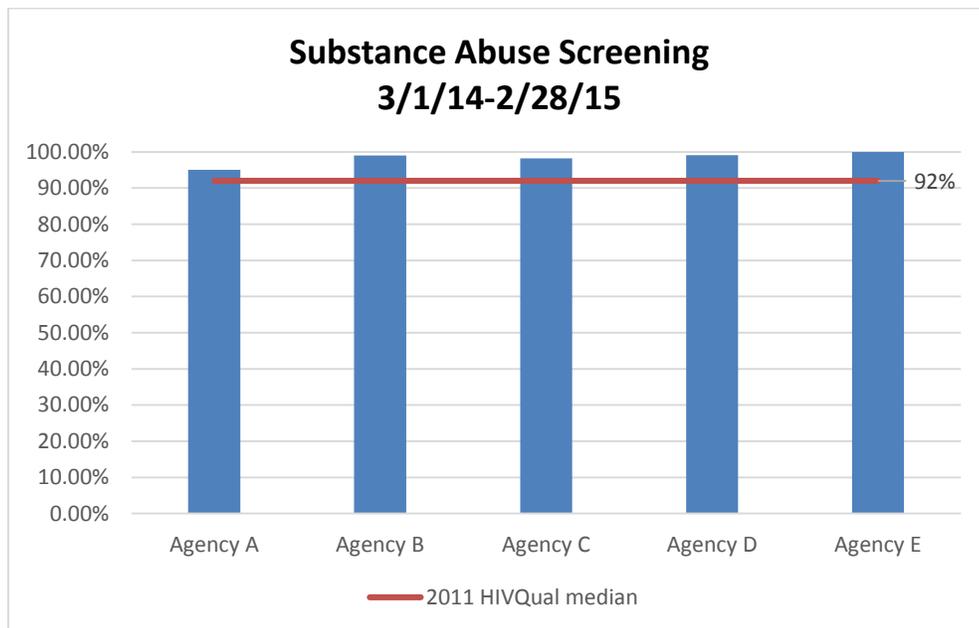
## Substance Abuse Screening

- Percentage of clients with HIV infections who have been screened for substance use (alcohol & drugs) in the measurement year\*

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of new HIV-infected clients who were screened for substance use within the measurement year  | 448          | 620          | 624          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement period | 597          | 635          | 635          |
| <b>Rate</b>   | <b>75%</b>   | <b>97.6%</b> | <b>98.3%</b> |
| <b>Change from Previous Years Results</b>   | <b>-3.9%</b> | <b>22.6%</b> | <b>.7%</b>   |

\*HAB measure indicates only new clients be screened. However, Houston EMA standards of care require medical providers to screen all clients annually.

- 6.1% (39/635) had substance abuse issues. Of the 39 clients who needed referral, 26 (66.7%) received one, and 11 (28.2%) refused.



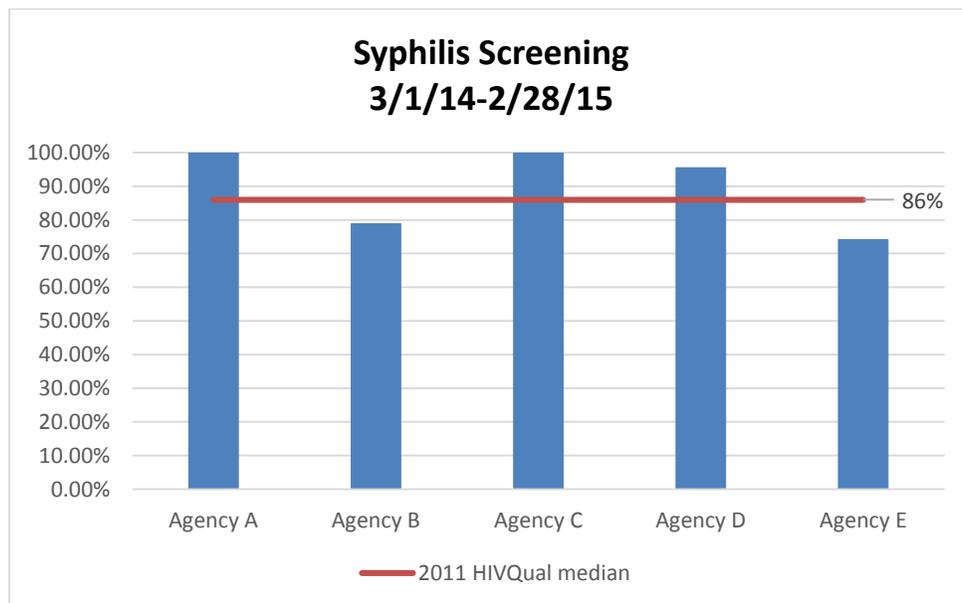
## Syphilis Screening

- Percentage of adult clients with HIV infection who had a test for syphilis performed within the measurement year

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected clients who had a serologic test for syphilis performed at least once during the measurement year                  | 499          | 591          | 594          |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 597          | 632          | 635          |
| <b>Rate</b>   | <b>83.6%</b> | <b>93.5%</b> | <b>93.5%</b> |
| <b>Change from Previous Years Results</b>   | <b>-2.2%</b> | <b>9.9%</b>  | <b>0%</b>    |

- 6.6% (39/594) new cases of syphilis diagnosed

| 2014 Syphilis Screening by Race/Ethnicity   |              |              |              |
|---|--------------|--------------|--------------|
|   | Black        | Hispanic     | White        |
| Number of HIV-infected clients who had a serologic test for syphilis performed at least once during the measurement year                  | 269          | 227          | 89           |
| Number of HIV-infected clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 284          | 245          | 96           |
| <b>Rate</b>   | <b>94.7%</b> | <b>92.7%</b> | <b>92.7%</b> |

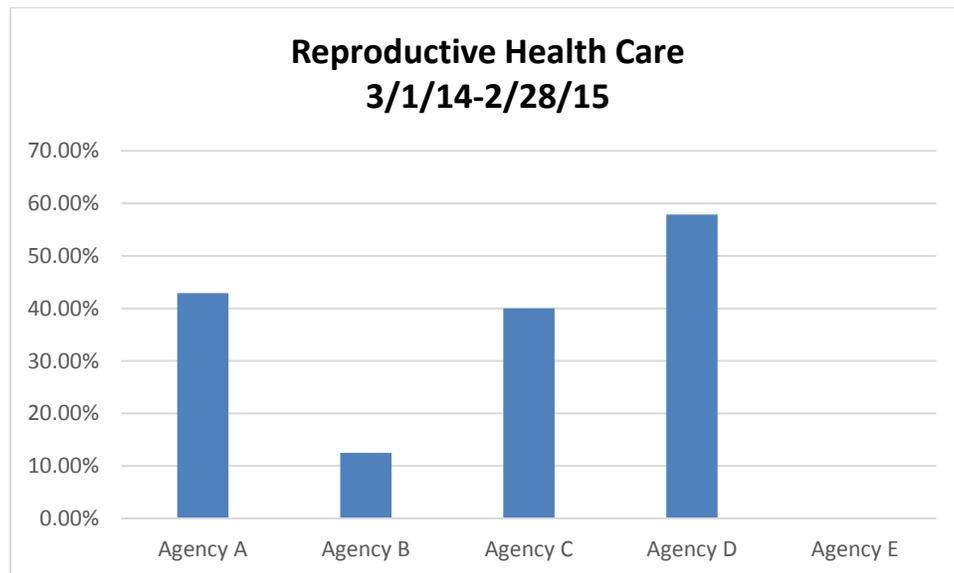


## Other Measures

### Reproductive Health Care

- Percentage of reproductive-age women with HIV infection who received reproductive health assessment and care (i.e, pregnancy plans and desires assessed and either preconception counseling or contraception offered)

|   | 2012         | 2013         | 2014         |
|---|--------------|--------------|--------------|
| Number of HIV-infected reproductive-age women who received reproductive health assessment and care  | 36           | 32           | 30           |
| Number of HIV-infected reproductive-age women who: <ul style="list-style-type: none"> <li>did not have a hysterectomy or bilateral tubal ligation, and</li> <li>had a medical visit with a provider with prescribing privileges at least twice in the measurement period</li> </ul> | 112          | 67           | 73           |
| <b>Rate</b>   | <b>32.1%</b> | <b>47.8%</b> | <b>41.7%</b> |
| <b>Change from Previous Years Results</b>   | <b>3.9%</b>  | <b>15.7%</b> | <b>-6.1%</b> |

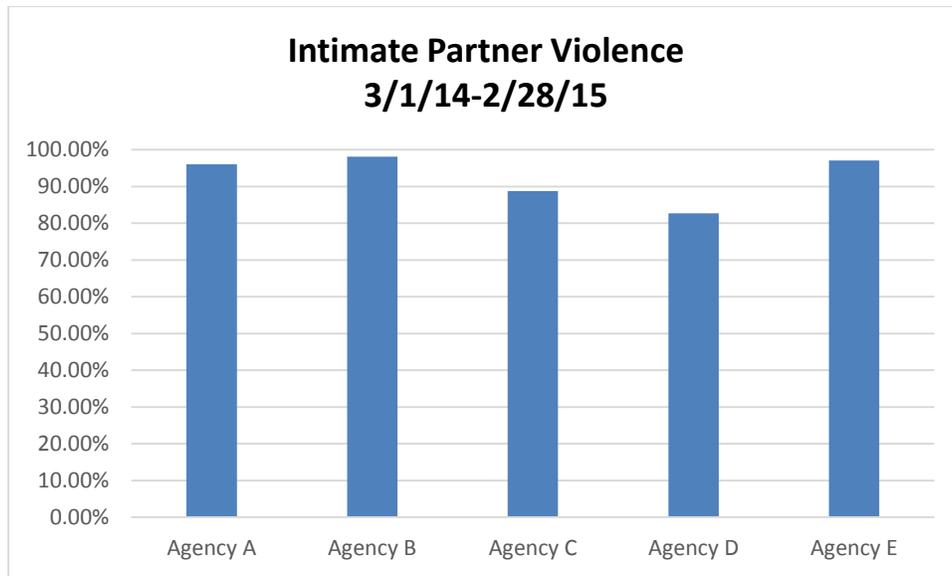


**Intimate Partner Violence Screening**

- Percentage of clients with HIV infection who received screening for current intimate partner violence

|  | 2013         | 2014         |
|--|--------------|--------------|
| Number of HIV-infected clients who received screening for current intimate partner violence  | 462          | 570          |
| Number of HIV-infected clients who: <ul style="list-style-type: none"> <li>• had a medical visit with a provider with prescribing privileges at least twice in the measurement period</li> </ul> | 635          | 635          |
| <b>Rate</b>  | <b>72.8%</b> | <b>89.8%</b> |
|  |              | <b>17%</b>   |

\*1/635 (.2%) screened positive



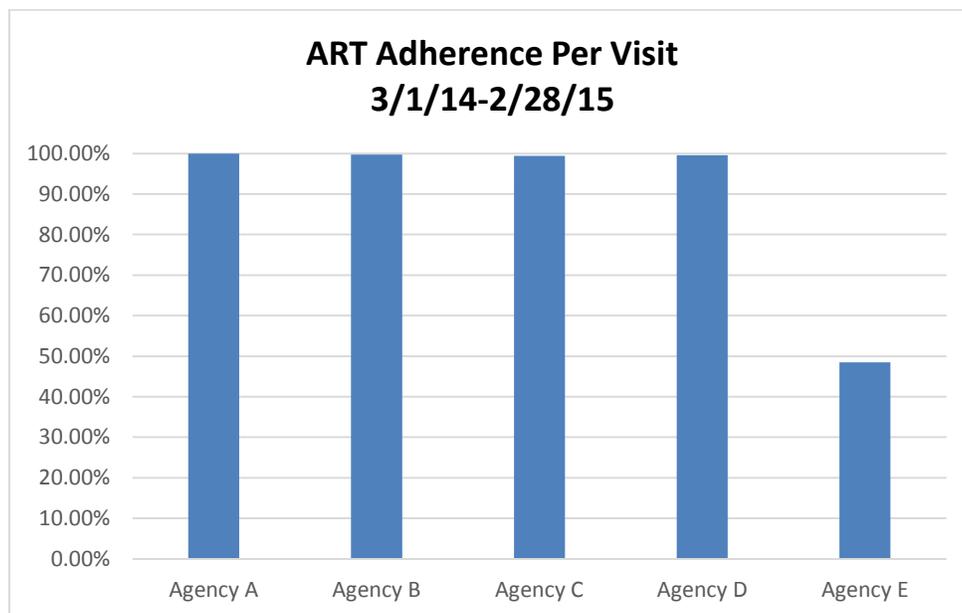
### Adherence Assessment & Counseling

- Percentage of clients with HIV infection on ART who were assessed for adherence at least once per year

|  | Adherence Assessment |              |             |
|--|----------------------|--------------|-------------|
|  | 2012                 | 2013         | 2014        |
| Number of HIV-infected clients, as part of their primary care, who were assessed for adherence at least once per year                            | 549                  | 541          | 599         |
| Number of HIV-infected clients on ART who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 557                  | 573          | 605         |
| <b>Rate</b>  | <b>98.6%</b>         | <b>94.4%</b> | <b>99%</b>  |
| <b>Change from Previous Years Results</b>  | <b>-9%</b>           | <b>-4.2%</b> | <b>4.6%</b> |

- HIVQUAL-US Mean 96%, 75<sup>th</sup> percentile 100%

| Adherence Assessment Per Visit   |              |
|--|--------------|
|  | 2014         |
| Number of primary care visits where ART adherence was assessed   | 1,926        |
| Number of primary care visits for HIV-infected clients on ART who had a medical visit with a provider with prescribing privileges at least twice in the measurement year | 1,979        |
| <b>Rate</b>  | <b>97.3%</b> |



### **ART for Pregnant Women**

- Percentage of pregnant women with HIV infection who are prescribed antiretroviral therapy (ART)

|   | 2012        | 2013        | 2014        |
|---|-------------|-------------|-------------|
| Number of HIV-infected pregnant women who were prescribed ART during the 2nd and 3rd trimester  | 7           | 4           | 4           |
| Number of HIV-infected pregnant women who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year | 7           | 4           | 4           |
| <b>Rate</b>   | <b>100%</b> | <b>100%</b> | <b>100%</b> |
| <b>Change from Previous Years Results</b>   | <b>0%</b>   | <b>0%</b>   | <b>0%</b>   |

### **Primary Care: Diabetes Control**

- Percentage of clients with HIV infection and diabetes who maintained glucose control during measurement year

|   | 2013         | 2014         |
|---|--------------|--------------|
| Number of HIV-infected diabetic clients whose last HbA1c in the measurement year was <8%  | 34           | 41           |
| Number of HIV-infected diabetic clients who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year | 53           | 68           |
| <b>Rate</b>   | <b>64.2%</b> | <b>60.3%</b> |
| <b>Change from Previous Years Results</b>   |              | <b>-3.9%</b> |

- 631/635 (99.4%) of clients were screened for diabetes and 68/631 (10.8%) were diagnosed diabetic

### ***Primary Care: Hypertension Control***

- Percentage of clients with HIV infection and hypertension who maintained blood pressure control during measurement year

|   | 2013         | 2014         |
|---|--------------|--------------|
| Number of HIV-infected hypertensive clients whose last blood pressure of the measurement year was <140/90   | 123          | 125          |
| Number of HIV-infected hypertensive clients who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year | 180          | 172          |
| <b>Rate</b>   | <b>68.3%</b> | <b>72.7%</b> |
| <b>Change from Previous Years Results</b>   |              | <b>4.4%</b>  |

- 172/635 (27.1%) of clients where were diagnosed with hypertension

### ***Primary Care: Breast Cancer Screening***

- Percentage of women with HIV infection, over the age of 41, who had a mammogram documented in the previous two years

|  | 2013         | 2014         |
|--|--------------|--------------|
| Number of HIV-infected women over age 41 who had a mammogram or a referral for a mammogram documented in the previous two years                                      | 136          | 138          |
| Number of HIV-infected women over age 41 who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year | 163          | 158          |
| <b>Rate</b>  | <b>83.4%</b> | <b>87.3%</b> |
| <b>Change from Previous Years Results</b>  |              | <b>3.9%</b>  |

## **Conclusions**

The Houston EMA demonstrates performance rates at or above national benchmarks for nearly all performance measures. In addition, there have been several positive trends over the past 2 years: viral load suppression rates, sexually transmitted infection screening, and vaccination rates have continued to improve. However, racial and ethnic disparities continue to be seen for most measures, with African-Americans having lower rates than White and Hispanic clients. Eliminating racial and ethnic disparities in care are a priority for the EMA, and will continue to be a focus for quality improvement.