San Francisco Department of Public Health
HIV Health Services

FY 14-15
Summary Report of the
San Francisco Eligible Metropolitan Area
Health Resource Service Administration’s
HIV/AIDS Bureau's
Quality Management Performance Measures

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Introduction

The San Francisco’s Eligible Metropolitan Area (SF EMA) Quality Management Program (QMP) takes two very important methodologies into consideration: Quality Assurance and Continuous Quality Improvement. Quality Assurance (QA) consists of measuring compliance to minimum quality standards and pinpoints specific problems to be resolved. Continuous Quality Improvement (CQI) is the continuous modification of a process or system to improve outcomes for everyone involved. By integrating these methodologies together, the SF EMA created a comprehensive QMP based on data measurements and persistence to continuously achieve maximum quality service provision.

SFEMA selects performance measure or indicators which assess specific aspects of care and services that are linked to better health outcomes while being consistent with current professional knowledge and meeting client needs. The development and tracking of measurable health outcomes as a result of services rendered by providers in the SF EMA is an ongoing focus of the regional QMP effort. Using current information in the AIDS Regional Information and Evaluation System (ARIES) database, a baseline measurement has been established for performance indicators and will be used as a foundation for future CQI activities.

HIV Data Collection

The following summary of selected Health Resource Service Administration’s (HRSA) HIV/AIDS Bureau’s (HAB) HIV/AIDS Performance Measures for Adults and Adolescents for the SF EMA – Outpatient Primary Care services are based on the national standards disseminated by HRSA.

Additionally, this summary report uses the ARIES database, which is programmed to comply with all State and Federal reporting formulas. It should be further noted that these federal standard indicator thresholds may vary from local contractual indicator thresholds. Local thresholds were established prior to national standards being established.

EMA data runs were conducted on 9/16/2015 and the timeframe studied was the Ryan White 2014-15 fiscal year (FY 14-15). The total unduplicated client count (UDC) for the SF EMA primary care clients is 3,621 (N=3,621). Inclusion criteria for QM indicators was based upon a client receiving at least two Primary Care visits during the measurement year which results in 3,380 (n=3,380) or 93.3% of all EMA primary care clients.

EMA Groups and County Statistical Overview for Report

- **Marin County** – The Marin primary care UDC is 143 or 3.9% of total EMA primary care UDC. Seventeen (17) or 11.9% primary care clients served in Marin were “new” and there were no deaths in FY 14-15.

- **San Francisco County** – The San Francisco primary care UDC is 3,348 or 92.5% of total EMA primary care UDC. Three hundred forty one (341) or 10.2% primary care clients served in San Francisco were “new” and 10 or 0.3% died in FY 14-15.
2014 SF EMA Summary Report of HAB Performance Measures

- **San Mateo County** – The San Mateo primary care UDC is 130 or 3.6% of total EMA primary care UDC. Eighteen (18) or 13.9% primary care clients served in San Mateo were “new” and there were no deaths in FY 14-15.

- **EMA-Wide** – The total UDC for the SF EMA primary care clients is 3,621 (100%). Three hundred seventy five (375) or 10.4% of primary care clients served in the EMA were “new” and 10 or 0.3% died in FY 14-15.

**Narrative format for each performance indicator:**

- Description of indicator including national and local threshold performance goals.
- Graphic depiction: The graph for each indicator measured illustrates the aggregate results in four groupings and includes local and national threshold value.
- Analysis of data findings.
  - Were performance goals met
  - Reasons if not

**Additional QM Charts**

- **RW FY 2014-15 QM Indicators by County Summary** - The summary chart selects the same QM indicators and each EMA county results achieved over the 3/1/2014-2/28/2015 reporting period.

- **2010-2014 SF EMA Performance Indicators Summary Chart** – The SF EMA summary chart selects the same QM indicators and the EMA results achieved over a five year time period (2010-2014).

- **FY 14-15 SF EMA Selected Quality Indicators by Gender Chart** – The SF EMA selects three QM indicators and the EMA results achieved by subgroups based upon gender.

- **FY 14-15 SF EMA Selected Quality Indicators by Race Chart** – The SF EMA selects three QM indicators and the EMA results achieved by subgroups based upon racial identification.
Data Perspective and Considerations

Conclusions drawn between the primary care groups should take into account several factors:

- Implementation of the Low Income Health Program (LIHP) in 2011-12. LIHP is a combined federal, state and local government effort to get ready for the health care coverage expansions that will take place as a result of federal health reform. Both San Mateo and San Francisco transitioned a number of Ryan White clients into their respective LIHPs which may affect some performance outcomes. LIHP transitioned clients who may have been included in the denominator of the potential criteria pool and no longer appear to have had sufficient services or data to be included in the numerator by criteria formulas.

- Recent data conversion into ARIES for entire EMA. This is the fourth EMA-wide report as data conversion into ARIES was completed in the later part of 2010 for the entire EMA and the EMA administrative account was created in early 2012.

- HRSA receives and reviews EMA client and service level data only as submitted in the annual Ryan White Service Report (RSR) which is solely extracted through ARIES and is the same data analyzed in this report.

- This summary report is designed to address CQI thresholds not to compare models of care.

- This summary report is not a study designed to compare the relative strength of primary care service delivery models between each EMA county. Variability in the service model design within each county and the individual primary care program limit the ability to determine which model is stronger.

- Primary Care service providers all conduct agency specific internal CQI activities with HIV-specific focused indicators which may be different from the indicators highlighted in this report. Using the agency’s primary database and subsequent data analysis of even the same indicators would render results very different than those derived through ARIES.

- Variance in agency experience with data input. Service models such as Centers of Excellence by its collaborative venture has many partners/staff entering data, analyzing and interacting with the ARIES database on a daily basis more often than other primary care settings.
Definition, Analysis and Discussion of QM Indicators

Medical Visits Indicator: Percentage of clients with HIV infection who had two or more medical visits at least three months apart within an HIV care setting in the measurement year. **New clients who received their first primary care visit within the last three months of the measurement year were excluded.** There is no national threshold performance level for this indicator. The local performance level goal is currently set at 85%.

The medical visits graph indicates the performance level range of 63.7% to 81.8% among the groups (74.5 to 96.2 percent of the local threshold goal). The San Francisco EMA performance level of 64.4% achieves 75.8% of the local threshold goal.

Medical Visits Analysis: There is no national consensus on performance level threshold for this indicator. The 85% local performance level threshold goal was not met by any of the groups.

Reasons for those not meeting the threshold goal could be: a) Newly insured clients placed client out of the numerator criteria within the reporting period; b) clients are medically “stable” and require less frequent visits within the reporting period; c) missed or rescheduled appointments place client beyond criteria range; d) clients were discharged from program services but are still listed as “active” in database, e) the service data entry is not complete for all client visits.

Highly Active Antiretroviral Therapy (HAART) Indicator: Percentage of clients with HIV/AIDS who are prescribed HAART. The national performance level goal for this
indicator is currently set at 80%. The local performance level goal is currently set at 85%.

![HAART 2014 Graph](image)

The HAART graph indicates the performance level range of 90.9% to 100% among the groups (106.9 to 117.6 percent of the local threshold goal and 113.6 to 125 percent of the national threshold goal). The San Francisco EMA wide performance level of 91.3% achieves 107.4% of the local and 114.1% of the national threshold goal.

**HAART Analysis:** The 80% national and 85% local threshold goals were met and exceeded in all groups.

**Viral Load Suppression Indicator:** Note this indicator is formulated to HAB criteria in ARIES starting in mid-2012, it requires at least two viral load test results during the reporting period. Percentage of patients, regardless of age, with a diagnosis of AIDS with a viral load test result less than 200 copies/ml in the last testing result entered during measurement period. Both the local and national performance level goal is currently set at 90%.
The Viral Load Suppression graph indicates the performance level range of 81.4% to 98.6% among the groups (90.0 to 109.6 percent of the local and national threshold goal). The SF EMA wide performance level of 82.6% achieves 91.8% of the local and national threshold goal.

**Viral Load Suppression Analysis:** The 90% local and national performance level threshold goal was met and exceeded by Marin and San Mateo.

**Hepatitis C Screening Indicator:** Percentage of clients for whom Hepatitis C (HCV) screening was performed at least once since the diagnosis of HIV infection. The national performance level goal for this indicator is currently set at 95%. The local performance level goal is currently set at 85%.
The Hepatitis C Screening graph indicates the performance level range of 75.8% to 92.5% among the groups (89.2 to 108.8 percent of the local threshold goal and 84.9 to 99.7 percent of the national threshold goal). The San Francisco EMA wide performance level of 77% achieves 90.6% of the local and 81.1% of the national threshold goal.

**Hepatitis C Screening Analysis:** The 95% national threshold goal was not met by any group. The 85% local performance threshold goal was met and exceeded by Marin and San Mateo.

Reasons for those failing to meet the national and local threshold goal(s) could be: a) there is no screening data element in the client electronic medical record thus information is buried in progress notes or simply not noted as a rendered service; b) data element was entered in ARIES as “unknown” as opposed to “not medically indicated” so client could not be excluded from calculation; and c) ARIES data entry is not complete for all clients.

**PCP Prophylaxis Indicator:** Percentage of clients with HIV infection & CD4 T-cell count below 200 cells/mm3 who were prescribed PCP prophylaxis. The local performance level goal is currently set at 85%. The national performance level goal for this indicator is currently set at 95%.

<table>
<thead>
<tr>
<th></th>
<th>Marin County (n=12)</th>
<th>San Francisco County (n=282)</th>
<th>San Mateo County (n=5)</th>
<th>SF EMA (n= 301)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCP Prophylaxis</td>
<td>91.7%</td>
<td>54.3%</td>
<td>80.0%</td>
<td>55.8%</td>
</tr>
<tr>
<td>Local Threshold</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>National Threshold</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
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The PCP Prophylaxis graph indicates the performance level range of 54.3% to 91.7% among the groups (63.9 to 107.9 percent of the local threshold goal & 57.2 to 96.5 percent of the national threshold goal). The San Francisco EMA wide performance level of 55.8% achieves 65.6% of the local and 58.7% of the national threshold goal.
PCP Prophylaxis Analysis: The 95% national threshold goal was not met by any group. The 85% local performance threshold goal was met and exceeded by Marin.

Reasons for those failing to meet the national and local threshold goal(s) could be: a) data element was entered in ARIES as “unknown” as opposed to “not medically indicated” so client could not be excluded from calculation, b) PCP prophylaxis medications not entered correctly in database and c) data entry is not complete for all ARIES clients and d) SF performance is also indicative of a data importation limit for this data element.

Syphilis Screening Indicator: Percentage of adult clients with HIV infection who had a test for syphilis performed within the measurement year. The local performance level goal is currently set at 85%. The national performance level goal for this indicator is currently set at 90%.

The Syphilis Screening graph indicates the performance level range of 39.8% to 84.5% among the groups (46.4 to 99.4 percent of the local threshold goal & 43.8 to 93.9 percent of the national threshold goal). The SF EMA wide performance level of 42.5% achieves 50.0% of the local and 47.2% of the national threshold goal.

Syphilis Screening Analysis: The 90% national performance level threshold goal was not met by any group. The 85% local performance threshold goal was essentially met by San Mateo.

Reasons for those failing to meet the national and local threshold goal(s) could be: a) there is no screening data element in the client electronic medical record thus information is buried in progress notes or simply not noted as a rendered service; b) data element was entered in ARIES as “unknown” as opposed to “not medically indicated” thus client could be excluded from calculation; and c) ARIES data entry is not complete for all clients and d) SF performance is also indicative of a data importation limit for this data element.
County Analysis Recap: The 85% local performance level threshold goal for Medical Visits was not met by any county. The 95% national goal for PCP Prophylaxis was not met by any county while the 85% local performance goal was met and exceeded by Marin. The 80% national and 85% local HAART goals were met and exceeded by all counties. The 90% local and national performance level goal for Viral Load Suppression was met and exceeded by Marin and San Mateo. The 95% national goal for Hepatitis C Screening was not met by any county while the 85% local performance goal was met and exceeded by Marin and San Mateo. The 90% national performance level goal for Syphilis Screening was not met by any county while the 85% local performance was essentially met by San Mateo.
2014 Gender Analysis: Males comprise 81.4%, Females 15.0% and Transgender 3.5% of the client pool who receives their primary care within the SF EMA. Transgender clients have a 6.7% greater frequency of attending a medical visit when compared with Females, and 11.5% greater frequency than Males and are 10.4% over the EMA level. Transgender clients also have a slight increase being on HAART over Females (+1.7%), Males (+3.3%) and EMA (+2.9%) levels. Female (-2.4%) and Transgender (-12.2%) clients have a lower rate of Viral Load Suppression than Males who are 0.9% over the EMA level. Due to the smaller size of the transgender and female client populations, the percentages are subject to more variation which may overstate the differences in outcomes.

Health disparities based on gender in the SF EMA primary care client pool don’t appear to be significant for HAART and may be present in viral load suppression as indicated by Transgender population having the greatest frequency of HAART and medical visits yet lowest rate of viral load suppression simultaneously.
Five Year Focus on Transgender Viral Load Suppression

<table>
<thead>
<tr>
<th>Year</th>
<th>Transgender</th>
<th>EMA Aggregate</th>
</tr>
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<tbody>
<tr>
<td>2010 (n=107)</td>
<td>72.9%</td>
<td>71.1%</td>
</tr>
<tr>
<td>2011 (n=116)</td>
<td>72.4%</td>
<td>83.0%</td>
</tr>
<tr>
<td>2012 (n=101)</td>
<td>73.3%</td>
<td>86.3%</td>
</tr>
<tr>
<td>2013 (n=90)</td>
<td>77.8%</td>
<td>83.8%</td>
</tr>
<tr>
<td>2014 (n=119)</td>
<td>71.3%</td>
<td>82.6%</td>
</tr>
</tbody>
</table>

In 2014 there has been a 6.5% decline in suppression levels compared to 2013 among Transgender clients. Data distortion due to the relatively small number within this subgroup is a partial explanation. Additionally, a 32.2% increase in the number of unduplicated clients in 2014 engaging or reengaging in care may also be a factor.
2014 Race Analysis: Racial subgroups percentages are 25.6% African American, 4.6% Asian & Pacific Islander (API), 21.6% Latino(a), 3.3%, Multi-Ethnic, 1.3% Native Americans and 37.6% White of the client pool who receives their primary care within the SF EMA.

APIs (-6.3%) have the lowest frequency for a medical visit and are furthest below the EMA level. White clients (-2.9%) are also lower than the EMA level. African American (0.6%) clients are virtually identical to the EMA level. Native American (+7.7%), Multi-Ethnic (+7.0%) and Latino(a) (+6.2%) clients are notably above the EMA result.

Latino(a) and Native American clients have the highest rate of being on HAART. API, African American, and White clients are clustered with the EMA result with Multi-Ethnic clients very slightly below. The national and local threshold goals were met and exceeded in all groups for the HAART indicator.

Native Americans have the lowest rate of suppression and are furthest below (-5.9%) the EMA result for the Viral Load Suppression indicator. African American (-4.9%) clients followed by Multi-Ethnic (-2.9%) client are below the EMA result. White (0.6%) client rates are virtually identical to the EMA result. API (+6.4%) and Latino(a)(+4.6%) clients have the highest rate of suppression and are notably above the EMA result.

Due to the smaller size of the API, Multi-Ethnic and Native American client populations, the percentages are subject to more variation which may overstate the differences in outcomes.
Health disparities based on race in the SF EMA primary care client pool don’t appear to be significant for HAART and may be present in viral load suppression as indicated by Native American population having the greatest frequency of medical visits and second highest rate on HARRT yet lowest rate of viral load suppression simultaneously.

Five Year Focus on Native American Viral Load Suppression

In 2014 there has been a 4.6% decline in suppression levels compared to 2013 among Native American clients. Data distortion due to the relatively small number within this subgroup is a partial explanation. Additionally, a 34.4% increase in the number of unduplicated clients in 2014 engaging or reengaging in care may also be a factor.
SF EMA Quality Indicators Over Five Years (2010 -2014):

<table>
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<tr>
<th>SF EMA Performance Indicators 2010 - 2014</th>
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<tbody>
<tr>
<td>2010 (n=3372)</td>
</tr>
<tr>
<td>Med. Visits</td>
</tr>
<tr>
<td>PCP Proph.</td>
</tr>
<tr>
<td>HAART</td>
</tr>
<tr>
<td>Viral Load Suppression</td>
</tr>
<tr>
<td>Hep C</td>
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<tr>
<td>Syphilis Screening</td>
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SF EMA Analysis: There is a very slight dip for HAART (2.3%) and Viral Load Suppression (1.2%) from the 2013 peak year while maintaining an excellent overall performance level. The Hep C screening indicator is shown in a slight decline (4.5%) from its peak in 2013. The indicator for Medical Visits had a slight increase (2.8%) over 2013. The strongest dip taken was in the indicators for PCP Prophylaxis (14.8%) and Syphilis Screening (11.1%) from 2013.

These decreases are primarily due to incomplete ARIES data entry due to limited data entry staff combined with data importation limitations for medication data and screening activities as shown most dramatically in the PCP Prophylaxis and Syphilis Screening indicators.
Conclusions and Next Steps for Improvement:

In summary, EMA-Wide HAART indicator met or exceeded established thresholds; Viral Load Suppression and Hepatitis C Screening nearly met established thresholds; and PCP Prophylaxis, Medical Visits and Syphilis Screening fell significantly below established thresholds. The most commonly given reason(s) for those failing to meet the national and local threshold goal(s) is ARIES data entry is not complete for all clients due to data entry staff turnover combined with data importation limits; data entry errors due to working in multiple databases thus doing double or triple data entry; and some indicators not in alignment with current clinical practices. In addition, the impact of Ryan White clients transitioning onto other funding streams with the procurement health insurance as had an appearance of incomplete client and service level provision when filtered by funding source for data analysis as not all funding sources and client services are required to be entered in the ARIES database.

The four primary goals/activities of the San Francisco EMA QM program: 1) To provide topical training and technical assistance (TA) to HIV community service providers; 2) To track progress toward established markers and milestones that are indicative of the quality of service provided by local providers; 3) To continually improve and enhance client service practices and outcomes through collection and application of accurate, timely electronic and other service data collection and analysis for the San Francisco EMA; and 4) To monitor programmatic services and ensure that local care services continue to adhere to the same high standard that has typified our local system of care.

Purging the damages of health disparities in the SF EMA client base remains the cornerstone of the regional QMP effort.