

BALTIMORE CITY HEALTH DEPARTMENT
RYAN WHITE OFFICE
CLINICAL QUALITY MANAGEMENT PROGRAM (CQM)

Service Category: Oral Health Services

June, 2012



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SECTION 1. INTRODUCTION

The Baltimore City Health Department (BCHD) Ryan White Clinical Quality Management Program (CQM) began in Calendar Year (CY) 2001. CQM verifies that people living with HIV/AIDS (PLWHA) in the Baltimore/Towson Eligible Metropolitan Area (EMA) have access to quality care and services, consistent with the Ryan White CARE Act.

In 2011, CQM staff reviewed services provided in FY2010 in five service categories:

- Outpatient ambulatory health services (primary medical care),
- Oral health,
- Hospice,
- Non-medical case management, and
- Psychosocial support services.

This report addresses oral health. Reports on the other service categories are available from the CQM office. To assist with reading this report, a glossary of oral health terms is provided in Appendix I.

The Greater Baltimore HIV Health Services Planning Council Standards of Care (Standards of Care), define the oral health service category. Oral health is “diagnostic, preventive and therapeutic services provided by general practitioners, dental specialists, dental hygienists and auxiliaries, and other trained primary care providers”.¹

Services that were given are compared with two sets of standards. The first is the Standards of Care developed by The Greater Baltimore HIV Health Services Planning Council (Appendix II). The review of 2010 services was based on the Standards ratified in October, 2009, as they were in effect in FY2010. The second set of standards is five Health Services and Resources Administration HIV/AIDS Bureau (HRSA/HAB) oral health performance measures, summarized in Appendix III.

Data were gathered and analyzed by reviewing patient charts at all Part A- and Minority AIDS Initiative (MAI)-funded oral health provider agencies in the EMA. This report presents the data collected during the review. The report also describes our methodology, provides a summary of findings, and makes suggestions for improving the quality of oral health services.

The prior CQM oral health review looked at services from FY2006. Wherever possible, FY2010 adherence to the Standards of Care is compared with FY2006 findings. The Standards received minor revisions between the two most recent reviews. Please note that data may vary due to several causes:

- Different reviewers,
- Different agencies reviewed,
- Different records reviewed,
- Revisions to the Standards of Care,
- Variations in the abstraction tool, and
- Actual differences in performance.

¹ Greater Baltimore HIV Health Services Planning Council, *Standards of Care, Oral Health Services*, revised November 2004, ratified March 2005.

In addition to preparing this EMA-wide report on Oral Health, the CQM team conducted two technical assistance sessions addressing PMC and Oral Health quality improvement. CQM also provides each agency with a report of its individual performance, compared with the EMA as a whole. Note that totals may vary slightly from **100%** due to rounding.

SECTION 2. METHODS

CQM reviews were conducted at all **5** agencies providing Ryan White Part A and MAI oral health services. Three types of data were collected:

- Services provided to clients—data collected via chart abstracts.
- Consumer perspective on services provided—data collected via face-to-face or telephone interviews, and
- Agency quality management structures and activities—data collected via a quality management organizational assessment.

CHART ABSTRACTION

The chart abstract tool was designed to assess agencies' adherence to the EMA Standards of Care and HAB performance measures. Reviewed services were provided in FY2010, which spans March 1, 2010 through February 28, 2011.

Data collected during the CQM review and presented in this report do not include the experience of every Ryan White Part A and MAI oral health client. The report is based on a sample. Agencies were directed to provide a random sample of client charts for review and two methods for pulling the random sample were provided. CQM staff did not verify that the sample was random. The number of charts requested was based on how many Ryan White clients received Oral Health services at the agency during FY2010. The exact number of charts requested from each agency was determined by the 2008 HIVQUAL sampling method, from the New York State Department of Health, AIDS Institute.²

Based on data provided to BCHD each month by the five Part A/MAI-funded agencies, a total of **1,213** PLWHA received oral health services during FY2010.³ During this review a total of **398** charts were reviewed at the **5** agencies funded to provide Oral Health services to Ryan White clients. On the figures in this report, this number is shown as FY10 N=**398**. CQM reviewed one third of all Oral Health charts. The number of charts reviewed per site ranged from **57** to **97** with an average of **80** charts reviewed per site, *Table 1*.⁴ Four hundred and fifteen charts were reviewed in 2006 (FY 06 N=**415**).

Information from the client chart abstraction is presented in *Sections 3-5*. All funded agencies participated in the review. This includes one agency that provides service to the counties surrounding Baltimore City and one agency that provides service through MAI funding.

² New York State Department of Health AIDS Institute, *The 2005 HIVQUAL Project Sampling Methodology*, January 2006. Available at www.hivguidelines.org

³ These data were obtained from the monthly Form 8 submitted to Baltimore City Health Department, the Grantee. This total is unduplicated at the agency level, and then aggregated to give a duplicated EMA-wide client count.

⁴ Agencies were requested to provide only their Part A and MAI client charts for review.

For each chart reviewed, one survey instrument was completed. While some demographic data were collected by CQM staff, oral health data were abstracted by reviewers who are licensed dentists. The chart abstraction tool is available on request from the Ryan White Office.

Table 1: Oral Health Clients Served and Charts Reviewed

Agency Name	Number of charts reviewed during CQM	% of CQM Total	Reported # of oral health clients	% of agency's reviewed by CQM
Independent Living Foundation	45	11%	69	65%
Chase Brexton Health Services (City & County)	79	20%	280	28%
Baltimore City Health Department	63	16%	143	44%
Total Health Care	57	14%	106	54%
University of Maryland – Dental Plus Clinic (City & County)	154	39%	615	25%
TOTAL	398	100%	1,213	33%

CONSUMER SURVEY

The Consumer Liaison completed consumer questionnaires. She posed questions to clients either face-to-face or by telephone. The consumer survey tool focused on two primary areas:

- Oral health services received, and
- Clients' experience with the agency.

Questions emphasized the type of services provided, clients' knowledge about their care, and satisfaction with services. Consumer survey results are presented in *Section 6*.

AGENCY QM CHECKLIST

The CQM team used a 2006 checklist from the HIVQUAL-US program to assess eight dimensions of each agency's quality management program:

Baltimore City Health Department, Ryan White, CQM Oral Health Report

- Quality improvement structure,
- Quality plan,
- Quality performance measurement,
- Quality improvement activities,
- Staff involvement in quality improvement activities,
- Consumer involvement in quality related activities,
- Evaluation of the quality improvement program, and
- Clinical information system support for patient care tracking and quality measurement.

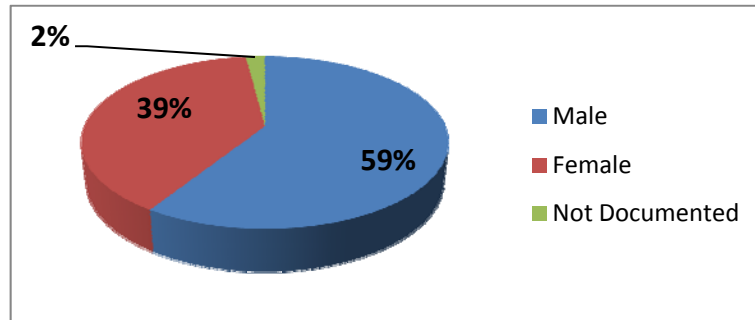
The agency liaison submitted documentation to the CQM team leader. Documentation included a copy of the agency's quality management plan. Based on the documents provided and interviews with one or more representatives of the agency, the CQM team leader completed the checklist. CQM then summarized scores for each dimension of quality improvement. CQM also calculated an overall score for each agency. Data aggregated from all oral health agencies are presented in this report. Findings from the agency QM checklist are presented in *Section 7*. The QM checklist is available upon request from the Ryan White Office.

SECTION 3. CLIENT DEMOGRAPHICS

GENDER

In the sample reviewed, **59%** were charts of male clients and **39%** female. Gender data was missing in **2%** of charts. One oral health client whose chart was reviewed self-identified as transgender, which is less than **1%** (*Figure 1*). The proportion of female clients has increased since the FY06 review from **34%** to **39%**.

Figure 1: Gender distribution of Oral Health clients, N=398

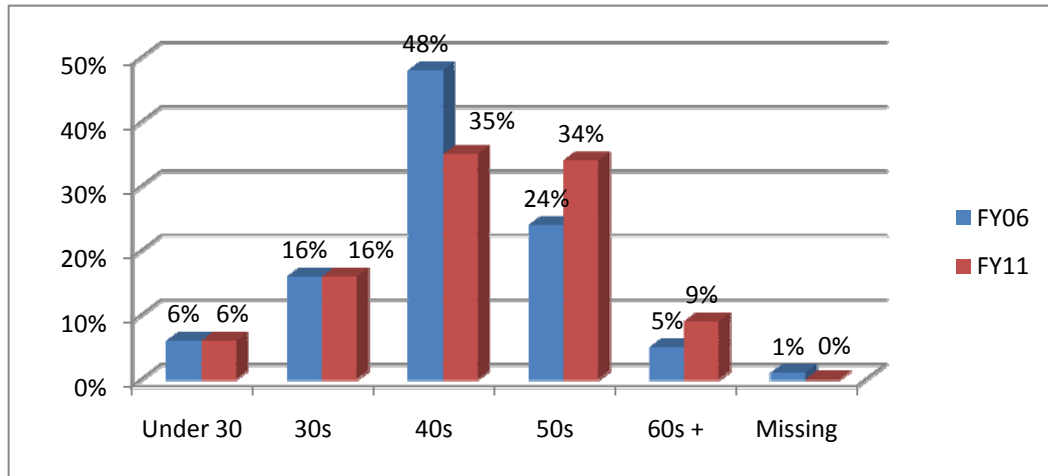


AGE

The highest represented age groups for the review were those in their **40s** and **50s**. The population receiving care is aging. These two age groups are now roughly the same. The proportion of those in their **60s** and above has also increased (*Figure 2*).

Figure 2: Age distribution of Oral Health clients

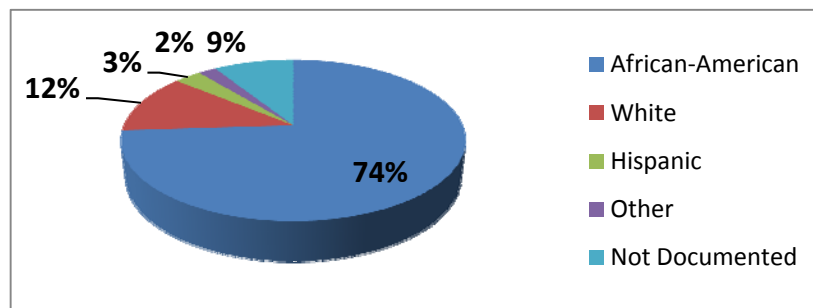
(FY06 N=415, FY10 N=398)



RACE/ETHNICITY

Seventy-four percent (**74%**) of the total sample size was African-American clients. The second largest group was Caucasian representing **12%** of the total. Three percent (**3%**) were Hispanic, and **2%** were “other” races including **3** American Indian or Alaskan Natives and **2** Asian or Pacific Islanders. For **34** clients (**9%**), race was not documented in the charts (*Figure 3*). Those receiving oral health services are overwhelmingly African-American, and their percent of the total has remained close to the same since the last review.

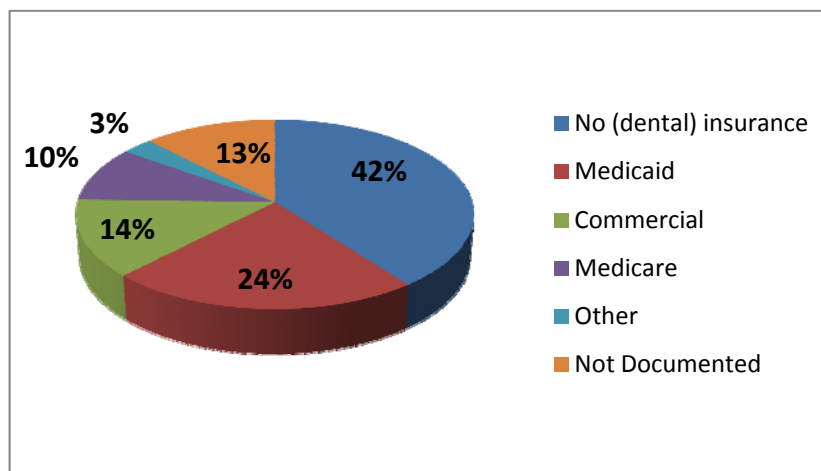
Figure 3: Race/ethnicity distribution of Oral Health clients, N=398



CLIENT INSURANCE

As illustrated in *Figure 4*, many oral health clients did not have dental insurance (**42%**). For those who did have coverage, almost as many were covered by Medicaid (**24%**) as by all other insurers combined. Note that a few individuals are covered by more than one type of dental insurance.

Figure 4: Insurance Policies Held by Oral Health Clients, N=398



SECTION 4. CLINICAL INDICATORS

In an effort to examine clinical and treatment indicators, CQM reviewers documented:

- Clients' laboratory values (CD4 and viral load), and
- Whether clients were on highly active antiretroviral treatment (HAART).

FY2010 CD4 values were recorded in **356 charts (89%)** and viral load measurements in **317 (80%)** charts. Three hundred and twenty-nine charts (**83%**) documented that clients were on HAART medication. This is a considerable increase from FY06 [*Table 2*].

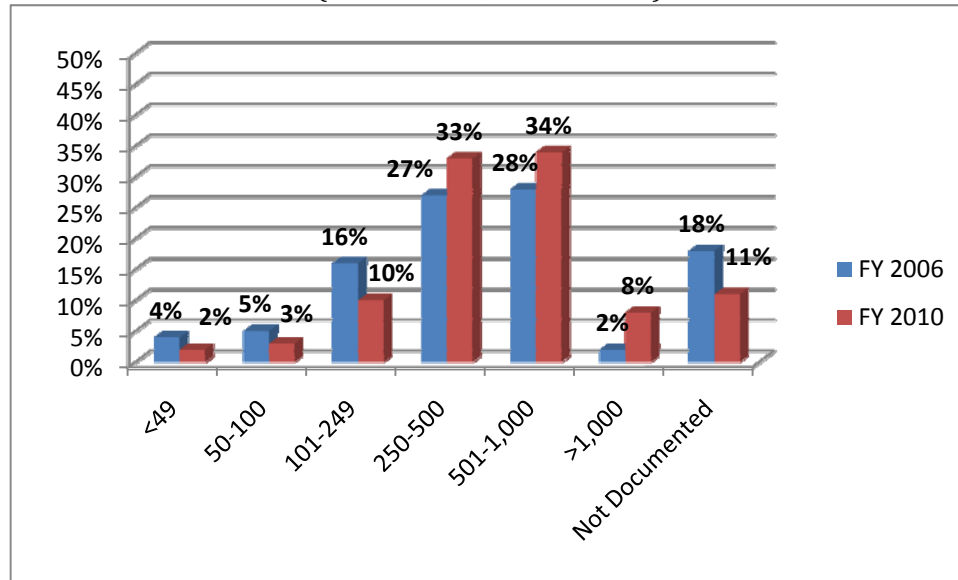
Table 2: Summary of Clinical and Treatment Indicators

	FY06 N=415	FY10 N=398
CD4	341(82%)	356 (89%)
Viral Load	329 (79%)	317 (80%)
On HAART Treatment	232 (56%)	329 (83%)

CD4

As shown in *Table 2*, CD4 documentation has improved in oral health charts, from **82%** in FY06 to **89%** in FY10. The CD4 distribution reported has also improved, as shown in *Figure 5*, with only **15%** of clients showing CD4 under **250cells/mm³**. The last review showed **25%** of clients with CD4s less than **250**.

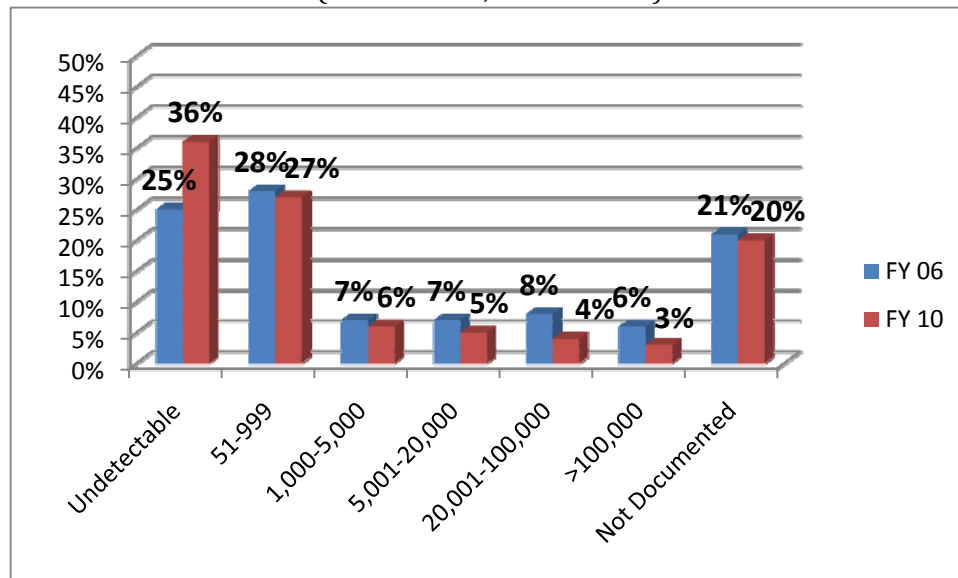
Figure 5: CD4 Distribution for Oral Health clients
(FY06 N=415, FY10 N=398)



VIRAL LOAD

Of the **398** charts reviewed, **80%** documented a viral load within the review year. As shown in *Figure 6*, there was a substantial increase in the percent of clients with undetectable viral loads, from **25%** in FY06 to **36%** in FY10.

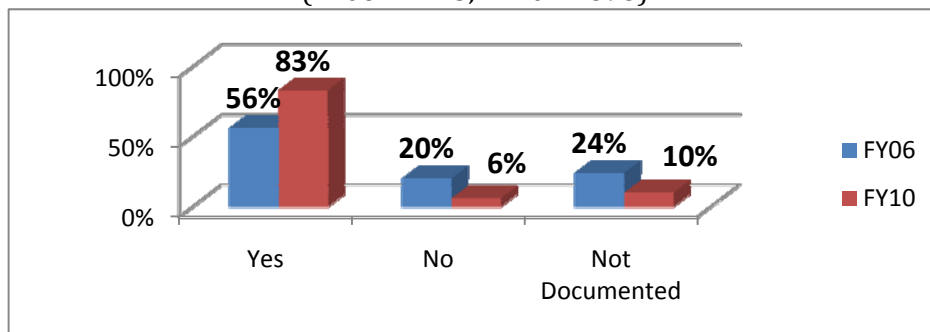
Figure 6: Viral Load Distribution for Oral Health clients
(FY06 N=415, FY10 N=398)



HAART

Treatment with HAART decreases morbidity and mortality for persons with HIV/AIDS. As defined by the U.S. Public Health Service,⁵ HAART is treatment using multiple antiretroviral medications. As shown in *Figure 7*, **83%** of clients were on HAART in FY2010. This is an increase from FY2006, when **56%** were on HAART. The number of charts lacking documentation regarding treatment status has declined to **10%** of the client records, so documentation is stronger as well.

Figure 7: Treatment Status
(FY06 N=415, FY10 N=398)



SECTION 5. COMPLIANCE WITH ORAL HEALTH STANDARDS OF CARE

NEW CLIENTS ONLY

Of the total **398** clients reviewed, **199** clients (**50%**) started receiving Oral Health services during FY10. The next two figures address:

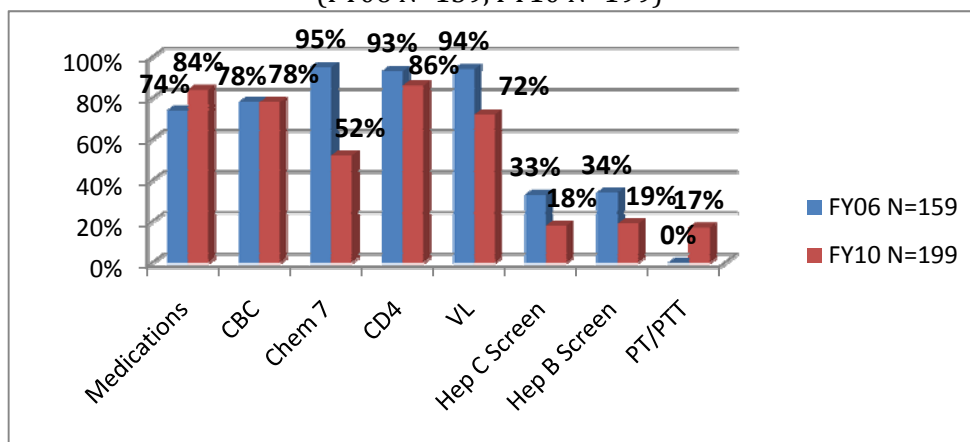
- Whether charts for these new clients had medical information from the referring provider, and
- Whether the initial evaluation assessed specific items required in the Standards of Care.

As shown in *Figure 8*, the percent of charts that contained baseline information about clients' medications has increased since the last review. However, a smaller percent of charts of new clients showed other baseline medical information including CD4 and Viral Load values. Attention is needed to obtain clinical information on new patients.

⁵ U.S. Department of Health and Human Services, *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adult and Adolescents*, June 2005.

Figure 8: Baseline Medical Information for New Clients

(FY06 N=159, FY10 N=199)*

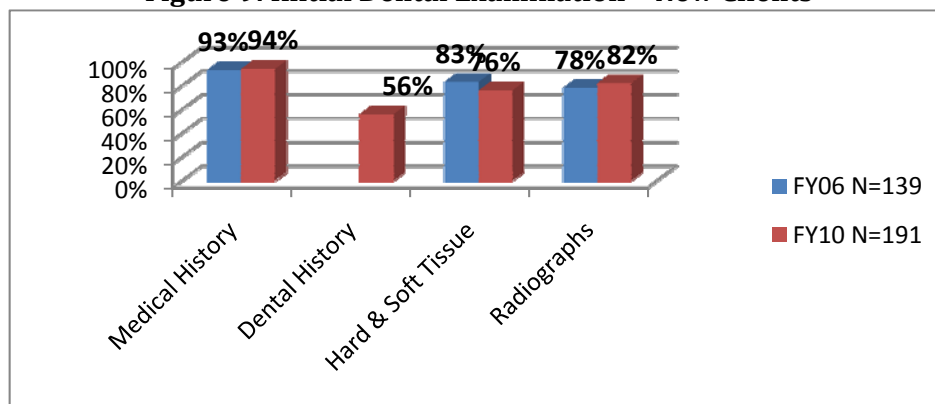


*Note that the clients for whom Hepatitis B, Hepatitis C, and PT/PTT screening was not appropriate were subtracted from the denominator when these percents were calculated. Screening is not appropriate if the client has already had Hepatitis B or C, or been vaccinated for Hepatitis B. PT/PTT coagulation tests are appropriate before surgery. Note also that 2006 PT/PTT screening was zero because this was not reviewed in 2006.

According to the Standards of Care, an initial dental evaluation should be conducted and documented in the client chart. An initial dental evaluation was conducted for **191** of the **199** new clients (**96%**). This is an increase from FY06 when **87%** of clients had an initial dental evaluation.

Figure 9 shows that, out of **191** clients who had an initial evaluation completed,

- **94%** of charts noted a comprehensive health history,
- **56%** contained a dental history—2006 dental history data are not available,
- **76%** documented a hard and soft tissue examination and
- **82%** of charts (for those who had teeth) contained radiographs (such as X-rays) of teeth.

Figure 9: Initial Dental Examination—New Clients

The Standards of Care require continuation or initiation of antibiotic prophylaxis (pre-treatment with antibiotics) as needed according to the current American Heart Association (AHA) recommendations. “Infective endocarditis (IE)... is an infection caused by bacteria that enter the bloodstream and settle in the heart lining, a heart valve or a blood vessel. IE is uncommon, but people with some heart defects have a greater risk of developing it. In the past, patients with nearly every type of congenital heart defect needed

to receive antibiotics one hour before dental procedures, however the American Heart Association has simplified its recommendation. Today, antibiotics are only recommended for patients with the highest risk of IE, those who have:

- An artificial heart valve or who have had a heart valve repaired with artificial material.
- A history of endocarditis.
- A heart transplant with abnormal heart valve function, or
- Certain congenital heart defects (American Heart Association, 2011)⁶

One hundred thirty eight charts of new patients (**69%**) documented whether or not antibiotic prophylaxis was required. Of these charts, prophylaxis was needed by 7 clients (**5%**). Of the 7 clients needing prophylaxis, 5 received it and prophylaxis was not documented for 2.

ALL CLIENTS (NEW AND CONTINUING)

Enrollment in Primary Medical Care (PMC): Of the 398 charts of new and continuing clients that were reviewed, 380 (**95%**) documented that the client was enrolled in PMC. This is an increase over the FY06 review, when 79% of clients were documented as being enrolled in PMC. PMC enrollment was not documented in 18 charts (**5%**).

Treatment Plans: The Standards of Care require oral health plans to be developed and discussed in detail with the client. The plans should address dental cavities, missing teeth, periodontal condition and extractions & replacement of teeth if needed. According to the New York State Department of Health, treatment plans should be updated on a regular basis to keep track of the client's needs.

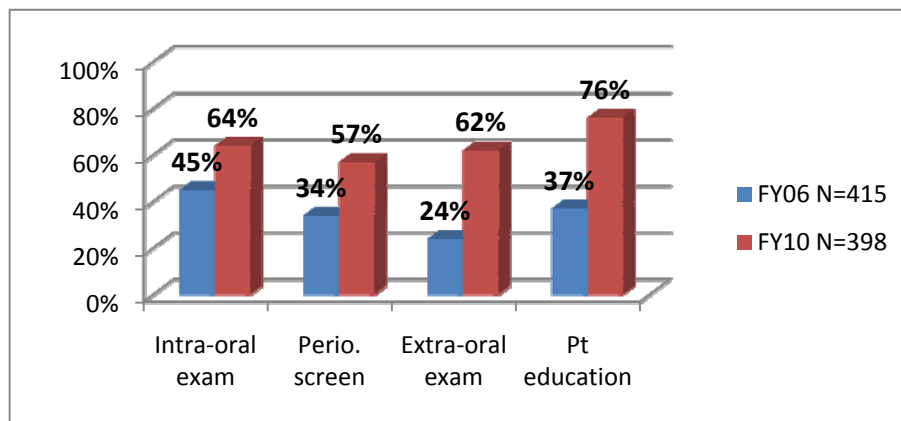
Of the 398 charts of new and continuing clients that were reviewed, 365 (**92%**) had a care plan. Eighty percent of the charts documented patient involvement in care planning. Of the 199 charts of continuing clients, 164 (**82%**) contained updates to the treatment plans.

Appointment Recall Interval: A recall interval was specified in **65%** of charts.

Screening and Education: As shown in *Figure 10*, a substantially greater proportion of patients received intra-oral exams, periodontal exams, extra-oral exams and patient education in FY10 than did so in FY06.

⁶ *endocarditis* . Retrieved 3/8/12 from

http://www.heart.org/HEARTORG/Conditions/CongenitalHeartDefects/TheImpactofCongenitalHeartDefects/Infective-Endocarditis_UCM_307108_Article.jsp

Figure 10: Screening and Education

Two hundred and fifty-four clients (**64%**) had an intra-oral exam. Pathology was found in **8** of the clients who had an intra-oral exam (**3%**). The charts of **4** of the clients with lesions (**50%**) documented treatment.

Periodontal screening was not applicable for **21 (5%)** clients without teeth. Of the remaining **377** clients, two hundred and fifteen (**57%**) received periodontal screening. Of those who had periodontal screening, details were documented as follows:

- **47%** of charts showed reports on the quantity and quality of attached gingival,
- **58%** contained an assessment of bleeding,
- **40%** reported on tooth mobility,
- **47%** had a radiological review, and
- **24%** reported on the status of the periodontium and dental implants.

Two hundred and forty-seven clients (**62%**) had an annual extra-oral examination. Of the charts documenting an extra-oral exam:

- **69%** documented facial symmetry,
- **71%** documented lymph node examination,
- **64%** documented thyroid gland examination, and
- **66%** documented exam of the lips.

Twenty-eight percent of the extra oral exams did not contain documentation on any of these elements.

Three hundred and one charts (**76%**) documented that oral health instruction (OHI) was provided to clients. One-third of these documented details of the OHI.

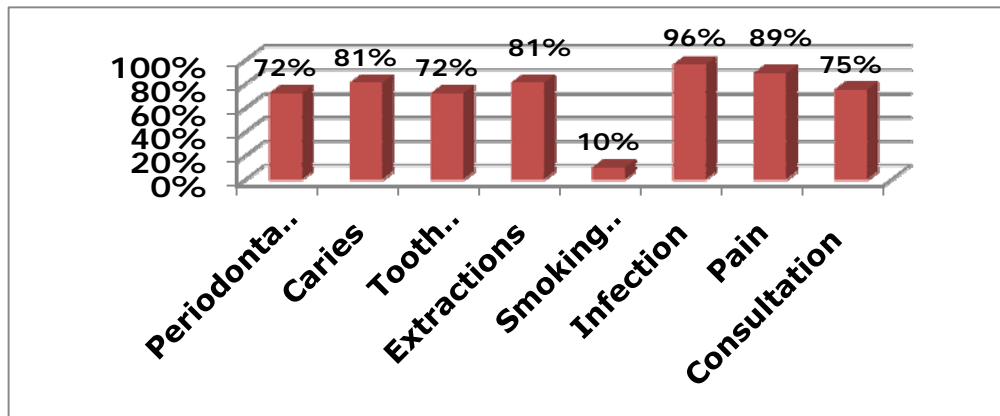
CONTINUING CLIENTS

Treatment Provided: The Standards of Care do not address care for ongoing clients in a comprehensive manner. According to the New York State Department of Health, quality performance indicators for oral

health entail intra-oral, extra-oral and periodontal examinations to be performed annually.⁷ Overall, *Figure 11* shows charts documented that:

- A very high percent of clients with infections and/or pain had their needs met,
- About four in five who needed extractions or had caries (tooth decay) had their needs met,
- About seven in ten who had periodontal issues (issues with tissue around the teeth), tooth spacing or function issues, or needed consultation had their needs met, and
- Only one in ten who needed smoking cessation counseling had that need met.

Figure 11: Comparison of Percent of Needs Met for Continuing Clients (N=199)



DISPARITIES

Gender Disparities: There were almost no differences between male and female on treatment variables pertaining to: 1) whether there was a treatment plan in the chart, 2) whether an intra-oral exam was done, 3) and whether a periodontal exam was performed.

A few treatment variable cross-tabulations include:

- **85%** of males' charts documented that treatment plans were updated while **78%** of females' charts contained this documentation,
- **78%** of males' charts documented an extra-oral examination while **62%** of females' charts contained this documentation, and
- **35%** of male's charts documented patient education specifics, while **67%** of female's charts contained this documentation.

Racial Disparities: A few treatment variables showed modest differences between African-American and Caucasian patients but these disparities did not show a consistent pattern, as seen in *Table 3*.

⁷ Office of the Medical Director, New York State Department of Health AIDS Institute in collaboration with the Johns Hopkins University Department of Infectious Diseases. (2001, December 1). *Hiv and oral health general principles*. Retrieved from <http://www.hivguidelines.org/clinical-guidelines/hiv-and-oral-health/general-principles/>

Table 3: Racial disparities, African Americans (N=296) and Whites (N=48)

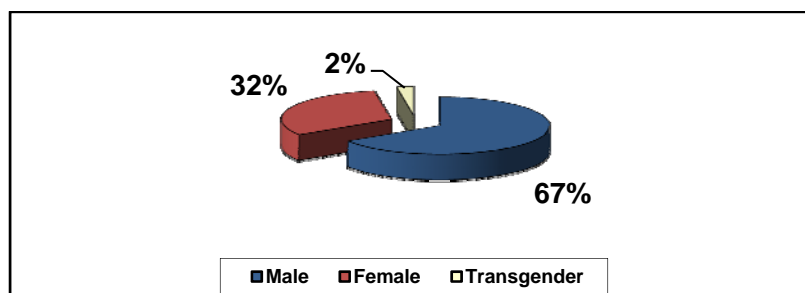
	African-American	White
Any treatment plan in chart	90%	100%
Plan updated for continuing clients	78%	92%
Annual intra-oral exam	69%	50%
Annual periodontal exam	59%	48%
Annual extra-oral exam	66%	54%
Patient Education	74%	26%

SECTION 6. CONSUMER SURVEY

Consumer surveys were administered at all Ryan White oral health provider agencies. Fifty-seven (N=57) consumers were recruited at 5 agencies providing oral health services during FY2010. The consumers represent a convenience sample and were administered face-to-face or by telephone. Consent for permission to contact clients by telephone was obtained prior to calling. The survey was a short, 10-minute questionnaire administered by a Ryan White consumer liaison.

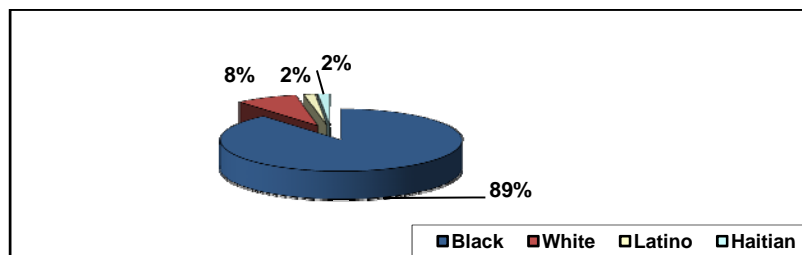
CONSUMER SURVEY DEMOGRAPHICS

Gender: As shown in *Figure 12*, **Sixty-seven percent** of consumers surveyed were male, a third (**32%**) female, and the remaining (**2%**) indicating they were transgender.

Figure 12: Gender distribution, N=57

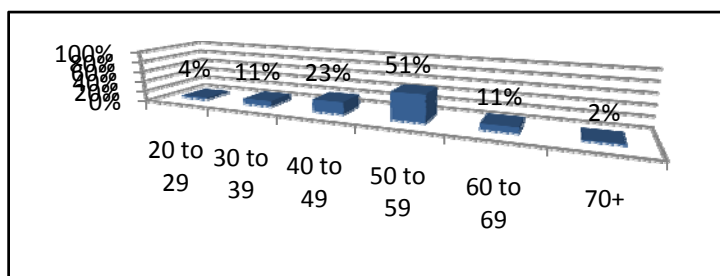
Race/Ethnicity: Of the consumers who participated in the oral health survey, **(89%)** reported their race/ethnicity as Black, while **(8%)** reported their race/ethnicity as White. Fewer numbers, **(2%)** indicated Latino and **(2%)** Haitian. [Figure 13]

Figure 13: Race/Ethnicity distribution, N=57



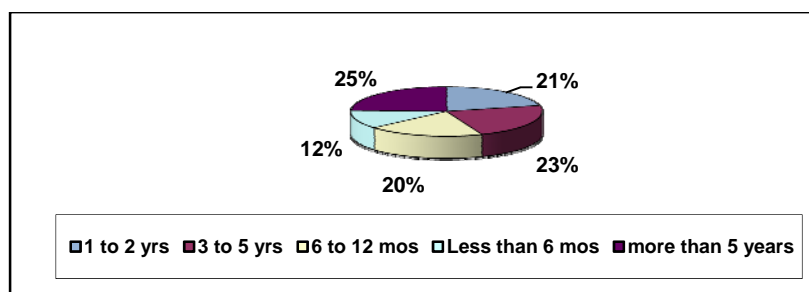
Age: As shown in Figure 14, more than half **(51%)** of survey respondents were in their fifties. Next in frequency were those in their forties at **(23%)**. The same percentage **(11%)** of clients reported being in their sixties and in their thirties. **Four percent (4%)** reported being in their twenties, and **(2%)** were 70 or older.

Figure 14: Age distribution, N=57



Length of Agency Service: The largest percentage of consumers, one quarter, **(25%)** indicated they had been in care more than five years. One in five **(21%)** had received oral health service for 1 to 2 years, another **(23%)** for 3 to 5 years, **(20%)** reported 6 to 12 months of service and **(12%)** responded 6 months or less. [Figure 15]

Figure 15: Length of Service, N=57



CONSUMER REPORTS OF INFORMATION RECEIVED AND ELIGIBILITY

Agency Policy Receipt:

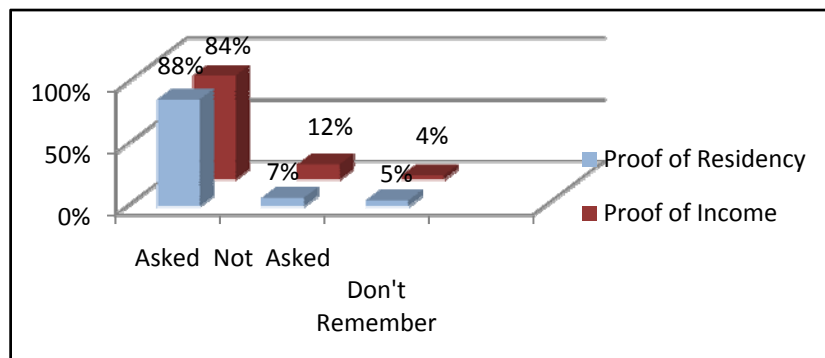
When asked, the majority of consumers recalled being given agency related policies at oral health clinics. [Table 4]

Table 4: Consumer-Reported Agency Policy Receipt, N=57

Agency Policies	Number	Percentage
Grievance Procedures	46	81%
Rights and Responsibilities	48	84%
HIPPA Confidentiality	50	88%
Informed Consent	52	91%
Release of Information	47	82%

Eligibility Documentation: Proof of residency and proof of income were requested from **(88%)** and **(84%)** of clients respectively. [Figure 16]

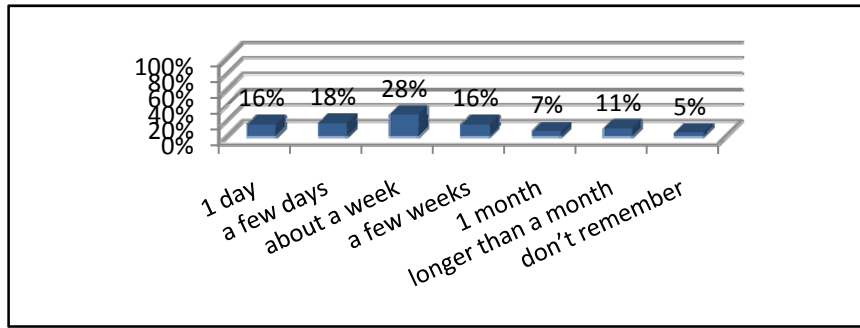
Figure 16: Eligibility Documentation, N=57



CONSUMER-REPORTED ORAL HEALTH CARE

Wait Time: When consumers were asked how long it took to receive a date for a first appointment, the largest portion **(28%)** indicated about a week, followed by a few days at **(18%)**. Equal numbers **(16%)** indicated “a few weeks” and “1 day.” However, **(11%)** waited longer than a month for an initial dental visit. [Figure 17]

Figure 17: First dental care appointment, N=57



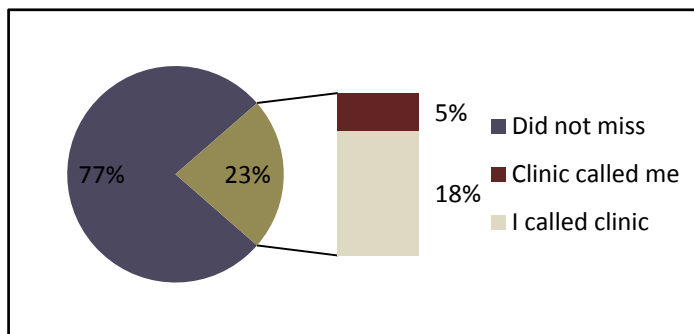
Oral Health Procedures: X-rays were the most commonly reported oral health procedure (**68%**) and the next most common procedure was cleaning (**53%**). Fewer numbers reported fillings (**12%**), bridges (**7%**), crowns (**4%**) and root canals (**2%**) as the procedures they received. [Table 5]

Table 5: Dental Procedures, N=57

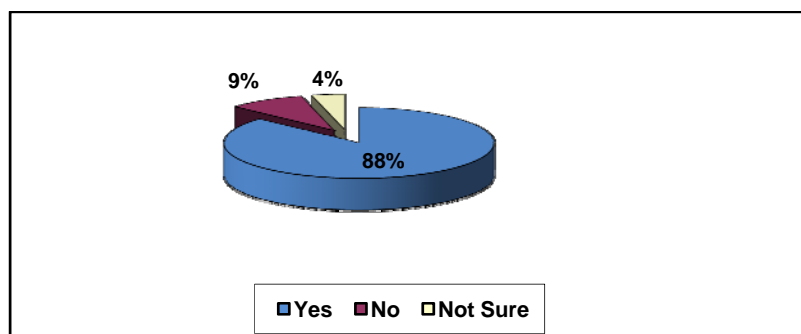
X-ray	39	68%
Crown	2	4%
Denture	12	21%
Cleaning	30	53%
Root Canal	1	2%
Antibiotics	21	37%
Extraction	33	58%
Bridge	4	7%
Filling(s)	7	12%
Other	8	14%

Transportation to Appointments: Consumers were asked whether they were in need of transportation to and from dental appointments. A majority (**81%**) responded that this was never the case; however, (**19%**) did acknowledge having difficulty obtaining transportation to scheduled appointments.

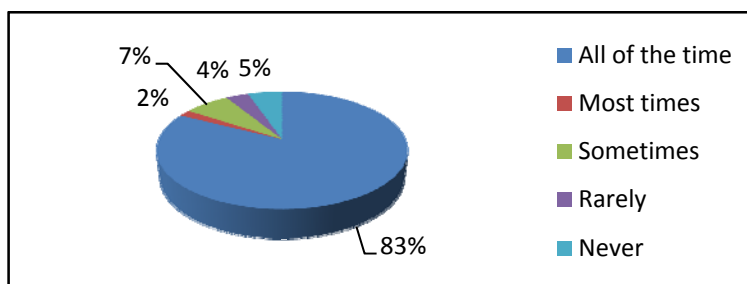
Missed Appointments: Figure 18 shows that one in five (**23%**) consumers missed a scheduled appointment within the previous six months. Of those, most (**77%**) contacted the clinic to reschedule upon realization of the missed engagement.

Figure 18: First dental care appointment, N=57

Treatment Plan: The majority of consumers (**88%**) report having a treatment plan, with smaller percentages either indicating not having a treatment plan (**9%**) or not knowing if they have one (**4%**). Most consumers who reported having a treatment plan further indicated that plan was both shown to and discussed with them. [Figure 19]

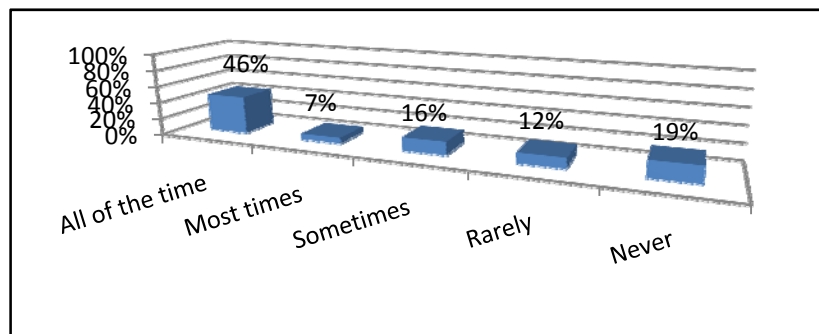
Figure 19: Dental Care Treatment Plan, N=57

Counsel on Regular Dental Care: Consumers were asked whether or not their oral care provider discussed the importance of regular dental care. Most, (**85%**) responded “all” or “most of the time”, few (**7%**) indicated “sometimes” and fewer numbers reported “rarely” (**4%**) or “never” (**5%**). [Figure 20]

Figure 20: Counsel on Regular Dental Care, N=57

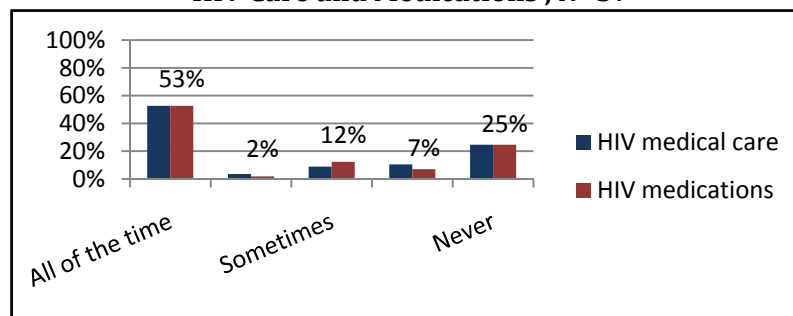
Oral Care Written Materials: When asked how often dental providers made written materials about oral health care available, nearly half (**46%**) responded “all of the time”. However, one fifth (**19%**) of respondents indicated these materials were “never” available. [Figure 21]

Figure 21: Oral Care Written Materials, N=57



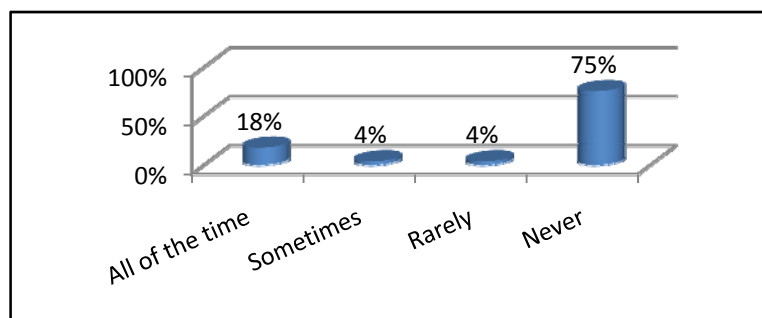
Questions regarding HIV care: Two questions, 1) “How often did dental providers ask about HIV-related medical care” and 2) “How often did dental providers ask about HIV-related medication you may be taking” elicited similar responses. Over half, **(53%)** were always asked about HIV care and medications, but **25%** reported never being asked. [Figure 22]

Figure 22: Consumer-Reported Frequency of Provider Inquiry Regarding HIV Care and Medications , N=57



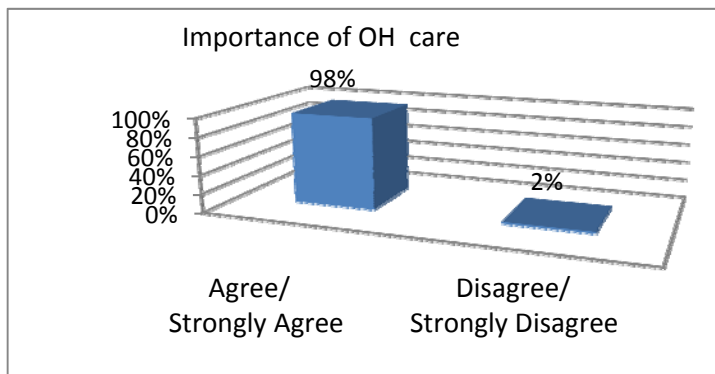
Consumer Difficulty Understanding Providers Responses: Consumers were asked if it was hard to understand the explanations of their dental providers concerning oral health procedures. While a considerable number **(75%)** indicated that they “never” found their dentists answers difficult to understand, notably **(18%)** of consumers found the responses from their dental health care provider hard to understand “all of the time” [Figure 23].

Figure 23: Consumer Difficulty Understanding Provider Explanations, N=57



Understanding Oral Health Care and HIV: As seen in *Figure 24*, virtually all, **(98%)** consumers agreed or strongly agreed that receipt oral health services helped them understand the importance of regular dental care.

Figure 24: Oral Health Care, N=57



Provider Collaboration and Referrals: Most clients **(88%)** agreed that their dentist and PMC provider worked in concert for patient benefit [*Figure 25*]. A majority of consumers **(70%)** were confident their oral care provider could assist with a referral for primary medical care, but **(5%)** disagreed or strongly disagreed. [*Figure 26*]

Figure 25: Provider Collaboration, N=57

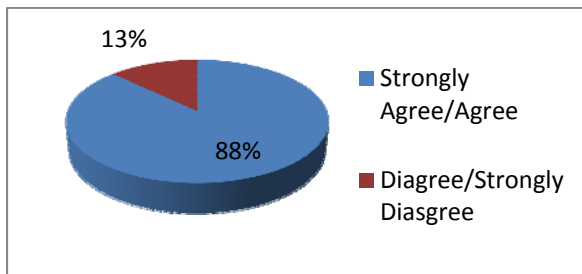
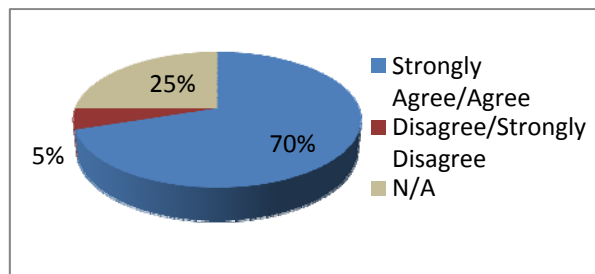
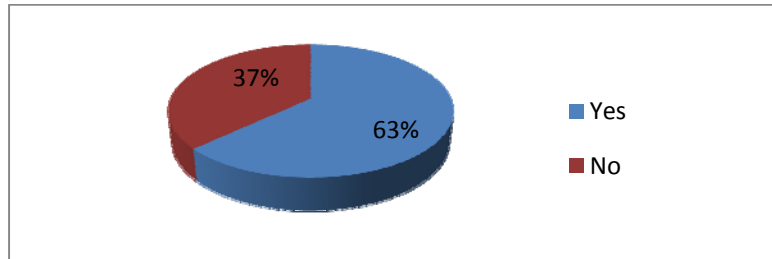


Figure 26: Referrals, N=57



Client Calls to Clinic: As seen in *Figure 27*, over half (**63%**) clients surveyed indicated at least one attempt to contact the clinic by phone during the review period, with most (**92%**) receiving the needed assistance.

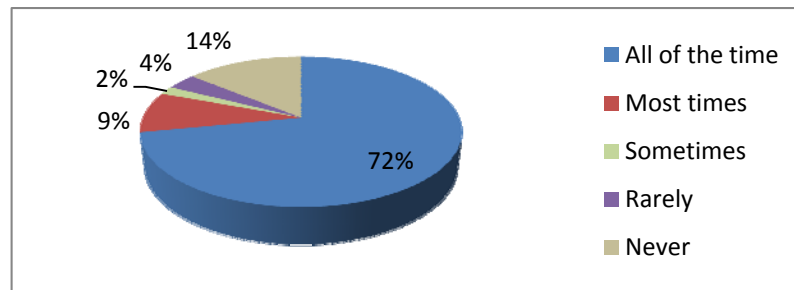
Figure 27: Client Calls to Clinic, N=57



Responses to Clinic Calls	
Got the help I needed	92%
Answering machine	2%
Put on hold too long	2%
Rang too many times	2%

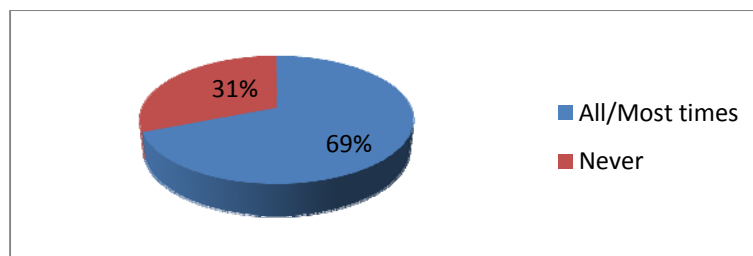
Appointment Reminders: Consumers were asked if providers stress the importance of keeping appointments. **Eighty-one percent** indicated they were reminded to attend scheduled appointments all or most of the time. However, (**18%**) were rarely or never reminded. [*Figure 28*]

Figure 28: Appointment Reminders, N=57



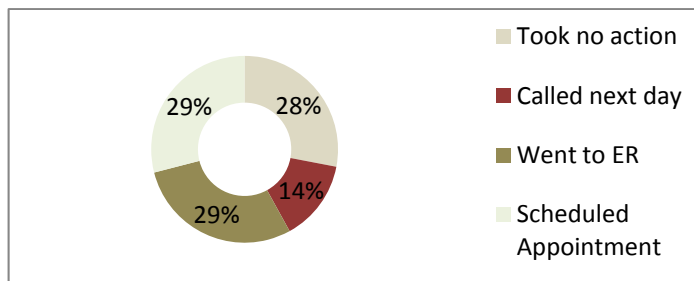
Clinic Staff Availability After-Hours: Clients were asked “If you needed care during off hours (evenings or weekends), could you reach someone at the agency to help you.” Almost half (**44%**) indicated that the question was inapplicable. Two-thirds of those (**69%**) were confident they could reach someone after hours if needed while one third (**31%**) indicated there was no staff availability after hours. [*Figure 29*]

Figure 29: Staff After Hours Availability, N=32



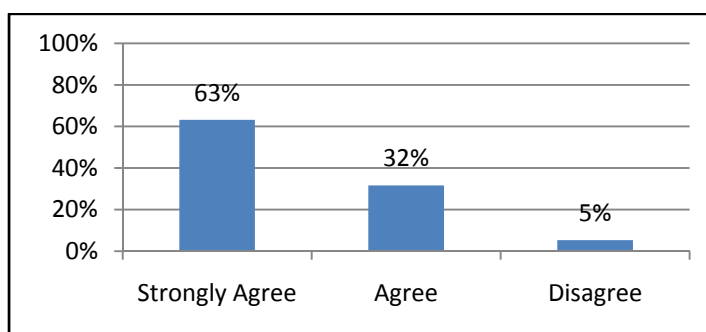
Alternatives to After Hours Care: When asked, “If you needed care during off hours (evenings or weekends) and you could not reach someone at this agency, what did you do? *Figure 30* illustrates the responses from consumers that attempted to assess care after clinic hours.

Figure 30: After Hours Care, N=7



Client Support: As shown in *Figure 31*, most consumers affirmed that they received support from their family members, friends or professionals.

Figure 31: Client Support, N=57



SECTION 7. AGENCY QUALITY MANAGEMENT CHECKLIST

CQM used the National HIVQUAL Project’s *Organizational Quality Assessment Tool* (OA Tool) to explore eight domains of the agencies’ quality management infrastructure as follows:

- **Quality structure** looks at four items: is an organizational structure to assess and improve the quality of care in place, are appropriate resources committed, does leadership support the quality program, and is there is a comprehensive quality plan?
- **Quality planning** looks at three items: were annual quality goals established, are there clearly defined roles and responsibilities for the quality program, and is there a work plan that specifies timelines for implementing the quality program?
- **Quality performance measuring** examines two items: were appropriate quality indicators selected, and did the program routinely measure quality of care?
- The **quality improvement activities** domain looks at two items: did the HIV program conduct quality improvement projects, and was a team approach utilized?
- **Staff involvement** addresses whether staff were routinely engaged in quality program activities.
- **Consumer involvement** addresses whether consumers were involved in quality –related activities.
- **Evaluation of the quality program** looks at whether there is a process in place to evaluate the HIV quality program.

- **Clinical information system** asks whether the HIV program has an information system in place to track patient care and measure quality.

The CQM team leader completes these items based on meeting with the agency staff and, in some cases, with the quality management team. Documents such as the quality improvement plan, documentation of quality improvement meetings, projects, and minutes are also reviewed. Each of the **15** items in the OA Tool is then given a score from **0** through **5**. Criteria included in the OA Tool are available upon request from the CQM program.

The results of the OA are shown in *Table 4*. The instrument used to assess agency activities during the last review of oral health was not comparable with the current OA.

Table 4: Results of FY10 Organizational Quality Assessment N=5 Agencies

Quality Domain	Average Score (Maximum = 5)	Range (Min-Max)
Quality structure	4.2	2.5-5
Quality planning	4.4	3-5
Quality performance measuring	4.4	3-5
Quality improvement activities	4.0	2-5
Staff involvement	3.8	2-5
Consumer involvement	3.4	1-5
Evaluation of the quality program	3.6	3-5
Clinical information system	3.4	1-5

SECTION 8. DISCUSSION

In 2011, CQM staff and consultants conducted a systematic review of agency compliance with EMA Oral Health Standards of Care, HAB oral health measures, and New York State guidelines for Oral Health providers. A total of **398** FY2010 records were reviewed representing **33%** of the reported HIV-positive individuals served by Ryan White Part A and MAI-funded oral health providers in the Baltimore EMA. Agency surveys were completed at all **5** programs, with **57** consumers filling out surveys providing their perspective on Oral Health services as well. This section summarizes the strengths and areas for improvement based on the CQM review.

Overall, Ryan White oral health care providers are delivering HIV care in accordance with the majority of the HIV/AIDS Bureau (HAB) clinical performance measures. Most agencies continue to provide an excellent level of service and most consumers rate their providers extremely well.

Chart abstractions

ALL CLIENTS: HIV clinical indicators continued to be reasonably strong, with nine in ten charts containing current CD4 levels and four in five containing current viral load levels. Oral health chart documentation of patient linkage with primary medical care has also improved, with nineteen of twenty charts containing this documentation. Documentation of treatment on HAART has improved since the last review from **56%** to **83%** of charts. With more clients on HAART, CD4 and viral load distributions also showed improvement. However, a smaller percent of charts of new clients showed CD4 and Viral Load values. Attention is needed to obtain clinical information with new patient referrals.

Services provided to clients (treatment plans, intra- and extra- oral examinations, periodontal screening, and patient education) all improved. While key items have improved since the last review, QI initiatives may strive to increase the percent of clients receiving intra-oral and extra-oral exams (currently documented in about two-thirds of charts), periodontal exams (currently documented in about three-fifths of charts) and patient education (currently documented in about three-fourths of charts). About two-thirds of charts documented a recall interval.

- **Periodontal Examination:** Gingivitis over time can cause inflammation in the bone, causing it to slowly disappear undermining the attachment to the tooth and ultimately to tooth loss. While periodontal screening has improved since the last review, it was not documented in two in five charts.
- **Patient Education:** The detrimental effects of smoking and tobacco use on oral health are well recognized and being an HIV-infected patient further adds to the problem. Less than one client in ten who needed referral to smoking cessation counseling received it. While not specifically mentioned in the Standards of Care that served as the basis for this review, the importance of smoking cessation counseling was stressed at all exit interviews in 2006. This specific type of patient education is required with the new Oral Health Standards of Care, ratified in 2011. It is a good choice for quality improvement projects by all oral health providers. Appendix III contains a list of smoking cessation programs in Baltimore.
- **Coordination with Primary Medical Care:** In the CQM primary medical care review, slightly more than one in ten charts documented that PLWHA saw a dentist during the year. Oral health professionals should take steps to strengthen their relationships with primary care programs.

Care planning: Nine in ten clients had a care plan. For about four-fifths of the care plans, client involvement in the plan was documented.

NEW CLIENTS: The vast majority of the **199** new clients whose charts were reviewed had an initial dental evaluation completed, a considerable increase from FY06. However, five of seven types of baseline information from the referring entity declined from FY06. As mentioned above, this includes CD4 and Viral Load documentation which continue to be required in the Oral Health Standards of Care ratified in 2011.

CONTINUING CLIENTS: For clients who started care prior to FY10, the review assessed whether or not their identified oral health needs were met. Needs were met for about four-fifths or more of clients who needed extractions, infection treatment or pain management, and were met for about three-fourths of clients who had issues with tooth spacing or function, or who needed periodontal treatment or consultation. This highlights the importance of client retention.

Consumer surveys

Four-fifths of surveyed consumers reported that they were asked for documentation of program eligibility. Over eighty percent of consumers reported that their providers stressed the importance of regular dental care, and believed their PMC and dental care providers worked together for the benefit of the patients. When asked, the majority of consumers recalled being given agency related policies at their oral health clinics. The majority of clients reported having a treatment plan, and most who had one reported being involved in its development. Most consumers who phoned clinics received the assistance they needed. Nearly all consumers surveyed reported increased understanding of the importance of proper dental care as a result of receiving regular dental care.

However, nearly one in ten consumers reported waiting at least a month for their first dental appointment. About one in five reported difficulty understanding provider responses to questions, and a comparable number reported difficulty in obtaining transportation to oral care appointments. Close to a third of clients reported that they were not asked about HIV-related medical care or HIV-related medications during visits, and a comparable proportion of clients reported that no staff was available after hours if needed.

Agency Quality Improvement Programs

All agencies providing oral health services have begun developing quality improvement structures and written plans and have a level of ongoing performance measurement. There is a wide range in the level of involvement in quality improvement activities across agencies. Agencies whose quality improvement programs are less advanced should emphasize developing their QI infrastructure.

In general, efforts are needed to involve consumers and staff in quality improvement activities and to evaluate the efficacy of their quality improvement programs. For some agencies, stronger clinical information systems would support better quality improvement measurement.

Standards of Care

In some instances, the Greater Baltimore HIV Health Services Planning Council Oral Health Standards of Care, as revised in October 2010 and ratified in April 2011 fall short of HRSA/HAB Oral Health HIV Performance Measures. Specifically, they do not include all of the items included in “clinical oral health evaluations,” “a complete dental treatment plan,” or “a periodontal screen,” identified in the notes/reference sections of each measure. Additionally, time frames are sometimes shown “as needed,” when the HAB performance measures require annual performance of services. Also, Phase I Treatment

Plan Completion in the first 12 months of service was not included. Oral Health contracts will require providers to meet the HAB performance measures in addition to the Planning Council Standards of Care, and the CQM team will assess performance in accordance with both criteria.

APPENDIX I. GLOSSARY OF ORAL HEALTH TERMS

Cavity	The lay term for tooth decay
Dental Caries	The technical term for decay which is the progressive breaking down or dissolving of tooth structure.
Edentulous	Lacking teeth
Endodontics	The dental specialty that deals with injuries to or diseases of the pulp, or nerve, of the tooth
Extraoral	Outside of the mouth
Extraction	Removal of a tooth
Gingivitis	Gum inflammation
Intraoral	Inside the mouth
Oral	Pertaining to the mouth
Periodontal	Pertaining to the supporting and surrounding tissues of the teeth
Prosthetics	An artificial body part e.g. dentures
Radiograph	A picture of the teeth and jaw bones taken using X-rays
Restorative	Any material or device used to replace lost tooth structure (e.g. crown) or to replace a lost tooth or teeth e.g. (dentures)
Serum Chemistries	Measurement of electrolytes that exist in the blood e.g. (sodium, calcium, potassium, chlorine, magnesium and bicarbonate)
Soft tissue examination ..	Examination of inside the mouth, other than the teeth

APPENDIX II. ORAL HEALTH STANDARDS OF CARE

Greater Baltimore HIV Health Services Planning Council, *Standards of Care, Oral Health*, revised August 2009, ratified October 2009.

<http://balpc.intergroupinfo.com/doc/doc/16/OralHealthdstandards2010.pdf>

APPENDIX III. HRSA/HAB ORAL HEALTH PERFORMANCE MEASURES

<http://hab.hrsa.gov/deliverhivaidscares/files/habpmsoralhealth.pdf>

Oral health performance measures for PLWHA who are at least one year of age and had a non-emergency clinical oral examination during the year:

How many had a dental and medical health history taken or updated?

The dental and medical histories should be considered by the dentist to identify medications and predisposing conditions that may affect the prognosis, progression and management of oral health condition.

How many had a dental treatment plan developed and/or updated?

A complete dental treatment plan should include the following: Provision for the relief of pain, elimination of infection; preventive plan component; periodontal treatment plan if necessary; elimination of caries; replacement or maintenance of tooth space or function; consultation or referral for conditions where treatment is beyond the scope of services offered; and determination of adequate recall interval.

How many received oral health education at least once in the measurement year.

Oral health education should include: oral hygiene instruction (ADA CDT code D1330) and smoking/tobacco cessation counseling (ADA CDT code D1320) as indicated.

How many had a Phase 1 treatment plan completed within 12 months.

Phase 1 treatment: Prevention, maintenance and/or elimination of oral pathology that results from dental caries or periodontal disease. This includes: restorative treatment; basic periodontal therapy (non surgical); basic oral surgery that includes simple extractions and biopsy; non-surgical endodontic therapy; and space maintenance and tooth eruption guidance for transitional dentition.

Performance measure for PLWHA at least 13 year of age who have teeth (not “edentulous”) and had a non-emergency clinical oral examination during the year:

How many had a periodontal screen or examination at least once in the measurement year.

A periodontal screen should include the assessment of medical and dental histories, the quantity and quality of attached gingival; bleeding; tooth mobility; and radiological review of the status of the periodontium and dental implants. Appropriate screening procedures may be performed to determine the need for a comprehensive periodontal evaluation.

APPENDIX IV: SMOKING CESSATION PROGRAMS IN BALTIMORE CITY

Baltimore Medical Systems

Highlandtown Community Center
3509 Eastern Ave.
Baltimore, MD 21224
Free patches, group and one-on-one
counseling and behavior modification.
Call 410-558-4879

Chase-Brexton Health Services, Inc.

1001 Cathedral Street
Baltimore, MD 21201
Free patches, group therapy and
behavior modification. Six week course.
Call 410-545-4481, ext. 2617

Good Samaritan Hospital

5601 Loch Raven Boulevard
Baltimore, Maryland 21218
Call 443-444-4100

People's Community Health Center

3028 Greenmount Avenue
Baltimore, Maryland 21218
Free patches, group and one-on-one
counseling.
Call 410-467-6040

Union Memorial Hospital

201 E. University Parkway
Baltimore, Maryland 21218
Free six-week program offered
Quarterly, one-on-one counseling
and behavior modification.
Call 410-554-65900

Baltimore City Health Department

For additional information, call 410-361-9765

Maryland Quitline

1-800-QUITNOW

Listings are for educational assistance. No endorsement of any program is intended.