

# **MassHealth Access Program Report on Workforce Development Initiatives May 2007**

## **I. Introduction**

In Fiscal year 2003, MAP created two Workforce Development Initiatives providing an incentive for dentists who choose to work in a public health setting early in their careers. The two initiatives are the Loan Repayment and Dental Student Award. These Workforce Development Initiatives offer award money to dentists in exchange for an obligation to provide services (usually two years) to low-income populations, MassHealth members and the uninsured at community health centers across the Commonwealth. In 2007, MAP marks its fifth year of administering these initiatives.

For the last few years MAP has surveyed awarded dentists in both MAP initiatives in order to learn of their experiences and measure the impact of the programs in dental public health settings. This document reports on the results of the FY 07 Survey.

## **II. Methods of the Survey Effort**

The FY 07 MAP effort to survey the Workforce Development Initiatives contained two parts: an Experiential Survey and a Clinical Data Survey. The Experiential Survey polled information from awarded dentists regarding their work experiences. The Clinical Data Survey collected statistical information on the clinical practices of awarded dentists from the Dental Directors of the community-based practices in which the dentists served.

Those surveyed for this report included all awarded dentists since the inception of the program in FY03 through FY06; those who are currently in their second year in fulfilling their service obligation and those who completed their term of service. This is more inclusive than previous reports which included only dentists who were fulfilling their service obligation at the time. Two dentists who dropped out of the program and one who defaulted prior to the service obligation were not surveyed. Four were unreachable because there was no forwarding information upon their completion of their service obligation.

In total, twenty-four dentists were contacted. If one of the two surveys (Experiential or Clinical Data) was returned, that dentist was included in the report.

## A. The Experiential Survey

MAP staff administered the Experiential Survey to awarded dentists of both the Loan Repayment and Student Award programs.

The Experiential Survey was composed of two survey instruments: (1) One instrument collected information from those *currently participating* in a workforce initiative at a community health center site; (2) One instrument collected information from those who have *completed* their service obligation.

Both instruments sought comments from dentists in the following areas:

- Satisfaction with various aspects of the work environment
- Positive and negatives of the work experience
- Participation in community projects
- Plans for future employment

Both surveys were initially administered via electronic mail. Staff followed up, as needed, with approximately two electronic mail reminders and two phone calls.

## B. Clinical Data Survey

The Clinical Data Survey was comprised of an instrument distributed to the Dental Directors of the community-based practices, in this case, all from Community Health Center Dental Clinics. The survey was sent via electronic mail, with a copy to the Management Information Manager, if known.

The Clinical Data Survey collected statistical data on the clinical practice of the awarded dentists during fiscal year 2006 from both Workforce Development Initiatives. If that fiscal year represented a problem for the center, Directors were asked to provide data for an annual period that they specified. If an awarded dentist did not work the entire annual period, Directors were instructed to send data on the period of the employment, specifying the time frame.

The survey sought information concerning:

- Number of Patients
- Number of Total Procedures
- Number of Procedures by subgroup:
  - Diagnostic care, taking x rays and treatment planning
  - Restorative care, fillings and crowns
  - Preventive care such as cleanings and sealants
  - Other procedures including specialty care and emergencies

The Clinical Data Survey also contained questions on the value of the Workforce Development Initiatives at their clinics.

Surveys were distributed via electronic mail. MAP staff followed up electronically and by phone. Phone follow up proved most effective. Some centers required more than two follow up contacts.

## C. Response Rates to Surveys

### 1. Experiential Survey Responses

MAP distributed surveys to a total of 24 awarded dentists in both the Loan Repayment and Dental Student Award programs. Eighteen dentists (66%) returned surveys.

The following table displays rates of return in the two categories of experiential surveys.

**Table 1**  
**Number of Respondents: Experiential Survey**

<b>Program Initiative</b>	<b>Total Participating</b>	<b>Number Responding</b>	<b>Completed Program<sup>1</sup></b>	<b>Number Responding</b>	<b>Total Survey Responses</b>
<b>Loan</b>	<b>7</b>	<b>7</b>	<b>11 (9)</b>	<b>4</b>	<b>11</b>
<b>Student Award</b>	<b>4</b>	<b>4</b>	<b>5 (4)</b>	<b>3</b>	<b>7</b>
<b>Total</b>	<b>11</b>	<b>11</b>	<b>16 (13)</b>	<b>7</b>	<b>18</b>

Those dentists who are still participating in workforce initiatives returned surveys at a much higher rate than those who had completed the program. Student Award dentists responded at a higher rate than Loan Repayment program dentists.

### 2. Clinical Data Survey Responses

The following table shows the number of clinical data surveys distributed and returned. One survey was distributed for each awarded dentist working at a community health center dental clinic.

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<sup>1</sup> Numbers in the parentheses indicate number of surveys distributed. The number distributed is less than those who were in the program, as some of the Loan Repayment awarded dentists left their placement and left no forwarding address. Surveys were not distributed to them. One of the Student Award dentists defaulted from the program prior to the service obligation, moved out of the area and was not surveyed.

**Table 2**  
**Number of Clinical Data Surveys Distributed and Returned**  
**By Community Health Center**

<b>CHC</b>	<b>Number Distributed</b>	<b>Number Returned</b>
<b>Dorchester House</b>	<b>3</b>	<b>3</b>
<b>Great Brook Valley</b>	<b>3</b>	<b>2 (one left practice prior to survey period)</b>
<b>Windsor</b>	<b>4</b>	<b>4</b>
<b>Uphams</b>	<b>2</b>	<b>2</b>
<b>Health Care for Homeless</b>	<b>1</b>	<b>1</b>
<b>Tufts Program for Special Needs</b>	<b>3</b>	<b>3</b>
<b>South Boston</b>	<b>2</b>	<b>2</b>
<b>Whittier</b>	<b>1</b>	<b>0</b>
<b>Joseph Smith</b>	<b>2</b>	<b>2</b>
<b>Franklin County</b>	<b>1</b>	<b>1</b>
<b>Lynn</b>	<b>2</b>	<b>2</b>
<b>TOTAL</b>	<b>24</b>	<b>22</b>

All community health center Dental Directors except for one responded with requested data, a 91% response rate.

For the FY 06 effort, MAP collected data on twenty-two dentists who were fulfilling service obligations for all or part of FY 06. Clinical data survey results were included regardless of whether the dentist returned an experiential survey.

### **III. Findings**

#### **A. Experiential Survey**

As stated above, the Experiential Survey instruments collected information on aspects of the awarded dentists' experience. For background, of the 11 respondents who are currently participating in a service obligation, 7 (64%) serve only adults, 1 (9%) serves mostly children including adolescents, and 3 (27%) serve both adults and children. The sections below highlight what MAP learned about the dentists work experience, community service and future plans. It also contains recommendations on how to improve the program.

##### **1. Satisfaction with Work Experience**

- Most dentists find the working conditions at the community health center satisfying, including work schedule, supervision and availability of dental assistants.

- Three dentists commented on lack of availability of dental assistants.
- Most are satisfied with the improvement in their clinical skills.
  - “I had a great mentor and was clinically allowed satisfying growth. I am more confident and comfortable in all aspects of dentistry.”—Dr. Jennifer Fallon, Uphams Corner CHC
- Most respondents feel professionally respected.
- All respondents who are currently participating in the program are supported by the community health center to attend professional conferences.
- Dentists’ comments on the rewards they experienced:
  - “(It is satisfying) to provide excellent dental care to those in need or others who simply can not afford the dentist, to restore teeth, smiles, and dignity to the overlooked.”--- Dr. Nicholas Ciancarelli, Lynn Community Health Center
  - “(It is rewarding) treating the wonderful community we serve. Seeing grandparents, parents and children come to us to become healthier and happier. Alleviating someone’s fears from a previous bad dental experience. Providing quality and kind service to individuals regardless of the size of their pocket books. “--- Dr. Christina Papageorgiou, Director, South Boston Community Health Center
  - “Working for a population that is almost completely and entirely grateful is tremendously satisfying.”--- Dr. Sam Merabi, Cambridge Health Alliance, Windsor Street Dental Clinic
  - “Most patients appreciate the work I do for them.” – Dr. John Wiederholt, Lynn Community Health Center

## **2. Community work**

Five of the eleven dentists (55%) who are currently participating in a service obligation spend a small portion of their time (under 15%) providing dentistry in the community. Highlights of these projects include:

- Oral health screening for adults on public health vans (South Boston Community Health Center)
- Screening children at a Headstart program pediatric children’s fair (South Boston Community Health Center)
- Screenings and oral health education seminars for senior citizens in Cambridge and Somerville (Cambridge Health Alliance, Windsor Street Dental Clinic)

- Dental screenings at two shelters and screenings of school children attending first grade in Everett. (Cambridge Health Alliance, Windsor Street Dental Clinic)
- Oral Health screenings for children and parents (Cambridge Health Alliance, Windsor Street Dental Clinic)
- Dental Services provided to children at Department of Social Services and to disabled patients at Perkins School for the Blind (Great Brook Valley Community Health Center).
- One of the eleven dentists spends 100% of his time in the community.
  - Mobile dental services for young people in Department of Youth Services, Department of Social Services, Head Start, and for some school systems (Commonwealth Mobile Oral Health Services)

### 3. Plans for the Future

In the FY 07 survey, a higher percentage of Loan Repayment awarded dentists are staying in the public sector than those receiving Student Awards. Ninety-one (91%) percent of the Loan Repayment program respondents are staying in the public sector. Student Award program percentages are less than half that amount though most Student Award dentists continue to serve MassHealth and the underserved. See below.

In the survey completed in FY06, these same Loan Repayment awarded dentists responded that their intention was to stay in the public sector. One year later, their intentions are the same.

**Table 3**  
**Plans for the Future of Responding Dentists**  
**By Workforce Initiative**

<b>Program</b>	<b>Stay in Public Sector</b>	<b>Go to Private Sector</b>	<b>Don't Know Plans</b>	<b>Total</b>
<b>Loan</b>	<b>10</b>	<b>1</b>		<b>11</b>
<b>Student Award</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>7</b>
<b>Total</b>	<b>12 (66%)</b>	<b>4(22 %)</b>	<b>23 (11%)</b>	<b>18 (100%)</b>

- Of both Loan Repayment awarded dentists and Student Award dentists, twelve out of 18 responding dentists (66%) plan to stay in the public sector.
  - Ten of the twelve dentists who plan to stay in the public sector received Loan Repayment awards. All of them currently work part time in the public sector.

- The remaining two of the twelve dentists who responded that they plan to stay in public health received a Student Award, and are currently working full time to fulfill their service obligation.
- Four out of 18 dentists (22%) went to the private sector:
  - Two, both from the Student Award program, chose practices that serve low-income people and which accept MassHealth. One of these dentists practices at Small Smiles, a private company serving only MassHealth.
  - One dentist from the Student Award program works in a practice in another state that does not focus on service to low income people
  - One dentist from the Loan Repayment program reluctantly moved to the private sector. She moved to another state, tried a position in public sector, left because the public work involved treating only emergencies (clinically superficial and unsatisfying) and now works in the private sector. That individual misses the rewards of service to underserved populations and looks forward to a chance to return to the public sector.
- Two dentists from the Student Award program indicated that they do not know their plans regarding a choice between the public and private sectors.
- One dentist who did not respond to the survey and who is traveling in India recently spoke with her dental advisor at the dental school. The dental school advisor informed MAP that this dentist intends to seek employment at a community health center upon her return to the United States.

Respondents shared these comments when asked why they moved to the private sector:

- "Due to the high cost of living in Boston and the amount I have in student loans, I chose to move to the private sector. I was discouraged to see how many patients were 'abusing' the system. I cannot compare the clinical experience I received to anything else. I am so much more confident and efficient in dentistry. I was promoted to director of the health center in which I fulfilled my obligation. (It was) the politics and lack of autonomy caused me to venture into the private sector." --- Dr. Jennifer Fallon, served at Uphams Corner Community Health Center
- " (In moving to the private sector I chose) to treat those patients in greatest need, i.e. the underserved/ MassHealth patients, in a private practice setting where reimbursement to the dentist is far greater than

(what) one receives at a community health center.” ---- Dr. Rohinton Patel, served at Great Brook Valley Community Health Center

The following chart displays the number of respondents who plan to stay in the public and private sectors by the community health center in which they fulfilled their service obligation.

**Table 4**  
**Plans for the Future of Responding Dentists**  
**By Community Health Center**

<b>CHC</b>	<b>Stay in Public Sector</b>	<b>Go to Private Sector</b>	<b>Don't know</b>
<b>Dorchester House</b>	<b>3</b>		
<b>Great Brook Valley</b>		<b>1</b>	
<b>Windsor</b>	<b>3</b>	<b>1</b>	
<b>Uphams Corner</b>	<b>1</b>	<b>1</b>	
<b>Health Care for Homeless</b>	<b>1</b>		
<b>Tufts Special Needs</b>	<b>2</b>		
<b>South Boston</b>	<b>1</b>		
<b>Joseph Smith</b>	<b>1</b>	<b>1</b>	
<b>Lynn</b>			<b>2</b>
<b>Total</b>	<b>12</b>	<b>4</b>	<b>2</b>

Five of the ten Loan Repayment recipients who stated they would stay in the public sector also had received the award two consecutive times for a total of four years. Four years may create a greater connection to the population and/or the facility in which they are practicing, thus increasing the likelihood that they will continue to serve this population. Also, all of the Loan Repayment awardees worked part time in the public sector and supplemented their time in the private sector, balancing in part the salary differential between the two sectors.

In the previous survey, all Student Award dentists, then at the midpoint of their service obligation, intended to stay public. This year, two responding Student Award dentists who have completed their payback changed their minds and went to the private sector. (One works at a MassHealth focused private practice.)

**Table 5**  
**Plans for the Future of Responding Dentists**  
**Number of those Participating in an Initiative and Those Completed**

<b>Program Status</b>	<b>Stay in Public Sector</b>	<b>Go to Private Sector</b>	<b>Don't know Plans</b>
<b>Participating</b>	<b>9</b>		<b>2</b>
<b>Completed</b>	<b>3</b>	<b>4</b>	
<b>Total</b>	<b>12</b>	<b>4</b>	<b>2</b>

In both Workforce Development Initiatives, dentists who are currently participating in their award had different levels of interest and plans for the future than those who have completed their award. Nine of those currently participating in a workforce initiative stated their intention to stay in public practice and only three of those who have completed the program plan to remain in the public sector.

## **B. Clinical Data Survey**

According to the FY 07 survey the numbers of patients served and the number of procedures delivered vary widely by the awarded dentists across the community health center system. Three key factors may have significant impact on the data patterns and thereby the conclusions that can be drawn.

- The characteristics of the patient population served at each clinic impacts the time needed to serve each type of patient and the complexity of the work required
  - Children
  - Elderly
  - Very young children
  - Non-English speaking people
  - Disabled people with Special Needs
  - Medically disabled people
- The practice infrastructure and staffing patterns of the community health center:
  - The practice pattern of a dentist is dependent on factors within the clinic structure such as the number of dental chairs available per dentist and the number of dental assistants available per dentist. A more efficient clinic uses at least two chairs per dentist, where the dental assistant can prepare the waiting patients in an available operatory and the dentist can switch back and forth between patients.
- The information systems available to capture dental data. There is variability among health centers in their ability to capture the data

requested and in the methods and techniques for collection, and thus uncertainty as to whether the data can be compared across entities.

### 1. Specific Findings

MAP collected data on twenty-two dentists who received awards from Workforce Development Initiatives. Data was reported for the FY06 time period of July 1, 2005 through June 30, 2006. During FY 06 those dentists participating in the Workforce Initiatives served 27, 032 patients and delivered 71,156 procedures.

The chart below shows the number of patients serviced and procedures delivered by workforce initiative:

**Table 6**  
**Awarded Dentists**  
**Number of Patients and Procedures**  
**By Workforce Initiative**

<b>Initiative</b>	<b>Number of Patients</b>	<b>Number of Procedures</b>
<b>Loan Repayment</b>	<b>16,078</b>	<b>46,172</b>
<b>Student Award</b>	<b>10,954</b>	<b>24,984</b>
<b>Total</b>	<b>27,032</b>	<b>71,156</b>

The clinical practice of awarded dentists focuses primarily on diagnostic, restorative and preventive care. Some specialty care is delivered. The following chart displays the percentages of each type of procedure out of the total for all respondents.

**Table 7**  
**FY 06 Type of Procedures Delivered by Awarded Dentist**  
**Percentage of Aggregated Total Procedures**

<b>Diagnostic</b>	<b>Restorative</b>	<b>Preventive</b>	<b>Specialty and Other</b>
<b>29%</b>	<b>23%</b>	<b>18%</b>	<b>30%</b>

The services delivered by the awarded dentists are not primarily focused on extractions and emergencies as theoretically could have occurred given the financial incentives of the state reimbursement formulas. The clinical practices of the awarded dentists are relatively balanced among the types of procedures in dentistry that promote oral health.

From clinical data collected in the previous survey for FY 05 to the current FY 06 data, MAP awarded dentists served an increased number of patients and delivered a higher number of procedures. Practice patterns of awarded dentists in FY06 show a somewhat higher ratio of procedures per

patient than those patterns in FY 05, rising from 2.3 procedures/patient in FY05 to 2.6 procedures/patient in FY 06.

**Table 8**  
**Number of Patients and Procedures for Awarded Dentists**  
**FY 05 and FY 06**

<b>Year</b>	<b>Number of Patients</b>	<b>Number of Procedures</b>
<b>FY 2005</b>	<b>19,562</b>	<b>45,001</b>
<b>FY 2006</b>	<b>27,032</b>	<b>71,156</b>

## 2. Value of the Programs to Dental Directors

All Directors credit the workforce development initiatives with helping to retain dentists and to recruit new ones to their clinics.

- “Our experience has been positive as the program does help retain and recruit dentists, (especially) since our pay scale is significantly lower than in private practice. Our Dental Director is promoting the program in all interviews with candidates” – Joseph Smith Community Health Center
- “I believe that the Loan Repayment helps individuals with the large discrepancy in salary that they might get in a health center setting as compared with private practice. It is difficult to attract dentists to these positions without benefits like the Loan Repayment. The program is a huge benefit to those awarded and is one good incentive for staying at the health center.”—South Boston Community Health Center
- “This program helps us to retain the dentists for a longer period of time because it increases their salary.”—Great Brook Valley Community Health Center
- “Our salaries are not competitive in today’s market. This type of loan repayment helps us to be competitive.”—Great Brook Valley Community Health Center

## 3. Recommendations for Program Improvement

- Pay the scholarship directly to the lenders so that loan recipient dentists would avoid paying taxes. --Franklin County and South Boston Community Health Centers
- Make more grants with a higher stipend amounts. --Joseph Smith Community
- Make awards to dentists who may not have outstanding loans.

- Franklin County Community Health Center
- Award a loan with a longer time period to promote stability and less staff turnover at the clinics. --South Boston Community Health Center

#### **IV. Conclusions**

The MAP Workforce Development Initiatives have been meeting their stated mission of supplying and retaining dentists in the public sector, serving MassHealth and the low income population. The number of awarded dentists has increased, as has the number of patients served by these dentists in the public sector. In this most recent survey, the number of served patients increased by 38% from FY 05 to FY 06.

In each of the annual reports since inception of these programs in 2003, awarded dentists report satisfying work experiences, gains in clinical skill and invigorated interest in serving low-income people. As reflected in the survey results on plans for the future, awarded dentists are interested in and committing to working with MassHealth members and low-income people. In this recent survey, those staying in the public sector total 66% of respondents. The percentage of Loan Repayment dentists with plans to stay in the public sector increased from the previous survey year (83%) to this year's survey (91%). And of those entering private practice, at least half have committed to continuing to treat these populations, either accepting MassHealth or working in a for-profit entity that serves MassHealth members.

According to the Dental Directors who have had these awarded dentists in their practices, there are fewer vacancies: more dentists are being retained in these centers and for longer periods of time. As a leader of the dental clinic at Great Brook Valley CHC stated in her comments, "This program helps us to retain the dentists for longer period of time because it increases their salary."

As community health center clinics are able to retain more and more dentists, other benefits have accrued. For one, continuity of care for patients is expanding, with dentists able to see the same patient over time. In the field of dentistry, this continuity of care is recognized as higher quality care, fostering an environment with reduced need for emergency treatment, more preventive and restorative care versus tooth extractions, and with overall higher levels of oral health.